# 1800, 1806, 1812, AND 1818 CRISLER WAY RESIDENCES PROJECT

# INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

Case No.: ENV-2015-4131-MND
ZA Case Nos.: ZA-2015-4125-ZAD, ZA-2015-4130-ZAD, ZA-2015-4146-ZAD, and ZA-2015-4149-ZAD

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September 2019

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# 1.0 INTRODUCTION

The subject of this Initial Study and Mitigated Negative Declaration (MND) is the 1800, 1806, 1812, and 1818 Crisler Way Residences Project ("Crisler Way Residences" or "Project") proposed by CAC Development ("Applicant") located within the boundaries of the Hollywood Community Plan Area of the City of Los Angeles ("City"), California. The Project consists of the construction and operation of four (4) single-family residences on four (4) contiguous vacant lots (lot numbers 95-98 of Tract 865) and the improvement of a portion of Crisler Way south of Grand View Drive. The Los Angeles Department of Building and Safety (LADBS) previously permitted the four residences, and the Bureau of Engineering previously issued a Class B permit for the improvement to Crisler Way to a 20 foot width fronting the permitted residences; however, after the issuance of the permits, LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the building permits because the Project does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area as required by the Los Angeles Municipal Code (LAMC).[1]

The General Plan land use designation of the Site is Low II Residential and the zoning is R1-1 (one-family dwelling zone) within a Hillside Area. The Applicant is requesting approvals and permits from the City for construction activities including, but not limited to, grading and construction of the single-family residences and improvements to Crisler Way in accordance with LAMC requirements.

## 1.1 CEQA REVIEW

The City, as lead agency under the California Environmental Quality Act (CEQA), has determined an expanded Initial Study should be prepared to evaluate potential environmental impacts of this Project and determine the appropriate CEQA document to be prepared based on existing local conditions and applicable regulations. The City has assumed responsibility as lead agency for preparing this document.

The City published the Initial Study/ MND (Case No: ENV-2015-4131-MND) for a 20-day public review period starting May 3, 2018 and ending May 23, 2018, with a notice posted to the Department of City Planning website and in the *Los Angeles Times* newspaper.[2] Comment letters the City received during this review period are provided in **Appendix M** along with responses provided in a letter by Envicom Corporation dated June 19, 2018, provided in **Appendix N**. The City also received a comment letter from Jeffer Mangels, Butler, and Mitchell, LLP (JMBM) dated June 19, 2018 in **Appendix O**, Envicom responded to in the JMBM letter in a response to comment letter dated January 10, 2019, provided in **Appendix P**.

During the 20-day public review period, the Zoning Administrator held a public hearing on the Project on May 22, 2018. This Expanded Initial Study contains revisions based on the comment letters received and the comments voiced during the May 22nd public hearing as indicated in the Zoning Administrator communication letter dated July 31, 2018, provided in **Appendix Q**. Direct responses to the comments in the Zoning Administrator communication letter are provided in **Appendix R**.

[1] Los Angeles Municipal Code Section 12.21 C.10(i)(2) and (3).
[2] CEQA Guidelines Section 15073(a). Public Review of a Proposed Negative Declaration or Mitigated Negative Declaration.

# 2.0 FINDINGS OF THIS INITIAL STUDY

As Lead Agency, the City prepared this Initial Study to evaluate the Project's potential environmental impacts and identify mitigation measures to reduce potential impacts. The City finds that based on the Initial Study and accompanying impact analysis provided in Section 4.0 below, the proposed Project would have no significant adverse effect on the environment regarding the environmental impact issue areas listed in Section 4.0, Initial Study and Mitigated Negative Declaration. The Initial Study and Environmental Checklist indicates the Project's potential to result in environmental impacts, with a brief explanation of how the significance of potential impacts was determined for each issue area. For each issue addressed in Section 4.0, the impacts associated with development of this Project have been determined to be "Potentially Significant Unless Mitigation Incorporated," "Less-than-significant," or "No Impact." For issues that were determined to be "Potentially Significant Unless Mitigation Incorporated," mitigation measures have been identified that would reduce impacts to below a level of significance.

# 3.0 PROJECT DESCRIPTION

The proposed Project consists of the construction, use, and maintenance of four (4) single-family residences, retaining walls, and swimming pools on four (4) contiguous vacant lots numbered 95 through 98 and improvement of a portion of Crisler Way fronting the lots. Given that the proposed residences would front a Substandard Hillside Limited Street, Crisler Way, that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area, the Project would provide a 185-linear foot long and 20-foot wide extension of Crisler Way joining the existing Grand View Drive roadbed for access to the proposed residences.

## 3.1 PROJECT BACKGROUND

As shown on the Street Plan and Profile provided in **Appendix C**, the Structural Engineering Division of the City's Bureau of Engineering approved street plans prepared by Hovell and Pilarski Engineering Inc. for the extension of Crisler Way (shown as Parcel 'BB') as to structural requirements on April 30, 2004. The Applicant also obtained an approved Class B Permit (Work Order No. BR402571) issued September 7, 2012 by the Los Angeles Department of Public Works Bureau of Engineering for the construction of street improvements on Crisler Way adjacent to the lots on which the proposed residences would be located. In accordance with Los Angeles Municipal Code requirements, the City issues "B" Permits for extensive public works improvements including the widening of streets, the changing of existing street grade, and the installation of sewers, storm drains, street lighting, and traffic signals. On June 8, 2015, the LADBS issued building permits for the proposed single-family dwellings, site grading, retaining walls and swimming pools on the Project site. The permitted residences and roadway improvement and their corresponding permit numbers are provided in **Table 3-1, Previously-Issued Building Permits**.

**Table 3-1**
**Previously-Issued Building Permits**

| Lot # | Street Address | Building Permit Numbers |
|---|---|---|
| 95 | 1818 N Crisler Way | 11010-20000-00921, 15030-20000- 02888, 11020-20000-01108, and 11047-20000-00522 |
| 96 | 1812 N Crisler Way | 1010-20000-01123, 11030-20000- 02061, 11020-20000-01109, and 11047-20000-00523 |
| 97 | 1806 N Crisler Way | 11010-20000-01124, 15030-20000- 02890, 11020-20000-01110, and 11047-20000-00524 |
| 98 | 1800 N Crisler Way | 11010-20000-01125, 15030-20000- 02889, 11020-20000-01111, and 11047-20000-00525 |
| BB | Crisler Way | Construction Class "B" Permit Reference Number 8910, Work Order No. BR402571. |
| Source: Rosenheim & Associates, Inc., Zoning Administrator Determination, Background/Project Information. | | |

Subsequent to the issuance of the building permits and Class "B" permit for roadway improvements noted in Table 3-1, LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the building permits because the Project Site fronts a Substandard Hillside Limited Street that is not fully improved and the Applicant had not obtained the requisite approvals as required by LAMC Sections 12.24 X.28(a)(7)(i) and (ii). Therefore, the Applicant is requesting Zoning Administrator Determination approval to improve a substandard hillside limited street as required by LAMC Section 12.28X(a)(7)(i) and (ii).

## 3.2 PROJECT SITE

Regionally, the Project Site ("Project Site" or "Site") is located in the Northwest ¼ of Section 8, Township 1.S, and Range 14.W of the United States Geological Survey (USGS) 7.5' Hollywood quadrangle (See **Figure 1**, **Regional Map**). The Project Site is located within the Hollywood Community Plan Area in the Hollywood hills south of Grand View Drive and northwest of the intersection of Laurel Canyon Blvd. and W. Sunset Blvd. (See **Figure 2**, **Project Location Map**). The Project Site consists of four (4) existing residential lots numbered 95 through 98 and the planned extent of Crisler Way fronting the residential lots. As shown in Figure 2, the Project site is located on steeply sloping terrain within the environmental setting of existing single-family residences on sloped terrain in the Hollywood Hills. The Project Site sits at the top of a south-facing slope that descends from the south side of Grandview Drive. The slope has a height of approximately 240 feet and a gradient ranging from ¾:1 (horizontal to vertical) to about 2:1 and an average slope angle of about 40 degrees. More details on the existing topographic conditions of the Project site is in the Slope Band Analysis provided in **Appendix I**.

The eastern portion of the Project Site, lots 95 and 96, was previously developed with a single-family residence constructed in the 1920's that burned down in the 1979 Laurel Canyon/Kirkwood Bowl fire. All that remains of the previous residence is the concrete floor slab, the fireplace, several retaining walls, and landscape rock rubble walls. Lots 97 and 98 in the western portion of the Project Site are vacant. The size of individual lot areas is in **Table 3-2, Lot Area Summary**.

**Table 3-2**
**Lot Area Summary**

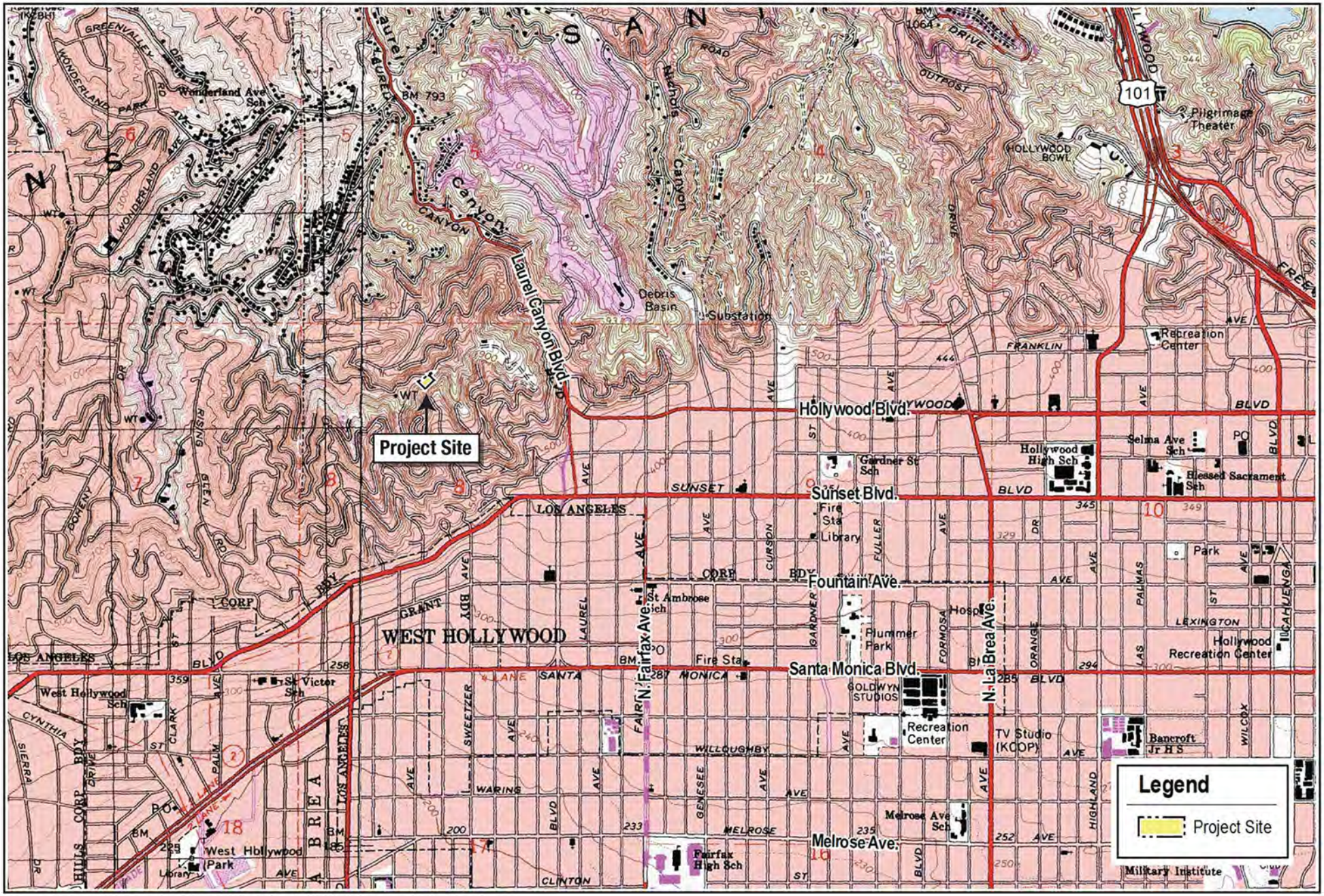
| Lot # | Street Address | Parcel Area (sq. ft.) | Assessor Parcel No. |
|---|---|---|---|
| 95 | 1818 N Crisler Way | 4,995.2 | 5556-022-002 |
| 96 | 1812 N Crisler Way | 5,050.7 | 5556-022-002 |
| 97 | 1806 N Crisler Way | 5,264.3 | 5556-022-003 |
| 98 | 1800 N Crisler Way | 4,868 | 5556-022-004 |
| | **Total** | **20,178.2** | |
| Source: LA Zoning Information and Map Access System (ZIMAS), December 26, 2018. | | | |

As shown in Table 3-2, the four (4) contiguous lots collectively comprise a total of 20,178.2 square feet (0.46 acre). The four (4) contiguous lots are part of Tract 865. The Project Site includes the planned portion of Crisler Way fronting the residential lots

## 3.3 PROPOSED PROJECT

### *On-Site Improvements*

The proposed Project consists of the construction and operation of four (4) single-family residences and accessory features on four (4) contiguous lots and the improvement of the portion of Crisler Way fronting the lots to join the existing Grand View Drive roadbed (See **Figure 3, Proposed Site Plan**). Accessory features include, but are not limited to, retaining walls, swimming pools, landscaping, and a stormwater infiltration planter. The Project would improve the planned, but currently unimproved, 25-foot wide Crisler Way public right-of-way with a 185-linear feet long and 20 feet wide paved roadway surface intersecting the existing roadway of Grand View Drive, as depicted on the Crisler Way Street Plan and Profile provided in Appendix C. The improved Crisler Way street would provide drainage inlets along the southern edge of the Crisler Way road surface to collect and convey stormwater to an infiltration planter near the southern property line on Lots 96 and 97. Crisler Way is currently a paper street, Bureau of Engineering Street No. 7617. A paper street is one that has been dedicated as a public right-of-way but does have an actual paved




Source: Portions of Hollywood and Beverly Hills, California USGS 7.5' Topographic Quadrangle map.



# Regional Map

0 1,000 2,000 Feet

FIGURE 1



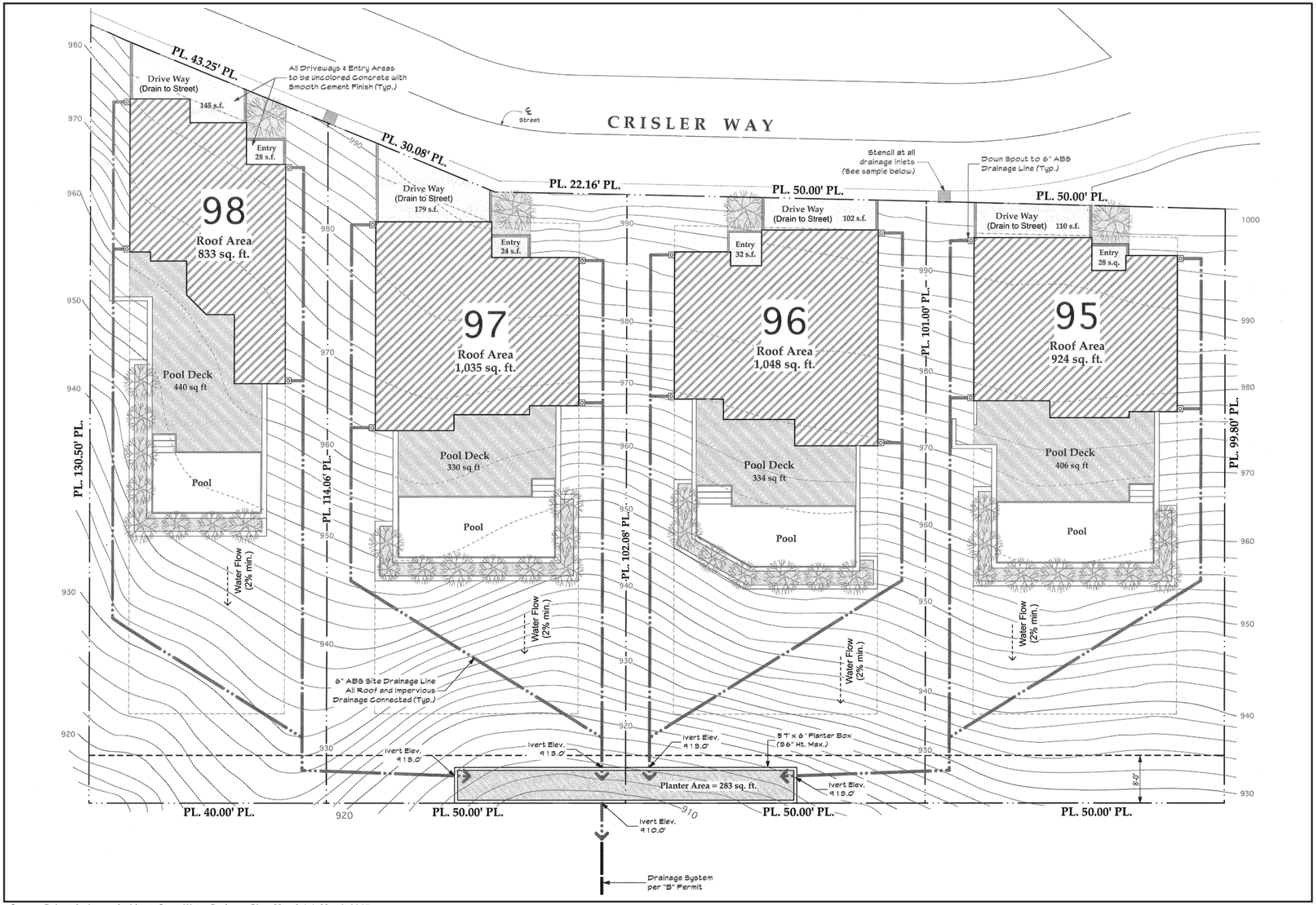

Source: GoogleEarth Pro, Feb. 8, 2016.

CRISLER WAY RESIDENCES IS/MND

# Project Location Map

0 200 400 Feet

FIGURE 2




Source: Robert Anderson Architect, StormWater Drainage Plan, Map A 1.1, March 2015.



# Proposed Site Plan

FIGURE 3

roadway. Given the planned portion of Crisler Way fronting the proposed residences is not built, the proposed residences would front a Substandard Hillside Limited Street that is not improved to a roadway width of 20 feet and does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area as required by the LAMC.[3] Therefore, the Project includes the improvement limited to the portion of the Crisler Way paper street fronting residential lots 95 through 98 with a 20 foot wide paved roadway in accordance with City Department of Public Works standards connecting to Grand View Drive to provide vehicular access to the proposed residences. The Crisler Way Street Plans in Appendix C provide the physical dimensions, elevations, and design details of the Crisler Way extension shown as Parcel 'BB' on this plan set. The floor area of the proposed residences is shown in **Table 3-3, Gross Floor Area Summary**.

**Table 3-3**
**Gross Floor Area Summary**

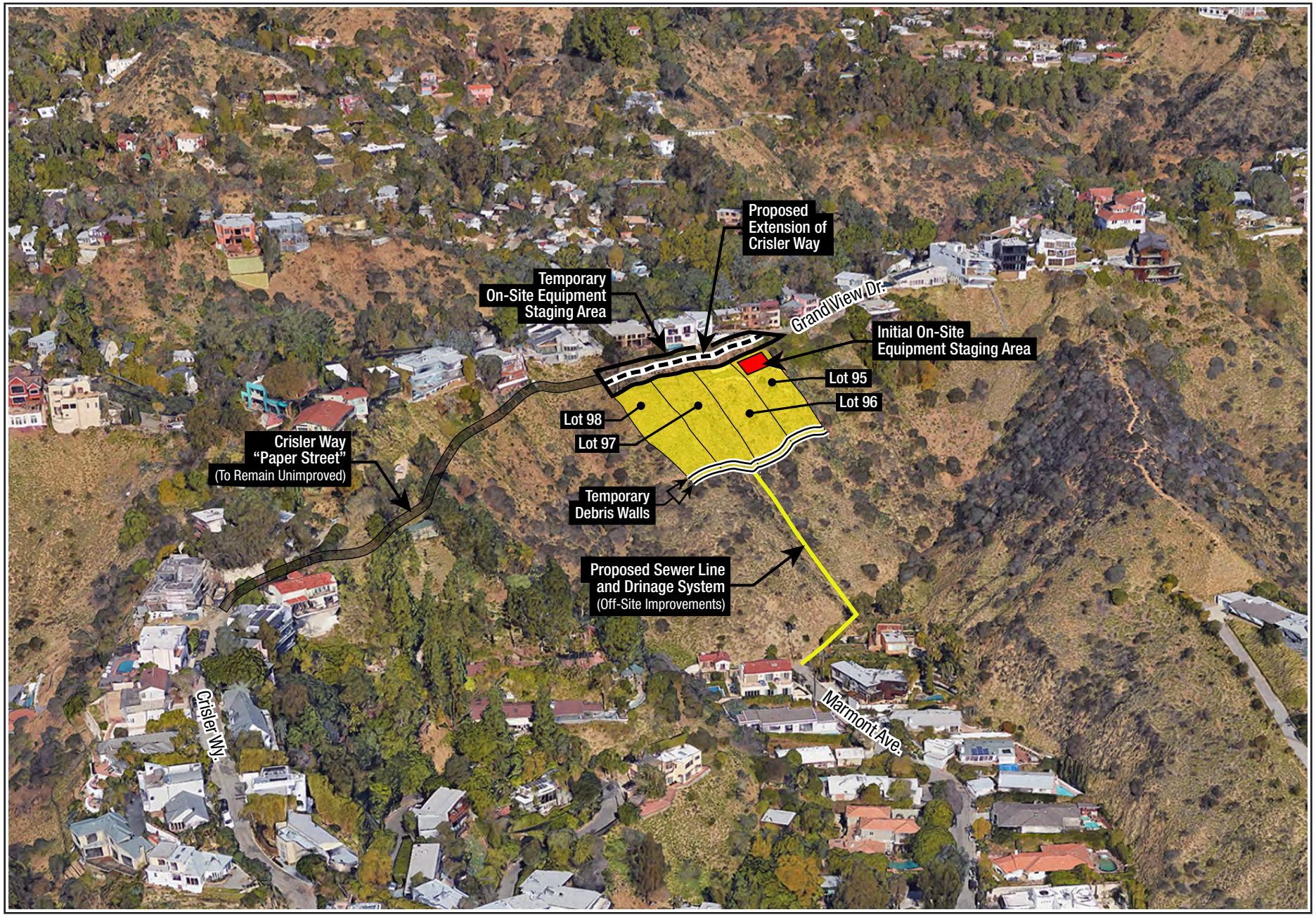
| Street Address | Floor Area (sq. ft.) |
|---|---|
| 1818 N Crisler Way – House 95 | 1,710 |
| 1812 N Crisler Way – House 96 | 1,653 |
| 1806 N Crisler Way – House 97 | 1,710 |
| 1800 N Crisler Way – House 98 | 1,221 |
| **Total** | **6,294** |
| Source: Architectural Plans prepared by CAC Development, Appendix A. | |

As shown in Table 3-3, the floor areas of the four (4) single-family residences sum to 6,294 square feet. The four (4) separate houses would each contain two (2) bedrooms and two (2) bathrooms. The Project includes accessory features including, but not limited to, driveways, structural walls, retaining walls, landscaping, patios, storm drains, a stormwater infiltration basin, utility infrastructure, pool decks, and pools for each house. Each residential lot would have a total of two retaining walls as permitted by LAMC Section 12.21.C.8. The retaining walls would not exceed 10 feet and would be a minimum of three feet apart. Retaining walls associated with the construction of the Crisler Way roadway within the public right-of-way are part of the roadway improvement plans and separate from the retaining walls necessary for the construction of the proposed residences. As shown on Sheet 3 of the Crisler Way Street Plans provided in Appendix C, the Crisler Way roadway would be bordered by a Northwesterly Retaining Wall on the uphill side of Crisler Way and a Southeasterly Retaining Wall on the downhill side of Crisler Way. As shown on Sheet three of the Crisler Way Street Plans, the Project features curbside grating catch basins along the southern edge of the Crisler Way roadbed, drainage pipes, and grouted rip-rap placement to collect and convey stormwater runoff from the Crisler Way roadway. As described in the Geologic and Soils Engineering Update Report for construction of the Crisler Way paved roadway prepared by GeoMatrix dated September 19, 2012, the Northwesterly Retaining Wall would range from six to up to 21 feet high along the uphill side of the street and the pile-supported Southeasterly Retaining Wall would range from five to 7-1/2 feet high along the downslope side of the proposed portion of Crisler Way.

### *Off-Site Improvements*

Proposed off-site improvements consist of the construction and operation of an underground sewer line and drainage on an easement on Lot 118 that would join an existing sewer line (Pipe ID# 4701402947014040A) beneath Marmont Avenue as shown on the Approved Sewer Plan and Profile prepared by Hovell and Pilarski Engineering provided in **Appendix B**. An approximation the proposed Sewer Line and Drainage System location is depicted in **Figure 4, Construction Site Plan**. The proposed off-site sewer line and

[3] Los Angeles Municipal Code Section 12.21C10(i)(2) and (3).




Aerial Source: GoogleEarth Pro, Dec. 3, 2017.



# Construction Site Plan

FIGURE 4

drainage would lay beneath Lot 118 and an unimproved "paper street" portion of Marmont Avenue before joining an existing eight-inch sewer line beneath the improved portion of Marmont Avenue near the existing residence at 1698 N. Marmont Avenue. Figure 4, Construction Site Plan, shows an approximation of the existing improved portion of the Crisler Way roadbed to the southwest of the Project site that terminates near the existing residence at 1746 Crisler Way. Figure 4 illustrates the approximate location of the portion of Crisler Way that would join Grand View Drive to provide access to the proposed residences on Lots 95 through 98, and the portion of the Crisler Way "paper street" that would remain unimproved after Project construction. The full length of the Crisler Way "paper street" right-of-way, from the existing intersection with Hillside Avenue in the south to Grand View Drive in the north, is 1,344 feet.[4] Approximately 582 feet of Crisler Way is already improved from the intersection of Crisler Way and Hillside Avenue to the terminus near the existing residence at 1746 Crisler Way. The proposed Project would improve a 185 linear foot portion of the northernmost extent of Crisler Way to join the existing roadbed of Grand View Drive. Therefore, approximately 577 linear feet of Crisler Way to the south of the proposed roadway improvement would remain unimproved as shown in Figure 4. The proposed extension of Crisler Way is an on-site aspect of the Project that would also serve as a temporary on-site equipment staging area during construction to avoid parking and staging activities on Grand View Drive.

## 3.4 SURROUNDING LAND USES

Surrounding land uses consist of vacant residential lots and existing single–family residences constructed in a similar environmental setting along narrow, winding hillside roads. Parcels to the north are zoned R1-1 (One-Family Zone) and contain existing single-family residences. Parcels to the east and west are also zoned R1-1 and currently vacant. Parcels south of the Project Site, north of the existing terminus of Marmont Avenue, are zoned R1-1 and also vacant.

## 3.5 REGIONAL AND LOCAL ACCESS

### *Regional Access*

Primary regional access to the Project Site is provided by the San Diego Freeway (Interstate 405) and the Hollywood Freeway (U.S. 101) via Santa Monica Boulevard (SR 2). The San Diego Freeway travels north–south approximately five (5) miles west of the site. The Hollywood Freeway runs north–south approximately three (3) miles east of the site. Santa Monica Boulevard travels in an east-west direction less than one (1) mile south of the site before turning southwest toward Beverly Hills.

### *Local Street Access*

Local street access is provided by a curvilinear street system surrounding the Project Site and area. Grand View Drive runs roughly parallel to the northern Project site boundary with the existing terminus of Crisler Way and Marmont Avenue to the south. The site would be accessed through improvements to the northernmost extent of Crisler Way as a "spur" from Grand View Drive.

### *Site Access and Street Improvements*

The Project includes improvements to Crisler Way, a Substandard Hillside Limited Street that is not improved to a roadway width of 20 feet and does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area as otherwise required by the LAMC.[5] Therefore, the Project would improve a 185-linear foot long by 20-foot wide portion of the northernmost extent of the existing Crisler Way paper street to join Grand View Drive, as illustrated in Figure 4, Construction Site Plan. Based on Mobility Plan 2035, Grand View Drive is designated "Local Street – Standard" with a roadway width of 36 feet; however, the actual pavement width

[4] City of Los Angeles, Dept. of Public Works, Bureau of Engineering, Navigate LA Online Database (accessed 17 Oct. 2018).
[5] Los Angeles Municipal Code Section 12.21C10(i)(2) and (3).

of Grand View Drive, from the edge of pavement to edge of pavement, varies between 14 to 20 feet, the design width of one travel lane on a Hillside Limited Standard and a Hillside Collector street.[6]

### *Public Transit*

The Project Site is located 1.3 driving miles west of the nearest public transit stop by way of Hollywood Boulevard, the northbound Laurel Canyon/Hollywood Bus Stop (#32158). The Los Angeles County Metropolitan Transportation Authority local bus Route #218 runs north–south along Laurel Canyon Boulevard from Studio City to Beverly Hills.

## 3.6 GRADING

The Project involves hillside grading for improvements of the portion of Crisler Way fronting the proposed single-family residences and for preparing building pads for the residences. Grading activities consist of cut, the removal of soil from existing slopes, for creating the pool level and lower level of each of the houses, and fill, the placement of soil to support the proposed pool decks, pools, and Crisler Way roadbed. Grading quantities are provided in **Table 3-4, Project Grading Summary**.

**Table 3-4**
**Project Grading Summary**

| Street Address | Grading (cubic yards) | | |
|---|---|---|---|
| | Cut | Fill | Export |
| 1818 N Crisler Way – House 95 | 229.2 | 73.3 | - |
| 1812 N Crisler Way – House 96 | 252.2 | 66 | - |
| 1806 N Crisler Way – House 97 | 275.2 | 61.9 | - |
| 1800 N Crisler Way – House 98 | 268 | 34.4 | - |
| Crisler Way Road Improvements | 0 | 789 | - |
| **Total** | **1024.6** | **1024.6** | **0** |
| Source: Architectural Plans, Sheet No. A-8, prepared by CAC Development, Nov. 3, 2016. | | | |

As shown in Table 3-4, grading would generate 789 cubic yards of cut and 789 cubic yards of fill based on the grading calculations provided on Sheet A-8 of the approved Architectural Plans in **Appendix A**. The 789 cubic yards of the fill soils generated by the net cut of the houses would be used as backfill onsite, thereby avoiding the need to export excess fill soils from the construction site. In particular, the approximately five feet of space between the structural walls and the downhill southeasterly retaining wall would need backfilling, as shown on Sheet 5, Northwesterly Retaining Wall Profile & Section, of the Street Plan and Profile provided in Appendix C.

Grading the pad for each house and the portion of Crisler Way across from the subsequent lot would proceed progressively, starting with Lot 95, moving to Lot 96, and onward, as the slope of Crisler Way descends. Proceeding in this "lot by lot" manner would avoid the need for the storage of large quantities of fill soil on the Project Site because the soil needed to backfill between the structural walls of the residences and the Southeasterly Retaining Wall for Crisler Way would be generated by cutting each of the residential lots. For example, the amount of roadway excavation directly across from Lot 95 would be minimal because the elevation of Crisler Way would join the Grand View Drive roadbed. Therefore, contractors would extend the grading of the roadbed to Lot 96 and immediately use the soil generated as backfill between the structural wall of the residence and the downhill Southeasterly Retaining Wall at Lot 95.

[6] City of Los Angeles, Dept. of Public Works, Bureau of Engineering, Navigate LA Online Database (accessed 17 Oct. 2018).

### *Haul Route*

Although the Project is located in a Bureau of Engineering (BOE) Special Hillside Grading Area, the Project would not involve import/export of 1,000 cubic yards or more of soil and Haul Route Approval from the Board of Building and Safety Commissioners is therefore not required. The Project will grade approximately 800 cubic yards to be used on-site as backfill for the Crisler Way street improvements. Nonetheless, given the narrow and winding condition of the construction access route, the Project would provide a Construction Traffic Control Plan as required by the City to avoid and minimize temporary construction effects on neighboring properties.

The Traffic Analysis provided in **Appendix K** considered potential access routes for construction vehicles and recommended Route B as the safest and most accessible route to minimize impedance on neighborhood circulation.[7] Consistent with this recommendation, construction waste would be disposed of following Access Route B: Grand View Drive to Kirkwood Drive to Laurel Canyon Blvd to Hollywood Blvd to Cahuenga Blvd to the U.S. 101 to CA 134 to Scholl Canyon Landfill.

## 3.7 LAND USE AND ZONING

The Project Site is located within the Hollywood Community Plan area of the City within the jurisdiction of the Central Area Planning Commission and Council District Four. The Project Site is not located in a more specific designated plan area or sub-district. The General Plan land use designation is Low II Residential and the zoning is R1-1 (one-family dwelling). The Project Site is located in Height District 1, which limits the overall height to 45 feet.

### *Los Angeles Municipal Code*

The Project Site is located in a Hillside Area and subject to the applicable zoning specified in the LAMC. In accordance with LAMC requirements, the Project is required to improve Crisler Way to a roadway width of 20 feet to provide a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area.[8] Each of the four (4) residences will provide two (2) covered parking spaces and would be accessible from the intersection of Crisler Way and Grand View Drive.

The Project proposes the following front, side, and rear yard setbacks in compliance with LAMC Requirements. Houses 95 through 97 will maintain a five-foot front yard, eight-foot side yard, and rear yard setback in excess of 15 feet. House 98 will maintain a five-foot front yard, seven-foot side yard, and rear yard setback in excess of 15 feet.

## 3.8 CONSTRUCTION

Construction proceeds in separate phases such as site preparation, rough grading, installation of building foundations, and finally, vertical construction of the proposed residences. Overseen by an applicant or an applicant's construction manager, various construction contractors would undertake phases in multiple stages detailed in the following tables.

### *Construction Schedule*

Grading and site preparation would be undertaken in multiple stages. A breakdown of the stages, estimated duration, approximate number of crew members, and crew parking locations is provided in **Table 3-5, Project Construction Schedule for Site Preparation, Grading, and Crisler Way Improvements.**

[7] See Figure 4 in Appendix F, Traffic Analysis for the Construction Phase – Associated Transportation Engineers, January 12, 2017.

[8] Los Angeles Municipal Code Section 12.21C10(i)(2) and (3).

Contractors would perform approximately the first nine stages shown in Table 3-5 to prepare the site, grade the building pads, and start Crisler Way improvements prior to beginning vertical construction of the proposed single-family residences.

**Table 3-5**
**Project Construction Schedule for Site Preparation, Grading, and Crisler Way Improvements**

| Stage | Activity | Duration | Workers | Crew Parking | Off-site Staging |
|---|---|---|---|---|---|
| 1 | Install primary and secondary protection debris walls at bottom of all four (4) lots. | 2 weeks | 6 | Off-site* | Yes – 1 truck |
| 2 | Mobilization: Four (4) men dropped off at site to clear debris and vegetation of staging area with hand tools. At end of day, a flatbed truck will arrive and haul debris away. | 2 weeks | 4 | On-site | No |
| 3 | Create an initial staging pad: Four (4) men dropped at site, Bobcat S300 (72" x 72") and Mini Excavator G35 62"x86" will be delivered to site by a 10 wheel 24' flatbed truck, unloaded off Grandview as the only inconvenience, 15 minutes at most for each delivery. This equipment will create the pad in one day. | 1 week | 4 | On-site | No |
| 4 | Drilling Rig G135 8'x20' delivered by a 10 wheel 24' flatbed truck will be placed completely on the created pad, not on the street. Drill 6 temporary shoring piles on Lot 95. The drilling rig is equipped with a boom as part of the 20' length, a separate crane is not needed. The Drilling Rig will set 6 "I Beams" W12x65 and 25' long brought up in three loads, one load delivered per day. This will reduce the weight on the street and reduce unloading time. The truck delivering the steel beams will only partially be on Grand View Drive. Delivery will be at 12 noon to minimize truck traffic. Equipment to remain on-site throughout construction progressing down Crisler Way. Concrete pour of all six (6) temporary shoring piles, one six-yard truck, 2 to 3 hours at most will be partially on Grand View. Install lagging in "I Beams" 4"x12"x8' long wood beams delivered by a 12' flatbed truck completely off the street. Lagging set in one (1) day by four (4) to six (6) workers dropped off at site. | 6 weeks | 12 | On-site | No |

| Stage | Activity | Duration | Workers | Crew Parking | Off-site Staging |
|---|---|---|---|---|---|
| 5 | With the temporary shoring in place, between the Bobcat, small excavator, and the drilling rig, all equipment onsite can cut further along the road, backfilling onto Lot 95 temporary shoring and start the foundation of Lot 96. | 3 weeks | 10 | On-site | No |
| 6 | Drilling 36" diameter solider piles. | 8 weeks | 6 | On-site | No |
| 7A | 50% install of steel cages and concrete piles. | 3 weeks | 10 | On-site | No |
| 7B | 100% install of steel cages and concrete piles. | 3 weeks | 10 | On-site | No |
| 8 | Sleeves and waterproofing installation. | 2 weeks | 12 | On-site | No |
| 9 | Construction of 10" concrete wall between soldier piles. | 6 weeks | 12 | On-site | No |
| 10 | Water proofing, drains, backfill and re-compaction | 4 weeks | 12 | On-site | No |
| 11 | Underground utility line installation. | 4 weeks | 4 | On-site | No |
| 12 | Backfill utility trenches. | 3 weeks | 6 | On-site | No |
| **Site Preparation and Grading Total** | | **47 weeks** | | | |

Source: CAC Development, email correspondence with Envicom Corporation, November 27, 2018.
*Off-site parking would consist of the active loading and unloading of crew members in a shuttle van that would park in an off-site location outside of the vicinity.

As shown in Table 3-5, grading and site preparation would last an estimated 47 weeks, with complete on-site parking available within two weeks of construction following the creation of an initial staging area on Lot 95. As noted in Table 3-5, temporary off-site crew parking would only be needed during stages one, consisting of six workers dropped off and picked up from the Project Site in a shuttle van. As noted, the applicant would shuttle workers to the Project Site in a van to avoid construction traffic and parking on Grand View Drive while the initial staging area on Lot #95 is created. As shown in the Construction Management Schedule, construction workers would be shuttled to the site, dropped off, and the shuttle would park off-site to avoid obstructing the Grand View right of way until the initial on-site equipment staging area is completed.

Contractor crews would also construct the residences in multiple stages. A detailed breakdown of the vertical home construction activities, estimated duration, approximate number of workers, and crew parking locations is provided in **Table 3-6, Project Construction Schedule for Vertical Home Construction**.

**Table 3-6**
**Project Construction Schedule for Vertical Home Construction**

| Activity | Duration [a] | Workers | Crew Parking |
|---|---|---|---|
| Foundations | 8 months | 8 | On-site |
| Framing | 8 months | 6 | On-site |
| Rough Plumbing | 4.5 months | 3 | On-site |
| Rough Mechanical | 3.5 months | 3 | On-site |
| Rough Electrical | 4 months | 4 | On-site |
| Doors/Win Installation | 3 months | 4 | On-site |
| Roofing | 3 months | 4 | On-site |
| Exterior Stucco/siding | 6 months | 6 | On-site |
| Insulation | 1.5 months | 3 | On-site |

| Activity | Duration [a] | Workers | Crew Parking |
|---|---|---|---|
| Drywall | 4 months | 6 | On-site |
| Cabinets | 4 months | 4 | On-site |
| Tile/Stone | 4 months | 4 | On-site |
| Finish Carpentry | 4 months | 4 | On-site |
| Flooring/Appliances | 2 months | 4 | On-site |
| Finish Elect/Mech/Plumb | 2 months | 6 | On-site |
| Landscape/Hardscape | 3 months | 8 | On-site |

[a] Several home construction activities may be performed concurrently and therefore do not sum to a total duration. CAC Development estimates home construction to be a 15-month process.
Source: CAC Development, July 1, 2016 Construction Schedule for the Crisler Project and email correspondence with Envicom Corporation, December 19, 2016.

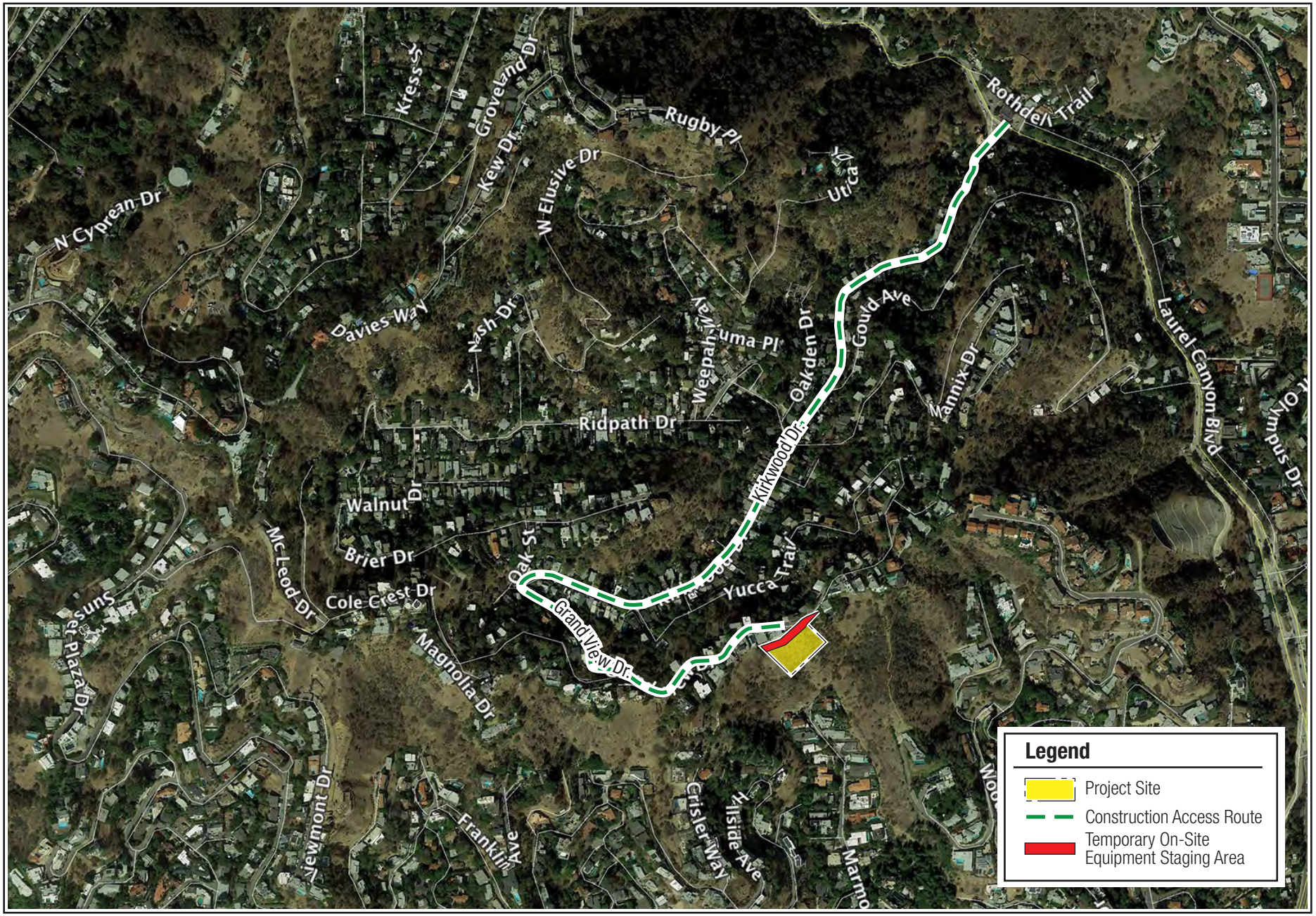
As shown in Table 3-6, crews would construct the homes in stages with varying durations that may be performed concurrently. These estimated durations are not additive because several home construction activities may be performed at the same time. Therefore, home construction activities do not sum to a total duration. The Applicant anticipates a 15-month process for home construction. Home construction would start approximately nine (9) months after work on the extension of Crisler Way begins, thereby reducing traffic and giving crews a staging area onsite for work on the houses. Work crew members would also carpool during the activities shown on Table 3-6 to reduce traffic on local streets. Combining the site preparation and grading portion of construction shown in Table 3-5 with the home construction portion shown in Table 3-6, the Applicant estimates a total construction duration of 24 months.[9] The Applicant, contractors, and sub-contractors would adhere to construction schedules to the maximum extent possible to consolidate trips and minimize interference with existing local traffic flow on Grand View Drive.

### *On-Site Equipment Staging Area and Construction Parking*

Crew members would be shuttled to and from the Site until the initial on-site equipment staging area is ready; therefore, there would be no need for construction parking on Grand View Drive. Based on the Construction Management Schedule prepared by Rigo's Construction Inc., provided as exhibit C in the Envicom Response to Comments letter in Appendix N, the initial staging area on lot 95 would be ready by day five from the start of construction. Lot #95 contains a remnant building foundation that would provide sufficient flat surface area for an initial construction parking and equipment staging area as shown in Figure 4, Construction Site Plan. This initial parking and equipment staging area on Lot 95 would transition to a temporary equipment staging area in the location of the Crisler Way improvements as construction progresses to avoid restricting vehicular access on Grand View Drive. As shown in Figure 4, the extension of Crisler Way would serve the dual purpose of a street improvement and a temporary equipment staging area 20 feet wide and the full 185 ft. length of the proposed Crisler Way roadbed. During construction, crews would use this extension of Crisler Way as a temporary parking and equipment staging area to avoid parking and staging on Grand View Drive. Construction vehicles making deliveries would also be able to back into the temporary equipment staging area on Crisler Way to avoid blocking Grand View Drive.

By providing an initial and temporary on-site construction equipment staging area, the Project would avoid the need for lane or road closures on the Construction Access Route shown in **Figure 5, Construction Access Route**. The Construction Management Schedule prepared by the Applicant's Foundation Contractor, Rigo's Construction Inc., included in Exhibit C in the Envicom Response to Comments letter in Appendix N, provides detailed descriptions of the size of construction equipment anticipated consisting of mini excavators and a drilling rig with a boom that would be initially delivered and quickly transferred – an estimated 15 minutes for delivery – to the on-site staging area to avoid restricting access on Grand

[9] Robert Anderson, Architect/Partner, CAC Development, email correspondence with Envicom, Dec. 19, 2016.




Aerial Source: GoogleEarth Pro, Oct. 18, 2016. Source: Associated Transportation Engineers.



# Construction Access Route

FIGURE 5

View Drive. In a worst-case scenario, during stage 4, pouring six temporary shoring piles is expected to partially block up to five feet of the Grand View Drive right of way for up to three hours. A temporary and partial blockage of up to five feet of Grand View Drive would still allow cars to pass. Given that construction equipment would be staged off of Grand View in an on-site equipment staging area and based on the physical dimensions of the equipment anticipated – a bobcat, mini-excavator, and drilling rig – project construction equipment would not completely block the full roadbed of Grand View Drive.

Construction within the temporary on-site equipment staging area would generally proceed from the inside out, meaning contractors would widen Crisler Way from a temporary 10 ft width at the intersection of Crisler Way and Grand View at the edge of Lot 95 where the temporary staging area would be located. Upon completion of the roadway to the end of Lot 96, and the foundation for House 96, contactors would backtrack to Lot 95. This approach would allow work crews to approach the transition from Crisler Way to Grand View Drive from the inside and not from Grand View itself, therefore avoiding interference with local traffic and work within the existing roadbed of Grand View Drive.

### *Construction Work Hours*

Unless stated otherwise, construction activities would be performed in accordance with all applicable federal laws, state statutes, and City codes with respect to building construction and activities. All project-related construction activities will occur only between the hours of 8:00 AM and 4:00 PM (with construction personnel arriving no earlier than 8:00 AM and departing no later than 5:00 PM) Monday through Friday; no work will occur on Saturdays until the construction activities are confined to inside work. No construction work will be performed on all Sundays and locally-recognized holidays.

In addition to complying with LAMC restrictions, the Applicant has committed to project design features[10] to avoid or minimize potential construction-related impacts on the surrounding neighborhood. Project design features during construction consist of the following:

- Construction crews will not work on Saturdays until the construction activities are confined to inside work.
- The contractor will shuttle workers to the Project Site to avoid construction traffic and parking on Grand View Drive.
- Construction crews will not work on Thursdays, trash collection days, until the initial on-site construction staging area on lot #95 is created.
- Within the first two weeks of construction, the contractor will install primary and secondary debris protection walls on all four lots.

These project design features, which exceed LAMC requirements, would effectively minimize potential impacts on neighboring residences during construction; however, these voluntary features are not required to avoid a potentially significant impact and there would be no new significant impacts if these project design features were not included in this Project. The primary and secondary debris protection walls shown in Figure 4, Construction Site Plan, would be built with #10 rebar (1.27-inch nominal diameter) at four (4) feet on center with ¾ inch plywood installed over the rebar. The lower (secondary) debris wall would go over the new property line fence during construction to protect downslope properties.[11]

[10] CAC Development, Crisler Way, April 12, 2016.
[11] CAC Development, Email correspondence with Envicom Corporation, June 18, 2018

### *Construction Equipment*

Different phases of construction require the use of different types of on-road and off-road construction equipment. Anticipated construction equipment is provided in **Table 3-7, Off-Road Equipment for Project Construction**. On-road construction vehicles would consist of one ten-wheel 24' flatbed truck, cement trucks with a six-cubic-yard-capacity, a shuttle van, powered hand tools, and other equipment necessary.

**Table 3-7**
**Off-Road Equipment for Project Construction**

| Construction Phase | Off-Road Equipment | Dimensions |
|---|---|---|
| Site Preparation, Grading, and Roadway Improvement | 1 "Bobcat" skid steer loader – S300 | 72" x 72" |
| | 1 mini excavator – G35 | 62" x 86" |
| | 1 drilling rig G135 with boom | 8' x 20' |
| | 1 roller (compacter) | 101" x 52" |
| | 1 paver | 166" x 60" |
| Rough Vertical Construction | 1 rough terrain forklift | 142" x 86.5" |
| | 1 Bobcat loader – S300 | 72" x 72" |
| Source: CAC Development, email correspondence with Envicom Corporation, Dec. 19, 2016, and Construction Management Schedule from Rigo's Construction, Foundation Contractor. | | |

The off-road construction equipment shown on Table 3-7 would be delivered and offloaded to the Project Site on one 24-foot long flat-bed truck and stored off of Grand View Drive on the initial on-site equipment staging area on Lot 95. The drilling rig would be equipped with a boom within the 20-foot vehicle length shown in Table 3-7, a separate crane would not be needed.

### *Temporary Street Closures*

With consideration of the narrow hillside roadway widths and curves in the vicinity, the proposed construction access route is shown in in Figure 5. By shuttling the construction crew to and from the Project Site, creating an initial on-site equipment staging area on Lot 95, and a temporary on-site equipment staging area as the construction of Crisler Way progresses, the Project is not expected to result in the need for temporary street closures.

Initial equipment and material deliveries, estimated at 15 minutes in duration, would partially obstruct the portion of Grand View Drive adjacent to the Project Site on an intermittent basis. Pouring six temporary shoring piles estimated at up to three hours in duration, and utility relocations/hook-ups would result in partial obstruction but would leave sufficient space for vehicles to pass. As detailed in the Construction Management Schedule provided in Exhibit C of the response to comments letter in Appendix N, site deliveries would be timed to avoid peak commute periods and equipment staging would be organized to remain on site to reduce temporary impacts to the neighborhood. The first construction equipment to arrive at the construction site would be unloaded off of Grand View Drive and would create the pad for the on-site equipment staging area on the existing building foundation on Lot 95. Subsequently delivered construction equipment and material would be staged on-site for the duration of construction. Appropriate City agencies are responsible for reviewing and permitting construction traffic control plans in conformance to City standards.

## 3.9 REQUIRED ACTIONS

### *Zoning Administrator's Determination*

The Applicant is seeking a Zoning Administrator's Determination on each of the lots for construction, use, and maintenance of the proposed Crisler Way Residences which front a Substandard Hillside Limited Street that is not improved to a roadway width of 20 feet and does not have a vehicle access route from a street improved with a 20-foot wide continuous paved roadway to the boundary of the designated Hillside Area as required by the LAMC.

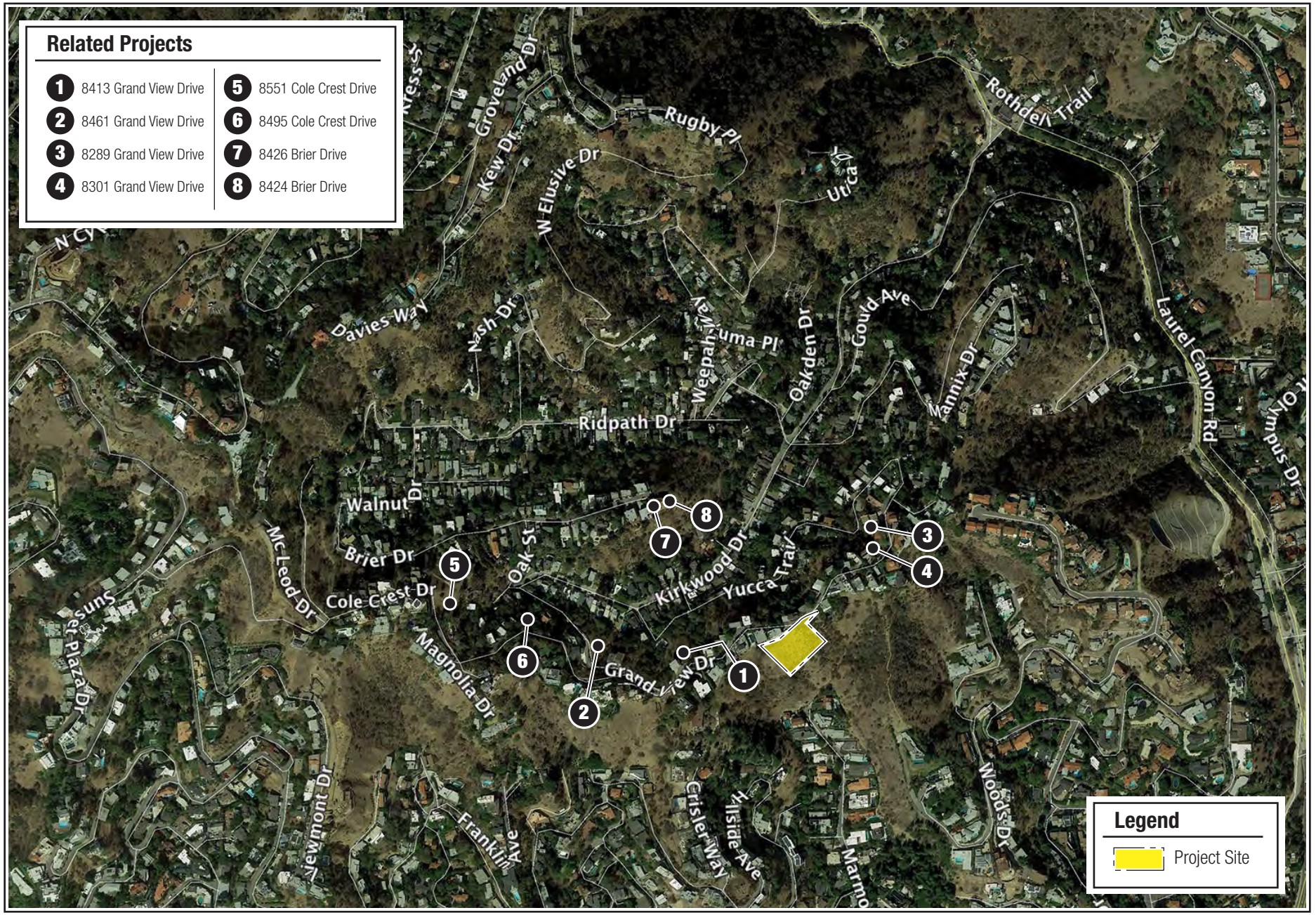
## 3.10 RELATED PROJECTS

The CEQA Guidelines define cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (Section 15355). This expanded Initial Study considers impacts of the proposed Project that are individually limited but cumulatively considerable. As defined in Appendix G, Environmental Checklist Form, of the CEQA Guidelines, "cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects, referred to as "related projects" in this Initial Study. Related projects include those recently approved, under construction, or reasonably foreseeable projects in proximity to the proposed Project Site. In coordination with Department of City Planning staff, a list of related projects used in conducting the cumulative impact analyses for this Project is presented in **Table 3-8, Related Projects List**.

**Table 3-8**
**Related Projects List**

| Project No. | Street Address | Description |
|---|---|---|
| 1 | 8413 Grand View Dr. | A Zoning Administrator Determination (ZAD) for a new 4-story single-family residence, 2,588 sq. ft., on a substandard street. (Case No. ZA-2014-2854-ZAD-ZAA) |
| 2 | 8461 Grand View Dr. | New single-family residence and driveway bridge from a less than 20 ft. wide paved roadway and a 10 ft. high retaining wall within the required front yard. (Case No. ZA-2015-718-ZAD-ZAA) |
| 3 | 8289 Grand View Dr. | Zone variance and zoning administrator determination to allow the construction, use, and maintenance of a new single-family dwelling with attached 2-car garage in the R1-1 zone. (Case No. ZA-2014-3436-ZV-ZAA-ZAD) |
| 4 | 8301 Grand View Dr. | New single-family dwelling consisting of a basement and three stories above ground. (Case No. ZA-2016-4722-ZV-ZAD-ZAA) |
| 5 | 8551 Cole Crest Dr. | New three-story, 1,798 sq. ft. single family dwelling with two-car garage. (Case No. ZA-2017-86-ZAD) |
| 6 | 8495 Cole Crest Dr. | A three-story, single-family dwelling with an attached two car garage, roof deck, and pool. (Case No. ZA-2017-9-ZAD) |
| 7 | 8426 Brier Drive | New 4,408 sq. ft. single-family dwelling. (Case No. ZA-2018-2917-ZAD) |
| 8 | 8424 Brier Drive | New 4,477 sq. ft. single-family dwelling. (Case No. ZA-2018-2920-ZAD) |
| Source: Coordination with City of Los Angeles, Department of City Planning, September 27, 2018. | | |

As shown in Table 3-8, this expanded Initial Study considers eight (8) related projects in the cumulative impact analysis in each of the environmental topics. All eight (8) related projects consist of the construction and operation of new individual single-family residences. The locations of these related projects in relation to the proposed Project Site are depicted in **Figure 6, Related Projects**; as shown, these related projects would rely on Kirkwood Drive for construction access. While Table 3-8 provides the location and description of the related projects sharing Kirkwood Drive for construction access, the status of each related project, such a permit application review, project approval, permit issuance, and the start of actual construction activity, varies considerably as each related project proceeds through public agency permitting and approval processes. In the case of the proposed Project, the proposed improvements to Crisler Way are considered an on-site aspect of the Project that would also serve as a temporary on-site equipment staging area during Project construction, thereby avoiding construction parking and staging activities on Grand View Drive and avoiding the need for temporary road closures.




Aerial Source: GoogleEarth Pro, Oct. 18, 2016.



# Related Projects Map

FIGURE 6

# 4.0 INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

**City of Los Angeles Department of City Planning**

CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY AND CHECKLIST

**1. Project title:**
1800, 1806, 1812, and 1818 Crisler Way Residences Project

**2. Lead agency name and address:**
City of Los Angeles
Department of City Planning
Central Project Planning Division
200 N. Spring Street, Room 621
Los Angeles, CA 90012

**3. Contact person and phone number:**
Mr. Jason Hernández; 213.978.1276

**4. Project locations:**
1800, 1806, 1812, and 1818 Crisler Way
Los Angeles, CA, 90069

**5. Project sponsor's name and address:**
CAC Development
18193 Knoll Hill
Granada Hills, CA 91344
Attn: Mr. Robert Anderson

**6. General plan designation:**
Low II Residential

**7. Zoning:**
R1-1 (one-family dwelling)

**8. Description of project:**
Construction and operation of four (4) single-family residences on four (4) contiguous lots (Lot Numbers 95-98 of Tract 865) and improvement of the Crisler Way paper street right-of-way, a Substandard Hillside Limited Street not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area as required by the Los Angeles Municipal Code.

**9. Surrounding land uses and setting:**
Developed and undeveloped hillside residential parcels zoned one-Family Residential (R1-1). Developed parcels contain existing single-family residences and undeveloped parcels contain vacant land located along winding, narrow, hillside roads.

**10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**
No other public agency approvals are required.

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☒ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☒ Geology/Soils | ☐ Greenhouse Gas Emissions | ☒ Hazards & Hazardous Materials |
| ☐ Hydrology/Water Quality | ☐ Land Use/Planning | ☐ Mineral Resources |
| ☒ Noise | ☐ Population/Housing | ☐ Public Services |
| ☐ Recreation | ☒ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities/ Service Systems | ☒ Wildfire | ☐ Mandatory Findings of Significance |

## DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, an EIR Addendum will be prepared.

Signature: _____ Date: 9/23/2019

Name:

| | | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|---|
| **I.** | **AESTHETICS.** Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a. | Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b. | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway? | ☐ | ☐ | ☒ | ☐ |
| c. | Substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| d. | Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project have a substantial adverse effect on a scenic vista?***

**Less-than-significant Impact.** Based on the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project introduces incompatible visual elements within a field of view containing a scenic vista or substantially blocks views of a scenic vista. Scenic vistas are generally described in two ways: panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, or feature of interest).

The Hollywood Community Plan does not designate a scenic vista from the Project Site, neither is the Project site located in the viewshed of a designated scenic vista in the Hollywood Community Plan. The Project site is not located in, or visible from, a designated scenic vista or protected viewshed in an adopted land use plan. Therefore, development of the Project Site would not have a substantial adverse effect on a scenic vista from a panoramic view. The proposed residences would be visible in the context of other existing hillside residences in northerly-directed focal views from the terminus of Marmont Avenue. The Project is similar in appearance to existing single-family residences in the vicinity and this focal viewpoint is not a designated scenic vista in an adopted land use plan. Therefore, the Project site would have a less-than-significant impact on a scenic vista.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

**Less-than-significant Impact**. A significant impact would occur if scenic resources would be damaged or removed by development of a project. The Hollywood Community Plan designates Laurel Canyon Blvd. as a local scenic secondary highway; due to the topographical elevation changes from the east-facing slopes

of Laurel Canyon, the Project Site would not be visible from Laurel Canyon Blvd.[12] The State designates Topanga Canyon as a scenic highway, but the subject site is over 10 miles away and blocked by intervening topography. The Project would not substantially damage scenic resources, including trees, rock outcroppings, and historic structures. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

**Less-than-significant Impact**. A significant impact could occur if the proposed Project were to introduce incompatible visual elements on the project site or visual elements that would be incompatible with the character of the area surrounding the project site. The Project Site is located within the foothills of a developed and urbanized area of the City. The existing visual character of the Project Site and surroundings consist of sloping hillsides and canyons with existing one-family residences along the southern foothills of the Santa Monica Mountains. The Project would alter the existing views of the Project Site and immediately surrounding area in a manner compatible with the existing hillside residential character of the Hollywood Hills area of the City. The Project would be visually compatible with the surrounding neighborhood and the proposed single-family residential land uses are consistent with single-family residential uses in the area. As such, the project would not conflict with applicable zoning and other regulations governing scenic quality. (Refer to page 80 below for a discussion of the Project's general consistency with the zoning for the Project Site.)

### *Building Heights and Massing*

The Project Site is located in a hillside residential neighborhood characterized by multi-level houses with accessory features such as pools, pool decks, and retaining walls. The Project would develop the property consistent with the current single-family residential character of development within the surrounding neighborhood. As discussed under topic XI. Land Use and Planning, the proposed building heights would not conflict with the applicable LAMC height restrictions. In addition, the building heights of the Project would not have a substantial adverse effect on southerly directed views from existing residences along Grand View Drive because the highest roof levels of the proposed residences would be below the base floor elevations of existing residences directly to the north.

The sizes of the proposed residences would be: 1,710 sq. ft. on Lot 95, 1,653 sq. ft. on Lot 96, 1,710 on Lot 97, and 1,221 sq. ft. on Lot 98. The size of the existing residences the nearest developed parcel to the east is 2,699 sq. ft., the north along Crisler Way: 2,860 sq. ft, 2,108 sq. ft., and 3,368 sq. ft., to the south at the terminus of Marmont Avenue: 2,810 sq. ft. and 2,808 sq. ft., and to the west along Grand View Drive, 2,123 sq. ft. The size of the proposed residences would be consistent with the existing visual character of the Site and its surroundings. Therefore, the proposed Project's aesthetic impacts with respect to building height and massing would be less-than-significant.

### *Views*

Existing views of the Project Site are available from neighboring residential properties along Grand View Drive, Crisler Way, Hillside Avenue, Hillside Way, Marmont Ave. and from distant mid-city locations. The Project would afford the proposed residences expansive views of the west side of the City, similar to views from existing residences along Grand View Drive. Although the proposed residences would consist

[12] Los Angeles Dept. of City Planning, Hollywood Community Plan, General Plan Land Use Map, April 2014.

of multiple levels, each successive level would decrease in elevation along the hillside such that only potions of the uppermost street level would rise above, and therefore be visible from, the improved portion of Crisler Way and from existing residences with south facing views from Grand View Drive. The roof levels for each of the proposed residences would progressively decrease from east to west along the decreasing elevation of Crisler Way with the following elevations: House 95, 1,018 feet; House 96, 1,009 feet, House 97, 1,005 feet, House 98, 1,002 feet.[13] The lowest floor elevation of the existing residences to the south of Grand View Drive, moving from east to west, begins at an elevation of 1,018 feet on lot 505, 1,015 feet on lot 504, and 1,012 feet on lot 503; therefore, the lowest floor elevation of these existing residences begins at a higher elevation than the proposed Project. The highest roof levels of the proposed residences would be below the base floor elevation of the existing residences. Due to these differences in elevation between the highest roof of the proposed residences and the lowest floor of the existing residences, the Project would not have a substantial adverse effect on southerly directed views from existing residences along Grand View Drive directly to the north. Therefore, impacts on views from existing residences on Grand View Drive and from Grand View Drive would be less-than-significant.

The proposed residences would be in the visual setting of other existing hillside residences from the terminus of Marmont Avenue. An existing hillside residence at 8334 Grand View Drive is approximately 150 feet east of the Project area and constructed on the hillside with a swimming pool at the lowest level similar to proposed project. Given the Project is similar in scale and appearance to existing single-family residences in the vicinity, the Project would not substantially degrade the existing visual character or quality of the Site and surroundings.

### *Landscaping*

The landscape plan would be consistent with City Department of Building and Safety Green Building Code standards and would not result in significant impacts to the visual character and aesthetics of the surroundings. Landscaping would be compatible with the existing visual character of the surrounding area and would partially screen visibility of the Project Site in views from adjacent residences. Therefore, aesthetic impacts would be less-than-significant.

The proposed Project would be visually compatible with the surrounding neighborhood; therefore, the Project impact on the existing visual character and quality of the site and surroundings would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***d. Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?***

**Less-than-significant Impact.** A significant impact may occur if a project introduces new sources of light or glare on a site which would be incompatible with the surrounding area, or which pose a safety hazard to motorists on adjacent streets or freeways. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether the proposed Project results in a significant nighttime illumination impact should consider the following factors: (1) the change in ambient illumination levels as a result of proposed Project sources; and (2) the extent to which proposed Project lighting would spill off the Project Site and affect adjacent light-sensitive areas.

[13] Project Level Floor Plan/Exterior Elevations, Sheet #A-4, Robert Anderson, Architect, Date Printed: 3-12-15.

### *Light*

Nighttime lighting would be limited to the extent necessary to illuminate the building entrances and landscape areas to provide both adequate night visibility and security for residents and visitors. Nighttime lighting for the proposed residences would be consistent with the area and would be low in height, shielded, and directed downward to minimize light spillover pursuant to LAMC standards. Therefore, light impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.[14]

### *Glare*

Reflective surfaces that could potentially produce glare in the Project vicinity include traveling vehicles and those parked on nearby streets, exterior building windows, and surfaces of brightly painted buildings. Excessive glare not only restricts visibility but also increases the ambient heat reflectivity in a given area. proposed landscaping consists of trees, ground cover, and shrubs to enhance the visual appeal of the built environment. Windows installed as part of the Project would be consistent with LAMC standards and would not generate a substantial amount of glare. The Project does not propose highly polished materials or highly reflective metals and glass that could reflect light and create glare. The Project would not create a new source of substantial glare affecting day or nighttime views of the area. Additionally, the architectural materials to be used for the exterior would be limited to materials that do not cause excessive glare. Therefore, glare impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight (8) related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous aesthetics analysis, including views, scenic resources, shade, and shadow.

The related projects nearest the Project Site are located at 8413 (Related Project #1) and 8301 Grand View Drive (Related Project #4), see Figure 6, Related Projects Map. These related projects would be approximately 450 feet east and west of the proposed Project and adjacent to existing residences along Grand View Drive. Views of these two (2) and the other six (6) related projects in the vicinity are obstructed by the existing built environment, intervening hillside terrain, and mature landscaping. These related projects do not feature prominently within the field view from the Project Site. Therefore, development of the related projects would not result in a significant impact on the Project visual setting, the aesthetic impact of the related projects would not combine with the Project to result in a cumulative aesthetic impact. Reasonably foreseeable development would be reviewed for consistency with adopted plans and regulations, such as LAMC Article 6.1 – Review of Development Projects – and would be subject to the review and approval of the Department of City Planning for plan consistency prior to issuance of building permits. Related project approvals are reasonably anticipated to allow landscape and signage that would be aesthetically compatible with the surrounding neighborhood.

Reflective surfaces that could produce glare in the Project vicinity include traveling vehicles and those parked on nearby streets, exterior building windows, and surfaces of brightly painted buildings. Excessive glare can restrict visibility and increases the ambient heat reflectivity in a given area. Landscape plans for the proposed and related projects would consist of trees, ground cover, and shrubs to enhance the visual

[14] For purposes of this IS/MND, compliance with the requirements of the LAMC is considered a regulatory compliance measure and not a CEQA mitigation measure. However, regulatory compliance measures will be enforced through conditions of approval.

appeal of the built environment. Windows installed on related projects would be reviewed for consistency with LAMC standards and would not generate substantial glare. The lighting for related projects can reasonably be expected to: 1) be limited to that necessary for nighttime safety and security; and 2) comply with the standards specified in LAMC Chapter IX, Article 9, Green Building Code.

The proposed Project and related projects are all single-family residences required to comply with LAMC building height limitations, effectively reducing potential shade and shadow cumulative impacts to less-than-significant. Compliance with regulatory requirements would reduce the Project impact to aesthetics to less than significant. The cumulative aesthetic impact of related projects would also be less-than-significant through regulatory compliance, no mitigation measures are required.

| | | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|---|
| **II.** | **AGRICULTURE AND FORESTRY RESOURCES**. Would the project: | | | | |
| a. | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b. | Conflict the existing zoning for agricultural use, or a Williamson Act Contract? | ☐ | ☐ | ☐ | ☒ |
| c. | Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d. | Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e. | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

***a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

**No Impact.** A significant impact would occur if the proposed Project would convert designated farmland to non-agricultural uses. The Project Site is located within the foothills of a developed and urbanized area of the City. No farmland or agricultural activity exists on or near the Project Site. According to the California Department of Conservation "Los Angeles County Important Farmland 2016" map, the Project site is not designated as farmland.[15] No portion of the Project Site is designated as Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. Therefore, no impacts would occur.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

**No Impact.** A significant impact would occur if the proposed Project conflicted with existing agricultural zoning or agricultural parcels enrolled under the Williamson Act. The Project Site is located within City jurisdiction and is subject to the applicable land use plans and zoning requirements of the LAMC. The current zoning is R1-1 and land use designation is Low II Residential in the Hollywood Community Plan. The Project Site is not zoned for agricultural production, there is no farmland at the Project Site, and no

[15] California Department of Conservation, Division of Land Resource Protection, Los Angeles County Important Farmland 2016, ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/los16.pdf.

Williamson Act Contracts are in effect for the Project Site.[16] The Project Site is not zoned as forestland or timberland, there is no timberland production at the Project Site. Therefore, no impacts would occur.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

**No Impact.** A significant impact would occur if the proposed Project conflicted with existing zoning or caused rezoning of forest land or timberland, or result in the loss of forest land to non-forest use. The Project Site is not zoned as forestland or timberland, and there is no timberland production at the Project Site. Therefore, no impacts would occur.

***Mitigation Measures:*** No mitigation measures are required.

***d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?***

**No Impact.** A significant impact would occur if the proposed Project conflicted with existing zoning or caused rezoning of forest land or timberland, or resulted in the loss of forest land to non-forest use. No designated forested lands exist on or near the Project Site. The Project would develop residential uses within the existing neighborhood and would consequently, not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impacts would occur.

***Mitigation Measures:*** No mitigation measures are required.

***e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?***

**No Impact.** A significant impact would occur if the proposed Project caused the conversion of farmland to non-agricultural use. Neither the Project Site, nor nearby properties, are currently utilized for agricultural or forestry uses. The Project Site is not classified in any "Farmland" category designated by the State of California. Therefore, no impacts would occur.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

The Project Site and related projects are located in developed areas of the City and do not contain any agricultural or forest lands.

[16] California Department of Conservation, Division of Land Resource Protection, "Los Angeles County Williamson Act FY 2012/2013" (2016), http://www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx.

| | | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|---|
| **III.** | **AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project result in: | | | | |
| a. | Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b. | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☒ | ☐ |
| c. | Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| d. | Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

The following impact analysis is based on the Air Quality and GHG Impact Analysis prepared by Giroux and Associates dated December 14, 2018, provided in **Appendix D**.

***a. Would the project conflict with or obstruct implementation of the applicable air quality plan?***

**Less-than-significant Impact.** Based on the *L.A. CEQA Thresholds Guide*, a significant air quality impact may occur if a project is not consistent with the applicable Air Quality Management Plan (AQMP) or would represent a substantial hindrance to employing the policies or obtaining the goals of that plan. In the case of projects proposed within the City or elsewhere in the South Coast Air Basin (SCAB or "Basin"), the applicable plan is the AQMP prepared by the South Coast Air Management District (SCAQMD). The SCAQMD is the agency responsible for comprehensive air pollution control in the Basin. As a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and cooperates actively with all State and federal agencies. The SCAQMD develops regulations, establishes permitting requirements, inspects emissions sources, and enforces such standards though educational programs or fines.

The SCAQMD is responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. Therefore, SCAQMD has prepared a series of AQMPs which are required to be updated every three years. The Final 2016 AQMP dated March 2017 is the most recent. The 2016 AQMP has a new approach focusing on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement.[17] These planning efforts have substantially decreased the population's exposure to unhealthy levels of pollutants, even with substantial population growth within the Basin. The current deadlines for all federal non-attainment pollutants are identified in **Table 4.3-1, Latest Attainment Years**.

[17] South Coast AQMD, "Air Quality Management Plan" http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan (accessed October 24, 2017).

**Table 4.3-1**
**Latest Attainment Years**

| Standard and Concentration | Classification | Latest Attainment Year |
|---|---|---|
| 2008 8-hour ozone (75 ppb) | Extreme | 2031 |
| 2012 Annual PM2.5 (12 μg/$m^3$) | Moderate<br>Serious | 2021<br>2025 |
| 2006 24-hour PM2.5 (35 μg/$m^3$) | Serious | 2019 |
| 1997 8-hour Ozone (80 ppb) | Extreme | 2023 |
| 1979 1-hour Ozone (120 ppb) | Extreme | 2022 |
| Source: SCAQMD, Final 2016 AQMP, Table ES-1, pg. ES-2. | | |

Nitrogen oxide (NOx) emissions, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the attainment deadlines shown in Table 4.3-1 to be met. Unless additional NOx control measures are adopted and implemented, attainment goals may not be met. Projects consistent with the employment and population projections in the Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) are considered consistent with the AQMP growth projections because the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP.

The Project does not directly relate to the AQMP because there are no specific air quality programs or regulations governing residential projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. While acknowledging that the AQMP is a growth-accommodating document, the SCAQMD does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Therefore, the following air quality impact analysis of the proposed Project has been conducted in relation to applicable thresholds. The Project would contribute to regional and localized air pollutant emissions during construction and operation. These emissions have the potential to exceed SCAQMD emissions thresholds and are therefore forecasted and measured against the SCAQMD emissions thresholds for the construction and operational phases of the Project.

***Construction Emissions***

Dust is typically the primary air quality concern during construction of new buildings. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). These parameters are not known with any reasonable certainty prior to project development and may change from day to day. Any assignment of specific parameters to an unknown future date is speculative and conjectural.

The SCAQMD developed an air emissions modeling program called the California Emissions Estimator Model (CalEEMod) to calculate both construction and operational emissions from a variety of land use projects. CalEEMod calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual Greenhouse Gas (GHG) emissions. The Clean Air Act requires the Environmental Protection Agency to set National Ambient Air Quality Standards National Ambient Air Quality Standards. These standards specify maximum allowable concentrations of six "criteria" pollutants in outdoor air. The six (6) criteria pollutants are carbon monoxide (CO), lead, ground-level ozone, nitrogen dioxide ($NO_2$), particulate matter (PM-10 and PM-2.5), and sulfur dioxide ($SO_2$). Reactive Organic Gases (ROG) means any compound of carbon with exceptions specified by the California Air Resources Board (CARB). Although exhaust emissions will result from on and off-site heavy equipment, the exact types and numbers

of equipment will vary among contractors such that such emissions cannot be quantified with certainty. Estimated construction emissions were modeled using CalEEMod2016.3.2 to identify maximum daily emissions for each pollutant during Project construction. The modeled construction equipment fleet and schedule is appended to the Air Quality Impact Analysis provided in Appendix D. Using this equipment fleet, the following "worst-case" daily construction emissions are provided in **Table 4.3-2, Project Construction Activity Emissions**.

**Table 4.3-2**
**Project Construction Activity Emissions**

| Maximal Construction Emissions | Maximum Daily Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | **ROG** | **NOx** | **CO** | **$SO_2$** | **PM-10** | **PM-2.5** |
| Year 2019 Site Prep and Grading | 1.1 | 11.9 | 11.6 | 0.0 | 1.6 | 1.0 |
| Year 2019 Vertical Construction | 0.4 | 3.3 | 3.9 | 0.0 | 0.5 | 0.2 |
| Year 2020 Vertical Construction | 0.4 | 3.1 | 3.9 | 0.0 | 0.4 | 0.2 |
| **Total Year 2019** | **1.5** | **15.2** | **15.5** | **0.0** | **2.1** | **1.2** |
| **Total Year 2020** | **0.4** | **3.1** | **3.9** | **0.0** | **0.4** | **0.2** |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |
| **Exceeds Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |
| Source: Air Quality and GHG Impact Analysis, Giroux and Associates, December 14, 2018. | | | | | | |

As shown in Table 4.3-2, calculated peak daily construction activity emissions are below SCAQMD CEQA thresholds without mitigation. Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure. Peak daily construction activity emissions are estimated to be below SCAQMD thresholds without the need for mitigation. Therefore, construction air quality impacts would be less-than-significant.

### *Operational Impacts*

Operational emissions were also calculated using CalEEMod2016.3.2 for an assumed Project build-out year of 2021 as a target for full occupancy. Default trip generation data for single-family housing in the Project area was used to estimate the number trips the Project would generate as explained in Appendix D. In addition to mobile sources from vehicles, general development causes smaller amounts of "area source" air pollution to be generated from on-site energy consumption (primarily landscaping) and from off-site electrical generation (lighting). These sources represent a minimal percentage of the total Project NOx and CO burdens, and a few percent of other pollutants. The inclusion of such emissions adds negligibly to the total significant Project-related emissions burden as shown in **Table 4.3-3, Project Daily Operational Impacts**.

**Table 4.3-3**
**Project Daily Operational Impacts**

| | Operational Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| **Source** | **ROG** | **NOx** | **CO** | **$SO_2$** | **PM-10** | **PM-2.5** |
| Area | 1.2 | 0.1 | 2.4 | 0.0 | 0.3 | 0.3 |
| Energy | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mobile | 0.1 | 0.4 | 1.0 | 0.0 | 0.3 | 0.1 |
| **Total** | **1.3** | **0.6** | **3.4** | **0.0** | **0.6** | **0.4** |
| SCAQMD Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Exceeds Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |
| Source: Air Quality and GHG Impact Analysis, Giroux and Associates, December 14, 2018. | | | | | | |

As seen in Table 4.3-3, the Project would not cause any operational emissions to exceed their respective SCAQMD significance thresholds. Operational emission impacts are less-than-significant; no mitigation for operational emission is necessary.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?***

**Less-than-significant Impact.** Based on the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project would add a considerable cumulative contribution to federal or State nonattainment pollutants. As the Basin is currently in State nonattainment for ozone, nitrogen dioxide (NO2), PM-10 and PM-2.5, related projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. In regard to determining the significance of the Project contribution, the SCAQMD neither recommends quantified analyses of construction and operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts. Furthermore, SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions, then the development project would not generate a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed, the Project would not generate construction or operational emissions that exceed the SCAQMD's recommended regional thresholds of significance. The Project would not generate a cumulatively considerable increase in emissions of the pollutants for which the Basin is in nonattainment. Construction activities are not anticipated to exceed SCAQMD thresholds. Nevertheless, construction contractors would be required to comply with existing SCAQMD and City regulations pertaining to the control of fugitive dust and diesel exhaust. Given Project construction and operational emissions would not exceed SCAQMD thresholds, and through compliance with existing regulatory requirements, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project expose sensitive receptors to substantial pollutant concentrations?***

**Less-than-significant Impact.** Project construction activities and operations, as described above, may increase air emissions above current levels. Also, concentrations of pollutants may have the potential to impact nearby sensitive receptors. Sensitive receptors are defined as schools, residential homes, hospitals, resident care facilities, daycare centers or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality.

The SCAQMD has developed parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for is optional. For the Project, the primary source of a possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility. LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500-meter source-receptor distances. For this Project, the nearest sensitive receptors are modeled with the most conservative distance of 25 meters. The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for one (1), two (2) and five (5) acre sites for varying distances. For this Project, the most stringent thresholds for a 1-acre site were applied.

For an LST analysis, only emissions occurring on-site are evaluated while emissions occurring off-site such as those associated with on-road truck haul for material disposal or on-road construction crew commuting are excluded. LSTs were compared to the maximum daily construction activities. The applicable maximum thresholds and emissions determined (pounds per day) are provided in **Table 4.3-4, LST and Project Emissions (pounds/day)**.

**Table 4.3-4**
**LST and Project Emission (pounds/day)**

| LST 1.0 acres/25 meters NW Coastal LA County | Emissions (pounds/day) | | | |
|---|---|---|---|---|
| | **CO** | **NOx** | **PM-10** | **PM-2.5 [a]** |
| Max Project Emissions 2019 | 16 | 15 | 2 | 1 |
| Max Project Emissions 2020 | 4 | 3 | 1 | 1 |
| Max Allowable On-Site Emissions | 1,531 | 103 | 4 | 3 |
| **Exceeds Threshold?** | **No** | **No** | **No** | **No** |

Source: Air Quality and GHG Impact Analysis, Giroux and Associates, December 14, 2018.
[a] emissions reported include compliance with SCAQMD Rule 403 requiring watering for fugitive dust control.

As shown in Table 4.3-4, emissions are below the LST for construction thresholds without the application of any mitigation measures. Therefore, LST impacts are less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

**Less-than-significant Impact**. A significant impact would occur if other emissions (such as those leading to odors) would adversely impact sensitive receptors. Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As the Project involves no elements related to these types of activities, no odors are anticipated from Project operations. Construction, activities such as the operation of equipment, the application of asphalt and architectural coatings, and other interior and exterior finishes may produce discernible temporary odors typical of construction sites. As construction-related emissions dissipate from the construction area, potential odors associated with these emissions would also decrease, dilute, and become unnoticeable. Trash receptacles located near adjacent residences could produce temporary nuisance odors; however, receptacles will be covered and emptied regularly, reducing odor potential. Therefore, the Project would have less-than-significant impacts.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous air quality analysis for the proposed Project, including air quality standards, substantial contributions to an existing or projected air quality violations, and a cumulatively considerable net increases of any criteria pollutant for which the Project region is non-attainment under applicable federal or state ambient air quality standards. The following impact analysis is based on the Cumulative Air Quality, Greenhouse Gas, and Noise Analysis prepared by Giroux and Associates dated December 14, 2018, provided in **Appendix L**.

Because the South Coast Air Basin is in non-attainment for ozone and PM-2.5, new projects in the Basin could exceed an air quality standard or contribute to an existing or projected air quality exceedance. With regard to determining the significance of the Project contribution, the SCAQMD considers any construction-related or operational emissions from individual projects that exceed the project-specific thresholds of significance to be considered cumulatively considerable. As shown in Table 4.3-2 and Table 4.3-3 and discussed previously, the Project would not generate construction or operational emissions that exceed the SCAQMD's recommended regional thresholds of significance. Therefore, the Project would not generate a cumulatively considerable increase in emissions of the pollutants for which the Basin is in nonattainment. Nevertheless, this cumulative impact analysis considered the construction and operational air quality impacts of the eight related projects along the construction access route of the proposed Project in combination with the proposed Project. This cumulative air quality analysis assumed half of the eight new homes will balance grading on site and half will require 1,500 cubic yards of earthwork export.[18] Because the local roads are narrow, the air quality analysis assumed the use of smaller 10 cubic yards capacity dump trucks for soil hauling, resulting in the assumed generation of 300 truck trips (one way).

### *Cumulative Construction Emissions*

The California Air Resources Board created a tool for estimating emissions from on-road vehicles, called Emissions Factor (EMFAC) 2017 to calculate truck emissions associated with hauling earthworks. These emissions calculations were based on the mileage to the Sunshine Canyon Landfill in Sylmar, the closest

[18] Jason Hernández, Central Project Planning Division, City of Los Angeles, Department of City Planning, telephone communication with Envicom Corporation, September 25, 2017.

disposal area. The landfill is about 22 miles from the Project Site. Therefore, the 1,200 one-way truck trips would require a total of 26,400 miles of on-road travel. Assuming all soil haul occurs within a two-week period, the daily haul emissions for 2,640 miles per day (26,400 total miles/10 days) are provided in **Table 4.3-5, Related Project Truck Haul Emissions**.

**Table 4.3-5**
**Related Project Truck Haul Emissions**

| Maximal Haul Emissions | Daily Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
| **Year 2019** | 1.9 | 42.1 | 8.3 | 0.1 | 1.0 | 0.9 |
| Source: EMFAC2017 Output, Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux and Associates, December 14, 2018. | | | | | | |

Combining the emissions from truck hauling for the related projects shown in Table 4.3-5 with emissions from construction equipment would produce the cumulative emissions provided in **Table 4.3-6, Cumulative Construction and Earthworks Haul Emissions**. Cumulative emissions consist of construction of the Project in connection with the eight related projects plus truck trips.

**Table 4.3-6**
**Cumulative Construction and Earthworks Haul Emissions**

| Maximal Construction Emissions | Maximum Daily Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
| **Year 2019** | 5.2 | 77.8 | 43.1 | 0.1 | 5.8 | 3.9 |
| **Year 2020** | 1.2 | 9.3 | 11.7 | 0.0 | 1.2 | 0.6 |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |
| **Exceeds threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |
| Source: Cumulative Air Quality, Greenhouse Gas, & Noise Analysis, Giroux and Associates, December 14, 2018. | | | | | | |

As shown in Table 4.3-6, even if all 12 homes were constructed at the same time and undergo grading at the same time, daily emissions are still projected to be less than the SCAQMD thresholds with a healthy margin of safety.

### *Localized Truck Haul Emissions*

The SCAQMD developed parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs) and evaluate peak day emissions. The worst-case assumption is four related projects undergo simultaneous grading and hauling. If all soil hauling occurs over a two-week period, there will be 300 truck trips/10 days = 120 trips per day. For this localized analysis, all trucking associated with soil disposal was assumed to overlap on the same day. The 120 daily haul trips could impact a single home and extend for an assumed 1,000 linear foot impact zone per haul truck. Therefore, a single home could be exposed to 22.7 miles of exhaust during a worst-case day (120 trips x 1,000 feet = 22.7 miles). When spread across a localized area of 22.7 miles, in a worst-case scenario involving 120 truck trips in one day, related project construction could generate the totals shown in **Table 4.3-7, Localized Emissions Along Truck Haul Route**.

**Table 4.3-7**
**Localized Emissions Along Truck Haul Route**

| Maximal Haul Emissions | Daily Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
| **Year 2019** | 0.01 | 0.33 | 0.05 | < 0.01 | 0.01 | 0.01 |
| Source: Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux and Associates, December 14, 2018. | | | | | | |

**Table 4.3-8, Haul Truck Emissions and Localized Significance Thresholds**, provides a comparison of these localized impacts along the truck haul route to the most stringent LST thresholds for a 1-acre site with a 25-meter separation distance in northwest Coastal LA County.

**Table 4.3-8**
**Haul Truck Emissions and Localized Significance Thresholds**

| LST 1.0 acres/25 meters NW Coastal LA County | Emissions (pounds/day) | | | |
|---|---|---|---|---|
| | CO | NOx | PM-10 | PM-2.5 |
| Max Haul Emissions | 0.05 | 0.33 | 0.01 | 0.1 |
| **Max Allowable Emissions Per Receptor** | 1,531 | 103 | 4 | 3 |
| **Exceeds threshold?** | **No** | **No** | **No** | **No** |
| Source: Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux and Associates, December 14, 2018. | | | | |

As shown in Table 4.3-8, localized emissions would remain below the LST thresholds with a significant margin of safety. Therefore, localized air quality emissions associated with truck hauling on common routes would have a less-than-significant impact.

### *Cumulative Operational Impacts*

The following summarizes the operational air quality impact of the Crisler Way Project plus the eight (8) related projects for a cumulative impact total. **Table 4.3-9, Cumulative Operational Air Quality Impacts**, provides totals.

**Table 4.3-9**
**Cumulative Operational Air Quality Impacts**

| | Daily Operational Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| **Source** | **ROG** | **NOx** | **CO** | **$SO_2$** | **PM-10** | **PM-2.5** |
| Area | 3.6 | 0.3 | 7.2 | 0.0 | 0.9 | 0.9 |
| Energy | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0 |
| Mobile | 0.3 | 1.2 | 3.0 | 0.0 | 0.9 | 0.3 |
| **Total** | **3.9** | **1.5** | **10.2** | **0.0** | **1.8** | **1.2** |
| SCAQMD Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Exceeds Threshold? | No | No | No | No | No | No |
| Source: Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux & Associates, December 14, 2018. | | | | | | |

As shown in Table 4.3-9, the cumulative operational impacts of all 12 residences are much less than the suggested SCAQMD thresholds. Cumulative operational emissions are less-than-significant with a healthy margin of error. Therefore, construction and operational cumulative air quality impacts associated with the proposed and related projects would be less-than-significant.

| | | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|---|
| **IV.** | **BIOLOGICAL RESOURCES.** Would the project: | | | | |
| a. | Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b. | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c. | Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d. | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☒ | ☐ |
| e. | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f. | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

The following impact analysis is based on a biological resources survey of APNs 5556-022-002 through 5556-022-004, hereafter referred to as the study area, conducted by Envicom Corporation Biologist Mr. Tyler Barns on October 13, 2016. Plant and wildlife species observed by Envicom during the site survey and supporting data are provided in **Appendix E**, Biological Resources Data.

***a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

**Potentially Significant Unless Mitigation Incorporated.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on biological resources if it could result in: (1) the loss of individuals, or the reduction of existing habitat of a State- or federal-listed endangered, threatened, rare, protected, candidate, or sensitive species or a Species of Special Concern; (2) the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in

a locally designated natural habitat or plant community; or (3) interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise or light) to a degree that may diminish the chances for long-term survival of a sensitive species.

***Special-Status Wildlife Species***

This assessment of impacts to special-status wildlife considers species listed, proposed for listing, or meeting criteria for listing as Endangered or Threatened under the Federal Endangered Species Act or California Endangered Species Act; and those with a designation of SSC (California Species of Special Concern) or CFP (California Fully Protected), as mandatory special consideration and/or protection of these species is required pursuant to the Federal Endangered Species Act, the State Endangered Species Act, and/or CEQA.

Most of the special-status wildlife species that potentially occur at the site are capable of escaping harm during Project development, including grading or fuel modification, while a few are vulnerable to direct impacts, including injury and mortality. Special-status species that could be directly impacted include potentially-occurring land dwelling animals consisting of:

- Coast horned lizard (*Phrynosoma blainvillii*) [SSC]
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*) [SSC]
- San Bernardino ringneck snake (*Diadophis punctatus modestus*) [SSC]
- San Diego mountain kingsnake (*Lampropeltis zonata pulchra*) [SSC]
- San Diego desert woodrat (*Neotoma lepida intermedia*) [SSC]
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) [SSC]

The coast horned lizard, coast patch-nosed snake, San Diego desert woodrat, have a low potential for occurrence at the site. The presence of San Bernardino ringneck snake or San Diego mountain kingsnake is possible, although unlikely. The Los Angeles pocket mouse has an unlikely potential for occurrence. The presence of the following species of gastropod and arachnid is possible, although unlikely:

- Trask shoulderband snail (*Helminthoglypta traskii traskii*)
- Gertschs socalchemmis spider (*Socalchemmis gertschii*)

Given the relatively small size of the proposed Project's development footprint, and because wildlife species are generally capable of escaping harm, direct loss or injury to individuals of a special-status wildlife species would be considered a less-than-significant impact. In addition, because the surrounding level of development and the amount of remaining suitable habitat in the surrounding area, the habitat loss associated with the Project would not significantly impact a population of any of these species.

***Nesting Birds***

Birds may be exposed to noise and other disturbance during construction, but these activities are typical of urban environments and these species are acclimated to these types of disturbance. Populations of common bird species, including migratory birds, are typically stable, and the loss of individuals would not substantially affect the species' population. Additionally, species of bats considered to be special concern are regulated through CEQA and California Fish and Game Code Section 4150.

Ground and vegetation disturbing activities, if conducted during the nesting bird season (February 1 to August 31), would have the potential to result in removal or disturbance to trees and shrubs that could contain active bird nests. In addition, these activities would affect herbaceous vegetation that could support and conceal ground-nesting species. Birds nesting in the vicinity of Project activities may potentially be

disturbed by noise, lighting, dust, and human activities associated with the Project, which could result in nesting failure and the loss of eggs or nestlings. Project activities that result in the loss of bird nests, eggs, and young, would be in violation of one or more of California Fish and Game Code sections 3503 (any bird nest), 3503.5 (birds-of-prey), or 3511 (Fully Protected birds). In addition, removal or destruction of one or more active nests of any other birds listed by the federal Migratory Bird Treaty Act of 1918 (MBTA), whether nest damage was due to vegetation removal or to other construction activities, would be considered a violation of the MBTA and California Fish and Game Code Section 3511.

However, direct and indirect impacts to migratory nesting birds would be avoided through compliance with the Migratory Bird Treaty Act (16 U.S.C. 703–712) and California Fish and Game Code Sections 3503.5, 3503, and 3513. As a regulatory requirement, the Project would comply with nesting bird regulations by scheduling ground disturbing and/or vegetation trimming/removal activities to occur outside of the bird breeding season, conducting a preconstruction nesting bird survey prior to work within the general breeding season, and avoidance of active bird nests including appropriate avoidance buffers from active nests. The Project is not expected to have a significant impact on nesting birds with implementation of regulatory compliance measures.

***Potentially Occurring Special-Status Plant Species***

This evaluation of impacts to special-status plants considers those species that require mandatory special consideration and/or protection pursuant to the Federal Endangered Species Act, the State Endangered Species Act, and/or CEQA. Plants with a California Rare Plant Rank (CRPR) of 4 are not rare, but rather are included on a "watch list" of species with limited distribution. However, while plants in this category cannot be called "rare" from a statewide perspective, and very few, if any, are eligible for state listing, many of them are significant locally. For this reason, CNPS strongly recommends that CRPR 4 plants be evaluated for consideration during preparation of environmental documents, which may be particularly appropriate for: the type locality of a CRPR 4 plant; populations at the periphery of a species' range; areas where the taxon is especially uncommon; areas where the taxon has sustained heavy losses; or, populations exhibiting unusual morphology or occurring on unusual substrates.

Based the California Natural Diversity Database results provided in Appendix E, 12 federal-listed, state-listed, or CRPR 4 plant species have a low potential to occur within the Project site. The federal and state listed species include Braunton's milk-vetch (*Astragalus brauntonii*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), San Bernardino aster (*Symphyotrichum defoliatum*), slender mariposa-lily (*Calochortus clavatus* var. *gracilis*), Davidson's bush-mallow (*Malacothamnus davidsonii*), and many-stemmed dudleya (*Dudleya multicaulis*). Catalina mariposa lily (*Calochortus catalinae*), Plummer's mariposa lily (*Calochortus plummerae*), western dichondra (*Dichondra occidentalis*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), and fragrant pitcher sage (*Lepechinia fragrans*) have a CRPR of 4.2.

Based on the biological resources survey, these species are not anticipated within the Project Site. These species were not observed during the Site survey and the species are not anticipated given the Site topography and community composition. In addition, the nearest recorded observation of a sensitive plant species, Braunton's milk-vetch, was recorded in 1930 and is listed as possibly extirpated from the area. The natural habitat within the Project Site is degraded and under continual fuel modification practices, which likely preclude sensitive species from occurring. The construction contractor would be responsible for complying with all terms of general permit conditions and approved Site plans. Nevertheless, sensitive plant species may occur outside of the limits of disturbance. Impacts to these species would be a potentially significant impact. Implementation of **MM BIO-1**, which lists general conditions to protect habitats, would reduce impacts to potentially-occurring special-status species to less than significant.

***Mitigation Measures***

**MM BIO-1: General Conditions**

The following measures shall be implemented during the construction phase to avoid impacts to native habitats and ephemeral drainages adjacent to or in the vicinity of the limits of disturbance, as well as special-status flora and fauna associated with these habitats.

a) Prior to all ground disturbing and construction activities, the Applicant shall demarcate the Project limits of disturbance to prevent encroachment of Project activities into adjacent native areas.
b) All construction and maintenance activities, except in an emergency, shall be limited to the hours of 7:00 a.m. to 7:00 p.m.
c) If construction lighting is required, then lighting shall be pointed away from native habitats and shall be pointed downward and shielded to the extent practicable.
d) No pets shall be allowed on the Project site.
e) All food-related trash shall be disposed of in closed animal-proof containers.
f) All trenches shall be filled within the same day, or escape ramps will be constructed if trenches are to be left open overnight.
g) All Project related equipment and vehicles shall be cleaned and decontaminated of weeds and soils prior to entering the Project site to reduce the potential for the spread and introduction of invasive and noxious weeds.

***b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

**Less-than-significant Impact.** The Project includes the development of four single-family residences, including ancillary access improvements on an approximately 0.46-acre Project Site. Development of the Project site as proposed would result in conversion of some of the Site's natural habitat into structures, pavement (roadway and parking areas), and landscaping. Given the size of the proposed Project, these proposed impacts on the area's biological resources would not constitute a significant adverse effect.

A review of the California Department of Fish and Wildlife's Natural Diversity Database (CNDDB) Rarefind 5 application in the Hollywood Quadrangle area, or within adjacent quadrangles, reveals reports of eight (8) Sensitive Plant Communities/Habitats. These Sensitive Plant Communities/Habitats include:

- California Walnut Woodland
- Riversidian Alluvial Fan Sage Scrub;
- Southern Cottonwood Willow Riparian Forest;
- Southern Coast Live Oak Riparian Forest;
- Southern Coastal Salt Marsh;
- Southern Dune Scrub;
- Southern Sycamore Alder Riparian Woodland; and
- Walnut Forest

There are no sensitive plant communities within the study area. Plant communities were correlated with those plant communities included in the *Vegetation Classification of the Santa Monica Mountains Natural*

*Recreation Area and Environs in Ventura and Los Angeles Counties, California* (CDFW/CNPS, January 2006), and the *List of Vegetation Alliances and Associations (Natural Communities List*) (CDFW, September 2010). These documents provide lists of officially recognized plant communities occurring in the Santa Monica Mountains and environs and in the State of California, respectively. In these documents, each plant community is assigned a conservation status rank (also known as "rarity rank"), which is used to determine the sensitivity of the plant community. Plant communities with global or state status ranks of G1 through G3, or S1 through S3, respectively, are considered to be sensitive, and are referred to as "natural communities of special concern." Plant communities are classified based on plant species composition and abundance, as well as the underlying abiotic conditions of the stand, such as slope, aspect, or soil type. Plant communities within the study area are primarily herbaceous and developed or disturbed.

***Herbaceous***

Laurel Sumac / Fountain Grass Swards

This non-native herbaceous association occurs on flat to very steep, often southerly facing slopes within the study area. The community is dominated solely by fountain grass (*Pennisetum setaceum*) in the herbaceous layer but includes native laurel sumac in the shrub layer. The California Invasive Plant Council (Cal-IPC) lists fountain grass as an invasive plant with its potential to impact native ecosystems as moderate because thick infestations of the grass, as found in the study area, interfere with regeneration of native plant species.

***Other Communities***

Individual Trees

No protected trees were observed within the Project Site. A few individual native and non-native trees occur within and adjacent to the subject properties. These trees are considered inclusions within laurel sumac/fountain grass sward community. Southern California native tree species, including southern California black walnut, western sycamore, and California bay trees meeting certain size requirements are protected pursuant to the City's Protected Tree Ordinance. One southern California black walnut was observed east of the study area.

Barren or Sparsely Vegetated (Ruderal)

Barren or sparsely vegetated (ruderal) areas consist primarily of sparse cover of non-native ruderal species or are devoid of vegetation. These areas have been graded or cleared of vegetation and may be mowed or otherwise disturbed on a regular basis. These areas generally lack native species. Due to their non-native condition, these areas are clearly not sensitive.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

**No Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on biological resources if it could result in the alteration of an existing wetland habitat. The Biological Resources Data included in Appendix E included a review of the U.S. Fish and Wildlife Service National Wetlands Inventory. No wetlands or non-wetland waters or natural stream channels occur within the site. Therefore, no impact would occur.

***d. Would the project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on biological resources if it could result in the interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species. The Conservation Element of the City of Los Angeles General Plan discusses important habitats within the City and wildlife corridors linking larger habitat areas.[19] Inland habitats include undeveloped areas, especially in the mountains, parks, bodies of water, and other lands with extensive vegetation. Significant Ecological Areas (SEAs) are habitats that have been designated by Los Angeles County as important for the promotion of biodiversity. Additionally, the Conservation Element discusses efforts to identify wildlife corridors that establish linkages between habitat areas and provide movement of animals between those areas. Within the City, there are few SEAs, most of them existing in areas of unincorporated Los Angeles County.

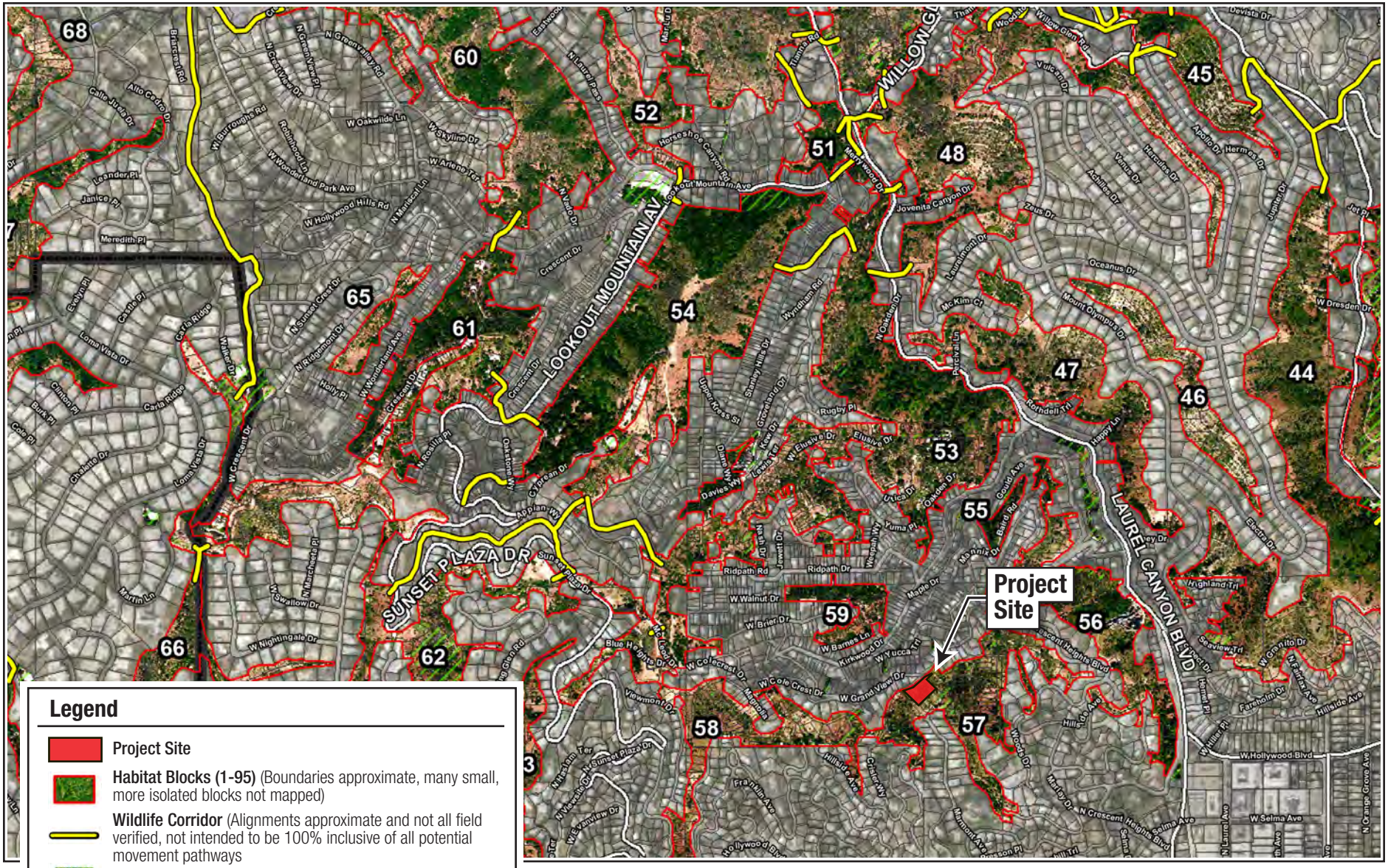
The Project site is not located near an SEA, an identified wildlife movement corridor, or near native wildlife nursery sites.[20] The term 'wildlife corridor' describes physical connections that allow wildlife to move between areas of suitable habitat in both undisturbed landscapes, or landscapes fragmented by urban development. The Project Site is not located within a designated wildlife corridors or habitat linkages identified in the South Coast Missing Linkages analysis conducted by South Coast Wildlands (2008), but it is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map (SMMC 2017). As shown in **Figure 7, Habitat Linkages Map**, there is no direct wildlife corridor from Habitat Block No. 57 to another Habitat Block. The nearest designated wildlife corridor is located northwest of the Project site and connects Habitat Block 58 to Blocks 54 and 62 (SMMC 2017). As illustrated in Figure 3, Proposed Site Plan, development would be clustered to the northernmost portion of the subject property, immediately adjacent to the proposed improvements to the Crisler Way right-of-way. As such, the proposed Project would not sever wildlife movement, as the southern portion of the subject lots would be left undeveloped. Thus, east-west wildlife movement would continue to be available in the area.

The Project Site occurs on a hill with steep slopes immediately surrounded by residential development on the north, east, and west. Although no riparian features or wildlife trails were observed during the site visit, the hillside to the south is contiguous with a band of natural vegetation that could provide suitable habitat for wildlife movement, as well as potentially suitable live-in habitat for smaller wildlife species (i.e., reptiles, birds, and small mammals). The proposed development footprint does not provide habitat linkage to these areas. Thus, given the isolated and primarily disturbed nature of the study area and the lack of access from the Project Site to other natural areas that provide high quality suitable habitat for wildlife species to traverse, the Project Site does not provide suitable habitat linkages or wildlife corridors.

The Project setting is urban, and the site contains remnant building foundations adjacent to existing surface streets associated with residential land uses that border portions of the subject property. Nevertheless, because the Project site is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map (SMMC 2017), the linkage could be affected by Project construction and operation (e.g., night time lighting and noise). Project construction and operation activities would primarily occur during the daytime hours as specified in the LAMC, limiting the potential noise and lighting impacts

[19] City of Los Angeles, Department of City Planning, General Plan, "Conservation Element" (adopted 2001).

[20] County of Los Angeles, Department of Regional Planning, General Plan 2035, Figure 9.2, Regional Habitat Linkages. Adopted October 6, 2015; and South Coast Wildlands, South Coast Missing Linkages: A Linkage Design for the Santa Monica – Sierra Madre Connection (Penrod et al. 2006).




Source: Santa Monica Mountains Conservancy, State of California, May 2017.



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# Habitat Linkages Map

FEET 0 1,000 2,000

FIGURE 7

during the nighttime hours when most wildlife species likely to traverse the area would be active. As such, significant direct and/or indirect impacts to wildlife corridors and habitat connectivity are not anticipated. Thus, the construction and operation of the proposed residences and improvement of Crisler Way fronting the residential lots would not substantially interfere with migratory corridors or impede wildlife movement and impacts to wildlife corridors and habitat linkages would be less-than-significant, no avoidance or mitigation measures are recommended.

***Mitigation Measures:*** No mitigation measures are required.

***e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

**No Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project-related, significant adverse effect could occur if a project were to cause an impact that is inconsistent with local regulations pertaining to biological resources, such as the City of Los Angeles Protected Tree Ordinance.[21]

The tree ordinance provides local regulations regarding tree protections, removal permitting, and replacements if applicable. Given that there are no protected trees within the site, no impact would occur.

***Mitigation Measures:*** No mitigation measures are required.

***f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

**No Impact.** A significant impact would occur if the proposed project would be inconsistent with mapping or policies in any conservation plans of the types cited. The Project Site is not part of any draft or adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or State habitat conservation plan. Therefore, there would be no impact to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight (8) related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous biological resource analysis. The Project Site and the related projects are located in a developed, urban area in the City. However, it is unknown whether or not any of the properties on which the related projects are located contain biological resources, such as sensitive species or protected trees. Although the impact of the Project on biological resources is limited to the Site, the combined impacts from the eight related projects shown in Figure 6, Related Projects Map, would extend beyond the Project Site.

As described in response to Checklist Questions IV.a above, with mitigation, the proposed Project would result in a less-than-significant impact to special-status biological resources. As discussed in response to Checklist Questions IV.b. and IV.d., the project impact to sensitive natural communities and the movement of any resident or migratory wildlife species would be less-than-significant. A significant impact to biological resources is typically based on the Project's impact on known sensitive species and/or the loss

[21] City of Los Angeles, Los Angeles Tree Ordinance (No. 177404), LAMC, sec. 12.21.

of suitable habitat. The Project Site is dominated by disturbed laurel sumac scrub infested with exotic, non-native fountain grass. In addition, the Site is bounded by residential development to the north, east, and west; thus, provides low quality habitat for species of special concern. Given the proposed Project would not affect any rare, threatened, or endangered species, nor result in the removal of special-status native habitat, the Project contribution to a cumulatively considerable impact is less-than-significant. However, if the proposed Project and the eight related projects were to undergo construction simultaneously, then there could be impacts (i.e., noise and lighting impacts) to wildlife movement in the general area. Direct and indirect impacts to migratory nesting birds would be avoided with compliance with the Migratory Bird Treaty Act (16 U.S.C. 703–712) and California Fish and Game Code Sections 3503.5, 3503, and 3513. The Project would comply with nesting bird regulations by including scheduling ground disturbing and/or vegetation trimming/removal activities outside of the bird breeding season, conducting a preconstruction nesting bird survey prior to work within the general breeding season, and avoidance of active bird nests including appropriate avoidance buffers from active nests. As such, cumulative impacts to special-status biological resources would be considered less-than-significant, additional avoidance and mitigation measures are not required.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES:** Would the project: | | | | |
| a. Cause a substantial adverse change in significance of a historical resource pursuant to §15064.5? | ☐ | ☐ | ☐ | ☒ |
| b. Cause a substantial adverse change in significance of an archaeological resource pursuant to §15064.5? | ☐ | ☐ | ☒ | ☐ |
| c. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☒ | ☐ |

The following responses are based on the results of a Records Search Request and Phase I(a) Cultural Resource Assessment of the project site conducted by Envicom Corporation dated November 22, 2016, provided in **Appendix F**.

***a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?***

**No Impact.** Based on the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a proposed project would disturb historic resources that presently exist within the proposed Project Site. The Project Site is vacant and contains no existing buildings. No ancillary structures are present on the Project Site that definitively meet the 50-year age threshold for typical consideration for the National Register of Historic Places or the California Register of Historical Resources, or as a City Historic-Cultural Landmark. Also, the results of the South Central Coastal Information Center (SCCIC) record search were negative for built environment resources within the Project Site. Therefore, the Project will not cause a substantial adverse change to a historic resource and no impacts would occur.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if grading or excavation activities would disturb existing archaeological resources within a project site. The Phase I(a) Cultural Resource Assessment was negative for cultural resources within the Project Site area. No archaeological sites (historic or prehistoric) were identified within the Project Site by the record search or the Phase I(a) Cultural Resource Assessment consisting of a pedestrian survey of the property by qualified archaeologists. The record search also did not identify any archaeological sites within the 0.25-mile study area; however, a single built environment resource was identified within the surrounding 0.25-mile study area. Both the pedestrian survey and record search suggest that subsurface archaeological resources are unlikely. Given that the presence or absence of such subsurface materials cannot be determined until the site is excavated, no further evaluation of this issue is warranted at this time. However, the possibility of encountering archaeological resources does exist considering the Project proposes to grade approximately 800 cubic yards of earth material to a depth of approximately 30 feet. In the unlikely event any archaeological resources are discovered during excavation or grading, any potential impact would be reduced through compliance with applicable regulations requiring that work cease in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2.

Applicable regulations prohibit construction personnel from collecting or moving any archaeological materials and associated materials. Construction activity may continue unimpeded on other portions of the Project Site. Any found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Through compliance with these regulatory requirements, the potential impact of disturbing a known or unknown archaeological resource as a result of the proposed development would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project disturb any human remains, including those interred outside of formal cemeteries?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project-related, significant adverse effect could occur if grading or excavation activities associated with the proposed Project would disturb previously interred human remains. While no formal cemeteries, other places of human interment, or burial grounds or sites are known to occur within the Project area, there is always a possibility that human remains can be encountered during construction, as the Project proposes to grade approximately 800 cubic yards of earth material to a depth of approximately 30 feet. If human remains are encountered unexpectedly during construction demolition and/or grading activities, the potential impact would be further reduced with the applicable regulations specified in State Health and Safety Code Section 7050.5 requiring that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code Section 5097.98. If human remains of Native American origin are discovered during project construction, compliance with state laws, which fall within the jurisdiction of the Native American Heritage Commission (Public Resource Code Section 5097), relating to the disposition of Native American burials will be adhered to. Therefore, in conjunction with regulatory requirements, impacts related to encountering human remains unexpectedly during construction, demolition, and/or grading activities as a result of the proposed development would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight (8) related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous cultural resource impact analysis. The Project Site does not contain any known historical, archaeological, or paleontological resources and would therefore not result in significant impacts to cultural resources. It is unknown if cultural resources exist on the related project sites, nevertheless, like the Project, related projects would be required to comply with applicable regulatory requirements in the event they are encountered during construction. Cumulative impacts to cultural resources would therefore be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less- Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. ENERGY** | | | | |
| Would the project: | | | | |
| a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☒ | ☐ |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

**Less-than-significant Impact.** The City's Green Building Ordinance (No 181,480) amended Chapter IX of the LAMC to add the Green Building Code and incorporate provisions of the latest California Green Building Standards (CALGreen). As a regulatory requirement, the project will be must comply with the efficiency standards specified in the California Building Standards Code, Title 24 of the California Code of Regulations (CCR), in effect at the time of building permit issuance. Title 24 is comprised of 12 parts, including Part 6, the California Energy Code (CEC) and Part 11, of the CALGreen Code.[22]

The CEC sets energy and water conservation requirements for new construction. The CEC sets performance standards that allow for an energy budget, builders may comply with these standards using different methods to meet performance standards.[23] The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in planning, energy efficiency, water efficiency, material conservation and environmental quality. The provisions of CALGreen apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure.[24]

The Los Angeles Green Building Code (LAGBC) is found in Article 9 of Chapter IX of the LAMC. The LAGBC adopts by reference CALGreen, which the State mandated to attain consistency among the various local jurisdictions, reduce building energy and water use, reduce waste, and reduce the carbon footprint.[25] The proposed development's new residential structures would be required to be built to comply with efficiency regulations of the applicable State and City efficiency standards. Such standards require incorporation of efficiency features including but not limited to structural efficiency, appliances and lighting, heating and air conditioning, water fixtures and water efficient landscaping. As shown on the

[22] Department of General Services, Division of the State Architect. Overview Title 24 Building Standards Code as Adopted by the Division of the State Architect, https://www.dgs.ca.gov/DSA/Resources/Page-Content/Resources-List-Folder/Title-24 (accessed August 26, 2019).

[23] California Energy Commission, 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, For the 2019 Building Energy Efficiency Standards (December 2018).

[24] California Buildings Standards Commission, 2016 California Green Building Standards Code, California Code of Regulations, Title 24, Part 11 (July 2016).

[25] Los Angeles Department of Water and Power, Green Building and Sustainability, https://www.ladbs.org/services/green-building-sustainability (accessed August 26, 2019).

Green Building Notes (Plan Sheet A-1.1) provided in Appendix S, the project would include various energy-saving features including solar panels, outlets equipped for electric vehicle chargers, reduced water flow fixtures such as showerheads, faucets, toilets, washers and dishwashers, and energy-saving LED fixtures. Compliance with State and City energy efficiency standards and project design features would reduce impacts related to energy efficiency to less than significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

**Less-than-significant Impact.** As a regulatory requirement, the Project will be consistent with applicable state and local plans for renewable energy and efficiency, specifically, the LAMC which incorporates CALGreen and California Green Code standards in effect at the time of building permit issuance. These standards require applicable projects to provide energy saving features. The CALGreen Code establishes minimum standards for energy efficient construction practices. The Project would be built up to the latest codes in effect at time of building permit issuance. The Project would result in four (4) single-family residences and accessory features in compliance with CALGreen and California Green Code standards, which would not conflict with a state or local plan for renewable energy or energy efficiency. As such, compliance with regulatory requirements and project design features, as shown above, would reduce energy impacts to less than significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight (8) related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous energy impact analysis. Related projects would be required to similarly comply with applicable state and local regulations, specifically the LAMC which incorporates CALGreen and California Green code standard, pertaining to the energy use and efficiency. As with the Project, adherence to applicable regulations and codes requiring energy efficient project features for planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, would reduce energy impacts to less-than-significant. Therefore, cumulative impacts related to energy would be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. GEOLOGY AND SOILS.** Would the project: | | | | |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii. Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv. Landslides? | ☐ | ☐ | ☒ | ☐ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☒ | ☐ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geological features? | ☐ | ☐ | ☒ | ☐ |

Unless noted otherwise, the following impact analysis is based on the LADBS Geology and Soils Report Approval Letter ("LADBS Approval Letter") dated April 10, 2015, and the Geology and Soils Reports referenced therein as listed in **Table 4.7-1, Project Geology and Soils Reports**. The LADBS Approval Letter and selected Geology and Soils reports are provided in **Appendix G**. As noted in the LADBS Approval Letter, the Project Site is located on an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope. Earth materials identified at subsurface exploration locations consist of up to two (2) feet of uncertified fill underlain by silty sand, natural residual soils, and granite bedrock. A regional topographic map showing the site and a geologic cross section showing the entire south-east facing slope and subsurface earth materials and geologic structure is provided on pages six through eight of the C.Y. Geotech report dated November 26, 2014, provided in Appendix G of this MND. Appendices B and C of the C.Y. Geotech report dated June 8, 2018, provides a topographic map, cross section, and additional slope stability analysis.

**Table 4.7-1**
**Project Geology and Soils Reports**

| Geology Report | Report Number | Date of Document | Prepared By |
|---|---|---|---|
| Response to Geology and Soils Questions from Review of MND* | CYG-14-7350 | June 8, 2018 | C.Y. Geotech, Inc. |
| Addendum Report* | CYG-14-7350 | 03/31/2015 | C.Y. Geotech, Inc. |
| Department Correction Letter | 79258-01 | 03/23/2015 | LADBS |
| Addendum Report* | CYG-14-7350 | 11/26/2014 | C.Y. Geotech, Inc. |
| Responsibility Letter | CYG-14-7350 | 11/10/2014 | C.Y. Geotech, Inc. |
| Department Correction Letter | 79258 | 01/30/2013 | LADBS |
| Geology/Soil Report* | PG 1091 | 09/19/2012 | GeoMatrix |
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log #23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | Geosystems |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |
| * Technical Report provided in Appendix G of this MND, other reports listed are available in the Project case file maintained by the City and upon request from the Applicant. | | | |

***a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

***i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project site is located within a State-designated Alquist-Priolo Zone or other designated fault zone. Alquist-Priolo Earthquake Fault Zones encompass surface traces of active faults with potential for future surface fault rupture. Fault rupture occurs when movement on a fault breaks through the earth's surface. Faults that show evidence of movement within the past 11,000 years (during the Holocene Epoch) are referred to as active faults. The California Geological Survey establishes regulatory zones around active faults, called Alquist-Priolo Earthquake Fault Zones. These zones extend from 200 to 500 feet on each side of the known fault. The zones identify areas where a potential surface fault rupture could prove hazardous for buildings used for human occupancy. Development located within an Alquist-Priolo Earthquake Fault Zone or other designated fault zone is required to prepare special geotechnical studies to characterize hazards from any potential surface ruptures. The Hollywood Fault is the nearest known fault to the Project Site. The Site is not located in the Alquist-Priolo Fault Zone for the Hollywood Fault[26] or a Preliminary Fault Rupture Study Area.[27] Given the Project Site is not located within an Alquist-Priolo Fault Zone, the potential risk for surface fault rupture through the site is considered low. Therefore, impacts would be less-than-significant.

[26] California Geological Survey, Earthquake Zones of Required Investigation Hollywood Quadrangle, Earthquake Fault Zones Official Map, November 6, 2014, http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM.pdf (accessed November 2016).

[27] Los Angeles Dept. of City Planning, ZIMAS, Seismic Hazards, http://zimas.lacity.org (accessed November 2016).

***Mitigation Measures:*** No mitigation measures are required.

*ii. Strong seismic ground shaking?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project represents an increased risk to public safety or destruction of property by exposing people, property, or infrastructure to seismically induced ground shaking hazards greater than the average risk associated with other locations in Southern California. The Project Site is located within a seismically active region, as is all of Southern California. The intensity of ground shaking depends primarily on the earthquake's magnitude, distance from the source, and the site response characteristics. Several active and potentially active faults could affect the Project Site. The potential for ground shaking to result in ground failure impacts are discussed and evaluated below in subsections VII. a.iii. and VII.a.iv.

Although future earthquakes could result in a perceptible degree of seismic ground shaking at the Site, the ground shaking would not be considered strong or of sufficient strength to expose people or structures to potential substantial adverse effects. Current California Building Codes and seismic standards specified in the Los Angeles Building Code as approved by the LADBS require that new buildings be designed to resist ground shaking through the use of shear panels, moment frames, and structural reinforcement. The design and construction of the Project would be required to conform to current Building Codes and the Site-specific geotechnical recommendations of the previously prepared Geology and Soils Reports to minimize potential impacts due to strong seismic ground shaking. Therefore, seismic ground shaking impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

*iii. Seismic-related ground failure, including liquefaction?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project site is located within a liquefaction zone. Liquefaction is the loss of soil strength or stiffness due to buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine- to medium-grained, cohesionless soils. The State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that the Project Site is not located within an area designed as a liquefaction zone, where historical occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements.[28] Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

*iv. Landslides?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A project-related, significant adverse effect may occur if the Project is located in a hillside area with soil conditions that would suggest a high potential for sliding. The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides.[29] As noted by

[28] California Geological Survey, Earthquake Zones of Required Investigation Hollywood Quadrangle, Earthquake Fault Zones Official Map, Seismic Hazard Zones, March 25, 1999, http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM.pdf (accessed November 2016).

[29] Ibid.

C.Y. Geotech, location in an earthquake-induced landslide zone means a site has a potential of earthquake induced landslide, not that a site will have an earthquake-induced landslide.

Although portions of the site are located within a potential earthquake-induced landslide zone mapped by in the California Division of Mines and Geology (renamed the California Geological Survey 2006), C.Y. Geotech found no evidence of deep-seated slope failure within the Project Site and no landslide was mapped within the Project Site or in the immediate vicinity in published geologic maps. In 1997, Geosystems analyzed the gross and surficial slope stability of the entire southeast-facing slope descending from Grand View Drive to the toe of the slope. The terms 'factor of safety' describe how much stronger a material is than it needs to be for an intended load. Geosystems' slope stability analysis indicated a factor of safety of 1.83, greater than the minimum code requirement of 1.50 in effect at the time. In 2001, Parmelee/Geology performed another analysis of static and seismic gross slope stability of the southeast-facing slope that indicated a factor of safety of 1.825, exceeding the minimum code requirement for static slope stability of 1.5, and 1.419, exceeding the minimum code requirement of 1.1 for seismic gross slope stability. In a geology report dated September 10, 2012, Geomatrix updated the static and seismic gross slope stability analysis, due to an updated requirement for the use of a seismic coefficient in the seismic slope stability analysis. The analysis in 2012 indicated a factor of safety of 1.814 for static slope stability, exceeding the minimum code requirement of 1.5 and a factor of safety of 1.260 for seismic slope stability, exceeding the minimum code requirement of 1.0. For informational purposes, the geology report prepared by C.Y. Geotech dated June 8, 2018 performed an additional seismic slope stability analysis using an update seismic coefficient to meet 2017 regulations. This analysis indicted a factor of safety of 1.129 which still exceeds the minimum code requirement.

The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced through review and approval of Geology and Soils Reports by the Department of Building and Safety. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

Based on a review of the Project Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided the Project complies with the conditions specified therein during site development. Therefore, through compliance with applicable regulatory requirements, impacts related to soil instability would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project result in substantial soil erosion or the loss of topsoil?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have significant sedimentation or erosion impacts if it would: (1) constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or (2) accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on site.

Although the Project has the potential to result in the erosion of soils during site preparation and construction, erosion would be reduced by implementation of stringent erosion controls imposed by the City through standard grading and building permit conditions. During Project operations, soil erosion would be minimized with the installation and maintenance of landscaping and stormwater collection and drainage. Although minor erosion and siltation could occur during grading, activities require grading permits from the LADBS, which include requirements and standards designed to limit potential impacts to acceptable levels. The Project would also install a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope.[30] In addition, on-site grading and site preparation would comply with applicable provisions of Chapter IX, Division 70 of the LAMC, which addresses grading, excavations, and fills. Through compliance with regulatory requirements and permit conditions, potential soil erosion impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

**Potentially Significant Unless Mitigation Incorporated.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it could cause or accelerate geologic hazards causing substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A significant impact may occur if the Project is built in an unstable area without site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property.

As discussed, the Site is located within an area subject to potential seismically-induced slope instability likely due to the presence of relatively steep slopes. Soil stabilization measures incorporated into the grading plan would include soil remediation, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to support the proposed structures. The Project would be required to incorporate slope reinforcement measures for compliance with City Code and site-specific recommendations by geology and soils engineers presented in previously-approved Geology and Soils Reports. As noted in the LADBS Approval Letter, the reports noted in Table 4.7-1 include an acceptable seismic slope stability analysis and the requirements of the 2014 City of Los Angeles Building Code have been satisfied. The City has indicated the referenced reports are acceptable provided that the Applicant complies with the conditions specified therein during development as required by mitigation measure **MM GEO-1**. There have been no changes to the physical condition of project site since issuance of the Geology and Soils Report Approval Letter on April 10, 2015, provided in Appendix G. For informational purposes, the geology report prepared by C.Y. Geotech dated June 8, 2018, performed an additional seismic slope stability analysis using an update seismic coefficient to meet 2017 regulations. This analysis indicted a factor of safety of 1.129 which still exceeds the minimum code requirement. Compliance with existing regulations and geology and soil engineer recommendations as required by MM GEO-1 for the evaluation and mitigation of earthquake-related hazards, and with the seismic safety requirements in the Uniform Building Code (UBC) and the LAMC would reduce impacts related to soil instability to less-than-significant.

Lateral spreading is a term referring to landslides that form on gentle slopes and have a fluid-like flow movement. Potential landslide impacts are addressed above in Subsection VII.a.iv.

[30] CAC Development, Crisler Way, April 12, 2016.

Subsidence is a form of ground failure that occurs when subsurface fluids such as groundwater or petroleum are extracted. The Seismic Hazard Zone Report for the Hollywood Quadrangle indicates that the historically-highest groundwater level at the site is greater than 40 feet below ground surface.[31] The Project proposes to grade approximately 800 cubic yards of earth material to a depth of approximately 30 feet. Therefore, no groundwater would be expected to be encountered during Project construction, and potential subsidence impacts would be less-than-significant. Subsection VII.a.iii. provides a discussion of liquefaction potential, which would not be present on the site as indicated by the California Geologic Survey Seismic Hazard Zone map. The Project would have no impact regarding liquefaction.

In summary, potential impacts related to soil instability would be less-than-significant because the Project would be required to comply with applicable regulatory requirements, City building codes, and implement site-specific recommendations of a soils engineer as required by MM GEO-1 to address soil stability. Therefore, impacts related to soil instability would be Potentially significant with mitigation incorporated.

***Mitigation Measures:***

**MM GEO-1: Geology and Soil Report Recommendations**

There have been no changes to the physical condition of project site since issuance of the Geology and Soils Report Approval Letter on April 10, 2015, by the Department of Building and Safety. Nonetheless, prior to the re-issuance of a grading or building permit, the Department of Building and Safety shall review the final plans to ensure the project incorporates the recommendations in the project Geology and Soils Report Approval Letter dated April 10, 2015 to the satisfaction of the Department of Building and Safety.

***d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

**Less-than-significant Impact.** Based the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A significant impact may occur if the Project is built on expansive soils without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property. Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation, heaving and cracking of building foundations could result.

The LADBS Approval Letter describes the earth materials of the Project Site, which include small amounts of up to two feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock. These materials are not considered expansive, as they would not contain significant amounts of clay particles with potential to swell or shrink. Construction of the Project would be required to comply with the City's applicable building codes, which include building foundation requirements appropriate to site-specific conditions. Therefore, soil expansiveness impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[31] California Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, California, 1998, Plate 1.2, Historically Highest Ground Water Contours and Borehole Log Data Locations, Hollywood Quadrangle. http://gmw.consrv.ca.gov/shmp/download/quad/HOLLYWOOD/reports/hollyeval.pdf (accessed November 2016).

***e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

**No Impact.** A project would cause a significant impact if adequate wastewater disposal is not available. The Project Site is located in a developed area of the City served by an existing wastewater collection, conveyance, and treatment system operated by LA Sanitation, a part of the City Department of Public Works. No septic tanks or alternative disposal systems are necessary, nor are they proposed. Therefore, no impact regarding septic tanks or alternative wastewater disposal systems would occur.

***Mitigation Measures:*** No mitigation measures are required.

***f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological features?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if grading or excavation activities were to disturb paleontological resources or geologic features that presently exist within a project site. The proposed Project Site and immediate surrounding areas were not studied for previously identified paleontological resources. However, the terrain of the Project area did not demonstrate any visible significant rock units.

However, considering the Project proposes to grade approximately 800 cubic yards of earth material to a depth of approximately 30 feet, the possibility of encountering unknown paleontological resources exists. In the unlikely event that any paleontological resources are discovered during excavation or grading, any potential impact would be reduced through compliance with regulatory requirements specified in California Public Resources Code Section 21083.2 and the Conservation Element of the City General Plan that states the City policy is to "continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities." These regulations would require the City Department of Building and Safety to be notified immediately and all work cease in the area of the find until a qualified paleontologist evaluates the find. Construction activity may continue unimpeded on other portions of the Project Site. The paleontologist may determine the location, the time frame, and the extent to which any monitoring of earthmoving activities shall be required. The found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Therefore, through compliance with these regulatory requirements, the potential for disturbing a known or unknown paleontological or geological resources as a result of the proposed development would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous geology and soils analysis. Geological hazards are site-specific and there is little connection between the hazards posed to the Project and those to related projects. Given that the region is seismically active, related projects would be at risk from similar geological hazards as the proposed Project. As with the Project, adherence to applicable regulations, building codes, engineering practices, and LADBS review processes would reduce geologic hazards to less-than-significant. Therefore, cumulative impacts related to geological hazards would be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. GREENHOUSE GAS EMISSIONS.** Would the project: | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

The following is based on the Air Quality and Greenhouse Gas (GHG) Impact Analysis prepared by Giroux and Associates provided in Appendix D.

***a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

**Less-than-significant Impact**. A significant impact would occur if a project generates Greenhouse Gases (GHG) that may have a significant impact on the environment. Greenhouse gases, so called because of their role in trapping heat near the surface of the earth, emitted by human activity are implicated in global climate change. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

Emissions identification may be quantitative, qualitative, or based on performance standards. CEQA guidelines allow the lead agency to "select the model or methodology it considers most appropriate." The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the following analysis.

In evaluating the significance of emissions, the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise. On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) $CO_2$ equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT $CO_2e$ for all land use projects although AQMD never finally adopted this standard. This 3,000 MT/year recommendation has been used as a guideline for this analysis.

**Construction Activity GHG Emissions**

The Project is assumed to require two years for construction. During Project construction, the CalEEMod2016.3.2 model predicts that the construction activities will generate the annual $CO_2e$ emissions identified in **Table 4.8-1, Construction Greenhouse Gas Emissions**.

**Table 4.8-1**
**Construction Greenhouse Gas Emissions**

| Year | Emissions (Metric Tons of $CO_2e$) |
|---|---|
| 2019 Grading/Prep | 288.0 |
| 2019 Construction | 95.1 |
| 2020 Construction | 22.8 |
| **Total** | **405.9** |
| **Amortized** | **13.5** |
| Guideline Threshold | 3,000 |
| **Exceeds Threshold?** | **No** |
| Source: Air Quality and GHG Impact Analysis, Giroux and Associates, December 14, 2018. | |

The SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. This amortized level is also provided above in Table 4.8-1. As shown in Table 4.8-1, construction GHG impacts are less-than-significant.

**Project Operational GHG Emissions**

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional $CO_2e$ emissions, are summarized in the CalEEMod2016.3.2 output files found in Appendix D. The total operational and annualized construction emissions for the proposed Project are identified in **Table 4.8-2, Operational Greenhouse Gas Emissions**.

**Table 4.8-2**
**Operational Greenhouse Gas Emissions**

| Consumption Source | Emissions (Metric Tons of $CO_2e$) |
|---|---|
| Area Sources | 1.4 |
| Energy Utilization | 24.2 |
| Mobile Source | 56.3 |
| Solid Waste Generation | 2.3 |
| Water Consumption | 3.3 |
| Construction | 13.5 |
| **Total** | **101.0** |
| Guideline Threshold | 3,000 |
| **Exceeds Threshold?** | **No** |
| Source: Air Quality & GHG Impact Analysis, Giroux & Associates, December 14, 2018. | |

As shown in Table 4.8-2, total Project GHG emissions are substantially below the proposed significance threshold of 3,000 MT suggested by the SCAQMD. Hence, the Project will not result in generation of a significant level of greenhouse gases and operational GHG impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

**Less-than-significant Impact.** A significant impact would occur if the proposed project conflicted with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs. There are several State statutes and at least three (3) California Executive Orders regarding greenhouse gases: AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. AB 32 is one of the most significant pieces of environmental legislation enacted in California. AB 32 maintains California's reputation as a "national and international leader on energy conservation and environmental stewardship" and has wide-ranging effects on California businesses and lifestyles. Beyond the broad and wide-ranging mandatory provisions and dramatic GHG reductions, a unique aspect of AB 32 is the short implementation time frames. Major components of the AB 32 include:

- Monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Immediate "early action" control programs on the most readily controlled GHG sources.
- A mandate that by 2020, California's GHG emissions be reduced to 1990 levels.
- An overall reduction of GHG gases in California by 25-40 percent, from business as usual, to be achieved by 2020.
- Complementary efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy, and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

The City published a climate action plan in 2007 titled "GreenLA." To provide detailed information on action items discussed in GreenLA, the City published an implementation document titled "ClimateLA." ClimateLA presents the existing GHG inventory for the City, includes enforceable GHG reduction requirements, provides mechanisms to monitor and evaluate progress, and includes mechanisms that allow the plan to be revised in order to meet targets. By 2030, the plan aims to reduce GHG emissions by 35 percent from 1990 levels, which were estimated to be approximately 54.1 million metric tons. Therefore, the City will need to lower annual GHG emissions to approximately 35.1 million metric tons per year by 2030. This voluntary plan identifies over 50 action items, grouped into focus areas, to reduce emissions.

To achieve these reductions, the City has developed strategies that focus on energy, water use, transportation, land use, waste, open space and greening, and economic factors. While the emphasis is first on municipal facilities and operations, several measures address programs to reduce emissions in the community.

The 2014 City Green Building Code, incorporating the requirements of the 2014 CALGreen statewide code, includes a wide variety of energy conservation measures applicable to new residential development. Because these are code requirements, they should be considered regulatory requirements and not discretionary GHG emissions reduction measures. The mandatory requirements for new residential construction (with some minor exceptions), include:

- Storm water drainage and retention during construction
- Proper site drainage through grading and paving
- At least one on-site electric vehicle charging station
- Cool roofs to reduce "heat-island" effect
- Solar ready wiring systems
- Low flow plumbing fixtures
- Drought-responsive outdoor water use
- Irrigation controllers
- Rodent proofing
- Construction waste reduction (>50%)
- Approved fireplaces (no-wood burning)
- Low VOC paints, coatings, adhesives, carpets
- Moisture control of building materials
- Exhaust fans (Energy Star-rated) in every bathroom
- High efficiency heating, venting and air conditioning

CALGreen also limits transmission heat loss and solar heat gain of windows. Except for unique windows, the code can only be met by dual-paned or better windows. Similarly, the state code requires high efficiency seals on doors to the outside. There are elective measures that can be implemented that exceed the minimums required by city/State codes. However, the scale of the Project is sufficiently limited such that GHG emissions thresholds will not be exceeded. Through compliance with the Green Building Code, GHG impacts will not exceed advisory emissions thresholds. The proposed Project will not interfere with compliance with plans and policies under AB-32.

Through code compliance with the LA Green Building Code, under which Building Permits were previously issued, the Project would be consistent with local and Statewide goals and policies aimed at reducing the generation of GHGs. Therefore, the Project's generation of GHG emissions would not conflict with, or make a cumulatively considerable contribution to conflicting with, an applicable plan, policy, or regulation for the purposes of reducing the emissions of greenhouse gasses.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous greenhouse gas emissions analysis, including greenhouse gas generation and conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As discussed previously in the Project greenhouse gas analysis, in September 2010 the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT $CO_2e$ for all land use projects. Consistent with the Project greenhouse gas analysis, this 3,000 MT/year recommendation has been used as a guideline for this cumulative analysis. In the absence of an officially adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

### *Construction GHG Emissions*

When viewed in connection with the four (4) residences proposed by the Project, construction of the eight (8) related projects would result in an increase in greenhouse gas emissions. This cumulative GHG analysis assumed half of the eight new homes will balance grading on site and half will require 1,500 cubic yards

of earthwork export. **Table 4.8-3, Cumulative Construction GHG Emissions**, provides the cumulative GHG impact form construction of the eight (8) related projects and the proposed Project.

**Table 4.8-3**
**Cumulative Construction GHG Emissions**

| Year | Construction Emissions (Metric Tons of $CO_2e$) | |
|---|---|---|
| | **Crisler Way Project Only** | **Cumulative** |
| 2019 Grading/Prep | 288.0 | 864.0 |
| 2019 Construction | 95.1 | 285.3 |
| 2020 Construction | 22.8 | 68.4 |
| Soil Haul | N/A | 4.7 |
| **Total** | **405.9** | **1,222.4** |
| Amortized | 13.5 | 40.8 |
| Source: Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux & Associates, December 14, 2018, Appendix L. | | |

SCAQMD policy for GHG emissions from construction is to amortize emissions over a 30-year lifetime. The amortized level is also shown in Table 4.8-3, as shown, GHG impacts from cumulative construction of the proposed Project plus the eight related projects are below 3,000 MT/year and therefore less-than-significant.

### *Operational GHG Emissions*

When viewed in connection with the four residences proposed by the Project, operation of the eight (8) related projects would result in an increase in GHG emissions. **Table 4.8-4, Cumulative Operational GHG Emissions**, provides the total operational and annualized construction emissions for the Crisler Way Project and the eight (8) related projects for a cumulative total.

**Table 4.8-4**
**Cumulative Operational GHG Emissions**

| Source | Operational Emissions (Metric Tons of $CO_2e$) | |
|---|---|---|
| | **Crisler Way Only** | **Cumulative** |
| Area Sources | 1.4 | 4.2 |
| Energy Utilization | 24.2 | 72.6 |
| Mobile Source | 56.3 | 168.9 |
| Solid Waste Generation | 2.3 | 6.9 |
| Water Consumption | 3.3 | 9.9 |
| Construction | 13.5 | 40.8 |
| **Total** | **101.0** | **303.3** |
| Guideline Threshold | 3,000 | |
| Exceeds Threshold? | No | No |
| Source: Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux and Associates, December 14, 2017, Appendix L. | | |

As shown in Table 4.8-4, total Project GHG emissions are substantially below the proposed significance threshold of 3,000 MT suggested by the SCAQMD. Therefore, the Project would result in a less-than-significant cumulative impact related to GHG emissions.

| | | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|---|
| **IX.** | **HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | | | | |
| a. | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b. | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c. | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d. | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e. | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f. | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☒ | ☐ | ☐ |
| g. | Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

**Less-than-significant Impact.** A significant impact would occur if a proposed project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The Project would not result in the routine transport, use, or disposal of hazardous materials. No hazardous materials other than modest amounts of typical cleaning supplies and solvents used for housekeeping and janitorial purposes would routinely be transported to the site and use of these substances would comply with State health codes and regulations. The proposed Project would not create a significant hazard to the public or the environment. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

### *Construction*

**Less-than-significant Impact.** A significant impact would occur if a project created a significant hazard to the public or environment due to a reasonably foreseeable release of hazardous materials. Construction activities may involve the use of hazardous materials, which may include fuels, lubricants, coatings, and grease related to the operation and maintenance of construction equipment. However, hazardous materials would be used in accordance with regulatory standards and protocols and would not be used in such quantities or stored in such a manner as to pose significant safety hazards. These activities would be short term and cease upon completion of Project construction.

The transport, storage, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with existing regulatory requirements would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations regarding the cleanup and disposal of the contaminant released. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Adherence to the Los Angeles County Hazardous Waste Management Plan and all other emergency response plan requirements set forth by the City of Los Angeles, the City of Los Angeles Fire Department, and the City's Department of Public Works would be required through the duration of the Project. Therefore, construction impacts would be less-than-significant.

### *Operation*

**Less-than-significant Impact.** The use of small amounts of cleaning materials would be categorized as potentially hazardous materials. These materials would be stored onsite in small quantities with the purpose of cleaning and maintaining operations of the household. The limited use of various pesticides and fertilizers would be permitted for landscaping maintenance on the Project Site. The use, storage, transport, and disposal of these potential hazardous materials by residents and maintenance staff would be required to comply with the existing regulations of several agencies, including the Department of Toxic Substances Control, U.S. EPA, Occupational Safety and Health Administration, City of Los Angeles Fire and Police Department, Department of Public Works, and Caltrans. Through compliance with existing regulatory requirements regarding the safe storage and use of these materials, impacts would be less-than-significant. Additionally, according to the City Methane and Methane Buffer Zones map, the Site is not located within a methane or methane buffer zone.[32] No impacts would occur as a result of methane gas. According to the Radon Potential Zone Map for southern Los Angeles County, the Site is not located within a high or moderate potential radon zone.[33] No impacts would occur as a result of methane or radon. Therefore, operational impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[32] City of Los Angeles Department of Public Works Engineering, Methane and Methane Buffer Zones, map date March 2004.

[33] California Geologic Survey, *Radon Potential Zone Map for Southern Los Angeles County, California,* map, prepared by Ron Churchill (January 2005), www.conservation.ca.gov/cgs/minerals/hazardous_minerals/radon/Documents/sr182map.pdf (accessed October 2016).

***c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

**No Impact.** A significant impact would occur if a proposed project emitted hazardous emissions or handled hazardous materials, substances or waste within a one-quarter mile of an existing or proposed school. The school closest to the Project Site is Pacific Hills School, an independent, co-educational school serving grades 6 to 12 located at 8628 Holloway Drive in West Hollywood, approximately 0.85 miles from the Project Site. No hazardous materials other than modest amounts of typical cleaning supplies and solvents used for housekeeping and janitorial purposes would be present at the Site and use of these substances would comply with State health codes and regulations. The proposed Project would not create a significant hazard through hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, no impact would occur.

***Mitigation Measures:*** No mitigation measures are required.

***d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

**No Impact.** A significant impact would occur if the Project Site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would create a significant hazard to the public or the environment. A review of the California Department of Toxic Substances Control's EnviroStor database resulted in the identification of no sites on the Project Site or within one-half mile of the Project Site that have known contamination or sites for which there may be reasons to investigate further.[34] No Federal Superfund sites, State Response sites (including military facilities and State Superfund sites), voluntary cleanup sites, and school sites were identified. Therefore, no impact would occur.

***Mitigation Measures:*** No mitigation measures are required.

***e. For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?***

**No Impact.** A significant impact would occur if a proposed project was located within an airport land use plan or within two miles of a public or private use airport and would result in a safety hazard for people residing or working in the project area. The closest public airports to the Project Site are the Burbank Bob Hope Airport (6.5 miles north of the Project Site) and the Santa Monica Municipal Airport which will close in 2028 (7 miles southwest of the Project Site). Neither airport is located within two miles of the Project Site. The Project Site is not in an airport hazard area. Therefore, no impact would occur.

***Mitigation Measures:*** No mitigation measures are required.

[34] California Department of Toxic Substances Control, EnviroStor Database, http://www.envirostor.dtsc.ca.gov/public/ (accessed October 14, 2016).

***f. Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?***

**Potentially Significant Unless Mitigation Incorporated.** Based on the criteria established in the *Los Angeles CEQA Thresholds Guide*, a project would normally have a significant impact to hazards and hazardous materials if the Project involved possible interference with an emergency response plan or emergency evacuation plan. The Project is not located on or near an adopted emergency response or evacuation plan. However, the Project is located on a narrow hillside street with limited emergency access. Although construction would occur over an estimated 24-month period, crew members could begin parking on site and completely off of Grand View Drive once an initial staging area is created on Lot 95 within the first week of starting construction as shown in Table 3-5, Project Construction Schedule – Grading and Site Preparation. Through the provision of an initial and temporary on-site equipment staging area, temporary construction parking would not cause permanent alterations to vehicular circulation routes and patterns or impede public access or travel on public rights-of-way.

The existing Crisler Way and Grand View Drive public right-of-ways are on local streets with curbside parking permitted along portions of only one side of the roadway. Given that vehicles are permitted to park on one side of the roadway, it is reasonable to conclude that any vehicle lawfully parked at the curbside, and of no greater width than is typical for passenger vehicles, has no greater impact on the functionality of the roadway. In the City, a standard-size parking stall is approximately 8 feet wide, large enough to accommodate the parking needs of typical passenger vehicles.

Through the provision of an on-site equipment staging area and shuttling workers to and from the Site, the Project avoids the need for prolonged street closures due to construction activities and parking. In a worst-case scenario, on day 12, pouring six temporary shoring piles is expected to partially block, up to five feet of the existing Grand View Drive right of way for up to three hours. A temporary and partial blockage of up to five feet of Grand View Drive for up to three hours would still allow cars to pass. While such partial blockages may cause temporary inconvenience, they would not be expected to substantially interfere with emergency response or evacuation plans. Crisler Way is currently an unimproved Substandard Hillside Limited Street, the Project would improve the portion of Crisler Way fronting the residential lots, providing Fire Department apparatus a location to turn around off of Grand View Drive. To minimize interference with emergency response or evacuation plans, the Applicant prepared a Construction Traffic Management Plan discussed in Section XVII, Transportation. Furthermore, to reduce potential interference with emergency evacuation plans, mitigation measure MM HAZ-1 requires the Project to submit a Hillside Construction Plan for review and approval by the Board of Building and Safety Commissioners and an Emergency Evacuation Plan. Therefore, with Project mitigation, emergency access and evacuation impacts would be reduced to less than significant.

***Mitigation Measures:***

**MM HAZ-1 Hillside Construction Plan**

The Hillside Construction Plan shall include, but not be limited to: identifying where all construction materials, equipment, machinery, and vehicles will be stored on-site and/or out of the public right-of-way of Crisler Way through the grading and construction phases of the project; and identifying the proposed locations of all on-site and off-site staging areas for construction delivery vehicles. This plan shall also include the following:

- No construction equipment or material shall be permitted to be stored within the public right-of-way.

- Delivery drivers for construction materials shall be required to follow the designated travel plan
- Truck traffic directed to the Project Site for the purpose of delivering materials, construction-machinery, or removal of graded soil shall be limited to off-peak traffic hours, Monday through Friday only. No truck deliveries shall be permitted on Saturdays, Sundays, or City Holidays.
- All deliveries during construction shall be coordinated so that only one vendor/delivery vehicle is at the site at one time, and that a construction supervisor is present at such time.
- A radio operator shall be on-site to coordinate the movement of material and personnel, in order to keep the roads open for emergency vehicles, their apparatus, and neighbors.
- A minimum of two flag persons are required. One flag person is required at the entrance to the Project Site and one flag person at the next intersection along Grand View Drive.
- Truck crossing signs are required within 300 feet of the exit of the Project Site in each direction.
- The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by grading, and at all times shall provide reasonable control of dust caused by wind.
- No person shall perform grading within areas designated "hillside" unless a copy of the permit is in the possession of a responsible person and available at the site for display upon request.
- The applicant shall identify a construction manager and provide a telephone number for any inquiries or complaints from residents regarding construction activities. The telephone number shall be posted at the site readily visible to any interested party during site preparation, grading and construction.
- The Construction Parking Plan shall identify where all contractor, subcontractor, and laborers will park their vehicles so as to prevent blockage of two-way traffic on streets in the vicinity of the construction site.
- During all phases of site development, all construction vehicle parking and queuing related to the Project shall be in substantial compliance with the approved Construction Staging and Parking Plans, to the satisfaction of the Department of Building and Safety and the Department of Transportation.

**MM HAZ-2 Emergency Evacuation Plan**

Prior to the issuance of a building permit, the applicant shall develop an emergency response plan in consultation with the Fire Department. The emergency response plan shall include but not be limited to the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments.

***g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

**Less-than-significant Impact.** A significant impact would occur if a project directly or indirectly exposed people and structures to high risk of wildfire. The Project Site is located in a Very High Fire Hazard Severity Zone (VHFHSZ) in hillside terrain with vegetation susceptible to wildland fires.[35] A previous residence at

35 City of Los Angeles Department of Planning, *ZIMAS*, http://zimas.lacity.org/, (October 14, 2016).

1850 Grandview Drive burned down in the 1979 Kirkwood Bowl/Laurel Canyon Fire and a remnant building foundation remains on Lot 95 of the Project Site.[36] Through compliance with fuel modification requirements to protect people and structures from significant risk of loss, injury, or death involving wildland fires, the Applicant would minimize wildland fire risk during construction and operation. The proposed Project was reviewed and previously approved by the City Fire Department. With implementation of fuel modification and compliance with Fire Code requirements, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous hazards and hazardous materials analysis. The Project Site is not known to contain hazardous materials, nor would the Project pose a significant hazard to the public or the environment through the use or transport of hazardous materials or substances. Related projects would be required to similarly comply with applicable local, state, and federal regulations pertaining to the use, transport, and handling of hazardous materials. Cumulative impacts related to hazards and hazardous materials are less-than-significant.

[36] Los Angeles Fire Department, Historical Archive, https://www.lafire.com/famous_fires/1979-0916_KirkwoodBowlFire/092479_kirkwood_heraldexaminer.htm (accessed October 17, 2018).

| | | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|---|
| **X.** | **HYDROLOGY AND WATER QUALITY.** Would the proposal result in: | | | | |
| a. | Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☒ | ☐ |
| b. | Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☒ | ☐ |
| c. | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would: | ☐ | ☐ | ☒ | ☐ |
| | i. Result in substantial on- or offsite erosion or siltation; | ☐ | ☐ | ☒ | ☐ |
| | ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offside; | ☐ | ☐ | ☒ | ☐ |
| | iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☒ | ☐ |
| | iv. Impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| d. | In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☒ | ☐ |
| e. | Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code or that violate regulatory standards defined in the applicable National Pollution Discharge Elimination System (NPDES) stormwater permit or Water Quality Control Plan for the receiving water body. A significant impact may occur if the Project would discharge water which does not meet the quality standards of local agencies which regulate surface water quality and water discharge into stormwater drainage systems. Significant impacts would also occur if the Project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board

(SWRCB). These regulations include compliance with the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts.

### *Construction*

Three general sources of potential short-term, construction-related stormwater pollution associated with the Project include: (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earth moving activities which, when not controlled, may generate soil erosion via storm runoff or mechanical equipment. Under the NPDES, the Applicant is responsible for preparing a Storm Water Pollution Prevention Plan (SWPPP) to avoid or minimize the effects of erosion and the inherent potential for sedimentation and other pollutants entering the stormwater system.

Surface water runoff from the Project Site would continue to be collected and directed towards existing storm drains in the Project vicinity that have adequate capacity to convey flows. Pursuant to local practice and City policy, stormwater retention will be required as part of the Low Impact Development (LID) and SUSMP implementation features. Any contaminants gathered during routine cleaning of construction equipment would be disposed of in compliance with applicable stormwater pollution prevention permits.

Additionally, any pollutants from equipment would be subject to the requirements and regulations of the NPDES and applicable LID Ordinance. The proposed Project would be required to demonstrate compliance with LID Ordinance standards and retain or treat the first 3/4-inch of rainfall in a 24-hour period, which would reduce the proposed Project's impact to the stormwater infrastructure. The proposed Project would not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Through compliance with regulatory requirements, construction impacts would be less-than-significant.

### *Operation*

Similar to the existing uses on the Project site, the proposed Project would continue to generate surface water runoff. The Project Stormwater Drainage Plan provided in **Appendix H** includes a 283 square-foot Stormwater Planter for Small Scale Residential Projects designed to collect and filter stormwater prior to off-site discharge through the proposed drainage system. Potential impacts to surface water runoff during operations would be reduced to a less-than-significant level by the Project Stormwater Drainage Plan and by incorporating stormwater pollution control measures in the SUSMP.

City Ordinance No. 172,176 and No. 173,494 specify Stormwater and Urban Runoff Pollution Controls that require the application of (Best Management Practices) BMPs. The proposed Project would also comply with water quality standards and wastewater discharge requirements set forth by the SUSMP for Los Angeles County and Cities in Los Angeles County and approved by the Los Angeles Regional Water Quality Control Board (RWQCB). Full compliance with the SUSMP and implementation of design-related BMPs would ensure that the operation of the Project would not violate any water quality standards or discharge requirements or otherwise substantially degrade water quality. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on groundwater level if it would change potable water levels sufficiently to: (1) reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or respond to emergencies and drought; (2) reduce yields of adjacent wells or well fields (public or private); (3) adversely change the rate or direction of flow of groundwater; or (4) result in demonstrable and sustained reduction in groundwater recharge capacity.

Review of the Seismic Hazard Zone Report for the Hollywood Quadrangle indicates the historical high groundwater level is over 40 feet below ground surface at the Project Site.[37] The Project would excavate soils to an approximate depth of 30 feet, which would not impact or interfere substantially with the groundwater table or groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:***

***i. Result in substantial on- or off-site erosion or siltation?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on surface water hydrology if it would result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow. The Site is in an urbanized served by existing drainage infrastructure, no streams or river courses are located on or within the surrounding Project vicinity. The Project Site is primarily impervious. Implementation of the Project would not increase site runoff or result substantial changes in the local drainage patterns. During construction, implementation of the SWPPP would reduce the amount of surface water runoff after storm events, as the Project would be required to implement stormwater BMPs to retain or treat the runoff from a storm event producing 3/4-inch of rainfall in a 24-hour period. During operations, the Project Stormwater Drainage Plan and stormwater planter would collect and convey drainage. Through Project design features and compliance with regulatory requirements, the Project would not substantially alter the existing drainage pattern of the Site in a manner which would result in substantial erosion or siltation on- or off-site. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***ii. Result in substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offside?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on surface water hydrology if it would result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow. There are no streams or rivers located in the Project vicinity. During operation, storm water or any runoff irrigation waters would be directed into existing storm drains currently

[37] California Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, California, 1998, Plate 1.2, Historically Highest Ground Water Contours and Borehole Log Data Locations, Hollywood Quadrangle. http://gmw.consrv.ca.gov/shmp/download/quad/HOLLYWOOD/reports/holly_eval.pdf (accessed November 2016).

receiving surface water runoff under existing conditions. Through design features including an appropriately sized stormwater planter and drainage system, drainage inlets on Crisler Way, and compliance with regulatory requirements for an approved SUSMP, the Project would not result in a significant increase in site runoff or change the local drainage patterns in a manner which would result in flooding on or off site. Accordingly, significant alterations to existing drainage patterns within the site and surrounding area would not occur. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body. For the purpose of this specific issue, a significant impact may occur if the volume of stormwater runoff from the Project Site were to increase to a level that exceeds the capacity of the storm drain system serving the Project Site. A Project-related significant adverse effect would also occur if the proposed Project would substantially increase the probability that polluted runoff would reach the storm drain system.

Two existing City-maintained storm drain catch basins are located south of the Site on Marmont Avenue, that connect to an existing storm drain leading away from the Project Site along Marmont Avenue.[38] The Project would not result in a significant increase in site runoff or substantial changes in local drainage patterns because Project Site runoff would be collected on site through the proposed drainage system and directed towards existing storm drains in the Project vicinity that have adequate capacity. Pursuant to local practice and City policy, stormwater retention would be required as part of the LID/SUSMP implementation features. Any contaminants gathered during routine cleaning of construction equipment would be disposed of in compliance with applicable stormwater pollution prevention permits. Further, any pollutants from the temporary construction parking areas would be subject to the requirements and regulations of the NPDES and applicable LID Ordinance requirements. The Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, through design features and compliance with regulatory requirements, the Project impact would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***iv. Impede or redirect flood flows?***

**No Impact.** A significant impact may occur if the site was located within a 100-year flood zone, which would impede or redirect flood flows. The Site is not in an area designated as a 100-year flood hazard area.[39] The Project Site is located in an urbanized area and no substantial changes to the local drainage pattern would occur with implementation; therefore, the Project would not potentially to impede or redirect flood flows and no impact would occur.

[38] Los Angeles County Department of Public Works, "Los Angeles County Storm Drain System," http://dpw.lacounty.gov/fcd/stormdrain/index.cfm (accessed November 2016).
[39] Ibid.

***Mitigation Measures:*** No mitigation measures are required.

***d. Would the project result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

**Less-than-significant Impact.** A 100-year flood is defined as a flood, resulting from a severe rainstorm that has a probability of occurring approximately once every 100 years. According to the Federal Emergency Management Agency Flood Insurance Rate Map for the Project area, the Site is not located within a designated special flood hazard area or floodway, the Site is located in a "other area" determined to be outside the 0.2 percent annual chance floodplain.[40] Based on the lack of such large enclosed water bodies nearby, the Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. The Project Site is not located in a tsunami inundation zone.[41] Seiches are large waves generated in very large enclosed bodies of water or partially enclosed arms of the sea in response to ground shaking. Based on the lack of large enclosed water bodies nearby, the Project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche.

With respect to the potential of the Project to expose people or structures to risks involving inundation by mudflow, the project site is located upslope and not located within a flood zone so the potential for mudflow to inundate in Site is low. The sloping terrain of the Project Site would be designed to reduce the potential for soil erosion and landslides through site grading, retaining walls and conventional and/or drilled-pile foundations bearing on competent bedrock to support the proposed structures as recommended by the Project geology and soil engineers. Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that previous reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. Through Project design features and compliance with regulatory requirements including permit conditions in the LADBS Approval Letter, the Project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by mudflow. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

**Less-than-significant Impact.** The Project would be required to comply with existing RWQCB discharge permit requirements, the LID ordinance, and the LAMC Stormwater, the SUSMP, and Urban Runoff Pollution control requirements to water quality control. Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable management plan and impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[40] Federal Emergency Management Agency, Flood Map Service Center, "FIRM Flood Insurance Rate Map, Los Angeles County, California, Map #06037C1605F, September 26, 2008, https://msc.fema.gov/portal (accessed November 2016).
[41] Los Angeles Department of City Planning, ZIMAS, http://zimas.lacity.org (accessed November 2016).

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous hydrology and water quality analysis. With respect to hydrology and water quality, hydrologic conditions at each related project are site-specific, although the eight projects are located on residential lots near streets with existing City and County-owned drainage infrastructure. Development of eight single-family residences within the environmental setting of a previously-developed community would not contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. The construction and operation of the eight related projects, all of which are single-family residences, would be subject to compliance with applicable RWQCB standards that apply to Los Angeles County Flood Control Facilities, would not rely on groundwater, and would not substantially alter the existing drainage pattern of the area, or substantially degrade water quality because the related projects would be required to comply LAMC standards pertaining to the preparation of a SWPPP during construction and LID standards during operations. Therefore, the Project and related projects would have a less-than-significant cumulative impact regarding hydrology and water quality.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. LAND USE AND PLANNING**. Would the project: | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☒ | ☐ |
| b. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project physically divide an established community?***

**Less-than-significant Impact.** A significant impact may occur if a proposed project would be sufficiently large or otherwise configured as to create a physical barrier within an established community. According to the *L.A. CEQA Thresholds Guide*, the determination of significance should be made on a case- by-case basis considering the following factors: (1) the extent of the area that would be impacted, the nature and degree of impacts, and the types of land uses within that area; (2) the extent to which existing neighborhoods, communities, or land uses would be disrupted, divided or isolated, and the duration of the disruptions; and (3) the number, degree, and type of secondary impacts to surrounding land uses that could result from implementation of a proposed project.

The Project Site is located within the Hollywood Community Plan Area of the City on land zoned for low density residential uses and is consistent with the existing physical arrangement of the nearby properties. No separation of uses or physical division of access between land use types would occur as a result of the proposed Project. Implementation of the Project would not disrupt or divide the physical arrangement of the established community. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

**Less-than-significant Impact.** A significant impact may occur if a project is inconsistent with the General Plan or zoning designations currently applicable to the project site and would cause adverse environmental effects which the General Plan and zoning ordinance are designed to avoid or mitigate.

The following analysis considers Project consistency with applicable regional and local land use plans. Regionally, the Project Site is located within the planning area of the Southern California Association of Governments, the region's federally designated Metropolitan Planning Organization. The proposed Project is also located within the South Coast Air Basin and therefore is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Locally, development of the Project Site is subject to the City General Plan, the Hollywood Community Plan, and the LAMC.

### *Regional Plans*

***Regional Transportation Plan/Sustainable Communities Strategy.*** The Project Site is located within the six-county region that comprises the Southern California Association of Governments planning area. The 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.[42] The proposed Project would be consistent with policies set forth in the RCP because it would develop property consistent with the existing zoning, General Plan, and applicable Community Plan. The proposed Project would be consistent with the Southern California Association of Governments Regional Comprehensive Plan and Sustainable Communities Strategy.

***Air Quality Management Plan.*** The Project is located within the South Coast Air Basin (Basin) and, therefore, falls under the jurisdiction of the SCAQMD. In conjunction with the Southern California Association of Governments , the SCAQMD is responsible for formulating and implementing air pollution control strategies. The SCAQMD's Air Quality Management Plan was updated in 2016 following a new approach that focuses on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement.[43] Given the proposed Project conforms to the zoning and land use designations for the site identified in the General Plan, the Project would not add emissions to the Basin that were not already accounted for in the approved Air Quality Management Plan. As noted in **Section 4.3, Air Quality**, the proposed Project would not exceed the daily emissions thresholds during the construction or operational phases. As discussed in Section III.a., the proposed Project would be consistent with the Air Quality Management Plan.

### *Local Plans*

***City of Los Angeles General Plan.*** The proposed Project would conform to the applicable objectives outlined in the City of Los Angeles General Plan, a comprehensive, long-range declaration of purposes, policies, and programs for the development of the City. The General Plan is a dynamic document consisting of 10 Citywide elements; Air Quality, Conservation, Historic Preservation and Cultural Resources, Housing, Infrastructure Systems, Noise, Open Space Element, Public Facilities and Services, Safety, and Transportation. The Land Use Element of the City General Plan provides individual plans for each of the City's 35 Community Plan Areas.

***Hollywood Community Plan.*** Development within the Project area is subject to the land use policies of the Hollywood Community Plan (Community Plan), a part of the City General Plan Land Use Element. The Community Plan goals and objectives include providing organized growth; furthering the development of Hollywood as a major center of population, employment, retail services, and entertainment; and providing a full range of housing choices for employees and residents of all economic segments in the Hollywood area. The Community Plan designates the Project Site for "low" residential density land uses.[44] The proposed Project, which would result in the construction of four (4) single-family residences on four (4)

[42] Southern California Association of Governments, 2016 RTP/SCS, http://scagrtpscs.net/Pages/2016RTPSCS.aspx (accessed November 2016).

[43] Air Quality Management District, *Revised Draft 2016 Air Quality Management Plan* (October 2016), http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/reviseddraft2016AQMP (accessed November 2016).

[44] Hollywood Community Plan, General Plan Land Use Map, Department of City Planning, cityplanning.lacity.org/CPU/hollywood/Maps/hwd_GenPlan.pdf (1988).

contiguous lots and improvements to Crisler Way in accordance with LAMC requirements, would not conflict with the goals, objectives, and land uses identified in the Community Plan.

***Los Angeles Municipal Code.*** The Project is located in a Hillside Area and subject to the applicable zoning specified in the LAMC. The Project proposes to improve the portion of Crisler Way fronting the residential lots to a roadway width of 20 feet to provide a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area in conformance with LAMC requirements.[45] Therefore, the Project is requesting a Zoning Administrator's Determination to allow the construction, use, and maintenance of a new single-family residences on residential lots which does not have vehicular access from a 20-foot wide continuous paved roadway from the driveway apron to the boundary of the hillside area as required by LAMC Section 12.21 C.10(i)(3).

**Baseline Hillside Ordinance**

Section 41 of the Baseline Hillside Ordinance (No. 184,802) states the following:

> Projects requiring a discretionary entitlement from the Department of City Planning shall be not be subject to the provisions of this ordinance [No. 184,802] so long as an application for the complete entitlement is filed and a fee paid prior to the date on which this ordinance becomes effective. Any such project shall be subject to the regulations that were in effect on the date on which the application was filed.

The Baseline Hillside Ordinance (No. 184,802) became effective on March 10, 2017. The Applicant filed complete entitlement applications for the proposed Project(s) on November 12, 2015 and the Project is therefore subject to the Hillside Ordinance regulations in effect at that time applications were filed (Ordinance 181,624 and 182,110).

**Floor Area, Building Heights, and Retaining Walls**

The Residential Floor Area Calculations and the Building Heights for the proposed Project(s) are based on LAMC regulations (Ordinance 181,624 and 182,110) in effect at the time the complete entitlement applications were filed and fees paid. The Slope Band Analysis (SBA), provided in Appendix I, prepared for each lot is based on Table 12.21 C.10-2a established by Ordinance 181,624:

- Pursuant to LAMC Section 12.21.C.10(b)(2) under Ordinance 181,624, the Guaranteed Minimum Residential Floor Area for all buildings on a R1 Zoned lot may be at least the 25 percent of the Lot size of 1,000 SF whichever is greater.
- Pursuant to 12.21.C.10(b)(3) under Ordinance 181,624 an additional 20 percent of the maximum residential floor area as determined by the slope band analysis or 30 percent for Lots utilizing the guaranteed minimum floor area is permitted if certain design options are utilized as specified in 12.21.C.10(b)(3)(i-vii).
- The chimney height restrictions in effect at the time the applications were filed allowed for a 5'-0" maximum above the building envelope. LAMC Section 12.21.C.10(d)(1)(i)(7) explicitly permits roof structures above the specified height limit as specified in Table 12.21 C.10-5. Chimneys, exhaust ducts/ventilation shafts are permitted to project no more than 5 feet above the height limit.
- Lot 98 proposes a 1,221 SF single-family Home where the SBA indicates 1,363 SF is permitted. As indicated on Sheet A-4 of the project Architectural Plans in the project case file maintained by the City of Los Angeles Department of City Planning (DCP), Department of Building and Safety (DBS), or Department of Public Works (DPW), the chimney for the house on Lot 98 does not

[45] Los Angeles Municipal Code Section 12.21 C.10(i)(2) and (3).

exceed the 33 foot Building Envelope line. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.

- Lot 97 proposes a 1,581 SF single-family Home where the Guaranteed Minimum Residential Floor Area permits 1,319 SF and 1,583 SF with a 20 percent Bonus. The Applicant utilized a 20 percent floor area bonus and implemented the Cumulative Side Yard Setback option outlined in LAMC Section 12.21.C.10(b)(3)(iii). The max height of the chimney is 3'-6" above the building envelope. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.
- Lot 96 proposes a 1,520 SF single-family Home where the Guaranteed Minimum Residential Floor Area permits 1,269 SF and 1,522 SF with a 20 percent Bonus. The Applicant utilized a 20 percent floor area bonus and implemented the Cumulative Side Yard Setback option outlined in LAMC Section 12.21.C.10(b)(3)(iii). The max height of the chimney is 2'-6" above the building envelope. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.
- Lot 95 proposes a 1,501 SF single-family Home where the SBA indicates 1,515 SF is permitted. The max height of the chimney is 5'-0" above the building envelope. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.
- The Applicant sought retaining wall permits for each of the four lots. Each lot would have a total of two retaining walls as permitted by LAMC Section 12.21.C.8. The walls will not exceed 10 feet and are a minimum of 3 feet apart. Retaining walls associated with the construction of the Crisler Way right-of-way are part of the roadway improvement plans and separate from the retaining walls necessary for the construction of the single-family homes.

The proposed Project would not conflict with local and regional plans applicable to the Site. The Applicant would proceed with construction and operation of the Project consistent with the previously-issued permits from the City Department of Building and Safety for project construction activities including, but not limited to, grading, construction, and occupancy. The previously-issued building permits were not subject to a Notice to Stop Construction and Intent to Revoke because the building permit applications failed to conform with LAMC building code requirements; the building permits were subject to a Notice to Stop Construction and Intent to Revoke because the buildings would front a substandard hillside street that does not have vehicular access from a 20-foot wide continuous paved roadway from the driveway apron to the boundary of the hillside area as required by LAMC Section 12.21 C.10(i)(3). Land use plan consistency impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous land use and planning analysis, including community division, consistency with land use plans, and consistency with habitat conservation plans. The physical extent of the cumulative impacts study area is the related projects within the Hollywood Community Plan area that would be accessed along the same construction access route as the Proposed Project.

With respect to community division and habitat conservation plans, the Project would have no impact on

community division and habitat conservation plans and would not contribute to a cumulative impact. The eight (8) related projects are all single-family residences proposed on residential lots, these projects would not physically divide an established community. Although at least one (1) of the related projects (Related Project #3 shown in Figure 6, Related Projects Map and Table 3-8, involves a variance, but would conflict with applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Development of the related projects would proceed in accordance with adopted plans and regulations. Based on the Project information from the City, the remaining six (6) related projects can reasonably be assumed to be consistent with the zoning and land use designations and compatible with existing surrounding uses. Therefore, cumulative land use impacts would be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. MINERAL RESOURCES**. Would the project: | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |

***a. Would the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?***

**No Impact.** A significant impact may occur if a project site is located in an area used or available for extraction of a regionally important mineral resource, or if the project development would convert an existing or future regionally important mineral extraction use to another use, or if the Project development would affect access to a site used or potentially available for regionally important mineral resource extraction. According to the *L.A. CEQA Thresholds Guide*, the determination of significance should be made on a case-by-case basis, considering: (1) whether, or the degree to which, the Project might result in the permanent loss of, or loss of access to, a mineral resource located in a State Mining and Geology Board Mineral Resource Zone 2 (MRZ-2) Area, or other known or potential mineral resource area, and (2) whether the mineral resource is of regional or Statewide significance, or is noted in the Conservation Element as being of local importance. The Project Site is not located within an MRZ-2 Area.[46] No mineral resources are known to exist beneath the Site. Therefore, no impacts associated with the loss of availability of a known mineral resource would occur.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?***

**No Impact.** A significant impact may occur if a project site is located in an area used or available for extraction of a regionally important mineral resource, or if the development would convert an existing or future regionally important mineral extraction use to another use, or if the development would affect access to a site used or potentially available for regionally important mineral resource extraction. The Project Site is not located within a Mineral Resource Zone 2 (MRZ-2) Area.[47] The Project Site is not designated as a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no impact would occur.

***Mitigation Measures:*** No mitigation measures are required.

[46] California Department of Conservation, California Geological Survey Information Warehouse: Mineral Land Classification, Mineral Land Classification Map Aggregate Resources Only, Hollywood Quadrangle, http://maps.conservation.ca.gov/cgs/informationwarehouse/ (accessed November 2016).
[47] Ibid.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous mineral resources analysis. The Project Site does not contain any known mineral resources and would therefore result in no impact to their potential recovery or use. It is unknown if mineral resources exist on the related project sites, nevertheless, the Project would not contribute to any potential cumulative impact.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. NOISE.** Would the project result in: | | | | |
| a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☒ | ☐ | ☐ |
| b. Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c. For a project within the vicinity of a private airstrip, or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

**Impact Analysis**

The following analysis is based on the Noise Impact Analysis for the Crisler Way Residences Project prepared by Giroux & Associates provided in **Appendix J**.[48] This Noise Impact Analysis introduces key terms and concepts used in the analysis of noise impacts. Noise is unwanted sound. Sound is mechanical energy is transmitted by pressure waves through a compressible medium such as air. The sound pressure level, expressed in decibels (dB), is the most common descriptor to characterize the loudness of an ambient sound level. A dB is a ratio of the unit of sound pressure to an assumed zero sound level. Sound or noise can vary in intensity by over one million times within the range of human hearing so a logarithmic loudness scale similar to the Richter Scale is used to keep sound intensity numbers manageable.

Variations in noise exposure over time are expressed in Leq, a steady-state energy level equal to the energy content of the time period. Leq provides a statistical description of the sound level that is exceeded over some fraction of a given observation period. Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL), a weighted average of noise levels over time.

***a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

**Potentially Significant Unless Mitigation Incorporated.** A significant noise impact may occur if a proposed project would generate excess noise that would cause the ambient noise environment at the site to exceed noise level standards set forth in the Noise Element of the City's General Plan and the City's Noise Ordinance.

[48] Giroux & Associates, Noise Impact Analysis, Crisler Way Residences Project, Los Angeles, California, December 14, 2018.

### *General Plan Noise Element*

The Noise Element of the General Plan provides "Guidelines for Noise Compatible Land Use" that pertain to permanent noise sources for the purpose of long-term land use planning, such as assessing the impact of operational airport noise on sensitive residential areas. Based on the Noise Element, 55 dB CNEL is the most desirable target for the permanent ambient noise level at the exterior of noise sensitive land uses such as homes, hotels and schools; however, such a level may not always be possible in areas of substantial traffic noise intrusion. Exposures up to 65 dB CNEL for such uses are considered conditionally acceptable if all measures to reduce such exposure have been taken. The land use compatibility guidelines in the Noise Element Noise state noise levels above 70 dB CNEL are considered normally unacceptable except in unusual circumstances. The purpose of these guidelines is to guide long-term land use compatibility planning decisions regarding the exposure of proposed land uses to existing for planned permanent noise sources. Short-term temporary noise, such as noise due to construction activity and the use of powered equipment, is regulated through noise ordinances codified in the LAMC.

### *Noise Ordinance*

The City's Noise Ordinances set standards for non-transportation noise, such as stationary sources. These standards regulate noise from one land use crossing the property line of an adjacent property. Noise ordinances contained in LAMC Section IX, Noise Regulation, restrict the level of noise that one type of land use or activity may broadcast to adjacent land use. Noise ordinance standards are stated with respect to ambient levels without the contribution of an identified noise source. If ambient levels are low, LAMC Section 111.03, Minimum Ambient Noise Level, establishes presumed ambient noise levels as a function of zoning and time of day for an evaluation baseline.

During the daytime, some deviation from these standards is allowed for short-term (less than 15 minute) noise generation. The Noise Ordinance numerical standards apply to "stationary" sources of noise (mechanical equipment such as air conditioning, refrigeration, heating, or pumping). If such activities are not specifically prohibited by ordinance, the noise constraint for general stationary sources is that they may not increase the ambient level by more than 5 dB above[49] ambient (measured or presumed minimum) levels associated with the zoning.

## *Construction Noise Impacts*

The LAMC limits the allowable times of construction equipment operations. LAMC Chapter IV, Public Welfare (Section 41.40), limits construction activities to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. However, to reduce potential construction noise impacts on neighboring residences, the Applicant has committed to not work on Saturdays.[50] As set forth in the LAMC, construction is not permitted on any national holiday or on any Sunday.

LAMC Chapter XI, Noise Regulation (Section 112.05) prohibits the use of any powered equipment or powered hand tool for construction that produces a maximum noise level exceeding 75 dB(A) at a distance of 50 feet. However, this noise limitation does not apply where compliance is technically infeasible. As defined, technically infeasible means that "the above noise limitation cannot be complied with despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment (Section 112.05)."

[49] City of Los Angeles Municipal Code Section 112.02(a).
[50] CAC Development, Crisler Way, April 12, 2016.

The *L.A. CEQA Thresholds Guide* also states that a project would normally have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day could exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use.
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
- Construction activities could exceed the ambient noise level by 5 dBA at a noise sensitive land use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday if construction occurred during those hours.

The noise levels that would be generated by the types of equipment used in site preparation and construction of the Project are shown in **Table 4.13-1, Construction Equipment Noise at Off-Site Sensitive Uses**.

**Table 4.13-1**
**Construction Equipment Noise at Off-Site Sensitive Uses**

| Phase | Equipment | Noise Level @ 20 feet (dB) | Noise Level @ 55 feet (dB) |
|---|---|---|---|
| Site Prep and Grading | Bobcat | 80 | 71 |
| | Roller | 82 | 73 |
| | Paver | 82 | 73 |
| | Rough Terrain Forklift | 79 | 70 |
| | Excavator | 79 | 70 |
| | Drill Rig | 81 | 72 |
| Building Construction | Bobcat | 80 | 71 |
| | Rough Terrain Forklift | 79 | 70 |
| Source: Giroux and Associates, Noise Impact Analysis, December 19, 2018. | | | |

As shown in Table 4.13-1, the unmitigated maximum level of construction noise is anticipated to be 82 dBA at 20 feet from a paver or roller. After grading, the worst-case noise levels would decrease to 80 dB from a Bobcat operating at 20 feet from the receptor. Therefore, construction noise may occasionally be audible and could exceed two of the three previously mentioned thresholds from the *L.A. CEQA Thresholds Guide*. In the absence of any shielding, noise level at the closest outdoor recreational use would exceed the City of Los Angeles suggested construction noise level of 75 dB at 50 feet from the source.

Construction activities lasting more than one day could exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use. Due to the minimal separation distance between the site and nearest residential use, construction noise levels could exceed exterior noise levels by more than 10 dB. Because of the steep slope and higher elevation of existing residences, the Noise Impact Analysis concluded there is no reasonable and feasible means to reduce construction noise (e.g. curtains, fences, or temporary noise barriers) to levels less than this threshold.

Construction activities lasting more than 10 days in a three-month period could exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use. With quiet suburban background noise levels, construction noise could potentially exceed ambient noise levels by 5 dB for more than 10 days in a three-month period. The Noise Impact Analysis again concluded that reasonable means to reduce construction noise, such as a temporary fence, would not be feasible because the adjacent sensitive uses are at such a higher elevation than the Project Site.

Construction activities would not exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday. Given that construction is not anticipated to occur after 9:00 p.m. or before 7:00 a.m. or anytime on Sundays, this condition will be met by adherence to standard hours of construction.

Due to the steep site topography and the higher elevation of adjacent existing residences, the Noise Impact Analysis found that the use of sound barriers or shields would be technically infeasible. In the absence of any other noise reduction device, noise levels at the closest outdoor recreational use would exceed the City's construction noise standard of 75 dB at 50 feet from the source specified by LAMC Section 112.05. Therefore, mitigation measure **MM NOI-1** requires retrofitting equipment with industrial grade mufflers to reduce construction equipment noise by 15 dB. Therefore, retrofitting the loudest piece of construction equipment anticipated, a roller or paver, with an industrial grade muffler would reduce the noise level from 82 dB to 67 dB, below the construction noise threshold of 75 dB at 50 feet from the source as specified by LAMC Section 112.05.

The potential for construction-related noise to adversely affect nearby residential receptors would depend on the location and proximity of construction activities to these receptors. Most construction equipment would be located at a much greater setback than the worst-case examples provided in Table 4.13-1. For example, increasing the distance of separation between the equipment and the receptor from 20 feet to 55 feet would reduce the interior noise level down from 52 dB to 43 dB for a more acceptable interior noise environment. To reduce potential noise impacts from the use of powered equipment or powered hand tools that could exceed 75 dBA at 50 feet from the equipment, **MM NOI-2** limits the permissible hours of construction to those specified in the LAMC, requires construction equipment and supply haul routes to avoid conflicts with noise-sensitive land uses, to the extent feasible, and requires the establishment of construction staging areas to minimize impacts to adjacent residences where feasible.

The Noise Impact Analysis found that truck pass-by noise for equipment and vendor deliveries would only last a few seconds. Because the relevant noise metric is a CNEL, or weighted daily average, a few truck trips in a day would be more than balanced by no truck trips for the other hours, therefore impacts related to construction truck pass-by would be less-than-significant.

In addition, the City imposes a number of standard conditions on construction activities when new construction will occur in close proximity to noise-sensitive land uses. Through compliance with regulatory requirements limiting construction noise, including the limitations specified in LAMC Chapter XI, Noise Regulation (Section 112.05) and Chapter IV, Public Welfare (Section 41.40), and the implementation of MM NOI-1 and MM NOI-2, construction noise impacts would be reduced to less-than-significant.

***Operational Impacts***

Sources of operational noise consist of Heating, Ventilation, and Air Conditioning (HVAC) systems, pool equipment, and vehicular trip generation. LAMC Chapter XI, Noise Regulation (Section 112.02) limits the operational noise from HVAC systems and pool heating or filtering equipment so that operational noise impacts would be less-than-significant. Vehicular trip generation from the operation of four single-family residences would be consistent with the existing land use plan for the site and would not result in exposure of persons to or generation of noise in level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Therefore, operational noise impacts would be less-than-significant.

***Mitigation Measures:***

**MM NOI-1** To reduce powered construction equipment noise to less than 75 dBA at 50 feet from the source, the following construction equipment shall be retrofitted with an industrial grade

muffler or muffler of similar capacity, capable of reducing engine noise by at least 15 dBA: graders, bobcats, loaders/backhoes, forklifts, pavers, paving equipment, and rollers.

**MM NOI-2 Increased Noise Levels (Grading and Construction Activities)**

To reduce the impact of temporary construction noise on adjacent residences, the Project Proponent shall comply the following measures:

- Construction activities shall be limited to the hours of 8:00 a.m. and 4:00 p.m. on weekdays; no work on Saturdays until the construction activities are confined to inside work.
- Construction is not permitted on any Sunday or locally-recognized holiday.
- Construction equipment and supply haul routes shall avoid conflicts with noise-sensitive land uses to the extent feasible through scheduling and points of access.
- Construction staging areas shall be established to minimize impacts to adjacent residences where feasible.

***b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?***

**Less-than-significant Impact.** A significant noise impact may occur if a proposed project would expose people to or generate excessive groundborne vibration or groundborne noise levels. Construction activities generate ground-borne vibration when heavy equipment travels over unpaved surfaces or is engaged in soil movement. The effects of groundborne vibration may include discernable movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. Ground vibration is quickly damped out within the softer sedimentary surfaces of much of southern California. Because vibration is typically not an issue, very few jurisdictions have adopted vibration significance thresholds. Vibration thresholds have been adopted for major public works construction projects, but these relate mostly to structural protection (cracking foundations or stucco) rather than to human annoyance.

A vibration descriptor commonly used to determine structural damage is peak particle velocity (ppv), the maximum instantaneous positive or negative peak of the vibration signal, usually measured in in/sec. The range of human responses to various vibration levels is provided in **Table 4.13-2, Human Response to Transient Vibration**.

**Table 4.13-2**
**Human Response to Transient Vibration**

| Vibration Level ppv (inches/second) | Average Human Response |
|---|---|
| 2.00 | Severe |
| 0.90 | Strongly perceptible |
| 0.24 | Distinctly perceptible |
| 0.03 | Barely perceptible |
| Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2013. Giroux and Associates, Noise Impact Analysis, December 19, 2018. | |

As shown in Table 4.13-2, at 0.24 in/sec, vibration levels become distinctly perceptible to humans. In terms of the impact of groundborne vibration on structures, the American Association of State Highway and Transportation Officials identifies maximum vibration levels for preventing damage to structures from intermittent construction or maintenance activities for residential buildings in good repair with gypsum board walls to be 0.4–0.5 in/sec. The damage threshold criterion of 0.2 in/sec is appropriate for older fragile

buildings. Below this level there is virtually no risk of building damage. Although the structures adjacent to the proposed Project are not considered fragile, to be conservative, the lower damage threshold of 0.2 in/sec was used for this analysis. The predicted vibration levels generated by anticipated construction equipment are provided in **Table 4.13-3, Estimated Vibration Levels During Construction**.

**Table 4.13-3**
**Estimated Vibration Levels During Construction**

| Equipment | PPV at 15 ft (in/sec) | PPV at 25 ft (in/sec) | PPV at 50 ft (in/sec) | PPV at 60 ft (in/sec) | PPV at 75 ft (in/sec) | PPV at 100 ft (in/sec) |
|---|---|---|---|---|---|---|
| Large Bulldozer | 0.191 | 0.089 | 0.031 | 0.024 | 0.017 | 0.011 |
| Loaded trucks | 0.152 | 0.076 | 0.027 | 0.020 | 0.015 | 0.010 |
| Jackhammer | 0.070 | 0.035 | 0.012 | 0.009 | 0.007 | 0.004 |
| Small Bulldozer | 0.006 | 0.003 | 0.001 | 0.001 | <0.001 | <0.000 |
| Source: FTA, Office of Planning and Environment, Transit Noise and Vibration Impact Assessment. Giroux and Associates, Noise Impact Analysis, December 19, 2018. | | | | | | |

As shown in Table 4.13-3, the maximum level of groundborne vibration would be generated by a large bulldozer at 15 feet from the source. However, equipment such as large bulldozers would not be used for this Project due to constraints resulting from the steep hillside setting. Instead, smaller bulldozers such as bobcats and loaders would be used with a much lower vibration potential. Small construction equipment could be operated as close as 15 feet from the closest property line. However, even at 15 feet, the predicted vibration levels generated by smaller construction equipment, 0.006 in/sec, would be well below levels that could create structural damage in fragile buildings (i.e., 0.2 in/sec) and human perceptibility (0.24 in/sec). Therefore, these vibration levels are acceptable. After construction, the operation of four single-family residences would not expose people to, or generate, excessive groundborne vibration or groundborne noise levels. Therefore, construction and operational vibration impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

**No impact.** A significant noise impact may occur if projects located within an airport land use plan or within two miles of a public airport, or within the vicinity of a private airstrip, would expose people residing or working in the project area to excessive noise levels. The Project is neither located within an airport land use plan nor within two miles of a public use airport that would expose people residing or working in the Project area to excessive noise levels. Therefore, the Project would have no impact with regard to this issue.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous noise analysis. Development of the Project in connection with the eight related projects would result in an increase in construction-related and traffic-related noise and on-site stationary noise sources in the Hollywood Community Plan Area of the City. The Applicant has no control over the timing or sequencing of the eight related projects identified within the Project study area. Therefore, this analysis assumes

multiple, concurrent construction projects as a "worst case" scenario because each of the related projects would likely begin at different times. Construction-noise and ground-borne vibration for the proposed Project and each related project would be localized to Grand View Drive, Kirkwood Drive, Gould Drive, Yucca Trail, and existing residences within the Project vicinity. The following cumulative analysis is based on the Cumulative Air Quality, Greenhouse Gas, and Noise Analysis prepared by Giroux and Associates dated December 14, 2018, provided in Appendix L.

### *Cumulative Construction Noise*

The nearest related projects are located approximately 480 feet west of the proposed Project adjacent to existing residences along Grand View Drive. Because noise impacts vary widely based on the distance between the noise source and the receptor, approximate distances between the proposed Crisler Way Site and the eight (8) related projects were measured and provided in **Table 4.13-4**, **Distance Between the Crisler Way Project Site and Related Project Sites**.

**Table 4.13-4**
**Distance Between the Crisler Way Project Site and Related Project Sites**

| Address: | Distance (Feet) |
|---|---|
| 8551 Cole Crest | 1,560 |
| 8495 Cole Crest | 1,185 |
| 8461 Grand View | 815 |
| 8413 Grand View | 480 |
| 8301 Grand View | 500 |
| 8289 Grand View | 600 |
| 8426 Brier Drive | 1,025 |
| 8424 Brier Drive | 975 |
| Source: Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux and Associates, December 14, 2018. | |

For cumulative noise analysis, a theoretical Maximally Exposed Individual (MEI) was considered to be immediately adjacent to the Crisler Way Site boundary and also impacted by the related projects. Point sources of construction noise radiate spherically and are atmospherically attenuated by a factor of 6 dB per doubling of distance, or about 6 dB in 100 feet of propagation. The impact radius pre-supposes a clear line-of-sight and no other machinery or equipment noise that would mask Project construction noise. With buildings and other barriers to interrupt line-of-sight conditions, the potential "noise envelope" around individual construction sites is reduced. Because the Project area is already developed with existing residences, there are numerous intervening structures.

In the noise study for the Crisler Way Project, the maximum noise from construction equipment was estimated to be 82 dB Leq at the closest MEI to the Project site. To determine the impact from related project sites, the Cumulative Noise Analysis factored for attenuation related to distance and intervening structures. Resulting residual noise levels at the Crisler Way MEI are provided in **Table 4.13-5, Construction Noise Level at Related Project Sites**.

**Table 4.13-5**
**Construction Noise Level at Related Project Sites**

| Adjustment for distance from Crisler Way to/ | Distance Attenuation (dB) | Attenuation for Intervening Structures (dB) | Residual Construction Noise (dB) at MEI |
|---|---|---|---|
| 8551 Cole Crest | -30 | -10 | 42 |
| 8495 Cole Crest | -27 | -10 | 45 |
| 8461 Grand View | -24 | -10 | 48 |
| 8413 Grand View | -20 | -10 | 52 |
| 8301 Grand View | -20 | -10 | 52 |
| 8289 Grand View | -22 | -10 | 50 |
| 8426 Brier Drive | -26 | -10 | 46 |
| 8424 Brier Drive | -25 | -10 | 47 |
| Source: Cumulative Air Quality, Greenhouse Gas, and Noise Analysis, Giroux and Associates, December 14, 2018. | | | |

As shown in Table 4.13-5, due to distance attenuation and intervening structures, residual construction noise at the Crisler Way Project MEI could range from 42-52 dB. The cumulative noise impact analysis concluded that because of the logarithmic nature of decibels, the addition of all the residual noise levels from the eight related project locations to the 82 dB Leq predicted to at the Crisler Way MEI would be minor. The addition of the residual noise levels from all eight (8) project sites is only 82.1 dB. The noise increase of +0.1 dB CNEL would not be noticeable. In addition, the noise analysis conservatively accounted for only a -10 dB credit for intervening structures when some sites are 0.3 miles away. Although difficult to precisely calculate, the credit for noise attenuation form existing structures would be much higher.

Unlike construction equipment, truck haul noise could affect a single receptor located along the common haul route. The worst-case assumption is that all homes undergo simultaneous grading and hauling for two (2) weeks, creating 67 haul truck trips per day. If all trucks passed by a single receptor there would be an increase in noise. Assuming trucks travel at a 35-mph speed limit, this would equate to a CNEL of 53.7 dB assuming hauling occurs during daytime. The Cumulative Noise Analysis considers noise exposures up to 65 dB CNEL for residential uses acceptable. Because a CNEL is a 24-hour average, a few seconds of truck travel would be diluted by the remaining 24-hours of no truck haul noise.

Unlike construction equipment, truck haul noise could affect a single receptor located along the common haul route. The worst-case assumption is that the grading for all eight related projects overlaps during the 10 days of earthworks export/haul creating 60 round trips (120 one-way trips) per day. If all trucks passed by a single receptor there would be an increase in noise. For a 35 mph speed limit this would equate to a CNEL of slightly less than 61 dB assuming all haul occurs during the daytime. Exposures up to 65 dB CNEL for residential uses are considered conditionally acceptable. Because a CNEL is a 24 hour average, a few seconds of truck travel is diluted by the remaining 24-hours of no truck haul noise. In addition. It is very unlikely that all cumulative projects would be grading during the same 10-day period and that every single truck for the four homes would pass by any single residence.

### *Cumulative Vibration*

Within the "soft" sedimentary surfaces of much of southern California, ground vibration is quickly damped out. The distances between any one related project site to the MEI are at 480 to 1,560 feet. At these distances, vibration even for a large bulldozer which is not anticipated to be used on these steep hillside sites would be <0.001 in/sec. The construction vibration level at the MEI attributed to the Crisler Way Project are expected to be around 0.006 in/sec. Therefore, a conservative damage threshold for older homes of 0.3 in/sec would not be exceeded.

Trucks travelling along haul routes are another source of cumulative vibration impacts. As discussed, the proposed Project would use smaller trucks because of roadway access. Because vehicles traveling on local roadways are supported on flexible suspension systems and pneumatic tires, these vehicles are not an efficient source of ground vibration. Even large trucks traveling at high speeds on a smooth roadway create a relatively low level of vibration. There is not a cumulative increase in ground vibration from the presence of multiple trucks. More trucks can potentially result in more vibration peaks if pavement is in poor condition. However, the pavement in the Project area is in good repair and smaller trucks passing through the narrow roads would travel at a relatively low speed. Therefore, the Cumulative Noise Analysis concluded cumulative truck haul vibration impacts would be negligible along common haul routes.

### *Operational Cumulative Noise Impacts*

Cumulative operational noise impacts would result from increased vehicle travel on local roadways due to the proposed Project and related projects within the study area. As discussed in response to XVI.a., Transportation, the adjacent roadway network would continue to operate at Level of Service (LOS) A with the addition of Project construction traffic, therefore traffic impacts resulting from the operation of four (4) proposed single-family residences and eight (8) related single-family residences would be relatively minor, generating fewer operational trips than those assumed in the construction trip generation estimates. Therefore, operational increases in roadway noise levels associated with cumulative development would not significantly increase in noise levels. Therefore, cumulative operational roadway noise impacts would be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. POPULATION AND HOUSING**. Would the project: | | | | |
| a. Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |
| b. Displace substantial numbers of existing people or housing necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

***a. Would the project induce unplanned substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

**No Impact.** A significant impact may occur if a project would locate new development such as homes, businesses, or infrastructure, with the effect of substantially inducing growth in the proposed area that would otherwise not have occurred as rapidly or in as great a magnitude. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether a project results in a significant impact on population and housing growth is to be made considering: (1) the degree to which a project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds projected/planned levels for the year of project occupancy/build-out, and would result in an adverse physical change in the environment; (2) whether the project would introduce unplanned infrastructure that was not previously evaluated in the adopted Community Plan or General Plan; and (3) the extent to which growth would occur without implementation of the project.

The Project consists of the construction and operation of four residences on four contiguous vacant residential lots and improvement of the portion of Crisler Way fronting the Project Site to join Grand View Drive. The residential uses and density are consistent with the allowable uses and density permitted by the LAMC, Zoning Code, and the General Plan land use designations. The Project is also consistent with SCAG growth projections as it involves residential construction consistent with existing plans and zoning. Therefore, the Project would not induce substantial population growth. Therefore, no impact would occur.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

**No Impact.** A significant impact may occur if a project would result in the displacement of existing housing units, necessitating the construction of replacement housing elsewhere. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether a project results in a significant impact on population and housing displacement shall be made considering the following factors:

- The total number of residential units to be demolished, converted to market rate, or removed through other means as a result of the project, in terms of net loss of market-rate and affordable units.
- The current and anticipated housing demand and supply of market rate and affordable housing units in the project area.
- The land use and demographic characteristics of the project area and the appropriateness of housing in the area.
- Whether the project is consistent with adopted City and regional housing policies such as the Framework and Housing Elements, Housing and Urban Development Consolidated Plan and Comprehensive Housing Affordability Study policies, redevelopment plan, and the Rent Stabilization Ordinance.

The Project consists of the construction of four new residences on four contiguous residential lots and improvement of the portion of Crisler Way fronting the Project Site to meet LAMC requirements. The Project would not demolish existing residential units or reduce the number of affordable housing units for very low- or low-income households. The Project would not result in the displacement of people. Therefore, no impact would occur.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous noise analysis. The Project and related projects consist of a total of 12 single-family residences and are considered in-fill development as they are all centrally located within the already built area of the City. Neither the Project, nor the Project in combination with related projects would displace substantial numbers of existing housing or people, nor would the Project in combination with related projects induce substantial population growth. Cumulative impacts to population and housing would therefore be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. PUBLIC SERVICES.** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| a. Fire protection? | ☐ | ☐ | ☒ | ☐ |
| b. Police protection? | ☐ | ☐ | ☒ | ☐ |
| c. Schools? | ☐ | ☐ | ☒ | ☐ |
| d. Parks? | ☐ | ☐ | ☒ | ☐ |
| e. Other public facilities? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***

### *Fire Protection*

**Less-than-significant Impact.** Based on the *L.A. CEQA Thresholds Guide*, a project would normally have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. The City of Los Angeles Fire Department (LAFD) considers fire protection services for a project adequate if a project is within the maximum response distance for the land use proposed. Pursuant to LAMC Section 57.507.3.3, the maximum response distance between low density residential land uses and a LAFD fire station that houses an engine company is 1.5 miles and 2.0 miles for a LAFD fire station that houses a truck company.[51] If the distance is exceeded, all structures located in the applicable residential area would be required to install automatic fire sprinkler systems. The nearest fire station is LAFD Fire Station No. 41, located at 1439 North Gardner Street, approximately 2.5 driving miles from the Project Site taking Grand View to Kirkwood to Laurel Canyon Blvd. to Hollywood Blvd. and then N Gardner St. Therefore, given the response distance from the Project Site to the nearest existing fire station exceeds 1.5 miles, the Project would be required to install fire sprinklers pursuant to LAMC Section 57.507.3.3 to the satisfaction of the LAFD.

The Project has been reviewed and approved by the LAFD. The addition of four single-family residences with 2-bedrooms within the existing urban setting and would not substantially increase the demand for LAFD services such that new or physically altered LAFD facilities would be needed to maintain acceptable service ratios. Nevertheless, building construction and occupancy would be required to comply with fire department codes and regulations. The Project is located in a Very High Fire Hazard Severity Zone and subject to compliance with the Fuel Modification Requirements of the Fire Code to protect against wildland fire.

[51] Los Angeles Municipal Code, Article 7 Fire Code, Section 57.507.3.3. LAND USE, Table 57.507.3.3.

Additionally, Crisler Way, Grand View Drive, and Kirkwood Drive are narrow roadways; construction and related street improvements would potentially affect access in the event of an emergency or wildland fire. Therefore, the Project design features the installation of a new fire hydrant at the intersection of Crisler Way and Grand View Drive so the proposed residences would be located within 300 feet of a fire hydrant, and entrances to the residences would be within 150 feet of an improved edge or approved fire lane to reduce potential fire hazards.[52] Through Project design features and compliance with LAMC and Fire Code requirements, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous fire protection analysis. The physical extent of the cumulative impacts study area is the related projects along the construction access route. These related projects are within the service area of LAFD Fire Station No. 41, located at 1439 North Gardner Street, approximately 2.5 driving miles from the Project site taking Grand View to Kirkwood to Laurel Canyon Blvd. to Hollywood Blvd. and then N. Gardner St.

Development of the Project in combination with the related projects would increase the cumulative demand for fire services. LAFD would continue to monitor population growth and land development throughout the City and identify additional resource needs and station expansions or new station construction that may become necessary to achieve the desired level of service. Through the City's regular budgeting process, LAFD's facility needs would be identified according to the priorities at the time, changes in service population, and demand factors. Any new or expanded fire station would be funded via existing mechanisms (e.g., property and sales taxes) to which the Project and related projects would contribute.

The LAFD would review each related project during plan check to ensure adequate fire flow capabilities and adequate emergency access. Each of the eight related projects involves the construction and operation of one single-family residence within an existing developed neighborhood context. Given the distance of the related projects from Station No. 41, these projects would be required to install sprinklers per the LAMC to the satisfaction of the LAFD. If there were a fire protection impact due to the combined impacts of the related projects, the Project would not make a cumulatively considerable contribution to the impact for the reasons described above. Therefore, the cumulative impact would be less-than-significant.

### *Police Protection*

**Less-than-significant Impact.** A significant impact may occur if the City of Los Angeles Police Department (LAPD) could not adequately serve a project without necessitating a new or physically altered station, the construction of which may cause significant environmental impacts. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether the project results in a significant impact on police protection should be made considering the following factors: (1) the population increase resulting from the project, based on the net increase of residential units or square footage of nonresidential floor area; (2) the demand for police services anticipated at the time of project build-out compared to the expected level of service available, considering, as applicable, scheduled improvements to LAPD services (facilities, equipment, and officers) and the project's proportional contribution to the demand; and (3) whether the project includes security and/or design features that would reduce the demand for police services.

[52] CAC Development, Crisler Way, April 12, 2016.

The Project Site is located in the Hollywood Area division of the LAPD West Bureau. The Hollywood Area is served by the Hollywood Community Police Station, located at 1358 North Wilcox Avenue. Within the Hollywood Area, the Project is located within Reporting District (RD) 622. RD 622 is defined by the following boundaries: Mulholland Drive to the north, Outpost Drive to the east, Hollywood Blvd. to the south, and between Laurel Canyon Blvd. to the west.[53] There are 350 sworn police officers and 50 civilian support staff assigned to the Hollywood Area.[54]

The response time is the period from the initiation of a call for assistance to the appearance of a police unit on scene. Calls for police assistance are prioritized based on the nature of the call. Unlike fire protection services, police units are most often in a mobile state; hence, actual distance between a headquarters facility and a given Project Site is of little relevance. Instead, the number of police officers on the street is more correlative with the realized response time. The LAPD has a preferred response time of seven minutes to emergency calls. For the Hollywood Community Police Station, the average response time to emergency (Code 3) calls for service is 4.7 minutes.[55]

The Project would add four single-family residences to the Hollywood Area division which would not substantially increase local population. Therefore, no new or physically altered police facilities would be needed to maintain performance objectives. As such, the Project would result in less-than-significant impacts on LAPD services during construction and operation.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous police protection analysis. The physical extent of the cumulative impacts study area is the related projects within the service area of the Hollywood Community Police Station.

The Project and the related projects would increase the demand for police services. This cumulative increase would increase demand for additional LAPD staffing, equipment, and facilities over time. The LAPD would continue to monitor population growth and land development throughout the City and identify additional resource needs, including staffing, equipment, vehicles, and potential station expansions or new station construction that may become necessary to achieve the desired level of service.

Through the City's regular budgeting process, the LAPD's resource needs would be identified and funds allocated according to the priorities at the time. Any new or expanded police station would be funded via existing mechanisms (e.g., property and sales taxes) to which the Project and related projects would contribute. As the related projects consist of the construction and operation of eight single-family residences within an existing developed neighborhood already served by the Hollywood Community Police Station, the Project would not make a cumulatively considerable contribution to the impact. Therefore, the cumulative police protection impacts would be less-than-significant.

[53] LAPD, Hollywood Area Reporting District Map, assets.lapdonline.org/assets/pdf/Hollywood_RD_Mar14.pdf, (accessed November 29, 2016).
[54] Captain Cory Palka, Commanding Officer, Hollywood Area, LAPD, Email Correspondence with Envicom Corporation, November 30, 2016.
[55] Captain Cory Palka, Commanding Officer, Hollywood Area, LAPD, Email Correspondence with Envicom Corporation, November 30, 2016.

### *Schools*

**Less-than-significant Impact.** A significant impact may occur if a project includes substantial employment or population growth, which could generate a demand for school facilities that would exceed the capacity of the LAUSD. Based on the *L.A. CEQA Thresholds Guide,* the determination of whether the project results in a significant impact on public schools shall be made considering the following factors: (1) the population increase resulting from the project, based on the net increase of residential units or square footage of nonresidential floor area; (2) the demand for school services anticipated at the time of project build-out compared to the expected level of service available; (3) whether (and to the degree to which) accommodation of the increased demand would require construction of new facilities, a major reorganization of students or classrooms, major revisions to the school calendar (such as year-round sessions), or other actions which would create a temporary or permanent impact on the school(s); and (4) whether the project includes features that would reduce the demand for school services (e.g., on-site school facilities or direct support to LAUSD).

The Project area is currently served by the following LAUSD public schools: Gardner Street Elementary (grades K-6), Hubert Howe Bancroft Middle School (grades 6-8), Fairfax Senior High School (grades 9-12), and Hollywood Senior High School (grades 9-12).[56]

The Project proposes 4 single-family residences with two-bedrooms. Based on the LAUSD Student Generation Rates for single-family detached residential units, this Project would be expected to generate less than one elementary, middle, and high school student.[57] Therefore, implementation of the Project would not increase the number of residents such that new or expanded school facilities would be needed.

In accordance with the LAMC, the applicant would pay the associated school impact fees to the LAUSD in effect at the time of development to offset the impact of additional student enrollment at schools serving the Project area. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous schools analysis. The physical extent of the cumulative impacts study area is the related projects within the service area of the following LAUSD public schools: Gardner Street Elementary (grades K-6), Hubert Howe Bancroft Middle School (grades 6-8), Fairfax Senior High School (grades 9-12), and Hollywood Senior High School (grades 9-12).

As discussed above, payment of developer impact fees in accordance with Senate Bill 50 and pursuant to Section 65995 of the California Government Code would ensure that the impacts of the Project on school facilities would be less-than-significant. Similar to the Project, the related projects would be required to pay impact fees to the LAUSD. The payment of school fees would fully mitigate any potential impacts to school facilities. Therefore, the cumulative impact would be less-than-significant.

### *Parks*

**Less-than-significant Impact.** Based on the *L.A. CEQA Thresholds Guide,* the determination of whether the project results in a significant impact on recreation and parks shall be made considering the following factors: (1) the net population increase resulting from the project; (2) the demand for recreation and park

[56] LAUSD, Resident School Identifier, rsi.lausd.net/ResidentSchoolIdentifier/ (accessed November 29, 2016).
[57] LAUSD, School Facility Needs Analysis, September 2012, New Students Projected by Grade Level, page 5.

services anticipated at the time of project build-out compared to the expected level of service available. Consider, as applicable, scheduled improvements to recreation and park services (renovation, expansion, or addition) and the project's proportional contribution to the demand; and (3) whether the project includes features that would reduce the demand for park services (e.g., on-site recreation facilities, land dedication, or direct financial support to the Department of Recreation and Parks). A significant impact would occur if the Project resulted in the construction of new recreation and park facilities that had significant direct or indirect physical impacts on the environment.

The proposed Project includes swimming pools that would reduce demand for park services and would not result in a substantial increase in demand for existing recreation and park services that would require new or expanded park facilities. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous parks analysis. The physical extent of the cumulative impacts study area is a 1.5-mile radius from the project site, which includes existing parks and recreational facilities such as the William S Hart Dog Park (8341 De Longpre Ave in West Hollywood), and Wattles Garden Park and Runyon Canyon Park to the east.

As discussed above, the Project would result in a less-than-significant impact on parks and recreational facilities due to the scale of the Project and the provision of swimming pools that would reduce demand on existing parks. The related projects, all of which are residential, would be required to pay a Dwelling Unit Tax. The payment of fees would mitigate potential impacts to park and recreational facilities. Therefore, the cumulative impact would be less-than-significant.

### *Other Public Facilities*

**Less-than-significant Impact.** A significant impact may occur if a project includes substantial employment or population growth that could generate a demand for other public facilities (such as libraries), which would exceed the capacity available to serve the project site. Based on the *L.A. CEQA Thresholds Guide,* the determination of whether the project results in a significant impact on libraries shall be made considering the following factors: (1) the net population increase resulting from the project; (2) the demand for library services anticipated at the time of project build-out compared to the expected level of service available. Consider, as applicable, scheduled improvements to existing library services (renovation, expansion, addition or relocation) and the project's proportional contribution to the demand; and (3) whether the project includes features that would reduce the demand for library services such as on-site library facilities or direct financial support to the Los Angeles Public Library (LAPL).

The LAPL branch currently serving the Project is the West Hollywood Library, located at 625 N. San Vicente Boulevard, approximately 2.4 miles south of the Site. As the Project would not result in a significant population increase, the demand for library services is not expected to substantially increase compared to the expected level of service. Therefore, implementation of the Project would not result in an increase in demand for existing library services that would require new or expanded library facilities. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous libraries analysis. The physical extent of the cumulative impacts study area is the service area of the West Hollywood Library approximately 2.4 miles south.

The related projects are all single-family residences that could increase the demand upon library services. However, the City Charter requires libraries to be funded from property taxes, including those assessed against the Project and related projects. The Project as well as the related projects would be required to pay these fees as applicable. The population increase resulting from the related projects will not be sufficient to result in a substantial increase in demand for library services compared to the expected level of service such that new or physically expanded libraries would be needed. Therefore, the Project, when viewed in connection with the eight related projects, would not result in an increase in demand for library services that would require new or expanded library facilities. Therefore, the cumulative impact would be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. RECREATION.** | | | | |
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☒ | ☐ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

**Less-than-significant Impact.** A significant impact may occur if a project includes substantial employment or population growth, which would increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether the project results in a significant impact on recreation and parks shall be made considering the following factors: (1) the net population increase resulting from the project; (2) the demand for recreation and park services anticipated at the time of project build-out compared to the expected level of service available. Consider, as applicable, scheduled improvements to recreation and park services (renovation, expansion, or addition) and the project's proportional contribution to the demand; and (3) whether the project includes features that would reduce the demand for park services (e.g., on-site recreation facilities, land dedication, or direct financial support to the Department of Recreation and Parks).

Each residence would be a two-bedroom dwelling with a swimming pool, therefore the Project would not generate a substantial increase in population, nor would it substantially increase the demand for recreation services. Therefore, impacts to parks and recreational facilities would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

**Less-than-significant Impact.** A significant impact may occur if a project includes the construction or expansion of park facilities that could have a significant adverse effect on the environment. The Project would not substantially increase the demand for existing park or recreation facilities, the construction or expansion of existing recreational facilities would not be required, and impacts would be less-than-significant. Each residence will have a swimming pool for recreational use. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous recreational facilities analysis. The physical extent of the cumulative impacts study area is a 1.5-mile radius from the Project Site, which includes existing recreational facilities such as the William S Hart Dog Park (8341 De Longpre Ave in West Hollywood), and Wattles Garden Park and Runyon Canyon Park to the east.

The related projects involve the development of residences that would result in an increase in residents in the area. Cumulative development would contribute to lowering the City's existing parkland-to population ratio. The scale of the related projects, eight single-family residences on existing residential lots, would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The related projects, all of which are residential, would be required to pay a Dwelling Unit Tax. The payment of fees would mitigate potential impacts to recreational facilities. Therefore, the cumulative impact would be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. TRANSPORTATION**. Would the project: | | | | |
| a. Conflict with a program, plan, ordinance or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☒ | ☐ | ☐ |
| b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☐ | ☒ |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☒ | ☐ | ☐ |
| d. Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |

Unless noted otherwise, the following responses are based on the Traffic Analysis for the Construction Phase of the Crisler Way Project, Los Angeles, California ("Traffic Study") prepared by Associated Transportation Engineers included as **Appendix K**.

***a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities?***

**Potentially Significant Unless Mitigation Incorporated.** A significant impact could occur if a project were to conflict with a program, plan, ordinance or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities. As an element of the City General Plan, the Mobility Plan 2035 sets the following objectives and policies addressing the City circulation system:

- Safety First: Design and operate streets in a way that enables safe access for all users and modes of travel,
- Access for All Angelenos: Ensure a fair and equitable system which is accessible to all and accommodates the most vulnerable of users,
- World Class Infrastructure: provide a well-maintained and connected network of streets, paths, bikeways and trails.[58]

The Project would comply with the Mobility Plan 2035 and would not disrupt public transportation services or alter existing public transportation routes and would not interfere or otherwise decrease the performance or safety of existing bikeways or pedestrian facilities. As the Project would improve a portion of Crisler Way, it would comply with the Safety First and Access for All Angelenos Elements to ensure safe street access and an equitable system accessible for all users. In addition, the Project would comply with the World Class Infrastructure Element as the project would improve the planned, but currently unimproved, 25-foot wide Crisler Way public right-of-way with 20 foot wide paved roadway surface intersecting the existing roadway of Grand View Drive to provide vehicular access to the proposed residences. As such, the Project would not conflict with the Mobility Plan 2035.

In addition, the Los Angeles Department of Transportation (LADOT) oversees transportation planning, design, construction, maintenance and operations within the City and includes recommended levels of

[58] Los Angeles Department of City Planning, Mobility Plan 2035, An Element of the General Plan, September 7, 2016.

service to measure the quality of vehicular traffic.[59] The Traffic Study found that existing traffic volumes on the network between Laurel Canyon Blvd and the Project Site are relatively low and the roadways operate at "Level of Service" (LOS) A, indicating relatively free flow conditions. After construction, the operation of four single-family residences would result in a less than significant impact on the performance of the circulation system. Therefore, the following transportation and circulation impact analysis considers the impact of temporary construction vehicle traffic on local roadways.

**Construction Site Access**

The U.S. 101 Freeway would provide regional access to the Project Site. The Traffic Study considered two potential local access routes for construction vehicles to access the Project Site. Both routes start at Laurel Canyon Boulevard and use a portion of Kirkwood Drive to access the Project Site. In preparing the Traffic Study, Associated Transportation Engineers surveyed the two routes to determine the best route for users given the roadway widths and curvatures while minimizing impedance to neighborhood access.

*Access Route A*

Access Route A begins at Laurel Canyon Boulevard and follows Kirkwood Drive to Yucca Trail to Grand View Drive to the Project Site. The segment of Kirkwood Drive between Laurel Canyon Boulevard and Yucca Trail is a two-lane road with curbs on both sides. Street parking is allowed on one side of the road. This segment of Kirkwood Drive between Laurel Canyon Boulevard and Yucca Trail is 26 feet wide curb to curb, allowing for two-way traffic flow. Construction traffic would turn from Kirkwood Drive onto Yucca Trail at a stop sign controlled intersection and then proceed along Yucca Trail to Grand View Drive. Yucca Trail varies in width between Kirkwood Drive and Grand View Drive, some areas as narrow as 10 feet and some as wide at 15 feet. Many areas are marked with no parking signs. The narrow width requires vehicles traveling in opposite directions to pass at widened areas or near residential driveways. Vehicles traveling downhill are sometimes required to back up short distances to allow for vehicles traveling uphill to pass. There is a narrow sharp turn over 90 degrees where Yucca Trail transitions to Grand View Drive. From there, Grand View continues to the Project Site. Grand View Drive is also a narrow roadway with some areas as narrow as 10 feet. There are many "No Parking" signs along Grand View Drive and the narrow width requires vehicles traveling in opposing directions to pass at widened areas or back up to allow the vehicle traveling in the opposite direction to pass.

*Access Route B*

Access Route B also begins at Laurel Canyon Boulevard and uses Kirkwood Drive to Grand View Drive to the Project site. Kirkwood Drive is 26 feet wide and allows for two-way traffic. Construction traffic would turn from Kirkwood Drive onto Grand View Drive and proceed to the Project Site. The Traffic Study included an Autoturn analysis to determine whether the largest piece of construction equipment, a 24-foot flatbed truck, would be able to navigate the sharp curve from Kirkwood Drive to Grand View Drive, concluding that this vehicle would be able to maneuver through the turn with a 4-point turn. The segment of Grand View Drive between Kirkwood Drive and the Project Site is narrow, some areas as narrow as 10 feet, requiring vehicles traveling in opposite directions to pass at widened areas or for vehicles traveling in one direction to back up short distances to allow for vehicles traveling in the other direction to pass. There are various choke points along the Access Route where the roadway narrows to less than 16 feet and prohibits two vehicles to pass in either direction. The roadway narrows to a minimum of 10 feet in some locations. The 24-foot flatbed truck would be able to maneuver along the access route at these choke points. Many areas are marked with "No Parking" signs. However, parked vehicles were observed in those locations during preparation of the Traffic Report.

[59] Los Angeles Department of Transportation, Transportation Impact Study Guidelines, December 2016.

Based on a field review of these two routes, the Traffic Study recommended Route B for access to and from the Project Site. Route B uses a longer portion of Kirkwood Drive which is 26 feet wide, allows for two-way traffic, is safer for roadway users, and would minimize impedance to neighborhood traffic.

**On-Site Equipment Staging Area and Construction Parking**

Crew members would be shuttled to and from the site until the initial on-site equipment staging area is ready; therefore, there would be no need for construction parking on Grand View Drive. Based on the Construction Management Schedule provided in Exhibit C of the response to comments letter in Appendix N, the initial staging area on lot 95 would be ready by day five (5) from the start of construction. By providing an initial and temporary on-site construction equipment staging area, the Project would avoid the need for lane or road closures on the Construction Access Route shown in Figure 5, Construction Access Route. The Construction Management Schedule, provides detailed descriptions of the size of construction equipment anticipated consisting of mini excavators and a drilling rig with a boom that would be initially delivered and quickly transferred – the construction management schedule estimates 15 minutes for delivery – to the on-site staging area to avoid restricting access on Grand View Drive. In a worst-case scenario, on day 12, pouring six (6) temporary shoring piles is expected to partially block, up to five (5) feet of Grand View Drive right of way for up to three (3) hours. A temporary and partial blockage of up to five (5) feet of Grand View Drive would still allow cars to pass.

**Construction Work Hours**

All construction activities are required to be performed in accordance with applicable State and federal laws, and City Codes, with respect to building construction and activities. All project-related construction activities will occur only between the hours of 8:00 a.m. and 4:00 p.m. (with construction personnel arriving no earlier than 8:00 a.m. and departing no later than 5:00 p.m.) Monday through Friday; no work will occur on Saturdays until the construction activities are confined to inside work. No construction work will be performed on all Sundays and locally-recognized holidays. Therefore, construction noise would not take place during the hours prohibited by LAMC Section 41.40. The Applicant has also committed to the following design features to avoid or minimize potential traffic impacts on the surrounding neighborhood.

- Construction crews will not work on Saturdays until the construction activities are confined to inside work.
- The contractor will shuttle workers to the Project Site in a van to avoid construction traffic and parking on Grand View Drive.
- Until the on-site construction staging area on Lot #95 is created, construction crews will not work on Thursdays, trash collection days.

**Truck Trips**

By using the fill soil generated from site preparation of the residential lots for the foundation of the Crisler Way improvement fronting the proposed residences, Project grading would balance on site and no soil import or export is anticipated. Site preparation, grading, and construction would require regularly scheduled truck deliveries for equipment and materials and construction waste hauling. Stage four of site preparation and grading would require concrete pouring estimated at up to three cement truck deliveries per day. In a worst-case scenario, the Applicant expects project construction to result in up to 10 truck trips per day during the highest-trip generating stages of construction such as concrete pouring. Truck deliveries and waste hauling would follow Access Route B as recommended in the Traffic Report to minimize potential construction traffic impacts on the surrounding neighborhood. The Applicant has provided a Construction Traffic Management Plan included in Appendix K.

**Temporary Street Closures**

By shuttling the construction crew to and from the Project Site, creating an initial on-site equipment staging area on Lot 95, and a temporary on-site equipment staging area as the construction of Crisler Way progresses, the Project would avoid the need for temporary street closures. Limited initial equipment and material deliveries would necessitate temporary partial obstruction of Grand View Drive adjacent to the Project Site, estimated at 15 minutes in duration, on an intermittent basis, while pouring the six temporary shoring piles estimated at up to three hours in duration, and for utility relocations/hook-ups. As detailed in the Construction Management Schedule, site deliveries would be timed to avoid peak commute periods and equipment staging would be organized to remain on site to reduce temporary impacts to the neighborhood. The first construction equipment to arrive at the Site would be unloaded off of Grand View Drive and would create the pad for the initial on-site equipment staging area on the existing building foundation on Lot 95. Subsequently delivered construction equipment and material would be staged on-site for the duration of construction. City agencies are responsible for reviewing the Project Construction Traffic Management Plan in conformance to City standards.

**Trip Generation**

The construction traffic generated by the Project would consist of worker trips to a shuttle pick-up location plus trucks hauling equipment and materials to and from the Site. A maximum of 10 vehicles would travel to the site per day which includes delivery vehicles, worker shuttles, and employee vehicles. The delivery vehicle trips include a smaller cement truck with a 6 cubic yard capacity, a smaller capacity truck that holds less than 10 cubic yards. The Traffic Study estimated traffic generation during construction based on the construction schedules provided in Section 3.0, Project Description, Tables 3-5 and 3-6, for each phase of the Project. **Table 4.16-1, Trip Generation Estimates – Site Preparation and Construction,** provides the estimated average daily trips (ADT) that would be generated during each phase of site preparation and construction.

**Table 4.17-1**
**Trip Generation Estimates – Site Preparation and Construction**

| Phase | Trips Per Day | |
|---|---|---|
| | Vehicles [a] | Trips [b] |
| Grading and Site Preparation | 10 | 20 ADT |
| Home Construction | 10 | 20 ADT |

Source: Associated Transportation Engineers, Traffic Analysis for Construction Phase, Appendix K.
[a] Assumes delivery vehicles, worker shuttles and employee vehicles
[b] Trip assume 1 inbound + 1 outbound trip per vehicle

As shown in Table 4.17-1, peak construction traffic is estimated at up to 20 trips per day (10 inbound and 10 outbound trips). The estimates shown in Table 4.17-1 assume some overlap in construction activities and therefore overestimate the day-to-day traffic generation because fewer workers and deliveries would be required for the Project. Most days would experience lower trip generation because a lower number of workers and/or deliveries will be required for the Project.

The Project Site is located in a hillside residential setting that does not contain public transit stations or bicycle facilities. There are few sidewalks along the roadways adjacent to the Project Site. Therefore, impacts to the circulation system involving other modes, such as transit, bicycle, and pedestrian, during construction and operation would be less-than-significant.

The Traffic Study found that the relatively minor amount of traffic generated by Project construction would not impact the volume-to-capacity ratios on the adjacent roadway network that currently operate at LOS A,

indicating relatively free flow conditions. In addition, the Project would shuttle workers to the Site in a van and establish an on-site construction parking and equipment staging area on Lot #95 to allow for no parking on Grand View Drive within two weeks after beginning construction. To reduce the impact of construction traffic on existing local traffic flow, mitigation measures MM TRA-1 through TRA-3 require notification of residents affected by construction, preparation of a traffic management plan, and scheduling material deliveries to avoid peak commuter periods. In compliance with MM TRA-2, the Applicant prepared a Construction Traffic Management Plan included in Appendix K. To reduce the impact of construction traffic on the effectiveness or performance of the local circulation system, mitigation measure MM TRA-4 requires Project construction traffic to use Access Route B and prohibits construction vehicle parking on roadways once the on-site staging area is operational. Implementation of mitigation measures TRA-1 through TRA-4 would reduce the impact of construction traffic to less than significant.

**Operations**

Given that the adjacent roadway network would continue to operate at LOS A with the addition of Project construction traffic, traffic impacts resulting from the operation of four (4) single-family residences would be relatively minor, generating equivalent or fewer trips than those assumed in the construction trip generation estimates. Therefore, construction and operation of the Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system and impacts would be less-than-significant.

***Mitigation Measures:***

**MM TRA-1** To minimize construction traffic and roadway hazards associated with the construction access route, which include sharp curves and narrow roadway widths, the Project proponent shall provide a mechanism to inform area residents potentially affected by construction traffic prior to the commencement of construction activities. Relevant Project information must include, but would not be limited to, the expected duration of the construction project, the weekdays during which construction is expected, hours of construction, and the amount of construction traffic expected. The Project proponent must also post temporary signage along the construction access route and at the Project Site with a hotline number for residents affected to voice problems associated with construction traffic.

**MM TRA-2** To minimize construction traffic and roadway hazards along the access route, the Project proponent shall prepare a Construction Traffic Management Plan conforming to City of Los Angeles requirements. The Construction Traffic Management Plan must detail the placement of warning signs, traffic control personnel needed, and assurance the size of trucks anticipated can adequately maneuver along the designated access route. The Traffic Management Plan must also provide for the use of flagmen along Grand View Drive to facilitate deliveries as necessary.

**MM TRA-3** To minimize construction traffic and roadway hazards along the access route, the Project proponent shall schedule trucks transporting construction materials and equipment to and from the construction site to arrive or depart outside of the morning and afternoon peak commuter periods. Morning peak commuter periods are defined as 8:00 a.m. to 9:00 a.m. and afternoon peak commuter periods are defined as after 4:00 p.m. The Project proponent shall use smaller concrete trucks with less than 10 cubic yards of capacity for transporting foundation materials to and from the Site.

**MM TRA-4** To minimize construction traffic and roadway hazards along the access route, the Project proponent shall use Access Route B, Kirkwood Drive to Grand View Drive, to Crisler Way. Once the initial on-site equipment staging area on Lot 95 is operational, the Project proponent shall prohibit construction vehicle parking on neighborhood roads.

***b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

**No Impact.** In September 2013, the Governor's Office signed Senate Bill 743 (SB 743) into law, starting a process that changes the way transportation impact analysis is conducted under CEQA. Within the State's CEQA Guidelines, these changes include the elimination of auto delay, Level of Service, and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant traffic impacts. Per OPR's revisions to the CEQA Guidelines, a lead agency may elect to be governed by the vehicle miles travelled (VMT) guidelines immediately. However, beginning July 1, 2020, the VMT guidelines shall apply Statewide. To date, the City of Los Angeles has not adopted a methodology or corresponding thresholds of significance for purposes of evaluating the potential traffic impacts of development projects based on VMT. Accordingly, this project assumes the analysis of Project-related traffic impacts will be prepared based on the City's current Level of Service-based methodology and thresholds of significance.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

**Potentially Significant Unless Mitigation Incorporated.** A significant impact may occur if a project includes new roadway design or introduces a new land use or features into an area with specific transportation requirements and characteristics that have not been previously experienced in that area, or if project site access or other features were designed in such a way as to create hazard conditions. The Traffic Study found that construction traffic between Laurel Canyon Boulevard and the Project Site has the potential to affect safety and access for roadway users given the roadway widths and curvatures. As recommended in the Traffic Study, mitigation measure MM TRA-4 requires Project construction traffic to use Access Route B to avoid narrow roadway widths and sharp curves on Yucca Trail.

The Access Route from Kirkwood Drive to Grand View Drive includes potentially hazardous choke points, where the roadway narrows to less than 16 feet and prohibits two vehicles to pass in either direction. The use of construction vehicles such as the 24-foot flat-bed truck and cement trucks on narrow roadways with sharp curves along Access Route B could create temporary hazardous roadway conductions. The Traffic Study included an Autoturn analysis to determine whether the largest piece of construction equipment, the 24-foot flatbed truck, would be able to navigate the sharp curve from Kirkwood Drive to Grand View Drive and exit the staging area onto Grand View Drive, concluding the vehicle would be able to maneuver through these turns with a 4-point turn. Mitigation Measures MM TRA-1 through TRA-3 require notification of residents affected by construction, preparation of a traffic management plan, scheduling material deliveries to avoid peak commuter periods, and prohibiting construction vehicle parking on roadways once the on-site staging area is operational. Heavily-laden construction equipment including flat-bed trucks delivering equipment and supplies and cement trucks could damage the existing roadway surface along the construction access route, therefore, mitigation measure **MM TRA-5** requires the Project proponent to record the existing condition of the pavement prior to construction, reasonably maintain the roadway during constriction, and repair damage caused by construction vehicle use. By directing construction traffic to use

Access Route B, compliance with existing State regulations and City code requirements, and implementation of MM TRA-1 through TRA-5, the Project would not substantially increase hazards due to design features or incompatible equipment, impacts would be less-than-significant after mitigation.

***Mitigation Measures:***

**MM TRA-5** The Project proponent shall repair potential physical damage to the pavement and curbs along the construction access route between the intersection of Laurel Canyon Boulevard and Kirkwood Drive to the Project Site resulting from project construction vehicle trips. To document pre-construction conditions, the Project proponent shall inspect and video record the pavement and curbs along the construction route between the intersection of Laurel Canyon Boulevard and Kirkwood Drive to the Project site prior to construction and submit the recording to the Department of Public Works for review.

To address roadway deterioration during Project construction, the Project proponent shall periodically inspect and reasonably maintain the roadway along the construction access route. Post-construction, the Project proponent shall inspect and video record any damage to the construction access route between the intersection of Laurel Canyon Boulevard and Kirkwood Drive and submit the recording to the Department of Public Works for review. The Project proponent shall then repair roadway damage due to Project construction vehicle use to the satisfaction of the Director of Public Works.

***d. Would the project result in inadequate emergency access?***

**Less-than-significant Impact.** A significant impact may occur if a project design would not provide emergency access meeting the requirements of the LAFD, or in any other way threatened the ability of emergency vehicles to access and serve a project site or adjacent uses. Site preparation and construction would generate construction traffic, particularly truck deliveries and hauling, which may affect short-term emergency access to the project site. A traffic control plan would be reviewed and approved, prior to construction if required by the LAMC. During operations, the Project would not cause permanent alterations to vehicular circulation routes and patterns or impede public access or travel on public rights-of-way.

The Hydrants and Access Unit of the LAFD has approved the Project, see Sheet Number A-1 in Appendix A. The improvement of Crisler Way and provision of a 20 foot wide roadway provides a spur from Grand View Drive for Fire Department vehicles to pull out of the way of existing residences in case of a fire.[60] By improving the portion of Crisler Way in front of the proposed residences, the Project would provide adequate emergency access. The Project does not propose hazardous design features that could impede emergency access. Furthermore, the Project must comply with site plan review requirements of the LAFD to ensure that all access roads, driveways, and parking areas would remain accessible to emergency vehicles. Given that Project plans has been approved by the LAFD and would provide adequate emergency access, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[60] CAC Development, Crisler Way, April 12, 2016. See also: House 98 Site Plan/Title Sheet, Sheet Number A-1, date Printed 6-20-2013, CAC Development.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous recreational facilities analysis. The Traffic Report added Project generated construction trips to the existing neighborhood intersections and concluded the neighborhood streets would continue to operate at LOS A, indicating the adjacent local roads operate at relatively free flow conditions. The City Department of Transportation has indicated that a cumulative analysis of traffic impacts is not required.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVIII. TRIBAL CULTURAL RESOURCES** | | | | |
| a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☐ | ☐ | ☒ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☐ | ☒ | ☐ |

The following responses are based on the results of a Records Search Request and Phase I(a) Cultural Resource Assessment of the project site conducted by Envicom Corporation dated November 22, 2016, provided in Appendix F.

***i. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, as defined […], and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?***

**No Impact.** Pursuant to AB 52, the Department of City Planning sent pre-consultation request letters on August 17, 2016 to the recognized Native American Tribal Representatives within the Los Angeles region. The Tribe must respond in writing within 30 days of the City's AB 52 notice. On August 24, 2016, one tribal response was received from the Gabrieleno Band of Mission Indians – Kizh Nation who requested a formal request for tribal consultation under the provisions of CEQA for the mitigation of potential impacts to tribal cultural resources. On October 7, 2016, the City began consultation required under AB 52, and through the process requested that substantial evidence be provided in follow up to the information that was provided during the telephone consultation and tribes letter. No substantial evidence was presented, no further consultation was conducted and the consultation was closed 30 calendar days after the City's response of October 7, 2016. Because the Project Site has been subject to ground disturbance activities in

the past and is not known to be associated with any cultural or sacred sites, the probability for the discovery of a known site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe is considered low.

As described previously in response to V.a., Cultural Resources, no ancillary structures are present on the Project Site that definitively meet the 50-year age threshold for typical consideration for the National Register of Historic Places or the California Register of Historical Resources, or as a City of Los Angeles Historic-Cultural Landmark. Also, results from the South Central Coastal Information Center record search were negative for built environment resources within the Project Site. Therefore, the Project will not cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources.

***Mitigation Measures:*** No mitigation measures are required.

***ii. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, as defined […], and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

**Less-than-significant Impact.** Pursuant to AB 52, the Department of City Planning sent pre-consultation request letters on August 17, 2016 to the recognized Native American Tribal Representatives within the Los Angeles region. The Tribe must respond in writing within 30 days of the City's AB 52 notice. On August 24, 2016, one tribal response was received from the Gabrieleno Band of Mission Indians – Kizh Nation who requested a formal request for tribal consultation under the provisions of CEQA for the mitigation of potential impacts to tribal cultural resources. On October 7, 2016, the City began consultation required under AB 52, and through the process requested that substantial evidence be provided in follow up to the information that was provided during the telephone consultation and tribes letter. No substantial evidence was presented, no further consultation was conducted and the consultation was closed 30 calendar days after the City's response of October 7, 2016. Because the Project site has been subject to ground disturbance activities in the past and is not known to be associated with any cultural or sacred sites, the probability for the discovery of a known site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe is considered low. Thus, in the absence of any known cultural resources, adherence to the regulatory compliance procedures referenced above for archeological resources and human remains would ensure impacts associated with the accidental discovery of any archaeological resources or human remains, including Native American resources would be avoided or reduced to less-than-significant levels.

The Phase I(a) Cultural Resource Assessment was negative for cultural resources within the Project area. No archaeological sites (historic or prehistoric) were identified within the Project area by either the record search or by the Phase I(a) Cultural Resource Assessment consisting of a pedestrian survey of the property by qualified archaeologists. Both the pedestrian survey and record search suggest that subsurface archaeological resources are unlikely. Given the presence or absence of such subsurface materials cannot be determined until the site is excavated, no further evaluation of this issue is warranted at this time. In the unlikely event that any archaeological resources are discovered during excavation or grading, any potential impact would be reduced with the following applicable regulatory compliance measures requiring that work shall cease in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Regulatory requirements prohibit personnel of the proposed Project from collecting or moving any archaeological materials and associated materials. Construction activity may continue unimpeded on

other portions of the Project Site. The found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Therefore, in conjunction with the applicable regulatory compliance measures, the potential for impacts related to adverse change of a tribal cultural resource would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to tribal cultural resource analysis. The Project Site does not contain any known tribal resources and existing regulatory compliance measures would to protect potential tribal cultural resources encountered during construction. It is unknown if tribal resources exist on the related project sites, nevertheless, related projects would be required to implement protective measures in the event potential tribal cultural resources are encountered during construction. Cumulative impacts to tribal resources would therefore be less-than-significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIX. UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? | ☐ | ☐ | ☒ | ☐ |
| c. Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

**Less-than-significant Impact.** A significant impact may occur if a project would require or result in relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

***Water Treatment Facilities and Existing Infrastructure***

The Project would be served by existing City facilities Based on the *L.A. CEQA Thresholds Guide*, the determination of whether a project would result in a significant impact on water should be made considering the following factors: (1) the total estimated water demand for the project; (2) whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project build-out; (2) the amount by which the project would cause the projected growth in population, housing, or employment for the Community Plan area to be exceeded in the year of project completion; and (4) the degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

The Los Angeles Department of Water and Power (LADWP) ensures the reliability and quality of its water supply through an extensive distribution system that includes distribution pipes, storage tanks and a total storage capacity of 315,245 acre-feet.[61] Much of the water flows north to south, entering the City at the Los Angeles Aqueduct Filtration Plant in Sylmar, which is owned and operated by the LADWP. Water entering the Los Angeles Aqueduct Filtration Plant undergoes treatment and disinfection before being distributed throughout the LADWP service area. The Los Angeles Aqueduct Filtration Plant has the capacity to treat approximately 600 million gallons per day (mgd).[62] In 2013, the average plant flow peaked at 444 mgd in July and in 2014 peaked at 386 mgd in August.[63] Therefore, using the peak month flow rates as a worst-case scenario, in 2013 to 2014 the plant operated at between 74 and 64 percent capacity. Therefore, in 2014, the Los Angeles Aqueduct Filtration Plant operated with at least 214 mgd of remaining treatment capacity. LADWP reports that Los Angeles' water needs will continue to steadily increase due to a growing population and expanding commerce. By the year 2040, LADWP forecasts that the City's population is expected to grow to more than 4.4 million people with a total water demand of 675,685 acre-feet per year.[64]

The Project would generate demand for potable water that would be supplied by LADWP. The *L.A. CEQA Thresholds Guide* indicates that residential water demands can be approximated based upon LADWP per capita data. In fiscal year 2014/15, per capita water use (excluding recycled water) was estimated to be 114 gpd.[65] Based on the residential densities of the Hollywood Community Plan, the proposed Project would be expected to generate a population of approximately nine (9) persons.[66] Therefore, the Project's estimated indoor potable water demand is 1,026 gpd or 1.15 acre feet per year. Each of the four (4) proposed residences would feature an outdoor swimming pool. Conservatively assuming a pool water area of 400 square feet and an average depth of six (6) feet per swimming pool, each pool would use an estimated 16,050 gallons per year for a Project total of 64,200 gallons or 0.2 acre feet per year.[67] The Project's estimated indoor potable water demand of 1.15 acre feet per year plus an outdoor water demand of 0.2 acre feet per year due operation of the swimming pools would result in a total estimated Project water demand of 1.35 acre feet per year. This estimated water demand is within the capacity of the LADPW to provide using existing infrastructure at the Los Angeles Aqueduct Filtration Plant. Implementation of the Project is not expected to exceed LADWP potable water treatment capacity; therefore, no new or expanded water treatment facilities would be required. The Project would have a less-than-significant impact on water treatment facilities.

The extension of existing water mains and laterals would be required to supply potable water to the Project. Such infrastructure improvements would be installed within right-of-way easements serving the Project area and would not create a significant impact to the physical environment because: (a) any disruption of service would be of a short-term nature; (b) the replacement of the water mains would be within public rights-of-way; (c) any foreseeable infrastructure improvements would be limited to the immediate Project vicinity; (d) LADWP would install extended potable water mains in compliance with applicable regulatory requirements. Therefore, potential impacts resulting from water infrastructure improvements would be less-than-significant.

[61] LADWP, "Facts and Figures," www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water (accessed November 2016).
[62] LADWP, "Showcase Project: Los Angeles Aqueduct Filtration Plant Modernization," https://betterbuildingssolutioncenter.energy.gov/printpdf/showcase-projects/los-angeles-aqueduct-filtration-plant-modernization-–-oxygen-plant-replacement (accessed November, 2016).
[63] Email Correspondence with Delon Kwan, Waterworks Engineer, Water System, LADWP, October 27, 2015.
[64] Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, page ES-7 and 11.
[65] Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, page 2-1.
[66] The Hollywood Community Plan estimates 18.5 persons per gross acre associated with a residential density of Low II: 18.5 persons x 0.46 acre = 8.51 persons (rounded up to 9).
[67] Santa Margarita Water District Pool Water Use Calculator, http://www.smwd.com/conservation/pool-information.html (accessed November 8, 2016).

***Wastewater Treatment Facilities and Existing Infrastructure***

Based on criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant wastewater impact if (1) the project would cause a measurable increase in wastewater flows to a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or (2) the project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan.

The Los Angeles Bureau of Sanitation (LA Sanitation) provides sewer service and maintains sewer pipelines in the Project area. Wastewater from the Project Site would be conveyed to the Hyperion Water Reclamation Plant ("Hyperion"). Hyperion treats an average daily dry weather flow of 275 million gallons per day (mgd), and has capacity to treat a maximum daily flow of 450 million gallons of water per day (MGD) and peak wet weather flow of 800 MGD.[68] Therefore, Hyperion has a remaining capacity to treat 175 mgd of wastewater. **Table 4.19-1, Project Wastewater Generation,** provides the expected amount of wastewater to be generated by the Project.

**Table 4.19-1**
**Project Wastewater Generation**

| Type of Use | Sewage Generation Rate (Gallons Per Day) [a] | Units proposed | Total Sewage Generation |
|---|---|---|---|
| Residential: Single-Family Dwelling – 2 Bd. | 180 gpd | 4 | 720 gpd |
| Swimming Pool – Residential* | 0 gpd | 4 | 0 gpd |
| **Total Project Wastewater Generation** | | | **720 gpd** |

[a] Source: City of Los Angeles CEQA Thresholds Guide (2006), Exhibit M.2-12. Cited to Los Angeles Bureau of Sanitation, Sewerage Facilities Charge, Sewage Generation Factors for Residential and Commercial Categories. Effective June 6, 1996.

*The sewage generation factors provided in the L.A. CEQA Thresholds Guide provide an average daily flow of 0 for residential swimming pools because the water is treated and filtered onsite.

As shown in Table 4.19-1, the Project would generate an estimated total of 720 gpd of wastewater. In addition, the LA Green Building Code requires projects to achieve a 20-percent reduction in potable water use and wastewater generation, meet and exceed Title 24 Standards adopted by the California Energy Commission on December 17, 2008, and meet 50-percent construction waste recycling levels. Given that the remaining treatment capacity of Hyperion is 175 mgd, the Project would not exceed the available treatment capacity and would not require new or expanded wastewater treatment facilities. Therefore, the Project impact on wastewater treatment facilities would be less-than-significant.

The Project area is served by a network of sewer lines located beneath major streets that convey sewage from the Site and surrounding residences to Hyperion. As part of pre-construction, detailed gauging and evaluation will be needed as part of the permitting process to identify a specific sewer connection point for the Project Site. Based on the configuration of sewer lines serving the Project Site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight foot wide sewer/storm drain easement on Lot 118 (#201501511325).[69] The approved Sewer Plan and Profile prepared by Hovell and Pilarski is

[68] LA Sanitation, Hyperion Water Reclamation Plant, https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=fp05g2dp6_70&_afrLoop=5346391223220913#! (accessed November 2016).

[69] Robert Anderson, Architect, Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015.

provided in Appendix B. Project-generated sewer flows would then connect[70] to the existing line under Marmont Ave (Pipe ID# 4701402947014040A).[71] Proposed sewer infrastructure improvements in the Project vicinity would be limited to trenching, excavating and backfilling the sewer lines within the easement and beneath the public right-of-way. Such construction activities would be localized in nature and would generally involve temporary partial lane closures of short duration typically lasting a few days to a few weeks.

The project proposes to connect to the existing sewer line (Pipe ID#: 4701402947014040A) in the Marmont Avenue right-of-way. Though regulations in the City of Los Angeles Sewer Allocation Ordinance (No. 166060), LA Sanitation does not determine sewer capacity until the Los Angeles Department of Building and Safety has established that the proposed Project's plans and specifications are acceptable for plan check. This process ensures that the system can accept the anticipated wastewater flows from the Project at the time of connection, as opposed to prematurely committing to projects that are in the environmental review or entitlement process. In the case of the proposed Project, the Los Angeles Department of Building and Safety has already reviewed the proposed Project's plans and specifications, completed plan check, and the City already issued building permits for the proposed residences. LA Sanitation indicated that the existing sewer line (Pipe ID#: 4701402947014040A) in the Marmont Avenue right-of-way has sufficient capacity to serve four, two-bedroom single-family residences.[72] At the time of connection, the Bureau of Sanitation will check the gauging of the sewer lines and make the appropriate decisions on how best to connect to the local sewer lines at the time of construction.

Given the remaining wastewater treatment capacity of Hyperion and that LA Sanitation has indicated the existing wastewater infrastructure in the Marmont Ave public right-of-way has sufficient capacity to serve this previously plan checked and Permitted project, the Project impact to sewer capacity and infrastructure would be less-than-significant.

***Stormwater Drainage Facilities and Existing Infrastructure***

The proposed Project would not result in a significant increase in site runoff or substantially alter local drainage patterns. Stormwater runoff from the Project Site currently is, and would continue to be, collected on the site and directed towards existing storm drains. The Project would be required to demonstrate compliance with Low Impact Development (LID) Ordinance standards and retain or treat the first 3/4-inch of rainfall in a 24-hour period. Accordingly, the Project features a drainage system within an eight foot wide sewer/storm drain easement on Lot 118 (#201501511325)[73] The Project Stormwater Drainage Plan, provided in Appendix H, also features a Stormwater Planter to be located along the southern edge of the Site to receive and direct stormwater drainage per Bureau of Engineering and Building and Safety Requirements.[74] These proposed stormwater drainage improvements to update or expand the storm drains in the Project vicinity would be limited to trenching, excavating and backfilling storm drains beneath the public right-of-way. Such construction activities would be localized in nature and would generally involve temporary partial lane closures of short duration typically lasting a few days to a few weeks. The Project impact to stormwater capacity and infrastructure would be less-than-significant.

[70] Hovell and Pilarski Engineering, Inc., Sewer Plan and Profile, Grandview Sewer Main, Design Permit/Construction Permit BC-401804.
[71] City of Los Angeles, Department of Public Works, Bureau of Engineering, Navigate LA, Sewer Information, navigatela.lacity.org/navigatela/ (accessed October 26, 2015).
[72] City of Los Angeles, Department of Public Works, Bureau of Sanitation, Wastewater Engineering Services Division, email communication with Envicom Corporation, November 20, 2018.
[73] Robert Anderson, Architect, Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015.
[74] Ibid.

***Electric Power, Natural Gas and Telecommunications Facilities and Existing Infrastructure***

The proposed Project is located within an urbanized area of the City and therefore would be served by existing electric power, natural gas and telecommunications facilities. The LADWP is responsible for supplying the City with electric power, and the Project would connect to existing electrical extensions. Southern California Gas Company (SoCalGas) would provide the Project would natural gas by connecting to existing natural gas extensions. The Information Technology Agency (ITA) would provide the Project with existing telecommunications regulatory services. As the Project would be served by existing electric power, natural gas and telecommunications facilities, the Project impacts to expanded facilities would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?***

**Less-than-significant Impact.** A significant impact would occur if the project did not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether the project results in a significant impact on water shall be made considering the following factors: (1) the total estimated water demand for the project; (2) whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project build-out; (3) the amount by which the project would cause the projected growth in population, housing, or employment for the Community Plan area to be exceeded in the year of the project completion; and (4) the degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

The Project would generate demand for potable water which would be supplied by LADWP. City efforts are underway to increase use of recycled water, expand capture of local stormwater runoff, and expand LADWP's water conservation programs to decrease reliance on purchased imported water for future demand. Short- and long-term conservation strategies include enforcing and expanding prohibited uses of water, increased use of recycled water, enhanced stormwater capture, extending outreach efforts, and encouraging regional conservation measures. Pursuant to LAMC Section 122.03(a), the Project is required to use water-saving devices including, but not limited to, high efficiency toilets, showerheads, and clothes washers equipped with flush-o-meter valves, which flush with a maximum of 1.28 gallons. The Project would also comply with City Ordinance No. 170,978 (Water Management Ordinance) which imposes numerous water conservation measures for landscaped areas. Compliance with the City's existing regulatory requirements for water efficiency would reduce the Project impact on water demand.

The *L.A. CEQA Thresholds Guide* indicates that residential water demands can be approximated based upon LADWP per capita data. In FY 2014/15, per capita water use (excluding recycled water) is estimated to be 114 gpd.[75] Based on the residential densities of the Hollywood Community Plan, the proposed Project would be expected to generate a population of approximately nine (9) persons.[76] The Project's estimated indoor potable water demand is 1,026 gpd or 1.15 acre feet per year. Each of the four (4) proposed residences would feature an outdoor swimming pool. Conservatively assuming a pool water area of 400 square feet and an average depth of six (6) feet per swimming pool, each pool would use an estimated

[75] Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, page 2-1.

[76] The Hollywood Community Plan estimates 18.5 persons per gross acre (2010) associated with a residential density of Low II: 18.5 persons x 0.46 acre = 8.51 persons (rounded up to 9).

16,050 gallons per year for a Project total of 64,200 gallons or 0.2 acre feet per year.[77] The Project's estimated indoor potable water demand of 1.15 acre feet per year plus an outdoor water demand of 0.2 acre feet per year due operation of the swimming pools would result in a total Project water demand of 1.35 acre feet per year.

LADWP water supplies for fiscal year 2014/2015 were 513,540 AF.[78] The Project's annual water demand of 1.35 acre feet would represent 0.000003 percent of the total LADWP supplies. Given that the Project is consistent with the current land use designation, zoning, and forecasted population increases in the Urban Water Management Plan, and the Project's small percentage of anticipated water demand relative to annual supplies, LADWP could serve the Project through existing entitlements. Therefore, the Project impact on water supply is considered less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant wastewater impact if: (1) the project would cause a measurable increase in wastewater flows to a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or (2) the project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its elements.

As stated earlier in response to Section XIX.b., the Hyperion has adequate remaining wastewater treatment capacity to serve the Project's projected demand. Therefore, the Project impact on wastewater treatment would be less-than-significant.

***Mitigation Measures:*** Mitigation measures are not required.

***d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

**Less-than-significant Impact.** A significant impact may occur if a project were to increase solid waste generation to a degree such that the existing and projected landfill capacity would be insufficient to accommodate the additional solid waste. Based on the *L.A. CEQA Thresholds Guide*, the determination of whether a project results in a significant impact on solid waste shall be made considering the following factors: (1) amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the project, considering proposed design and operational features that could reduce typical waste generation rates; (2) need for additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and (3) whether the project conflicts with solid waste policies and objectives in the Source Reduction and Recycling Element (SRRE) or its updates, the Solid Waste Management Policy Plan (CiSWMPP), Framework Element of the Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the SRRE.

[77] Santa Margarita Water District Pool Water Use Calculator, http://www.smwd.com/conservation/pool-information.html (accessed November 8, 2016).
[78] Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, page 1-14.

Solid waste generated within the City is disposed of at landfill facilities located throughout Los Angeles County. While LA Sanitation provides waste collection services to single-family and some small multifamily developments, private haulers provide waste collection services for most multifamily residential and commercial developments within the City. Solid waste transported by both public and private haulers is recycled, reused, transformed at a waste-to-energy facility, or disposed of at a landfill. The Sunshine Canyon City/County Landfill serves existing land uses within the City. This landfill is Class III and accepts residential, commercial, and construction nonhazardous waste. When waste is received at Class III landfills and transformation facilities, some is recycled for on-site use, such as alternative daily cover, and some is sent off-site for recycling or processing. The remaining waste is land filled or transformed into energy. If transformed, the residual ash can be turned into ashcrete and used as road base for winter deck operating areas and other beneficial uses.[79] As of December 2016, the Sunshine Canyon Landfill reported a remaining capacity of 62.1 million tons and a remaining life of 21 years.[80]

The Project would follow applicable solid waste policies and objectives required by law, statute, or regulation. Solid waste disposal needs would be directed to the local recycling facilities and landfills described above. Based on a total development size of 5,823 square feet inclusive of the four proposed residences and a standard waste generation rate of 4.39 pounds/square foot, construction of the Project would generate an estimated 13 tons of debris.[81] Given the available capacity reported at Sunshine Canyon and Chiquita Canyon Landfills, the impact of the solid waste generated by the Project during construction would be less-than-significant.

The Project's solid waste would be handled by private waste collection services and would only contract for waste disposal services with a company that recycles construction-related wastes. Prior to the issuance of any construction permit, the Applicant would provide a copy of the receipt or contract from a waste disposal company providing services to the Project, specifying recycled waste service(s), to the satisfaction of the Los Angeles Department of Building and Safety.

Based on a rate of 12.23 pounds per household per day for residential land uses, the operation of the four (4) proposed residences would generate an estimated 8.9 tons of solid waste per year.[82] However, this is a conservative estimate that does not factor in any recycling or waste diversion programs. This estimate does not include the separation of recyclables from solid waste at processing facilities. Given that the Sunshine Canyon has a maximum daily capacity of 12,100 tons and reported an average daily disposal rate of 7,582 tons per day, the amount of operational solid waste generated by the Project is within the available capacities of area landfills. Therefore, operational solid waste impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***e. Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?***

**Less-than-significant Impact.** A significant impact may occur if a project would generate solid waste not disposed of in accordance with applicable regulations. Construction and operation of the Project would

[79] Los Angeles County Department of Public Works, 2014 Annual Report: Los Angeles Countywide Integrated Waste Management Plan (December 2015), pg 27.

[80] Los Angeles County Department of Public Works, 2016 Annual Report: Los Angeles Countywide Integrated Waste Management Plan (September 2017), page 71.

[81] United States Environmental Protection Agency, Office of Resource Conservation and Recovery, Report No. EPA530-R-09-002, *Estimating 2003 Building-Related Construction and Demolition Materials Amount*, p. 9, https://www.epa.gov/cd-materials/estimating-2003-building-related-construction-and-demolition-cd-materials-amounts (accessed November 2016).

[82] City of Los Angeles, *L.A. CEQA Thresholds Guide* (2006), pg. M.3-2. Waste generation includes all materials discarded, whether or not they are later recycled or disposed of in a landfill.

generate solid waste typical of residential buildings and would comply with federal, State, and local regulations regarding proper solid waste disposal. Therefore, Project impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

**Water**

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous water analysis, including water treatment facilities, delivery infrastructure, and supplies. The physical extent of the cumulative impacts study area is the existing LADWP service area.

Implementation of the Project in connection with the related projects, along with other projects within the service area of LADWP, would generate demand for additional water supplies. In terms of the City's overall water supply, the water demand for any project consistent with the City's General Plan is accounted for in the adopted Urban Water Management Plan (UWMP). The UWMP anticipates that the future water supplies would be sufficient to meet existing and planned growth in the City to the year 2030 under wet and multiple dry year scenarios. The related projects would be consistent with the General Plan, although at least would apply for variances, and, therefore, have been accounted for the UWMP.

With respect to water treatment facilities, the remaining daily capacity of the Los Angeles Aqueduct Filtration Plant in 2014 operated with at least 214 mgd of remaining treatment capacity. Therefore, the LAAFP can reasonably be expected to have adequate capacity for the additional water demanded by the Project and the related projects. The cumulative impact would be less-than-significant.

With respect to water infrastructure, the potential need for the related projects to upgrade water lines to accommodate their water needs is site-specific, although the eight projects are on existing residential lots near streets with existing water supply infrastructure. As previously discussed in response to Section XIX.b., the Project would have a less-than-significant impact on water infrastructure. Any upgrades to the related projects' water infrastructure would be required to be implemented by the applicants of those related projects within the environmental setting of an existing residential area served by existing potable water and wastewater conveyance infrastructure maintained by LADWP and LA Sanitation. Therefore, the cumulative impact would be less-than-significant.

**Wastewater**

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Section 3.10, Related Projects) with respect to the topics listed in the previous wastewater analysis, including wastewater treatment, facilities, and capacities. The physical extent of the cumulative impacts study area is the existing LA Sanitation service area.

Implementation of the Project in connection with the related projects and other projects within the service area of LA Sanitation would generate additional wastewater that would be treated at existing wastewater treatment plants. Hyperion treats an average daily dry weather flow of 275 million gallons per day (mgd), and has capacity to treat a maximum daily flow of 450 million gallons of water per day (MGD) and peak wet weather flow of 800 MGD.[83] Therefore, Hyperion has a remaining capacity to treat 175 mgd of wastewater. Although the exact number of bedrooms for each of the eight related projects is unknown,

[83] LA Sanitation, Hyperion Water Reclamation Plant, https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=fp05g2dp6_70&_afrLoop=5346391223220913#! (accessed November 2016).

assuming each single-family residence has three bedrooms, each residence would generate 230 gpd for a total of 1,840 gpd. Combining this related project total of 1,840 gpd with the proposed Project total of 720 gpd results in a cumulative total of 2,560 gpd. Given Hyperion has a remaining capacity to treat 175 mgd of wastewater, the cumulative impact on wastewater treatment facilities would be less-than-significant.

With respect to sewer lines, the need for related projects to upgrade sewer lines to accommodate their wastewater needs is site-specific, requiring review by LA Sanitation before the issuance of building permits as a regulatory requirement. Similar to the Project, the City will require detailed gauging and evaluation of the related projects' wastewater connection point at the time of connection to the system to ensure the infrastructure has sufficient capacity to convey wastewater flows to existing facilities.

**Solid Waste**

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Section 3.10, Related Projects) with respect to the topics listed in the previous solid waste analysis, including landfill capacity and compliance with solid waste statutes and regulations. The physical extent of the cumulative impacts study area is the existing Countywide Integrated Waste Management Plan area.

Implementation of the Project in connection with the related projects within the County of Los Angeles region served by area landfills will increase regional demands on landfill capacities. Construction of the Project and related projects generate Construction and Demolition (C&D) waste, resulting in a cumulative increase in the demand for inert (unclassified) landfill capacity. Given the requirements of the Citywide C&D Debris Recycling Ordinance (No. 181,519), which requires all mixed C&D waste generated within City limits be taken to a City-certified C&D waste processor, future cumulative development would also implement similar measures to divert C&D waste from landfills.

Furthermore, the inert landfills do not face capacity issues, the Sunshine Canyon Landfill reported a remaining capacity of 62.1 million tons and a remaining life of 21 years for such waste in Los Angeles County, and thus, this and other available landfills would reasonably be expected to have sufficient capacity to accommodate cumulative demand.

With respect to operational solid waste, similar to the Project, the related projects would be required by Assembly Bill 939 to reduce the amount of solid waste generated through source reduction and recycling programs. With the mandatory reduction of solid waste, the related projects would not result in a significant impact on local landfills. Therefore, the cumulative operational solid waste impact would be less-than-significant.

Construction and operation of the related projects on existing residential lots would generate solid waste typical of residential buildings and would comply with federal, State, and local statutes and regulations regarding proper solid waste disposal. Therefore, cumulative impacts from C&D waste would be less-than-significant.

**Electric Power, Natural Gas, and Telecommunications Facilities**

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the topics listed in the previous analysis, including electric power, natural gas and telecommunications facilities. The related projects will increase the demands on the electric power, natural gas, and telecommunications facilities. The Project and related projects will be served by existing facilities, including LADWP, Southern California Gas Company and the ITA.

The LADWP is the nation's largest municipal electric utility in the nation and serves approximately including 1.5 million customers. Its annual sales exceed 24 million megawatt-hours (MWh). The LADWP has an installed net dependable generation capacity of 7,531 MW and experienced an all-time net energy-for-load peak demand of 6,431 megawatts (MW) on August 31, 2017 with an instantaneous peak demand of 6,555 MW on September 1, 2017.[84] Based on this information, the LADWP would have existing capacity to serve the residential Project and the eight related projects within the site vicinity.

SoCalGas provides natural gas resources to the City and supplies natural gas to a population of approximately 21.8 million, covering a 24,000 square mile service territory that encompasses southern California and portions of central California (excluding San Diego County, the City of Long Beach, and the desert area of San Bernardino County). In 2017, SCG natural gas sales were 301 billion cubic feet.[85] The gas supply available to SoCalGas in 2018 from California sources alone averaged 87 million cubic feet per day (MMcf/day).[86] Based on this, SoCalGas would have existing capacity to serve the Project in addition to the related projects within the area.

The ITA is comprised of 442 IT professionals with an annual operating budget of $90 million and provides services to 4 million LA residents across 469 square miles. The ITA is responsible for a broad range of services including computer support, enterprise applications, data networks, television programming, public safety radio and microwave communications and more. The ITA is able to provide digital services to the entire City of LA through promoting good technology and access to City services. From 2015-2016, the ITA was able to reduce dropped calls to 3-1-1 services by 70 percent from 2013, achieve a 99.85 percent network availability, and achieve 81.7 percent virtualized or cloud hosted servers within the City. Based on the ITA's ability to provide telecommunication services on an as-needed basis, the ITA would have existing capacity to serve the Project and related projects.[87]

Therefore, as the Project and related projects will be served by existing facilities with existing capacity, cumulative impacts from these additional facilities would be less-than-significant.

[84] Los Angeles Department of Water and Power, 2017 Power Strategic Long-Term Resource Plan, December 2017.
[85] Sempra Energy, Investing for the Future, 2017 Annual Report, 2017.
[86] California Gas and Electric Utilities, 2018 California Gas Report.
[87] Information Technology Agency, Strategic Plan (2017-2018).

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less- than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XX. WILDFIRE.** If located in or near state responsibility areas or land classified as very high fire hazard severity zones, would the project: | | | | |
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☒ | ☐ | ☐ |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☒ | ☐ |
| c. Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☒ | ☐ |
| d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☒ | ☐ |

***a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

**Potentially Significant Unless Mitigation Incorporated.** The project may have a substantial impact if it would substantially impact an adopted emergency response plan or emergency evacuation plan. Although the Project is located in a Very High Fire Hazard Severity Zone (VHFHSZ) with in hillside terrain with vegetation susceptible to wildland fires,[88] on the project would not substantially impair an adopted emergency response or evacuation plan due to the Construction Management Plan that would allow vehicular access to continue during construction. The Project is located on a narrow hillside street with limited emergency access. As stated previously in Section IX. Hazards and Hazardous Materials, the Construction Management Plan provides of an on-site equipment staging area and for shuttling workers to and from the Site. The Project avoids the need for prolonged street closures due to construction activities and parking.

The Construction Management Schedule prepared by the Applicant's Foundation Contractor, Rigo's Construction Inc., provides detailed descriptions of the size of the anticipated construction equipment to be initially delivered and transferred – an estimated 15 minutes for delivery – to the on-site staging area to avoid restricting access on Grand View Drive. In a worst-case scenario, the Construction Management Schedule states that day 12, pouring six temporary shoring piles, is expected to partially block up to five feet of the Grand View Drive right of way for up to three hours. The existing paved surface of Grand View

[88] Los Angeles County, Very High Fire Hazard Severity Zones in SRA, Adopted by CAL Fire on November 7, 2007, Accessed on May 13, 2019 at: http://frap.fire.ca.gov/webdata/maps/los_angeles/fhszs_map.19.pdf.

Drive fronting the Project Site is at least 13 feet wide; therefore, a temporary and partial blockage of up to five feet of Grand View Drive would leave 8 feet of clearance to allow cars to pass, the typical width of a large sports utility vehicle is six and a half feet. By providing an initial and temporary on-site construction equipment staging area, the Project, by design, would avoid the need for lane or road closures on the Construction Access Route. To reduce the impact of construction traffic on the effectiveness or performance of the local circulation system, the project would implement mitigation measures TRA-1 through TRA-4 requiring notification of residents affected by construction, preparation of a traffic management plan, scheduling material deliveries to avoid peak commuter periods, requiring construction traffic to use Access Route B, and prohibits construction vehicle parking on roadways once the on-site staging area is operational. While partial blockages may cause temporary inconvenience, they would not substantially interfere with emergency response or evacuation plans. The portion of the Crisler Way right of way within the project site is currently an unimproved Substandard Hillside Limited Street, the Project would improve the portion of Crisler Way fronting the residential lots, providing Fire Department apparatus traveling along Grand View Drive a location to turn around.

The Hydrants and Access Unit of the LAFD has approved the Project, see Sheet Number A-1 in Appendix A. The improvement of Crisler Way and provision of a 20 foot wide roadway provides a spur from Grand View Drive for Fire Department vehicles to pull out of the way of existing residences in case of a fire. By improving the portion of Crisler Way in front of the proposed residences, the Project would provide adequate emergency access. Additionally, the Project design features the installation of a new fire hydrant at the intersection of Crisler Way and Grand View Drive so the proposed residences would be located within 300 feet of a fire hydrant, and entrances to the residences would be within 150 feet of an improved edge or approved fire lane to reduce potential fire hazards. To minimize interference with emergency response, the Applicant prepared a Construction Traffic Management Plan (MM TRA-2) discussed in Section XVII, Transportation. Furthermore, to reduce potential interference with emergency evacuation plans, mitigation measure MM HAZ-1 requires the Project to submit a Hillside Construction Plan for review and approval by the Board of Building and Safety Commissioners. Mitigation measure MM HAZ-2 requires the applicant to develop an Emergency Evacuation Plan in consultation with the City Fire Department. Implementation of mitigation measures TRA-1 through TRA-4 and HAZ-1 through HAZ-2 would reduce impacts to emergency access and evacuation due to wildfire to less than significant.

***Mitigation Measures:*** MM TRA-1 through TRA-4 and HAZ-1 through HAZ-2 will apply.

***b. Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

**Less-than-significant Impact.** The project may have a significant impact if the project would exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors. The Project Site is located in a VHFHSZ in hillside terrain with vegetation susceptible to wildland fires. Therefore, the Project is subject to compliance with the LAMC requirements (LAMC Section 57.322) to protect against wildland fire.[89] LAMC requirements include brush clearance (LAMC Section 57.322.1), landscape vegetation requirements (LAMC Section 57.322.1.1.8), and inspections (LAMC Section 57.322.2) for effective protection of homes located in a VHFHSZ from wildfires.[90]

The proposed Project was reviewed and previously approved by the City Fire Department. Existing LAFD fire stations in the vicinity would serve the proposed project. In the event of a wildfire, the nearest fire

[89] LAMC Chapter V, Public Safety and Protection, Article 7, Fire Protection and Prevention (Fire Code).
[90] County of Los Angeles, Fire Department, Fuel Modification Plan Notes.

station is LAFD Fire Station No. 41, located at 1439 North Gardner Street, approximately 2.5 driving miles from the Project Site. The addition of four single-family residences within the existing urban setting and would not substantially increase the demand for LAFD services. Through compliance with Fire Code requirements, and proximity to existing LAFD stations, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

**Less-than-significant Impact.** A project may have a significant impact if it would require the installation of associated infrastructure that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment. The Project would install the planned, but currently unimproved, a 20-foot wide paved roadway within the 25-foot wide Crisler Way public right-of-way intersecting the existing roadway of Grand View Drive. The extent of this improvement is limited to the portion of the Crisler Way planned "paper street" fronting residential lots 95 through 98 to provide vehicular access to the proposed residences.

The Project's road improvements have been reviewed and approved by the LAFD and building construction and occupancy would be required to comply with fire department codes and regulations. The Project is located in a VHFHSZ and subject to compliance with the applicable LAMC requirements to protect against wildland fire. The Project's installation of associated infrastructure would be limited to street improvements within the public right of way, and therefore would not exacerbate fire risk within the area. As the Project's roadway improvements would be minimal and previously approved by the City Fire Department, impacts with regards to associated infrastructure exacerbating fire risk would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

**Less-than-significant Impact.** A project may have a significant impact if it would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The Project Site is located upslope and not located within a flood zone. Storm water or any runoff irrigation waters would be directed into existing storm drains currently receiving surface water runoff under existing conditions. Through design features including an appropriately sized stormwater planter and drainage system, drainage inlets on Crisler Way, and compliance with regulatory requirements for an approved SUSMP, the Project would not result in a significant increase in site runoff or change the local drainage patterns in a manner which would result in flooding on or off-site.

In addition, the LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides. The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, Site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. The Project plans were previously reviewed by LADBS Grading Division and the Approval Letter is included in Appendix G. Through compliance with

applicable regulatory requirements, the Project would not expose people or structures to significant downslope or downstream flooding or landslide risks resulting from runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight related projects (see Project Description Subsection 3.10, Related Projects) with respect to the wildfire analysis. Development of eight single-family residences within the environmental setting of a previously-developed community and VHFHSZ would not exacerbate wildfire risk, as each project would be subject to compliance with applicable LADBS and LAFD standards, including Fire Code requirements including brush clearance (LAMC Section 57.322.1), landscape vegetation requirements (LAMC Section 57.322.1.1.8), and inspections (LAMC Section 57.322.2). In addition, the related projects would comply with RWQCB standards that apply to Los Angeles County Flood Control Facilities and would not substantially alter the existing drainage pattern of the area and would not expose people or structures to risk of post-fire slope instability or drainage changes. Therefore, the Project and related projects would have a less-than-significant cumulative impact regarding wildfires.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XXI. MANDATORY FINDINGS OF SIGNIFICANCE.** | | | | |
| a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects). | ☐ | ☒ | ☐ | ☐ |
| c. Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

***a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?***

**Potentially Significant Unless Mitigation Incorporated**. As discussed previously in Section III, Biological Resources, Project impacts to biological resources, such as the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal would be less-than-significant after mitigation. Similarly, as evaluated in Section IV, Cultural Resources, Project impacts to potential unknown cultural, historical, and prehistoric resources would be less-than-significant through compliance with applicable regulatory requirements. Therefore, implementation of the mitigation measures identified in the Initial Study and compliance with existing regulations would reduce impacts to less-than-significant levels.

***b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)***

**Potentially Significant Unless Mitigation Incorporated**. A significant impact may occur if the proposed Project, in conjunction with other related projects in the area of the project site, would result in impacts that would be less-than-significant when viewed separately, but would be significant when viewed together. As previously evaluated in the cumulative impact analysis following each environmental factor, the Project's impact conclusions were either "no impact," "less-than-significant," or "potentially significant unless mitigation incorporated." Although projects may be constructed in the project vicinity, the cumulative impacts to which the proposed Project would contribute would be less-than-significant. Implementation of the mitigation measures identified in the Initial Study and compliance with existing regulations would reduce cumulative impacts to less-than-significant levels.

***c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?***

**Potentially Significant Unless Mitigation Incorporated**. A significant impact may occur if the proposed Project has the potential to result in significant impacts, as discussed in the preceding sections. As evaluated above, the Project impact conclusions were either "no impact," "less-than-significant," or "potentially significant unless mitigation incorporated." All potential impacts of the proposed Project have been identified, and mitigation measures have been prescribed, where applicable, to reduce all potential impacts to less-than-significant levels. Upon implementation of mitigation measures identified and compliance with existing regulations, the proposed Project would not have the potential to result in substantial adverse impacts on human beings either directly or indirectly.

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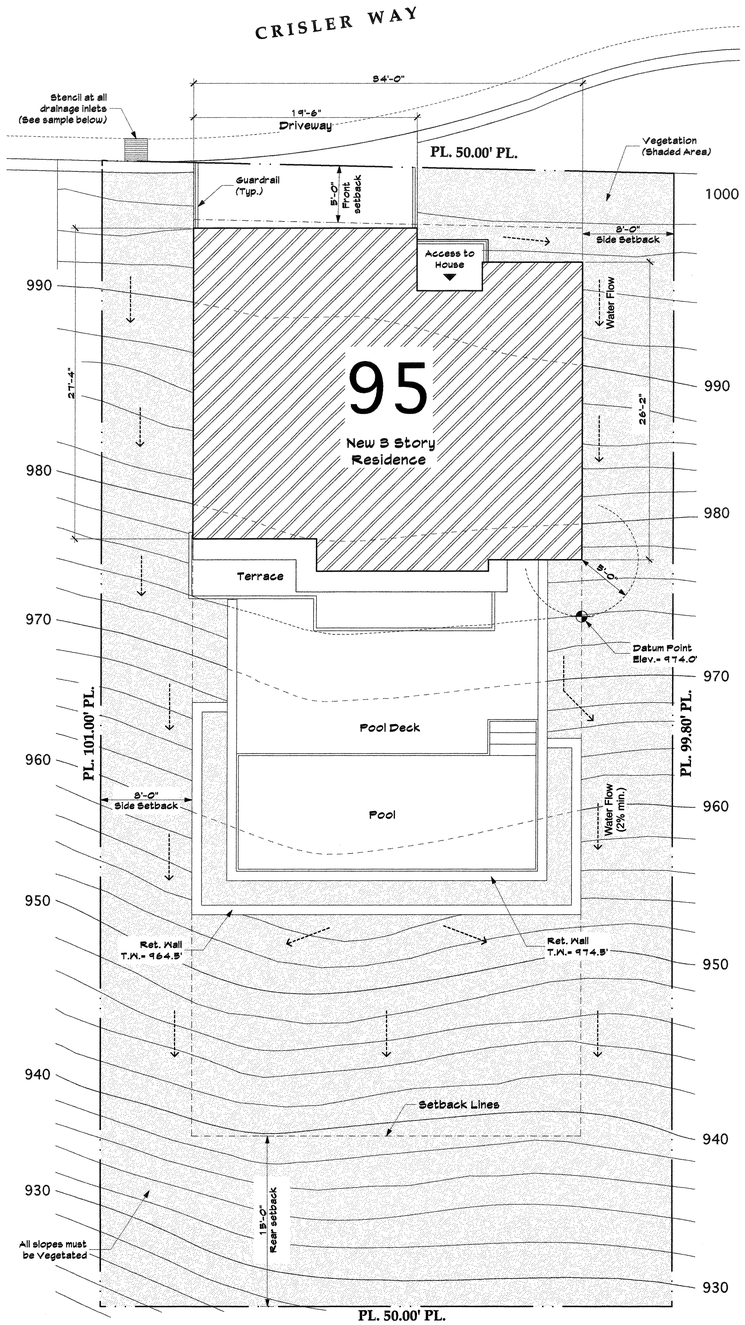
# Approved Architectural Plans

APPENDIX A

# HOUSE 95

## 1818 Crisler Way Los Angeles, California 90046




### Site Plan

Scale : 3/16" = 1'-0"




## General Notes

The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause construction delays and/or additional expenses.

An approved Seismic Gas Shutoff Valve will be installed on the fuel gas line on the down stream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping." (Per Ordinance 170,158) (Separate plumbing permit is required).

Plumbing fixtures are required to be connected to a sanitary sewer or to an approved sewage disposal system.

Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water and connected to an approved water supply.

Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet above the floor.

Provide ultra low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.

Provide 70 inch high non-absorbent wall adjacent to shower and approved shatterresistant materials for shower enclosure.

Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating (research report not required).

Water heater must be strapped to wall per seismic code.

Automatic garage door openers, if provided, shall be listed in accordance with UL 325.

Smoke detectors shall be provided for all dwelling units intended for human occupancy, upon the owner's application for a permit for alterations, repairs, or additions, exceeding one thousand dollars ($1,000).

Where a permit is required for alterations, repairs or additions exceeding one thousand dollars ($1,000), existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section R315.1. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained.

Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section R308.1 or shall be provided with artificial light that is adequate to provide an average illumination of 6 foot-candles over the area of the room at a height of 30 inches above the floor level.

A copy of the evaluation report and/or conditions of listing shall be made available at the job site.

Lots shall be graded to drain surface water away from foundation walls with a minimum fall of 6 inches within the first 10 feet.

Dampproofing, where required, shall be installed with materials and as required in Section.

Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.

An approved smoke alarm shall be installed in each sleeping room & hallway or area giving access to a sleeping room, and on each story and basement for dwellings with more than one story. Smoke alarms shall be interconnected so that actuation of one alarm will activate all the alarms within the individual dwelling unit. In new construction smoke alarms shall receive their primary power source from the building wiring and shall be equipped with battery back up and low battery signal.

An approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. Carbon monoxide alarm shall be provided outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s) and on every level of a dwelling unit including basements.

Protection of wood and wood based products from decay shall be provided in the locations specified per Section R317.1 by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA U1.

Provide anti-Graffiti finish within the first 9 feet, measured from grade, at exterior walls and doors.
Exception: Maintenance of building affidavit is recorded by the owner to covenant and agree with the City of Los Angeles to remove any graffiti within 7-days of the graffiti being applied.

Provide Automatic Fire Sprinklers System Through-out to be approved by Plumbing Div. prior to installation.

Where there is an excavation of a greater depth than are the walls or foundation of an adjoining building or structure and located closer to the property line than the depth of the excavation, the owner shall provide the Department of Building and Safety with evidence that the adjacent property owner(s) have been given a 30-day written notice of such intent to make an excavation.

Heater shall be capable of maintaining a min. room temperature of 68° F at a point 3 feet above the floor and 2 feet from ext. walls in all habitable rooms at the design temperature

POOL NOTES

• Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure

• Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."

• Doors (garage doors) & Gates, with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.

• For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.

• For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.

NO DUMPING
DRAINS TO OCEAN
L.A.M.C. 64.70

STORMWATER MITIGATION PLAN
APPROVED WITH CONDITIONS
☐ Low Impact Development (LID)
☐ Standard Urban Stormwater Mitigation Plan (SUMP)
☐ Site Specific Mitigation Plan (SSMP)
This set of plans and specifications must be at job site during construction.
NOTE: Stormwater Observation Report (SOR) is required prior to issuance of Certificate of Occupancy or final sign-off.
By _____ Date 12/12/12
Watershed Protection Division
Bureau of Sanitation - Department of Public Works

## Project Data

| | | |
|---|---|---|
| Legal Description | : | Lot 95 , Tract 865 |
| Construction Type | : | V - (Fully Sprinklered - NFPA 13D) |
| Zone | : | R - 1 - H |
| Hillside Grading | : | YES |
| VHFHSZ | : | YES |
| Square Footage | : | |

| | |
|---|---|
| Carport | 342 s.f. |
| Street Level (3rd Floor) | 137 s.f. |
| Center Level (2nd Floor) | 638 s.f. |
| Lower Level (1st Floor) | 726 s.f. |
| Total Habitable Area : | 1,501 s.f. |

Maxium Total Height : 33'-0"

Residencial Floor Area (R.F.A.) Calcualtion :

Lot Size 5,012 s.f. (Min. 25%) = 1,253 s.f. + 20% Setback Bonus
= 1,503.6 s.f. RFA Max.

## Lot Coverage

| | | |
|---|---|---|
| - Lot Size | 5,012 | s.f. |
| - House Foot Print | 930 | s.f. |
| - Pool / Pool Deck | 780 | s.f. |
| Total : | 1,710 | s.f. |

or 34.1 % < 40%

## Sheet Schedule


A-1 Site Plan / Title Sheet
A-2 Roof Plan & Street Level Plan
A-3 Center Level & Lower Level Plan
A-4 Pool Level Plan / Exterior Elevations
A-5 Exterior Elevations
A-6 Sections 1 & 2
A-7 Sections 3 & 4

(In Back of Set)
S-1 General Notes & Specifications
S-1.1 Structural Observation & Typical Details
S-2 Foundation Plans / Framing Plans
S-3 Framing Plans
S-4 Foundation Details
S-5 Foundation Details
S-6 Foundation Details
S-7 Foundation Details
S-8 Foundation Details
S-9 Foundation Details
S-10 Framing Details
S-11 Framing Details

R-1 Reference Notes
L-1 Survey PLan



Robert Anderson
Architect
18180 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


Site Plan / Title Sheet

1818 Crisler Way - HOUSE 95
CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-23-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 12-12-12 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 12-12-12

PROJECT REF. NUMBER

A-1

SHEET NUMBER 95

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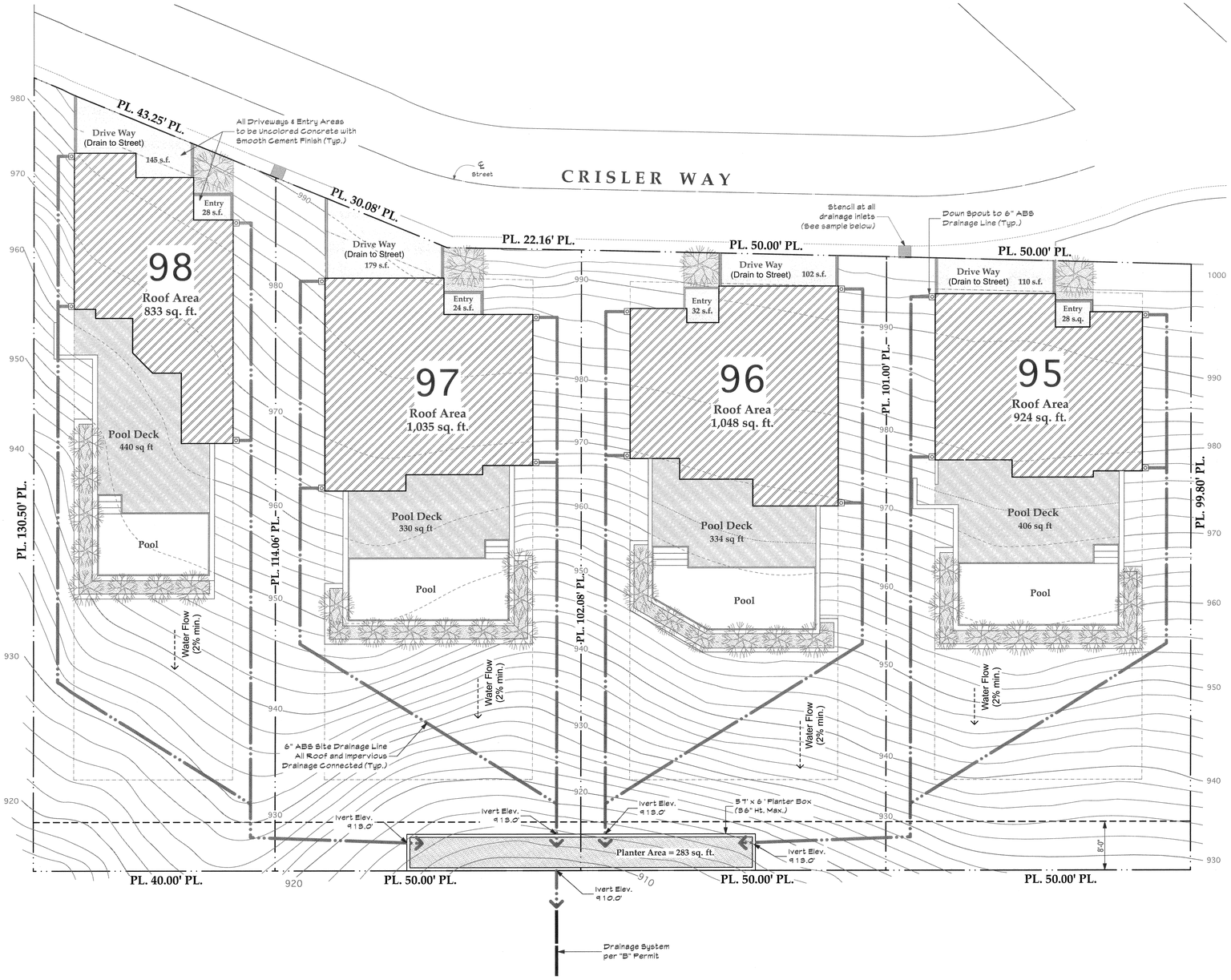
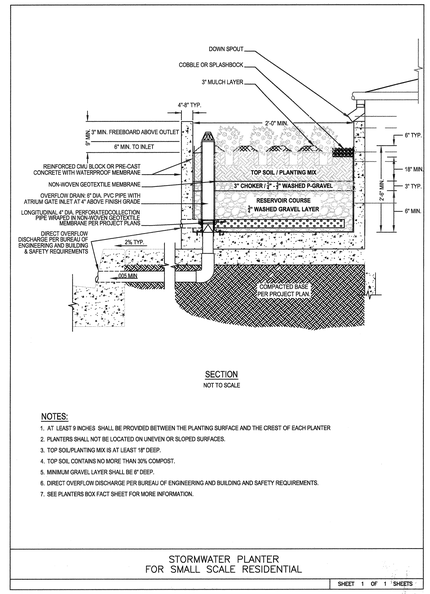



## Site Drainage Plan

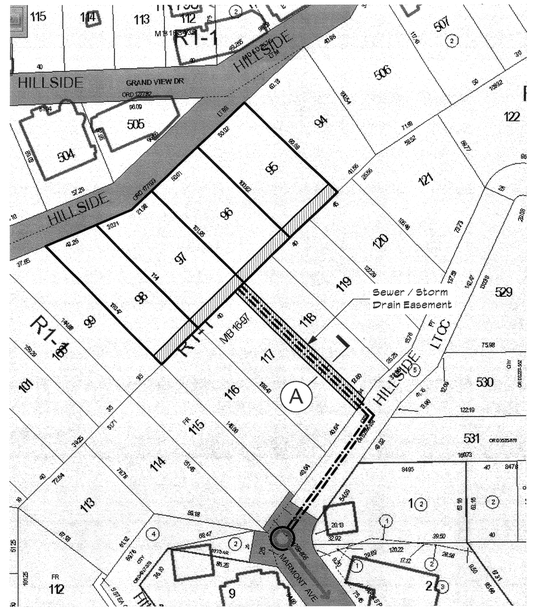



SECTION
NOT TO SCALE

NOTES:
1. AT LEAST 9 INCHES SHALL BE PROVIDED BETWEEN THE PLANTING SURFACE AND THE CREST OF EACH PLANTER
2. PLANTERS SHALL NOT BE LOCATED ON UNEVEN OR SLOPED SURFACES.
3. TOP SOIL/PLANTING MIX IS AT LEAST 18" DEEP.
4. TOP SOIL CONTAINS NO MORE THAN 30% COMPOST.
5. MINIMUM GRAVEL LAYER SHALL BE 6" DEEP.
6. DIRECT OVERFLOW DISCHARGE PER BUREAU OF ENGINEERING AND BUILDING AND SAFETY REQUIREMENTS.
7. SEE PLANTERS BOX FACT SHEET FOR MORE INFORMATION.

STORMWATER PLANTER
FOR SMALL SCALE RESIDENTIAL

SHEET 1 OF 1 SHEETS




## Vicinity Map

NOTE: Sewer / Storm Drain Easement on Lot 118 recorded on 2/11/15 # 20150151325

## StormWater Planter Calculation

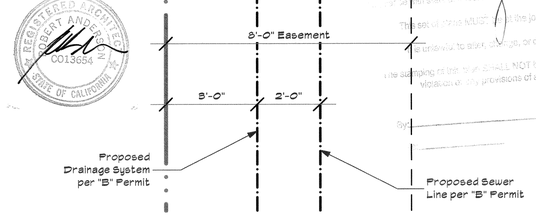
Total : 5,376 sq. ft. ( All Roofs : 3,840 s.f. + All Impervious Area: 1,536 s.f. )

Per Chart : 168 sq. ft. ( for the first 2,500 sq. ft. ) + 20 s.f. per every additional 500 sq. ft.
168 sq. ft. + ( 5,376 - 2,500 = 2,876 ÷ 500 ≈ 5.75 x 20 = 115 sq. ft. Additional ) = **283 sq. ft. Total needed**

## Site Paving Calculation

* All Driveways & Entry Areas to be Uncolored Concrete with Smooth Cement Finish (Solar Reflectance ≥ 0.30)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HOUSE 95 : | Pool Deck (406 sq. ft.) | + | Driveway (110 sq. ft.) | + | Entry (28 sq. ft.) | = | 544 sq. ft. | (25% = 136 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 110 | + | 28 | = | 138 sq. ft. | > | | 136 sq. ft. |
| HOUSE 96 : | Pool Deck (334 sq. ft.) | + | Driveway (102 sq. ft.) | + | Entry (32 sq. ft.) | = | 468 sq. ft. | (25% = 117 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 102 | + | 32 | = | 134 sq. ft. | > | | 117 sq. ft. |
| HOUSE 97 : | Pool Deck (330 sq. ft.) | + | Driveway (179 sq. ft.) | + | Entry (24 sq. ft.) | = | 533 sq. ft. | (25% = 133 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 179 | + | 24 | = | 203 sq. ft. | > | | 133 sq. ft. |
| HOUSE 98 : | Pool Deck (440 sq. ft.) | + | Driveway (145 sq. ft.) | + | Entry (28 sq. ft.) | = | 613 sq. ft. | (25% = 153 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 145 | + | 28 | = | 173 sq. ft. | > | | 136 sq. ft. |




## A Enlarged Plan

Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

# StormWater Drainage Plan

Four HOUSES for:
CAC Development
1504 South Figwer Street
Los Angeles, California 90015

S.HAL
DRAWN BY
DC
CHECKED BY
RA
APPROVED BY

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 3-12-15 | DC |

DATE ISSUED 3-9-15

DATE PRINTED 3-12-15

PROJECT REF. NUMBER

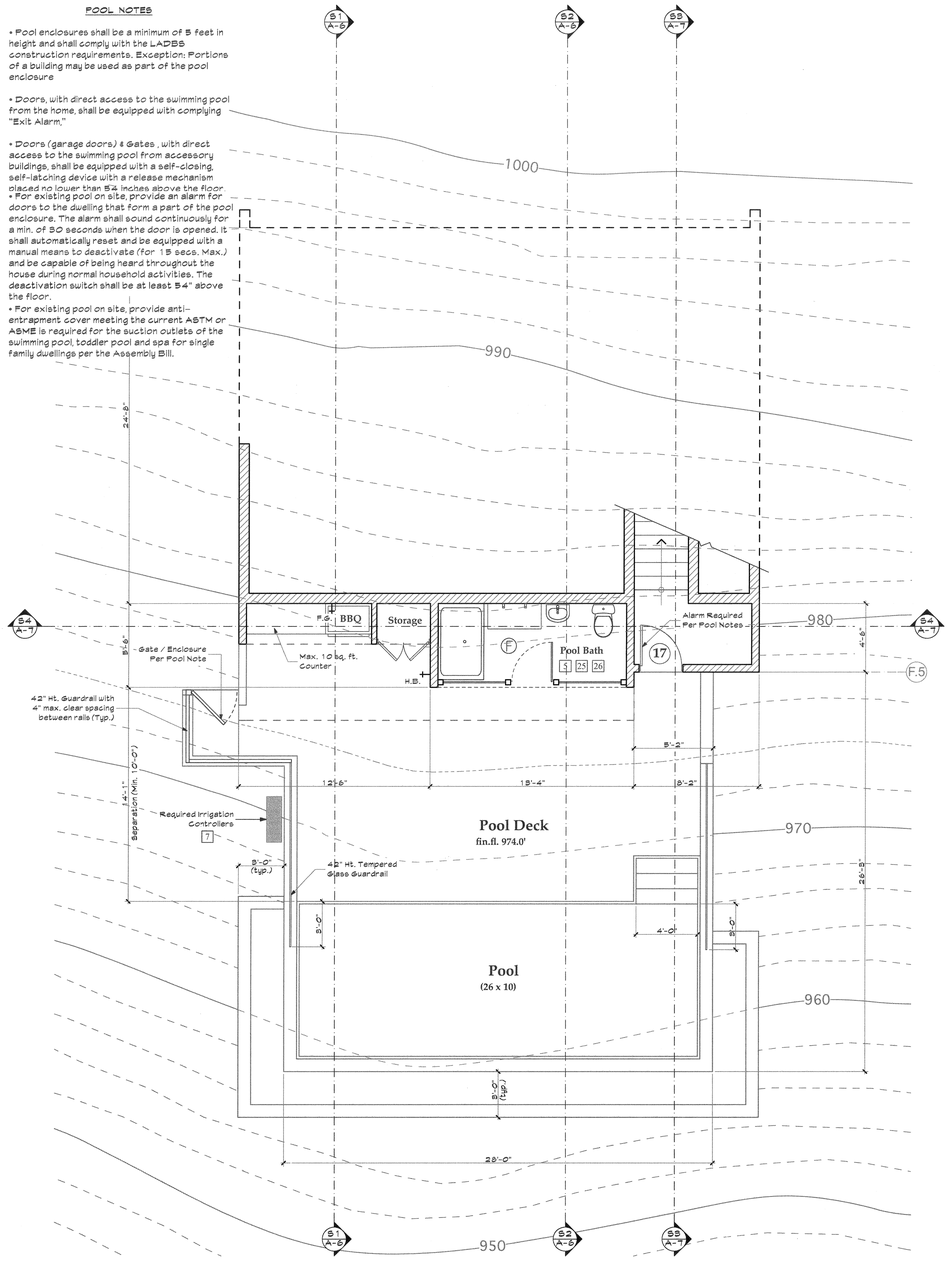
A-1.1

SHEET NUMBER

RT1 JUN 05 2015

**POOL NOTES**

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened, it shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




## Pool Level Plan

Scale : 1/4" = 1'-0"




## Floor Plan Notes

2 x 6 Stud Walls

2 X Stud Walls, as can be a convination of 2x4's, 2x6's, etc.

(SD) Los Angeles City Approved Smoke Detector hard wired w/ battery back up.

(F) "Energy star" 50 CFM Exhaust Fan ducted to terminate outside of the building.

Provide Emergency exit door or window from sleeping rooms. Net clear window opening area shall be not less than 5.7 sq. ft. min. w/ net window opening height of 24" clear with a min. net width opening of 20" clear. Finish sill height max. 44" above floor.

Provide natural light in (habitable rooms) by means of exterior wall openings with an area not less than 10% of floor area with a minimun of 10 sq. ft.

Under-floor ventilation shall be not less than 1/150 of under floor area.

The plumbing fixtures and plumbing fittings Flow Rates shall meet table 4.303.1 on Form GRN 16 (See Sheet GRN).

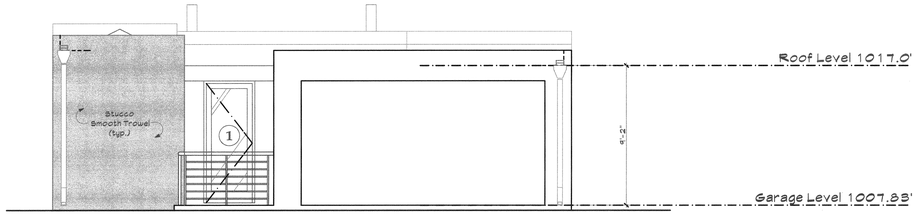
Incombustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1,000 square feet. Draftstopping shall divide the concealed space into approximately equal areas.

Attic ventilation of 1/150 of the area of ventilated space (approximately 10 sq. in. for each 10 sq. ft. of attic area) is required.

Bathrooms, water closet compartments and other similar rooms shall be provided natural ventilation and with mechanical ventilation capable of 50 cfm exhausted directly to the outside. Energy Star Compliant

Ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimun N° 26 gage sheet seel or other approved material & there shall be no openings from the ducts into the garage

Other Penetrations of garage/dwelling ceiling and walls are to be protected as required by Section R302.11




## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"


City of Los Angeles
Department of Building and Safety
Green Building Division

This set of plans and specifications has been reviewed and is approved for compliance with state and local ordinances related to the Green Building Code.

This set of plans MUST be on the job site during construction.

It is unlawful to alter, change or deviate from these plans.

The stamping of this plan SHALL NOT be construed to be approval of violation of any provisions of any ordinances or Law.

By _____ Date _____



Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Pool Level Floor Plan / Exterior Elevations

1818 Crisler Way - HOUSE 95

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL
CHECKED BY DC
APPROVED BY RA

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-23-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 3-28-13 | DC |
| 5 | 6-20-13 | DC |
| 6 | 3-12-15 | DC |

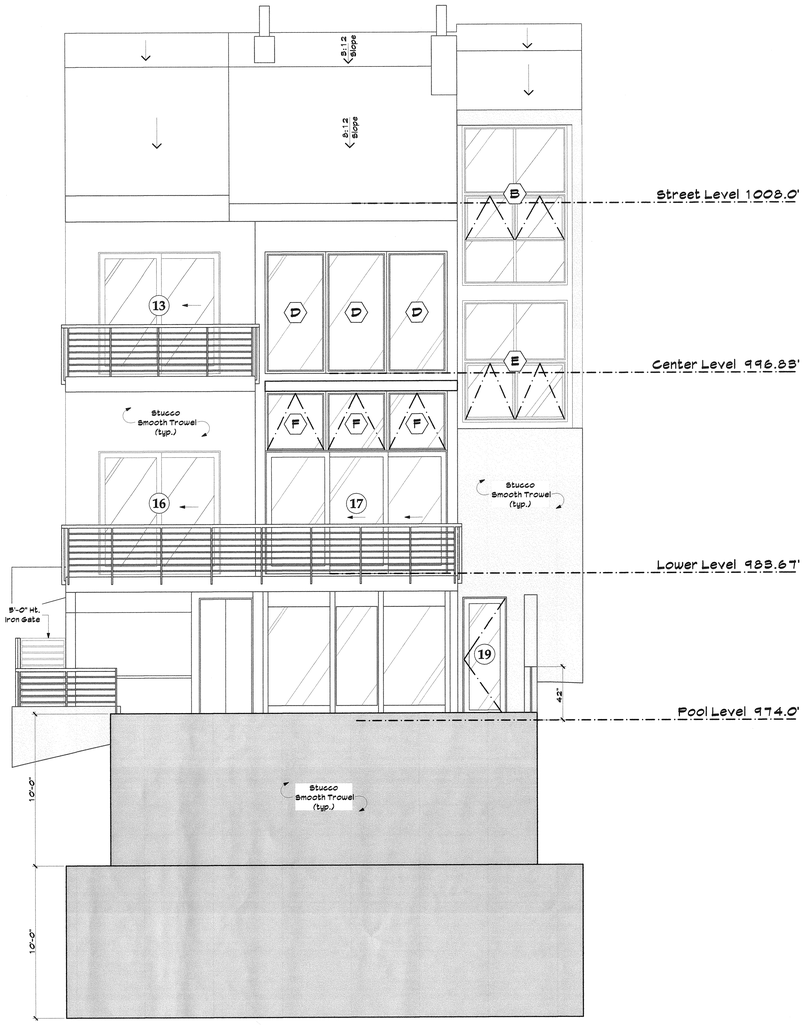
DATE ISSUED 5-1-11

DATE PRINTED 3-12-15

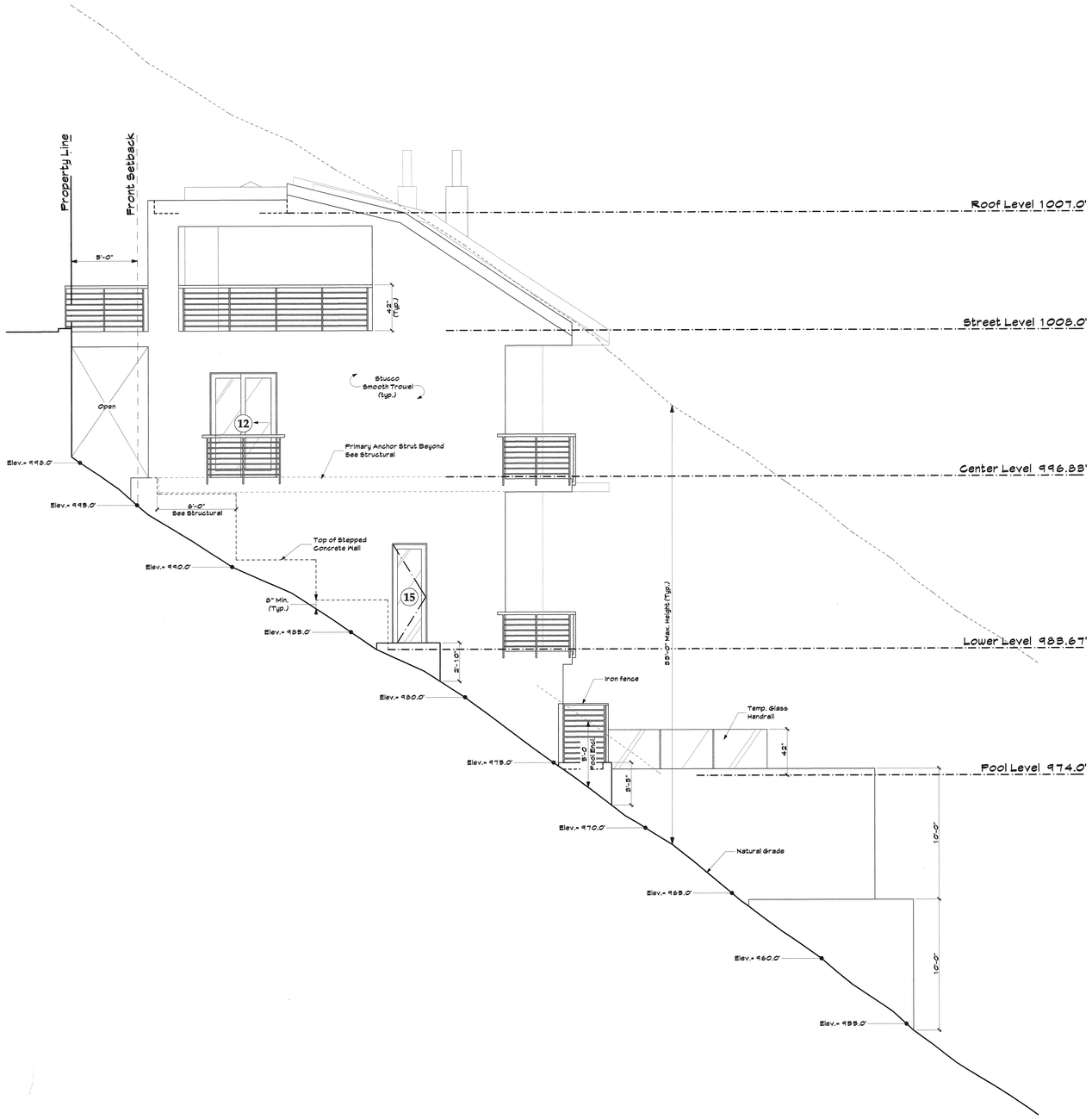
PROJECT REF. NUMBER

**A-4**

SHEET NUMBER RTI 95




## South Elevation




## West Elevation

# Exterior Elevations

Scale : 1/4" = 1'-0"

Robert Anderson
Architect
18169 KNOLL HILL
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818 488-1327
FAX 360-6134

**1818 Crisler Way - HOUSE 95**

**CAC Development**
**1504 South Flower Street**
**Los Angeles, California 90015**

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-23-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 3-28-13 | DC |
| 5 | 6-20-13 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 6-20-13

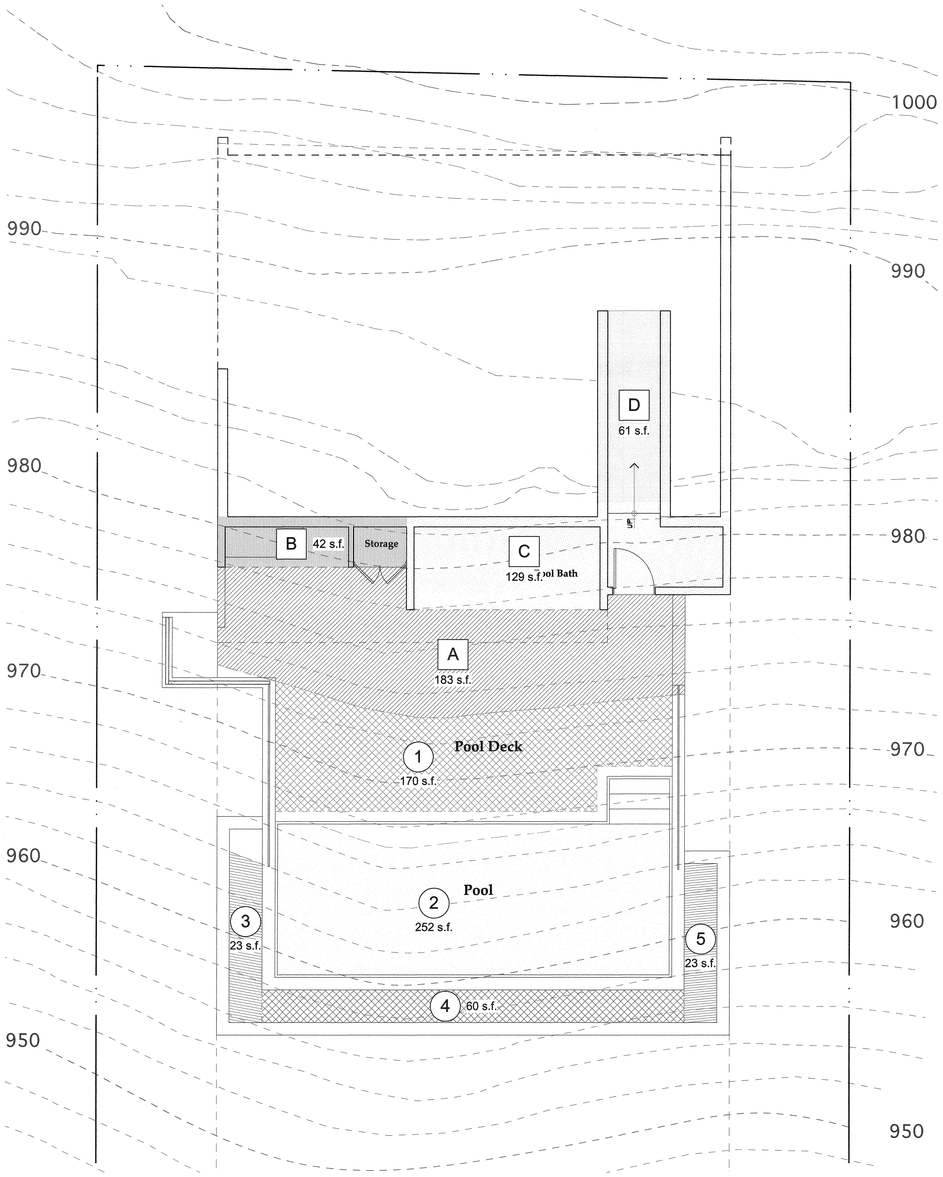
PROJECT REF. NUMBER

**A-5**

SHEET NUMBER

RECEIVED JUN 0 5 2013

95




## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

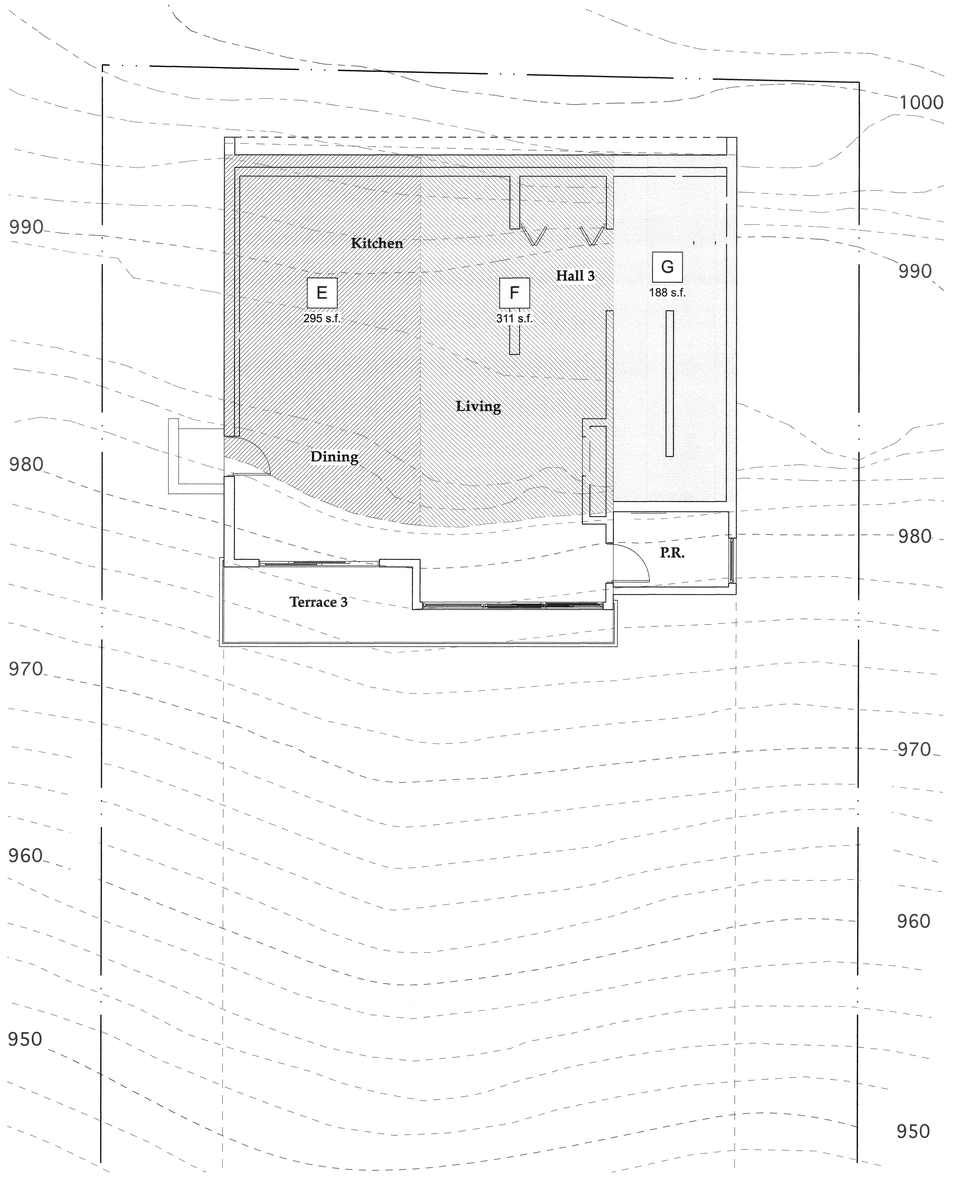
| | | | |
|---|---|---|---|
| A | 229 s.f. x 2.5 ÷ 27 | = | 21.2 $yd^3$ |

• Exempted Areas (Under House outline) :

| | | | |
|---|---|---|---|
| B | 42 s.f. x 6 ÷ 27 | = | 9.3 $yd^3$ |
| C | 129 s.f. x 5.5 ÷ 27 | = | 26.2 $yd^3$ |
| D | 61 s.f. x 3 ÷ 27 | = | 6.7 $yd^3$ |
| E | 295 s.f. x 5 ÷ 27 | = | 54.6 $yd^3$ |
| F | 311 s.f. x 5.75 ÷ 27 | = | 66.2 $yd^3$ |
| G | 188 s.f. x 6.5 ÷ 27 | = | 45 $yd^3$ |
| | Total Exempt | = | 208 $yd^3$ |

### Fill Calculation

| | | | |
|---|---|---|---|
| 1 | 170 s.f. x 2.25 ÷ 27 | = | 14.2 $yd^3$ |
| 2 | 252 s.f. x 4 ÷ 27 | = | 37.3 $yd^3$ |
| 3 | 24 s.f. x 4 ÷ 27 | = | 3.5 $yd^3$ |
| 4 | 60 s.f. ( x 5.75 = 345.0 ; x 0.875 = + 52.5 ) ÷ 27 | = | 14.7 $yd^3$ |
| 5 | 23 s.f. x 4.25 ÷ 27 | = | 3.6 $yd^3$ |
| | Total Fill = | | 73.3 $yd^3$ |




## Grading Calculation (Lower level)

Scale : 1/4" = 1'-0"

### Cut, Fill & Export Calculation

- Total Cut (21.2 $yd^3$) + Total Fill (73.3 $yd^3$) + Pool (N/A) = 94.5 $yd^3$ < 250 $yd^3$ ( Max. Allowed )
- Total Cut ( 21.2 $yd^3$ ) + Total Exempt Cut ( 208 $yd^3$ ) = 229.2 $yd^3$ ( Total Project Cut )
- Total Project Cut (229.2 $yd^3$) - Total Fill (73.3 $yd^3$) = 155.9 $yd^3$ ( TO EXPORT ) < 250 $yd^3$ ( Max. Allowed )


Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Grading Calculation

1818 Crisler Way - HOUSE 95

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL
CHECKED BY DC
APPROVED BY RA

REVISIONS
NUMBER DATE BY

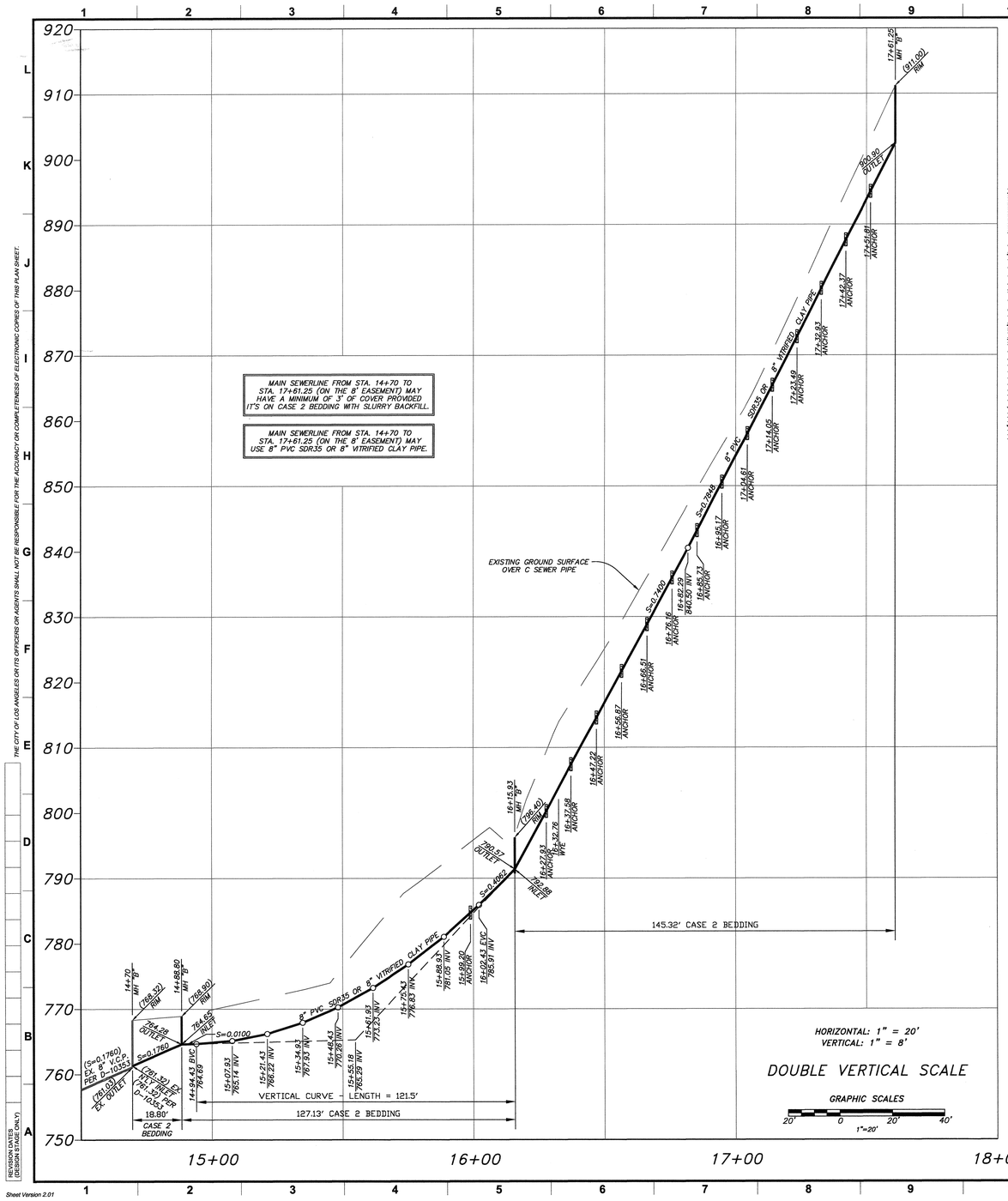
DATE ISSUED 3-4-15
DATE PRINTED 3-4-15

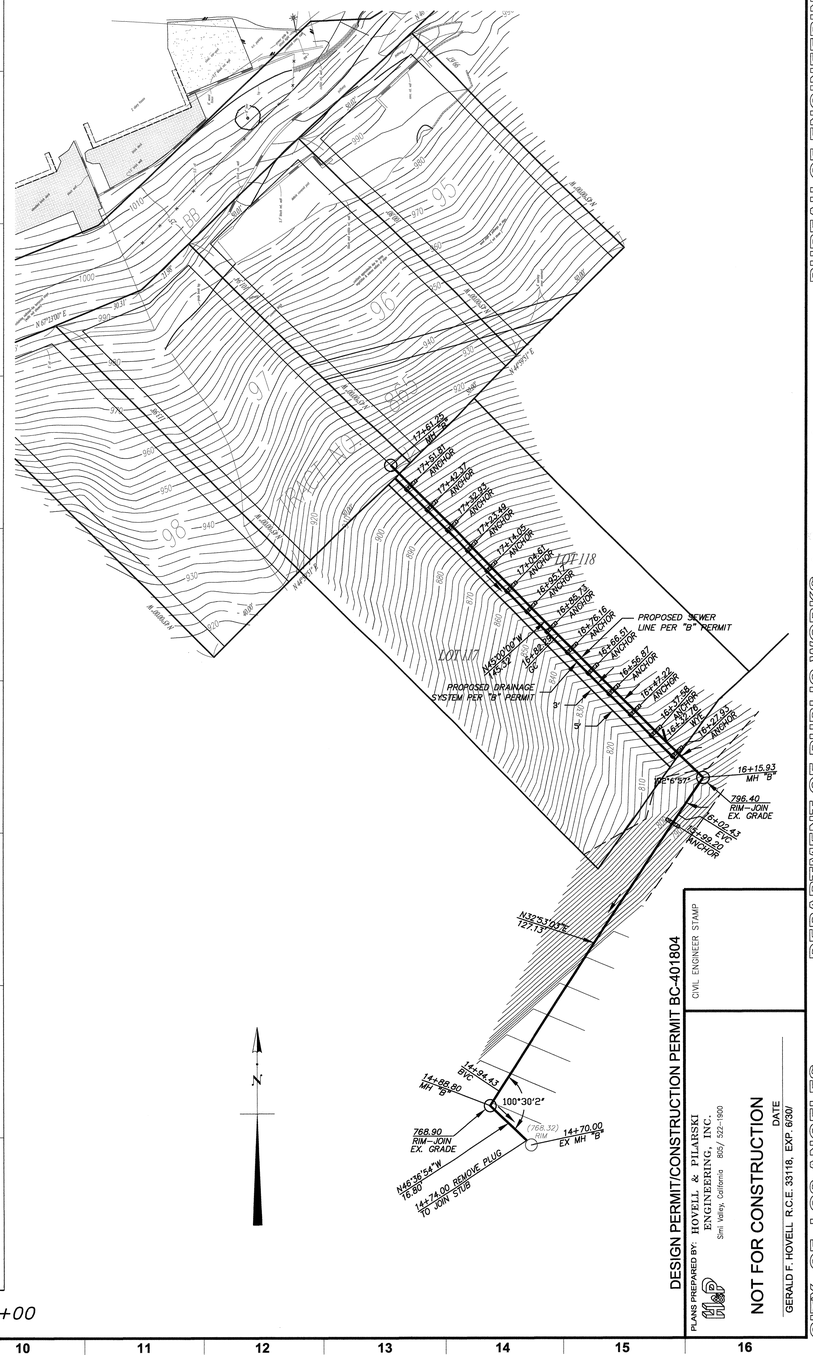
PROJECT REF. NUMBER

A-8

SHEET NUMBER 95

RECEIVED JUN 05 2015

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REVISION DATES (CROSS OUT OBSOLETE ONLY)

Sheet Version 2.01

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
CITY OF LOS ANGELES

DESIGN PERMIT/CONSTRUCTION PERMIT BC-401804

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900

NOT FOR CONSTRUCTION
DATE
GERALD F. HOVELL R.C.E. 33118, EXP. 6/30/

CIVIL ENGINEER STAMP

VERTICAL CONTROL:
HORIZONTAL CONTROL: BMTP #12

SHEET TITLE: SEWER PLAN AND PROFILE

PROJECT: GRANDVIEW SEWER MAIN

ADDRESS: PROPERTIES SOUTH OF GRANDVIEW TO MARMONT AVENUE

D.M. 147B173
DR. M. 470

PROJECT NO.

DRAWING NO. 2

SHEET 2 OF 2 SHEETS

GARY LEE MOORE, P.E.
CITY ENGINEER

DESIGN GROUP

| | | |
|---|---|---|
| ENGINEER: | GERALD F. HOVELL | R.C.E. 33118 |
| DESIGNED BY: | JEFFREY GARON | |
| DRAWN BY: | JEFFREY GARON | |
| CHECKED BY: | | |
| APPROVED BY: | | |

LA DPW ENGINEERING
Serving the People of Los Angeles

| NO. | REVISIONS: | DATE: | BY: |
|---|---|---|---|
| | | | |

WORK ACCEPTED
SERIAL NO.

INDEX NO. D

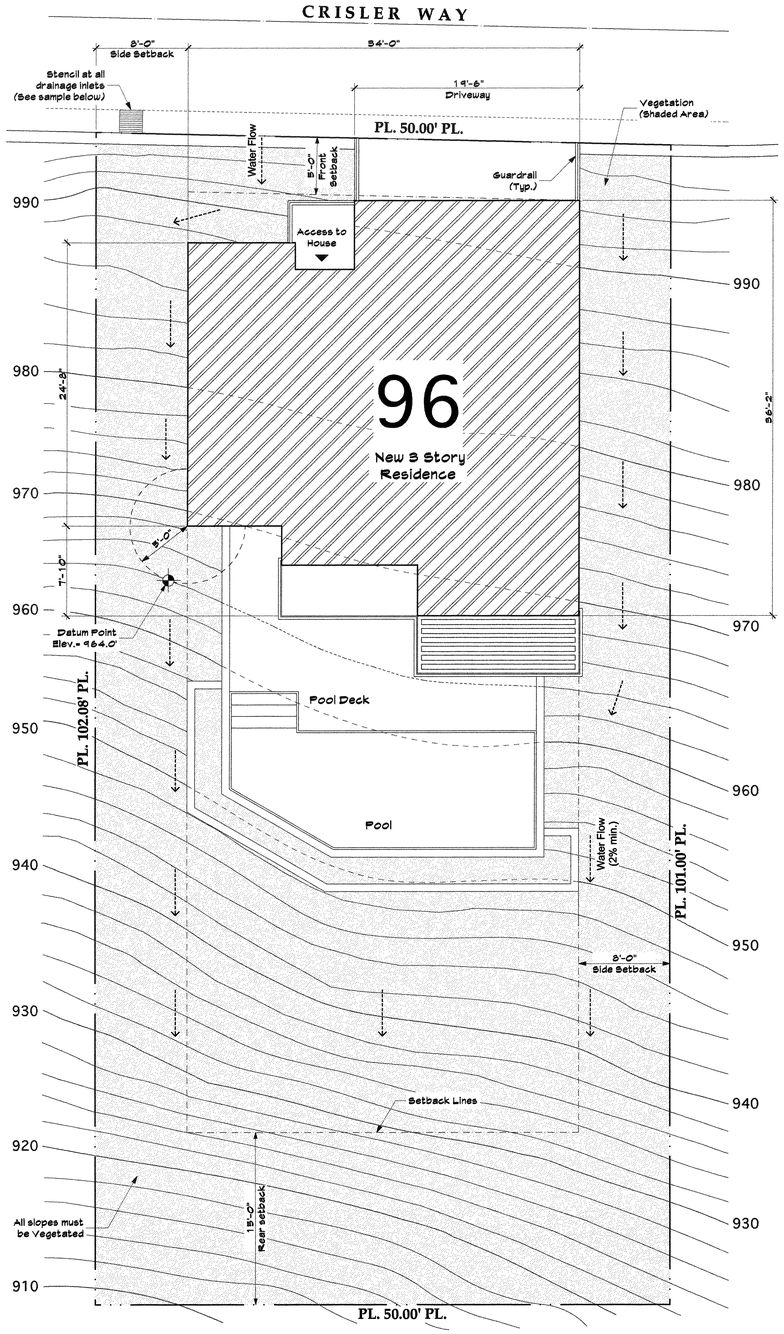
B - PERMITS
BC 401804

1860_Sewer_ACAD2000.dwg 2/13/2015 4:13:14 PM PST

RT1 JUN 05 2015

# HOUSE 96

## 1812 Crisler Way  Los Angeles, California  90046




### Site Plan

Scale : 3/16" = 1'-0"

## General Notes

The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause construction delays and/or additional expenses.

An approved Seismic Gas Shutoff Valve will be installed on the fuel gas line on the down stream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping." (Per Ordinance 170,158) (Separate plumbing permit is required).

Plumbing fixtures are required to be connected to a sanitary sewer or to an approved sewage disposal system.

Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water and connected to an approved water supply.

Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet above the floor.

Provide ultra low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.

Provide 70 inch high non-absorbent wall adjacent to shower and approved shatterresistant materials for shower enclosure.

Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating (research report not required).

Water heater must be strapped to wall per seismic code.

Automatic garage door openers, if provided, shall be listed in accordance with UL 325.

Smoke detectors shall be provided for all dwelling units intended for human occupancy, upon the owner's application for a permit for alterations, repairs, or additions, exceeding one thousand dollars ($1,000).

Where a permit is required for alterations, repairs or additions exceeding one thousand dollars ($1,000), existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section R315.1. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained.

Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section R305.1 or shall be provided with artificial light that is adequate to provide an average illumination of 6 foot-candles over the area of the room at a height of 30 inches above the floor level.

A copy of the evaluation report and/or conditions of listing shall be made available at the job site.

Lots shall be graded to drain surface water away from foundation walls with a minimum fall of 6 inches within the first 10 feet.

Dampproofing, where required, shall be installed with materials and as required in Section.

Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.

An approved smoke alarm shall be installed in each sleeping room & hallway or area giving access to a sleeping room, and on each story and basement for dwellings with more than one story. Smoke alarms shall be interconnected so that actuation of one alarm will activate all the alarms within the individual dwelling unit. In new construction smoke alarms shall receive their primary power source from the building wiring and shall be equipped with battery back up and low battery signal.

An approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. Carbon monoxide alarm shall be provided outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s) and on every level of a dwelling unit including basements.

Protection of wood and wood based products from decay shall be provided in the locations specified per Section R317.1 by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA U1.

Provide anti-Graffiti finish within the first 9 feet, measured from grade, at exterior walls and doors.
Exception: Maintenance of building affidavit is recorded by the owner to covenant and agree with the City of Los Angeles to remove any graffiti within 7-days of the graffiti being applied.

Provide Automatic Fire Sprinklers System Through-out to be approved by Plumbing Div. prior to installation.

Where there is an excavation of a greater depth than are the walls or foundation of an adjoining building or structure and located closer to the property line than the depth of the excavation, the owner shall provide the Department of Building and Safety with evidence that the adjacent property owner(s) have been given a 30-day written notice of such intent to make an excavation.

Heater shall be capable of maintaining a min. room temperature of 68° F at a point 3 feet above the floor and 2 feet from ext. walls in all habitable rooms at the design temperature

POOL NOTES

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates, with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.

NO DUMPING
DRAINS TO OCEAN
L.A.M.C. 64.70

STORMWATER MITIGATION PLAN
APPROVED WITH CONDITIONS
☐ Low Impact Development (LID)
☑ Standard Urban Stormwater Mitigation Plan (SUMP)
☐ Site Specific Mitigation Plan (SSMP)
This set of plans and specifications must be at job site during construction.
NOTE: Stormwater Observation Report (SOR) is required prior to request of Certificate of Occupancy or final sign-off
By _____ Date 12/18/12
Watershed Protection Division
Bureau of Sanitation - Department of Public Works

## Project Data

| | | |
|---|---|---|
| Legal Description | : | Lot 96 , Tract 865 |
| Construction Type | : | V - (Fully Sprinklered - NFPA 13D) |
| Zone | : | R - 1 - H |
| Hillside Grading | : | YES |
| VHFHSZ | : | YES |
| Square Footage | : | |

| | |
|---|---|
| Carport | 336 s.f. |
| Street Level (3rd Floor) | 127 s.f. |
| Center Level (2nd Floor) | 611 s.f. |
| Lower Level (1st Floor) | 782 s.f. |
| Total Habitable Area : | 1,520 s.f. |

Maxium Total Height : 33'-0"

Residencial Floor Area (R.F.A.) Calcualtion :

Lot Size 5,076 s.f. (Min. 25%) = 1,269 s.f. + 20% Setback Bonus
= 1,522.8 s.f. RFA Max.

### Lot Coverage

| | |
|---|---|
| - Lot Size | 5,076 s.f. |
| - House Foot Print | 1,088 s.f. |
| - Pool / Pool Deck | 565 s.f. |
| Total : | 1,653 s.f. |

or 32.5% < 40%

## Sheet Schedule

| | |
|---|---|
| A-1 | Site Plan / Title Sheet |
| A-2 | Roof Plan & Street Level Plan |
| A-3 | Center Level & Lower Level Plan |
| A-4 | Pool Level Plan / Exterior Elevations |
| A-5 | Exterior Elevations |
| A-6 | Sections 1 & 2 |
| A-7 | Sections 3 & 4 |

(In Back of Set)

| | |
|---|---|
| S-1 | General Notes & Specifications |
| S-1.1 | Structural Observation & Typical Details |
| S-2 | Foundation Plans / Framing Plans |
| S-3 | Foundation Plans / Framing Plans |
| S-4 | Foundation Details |
| S-5 | Foundation Details |
| S-6 | Foundation Details |
| S-7 | Foundation Details |
| S-8 | Foundation Details |
| S-9 | Foundation Details |
| S-10 | Framing Details |
| S-11 | Framing Details |

REGISTERED ARCHITECT ROBERT ANDERSON C023654 STATE OF CALIFORNIA


Robert Anderson
Architect
18180 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


Site Plan / Title Sheet

1812 Crisler Way - HOUSE 96

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-18-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 12-12-12 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 12-12-12

PROJECT REF. NUMBER

A-1

SHEET NUMBER 96

RECEIVED JUN 05 2013

## POOL NOTES

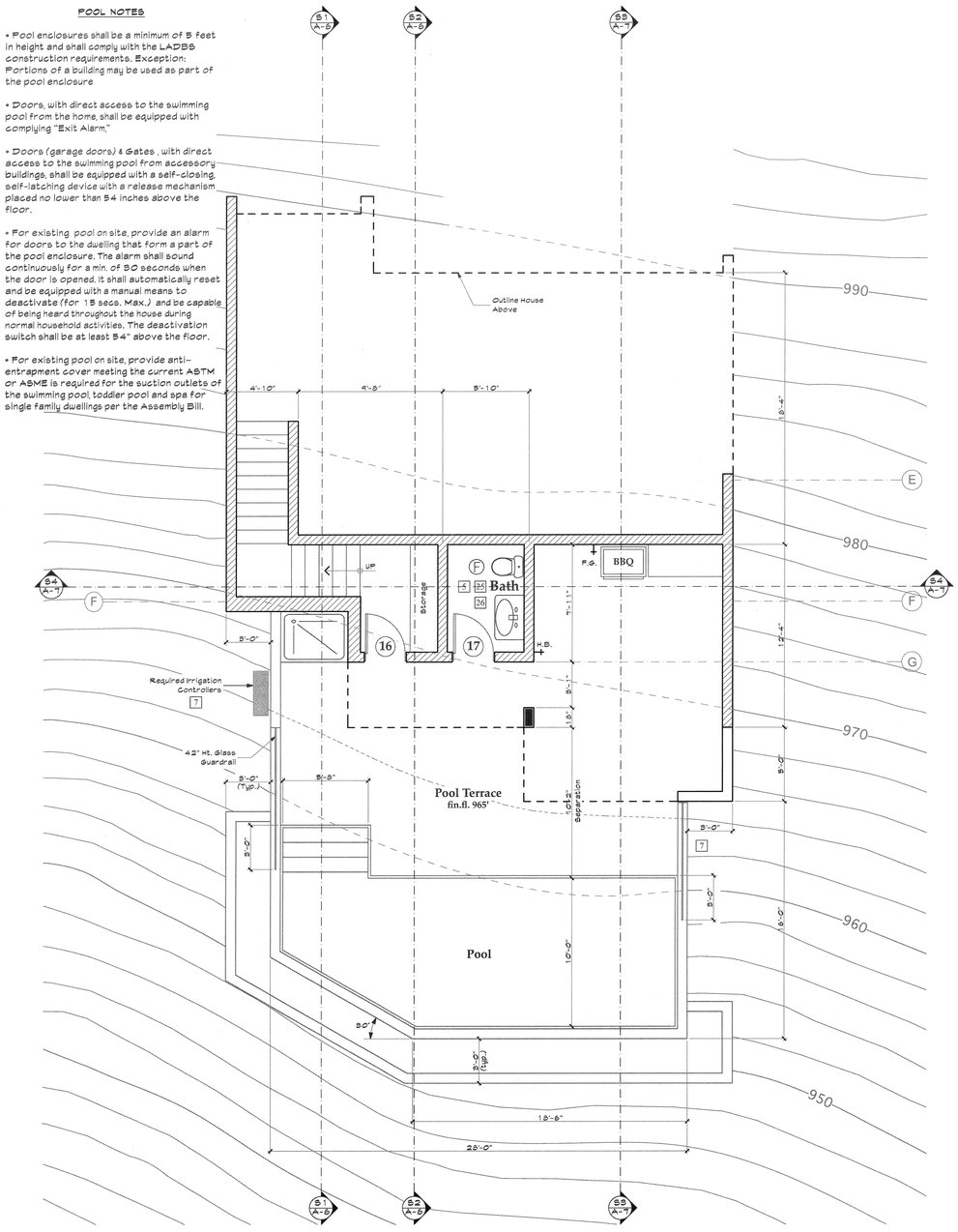
- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure

- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."

- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.

- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened, it shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.

- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




## Pool Level Plan

Scale : 1/4" = 1'-0"




## Floor Plan Notes

2 x 6 Stud Walls

2 X 4 Stud Walls, as can be a convination of 2x4's, 2x6's, etc.

(SD) Los Angeles City Approved Smoke Detector hard wired w/ battery back up.

(F) "Energy star" 50 CFM Exhaust Fan ducted to terminate outside of the building.

Provide Emergency exit door or window from sleeping rooms. Net clear window opening area shall be not less than 5.7 sq. ft. min. w/ net window opening height of 24" clear with a min. net width opening of 20" clear. Finish sill height max. 44" above floor.

Provide natural light in (habitable rooms) by means of exterior wall openings with an area not less than 10% of floor area with a minimun of 10 sq. ft.

Under-floor ventilation shall be not less than 1/150 of under floor area.

The plumbing fixtures and plumbing fittings Flow Rates shall meet table 4.303.1 on Form GRN 16 (See Sheet GRN).

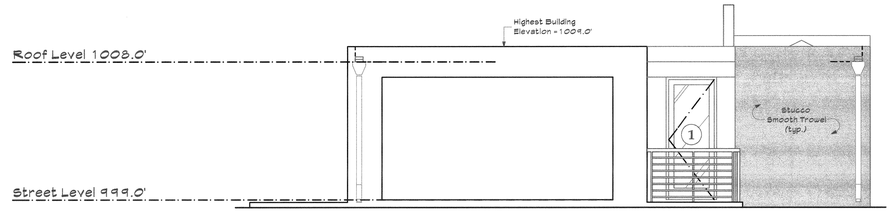
Incombustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1,000 square feet. Draftstopping shall divide the concealed space into approximately equal areas.

Attic ventilation of 1/150 of the area of ventilated space (approximately 10 sq. in. for each 10 sq. ft. of attic area) is required.

Bathrooms, water closet compartments and other similar rooms shall be provided natural ventilation and with mechanical ventilation capable of 50 cfm exhausted directly to the outside. Energy Star Compliant

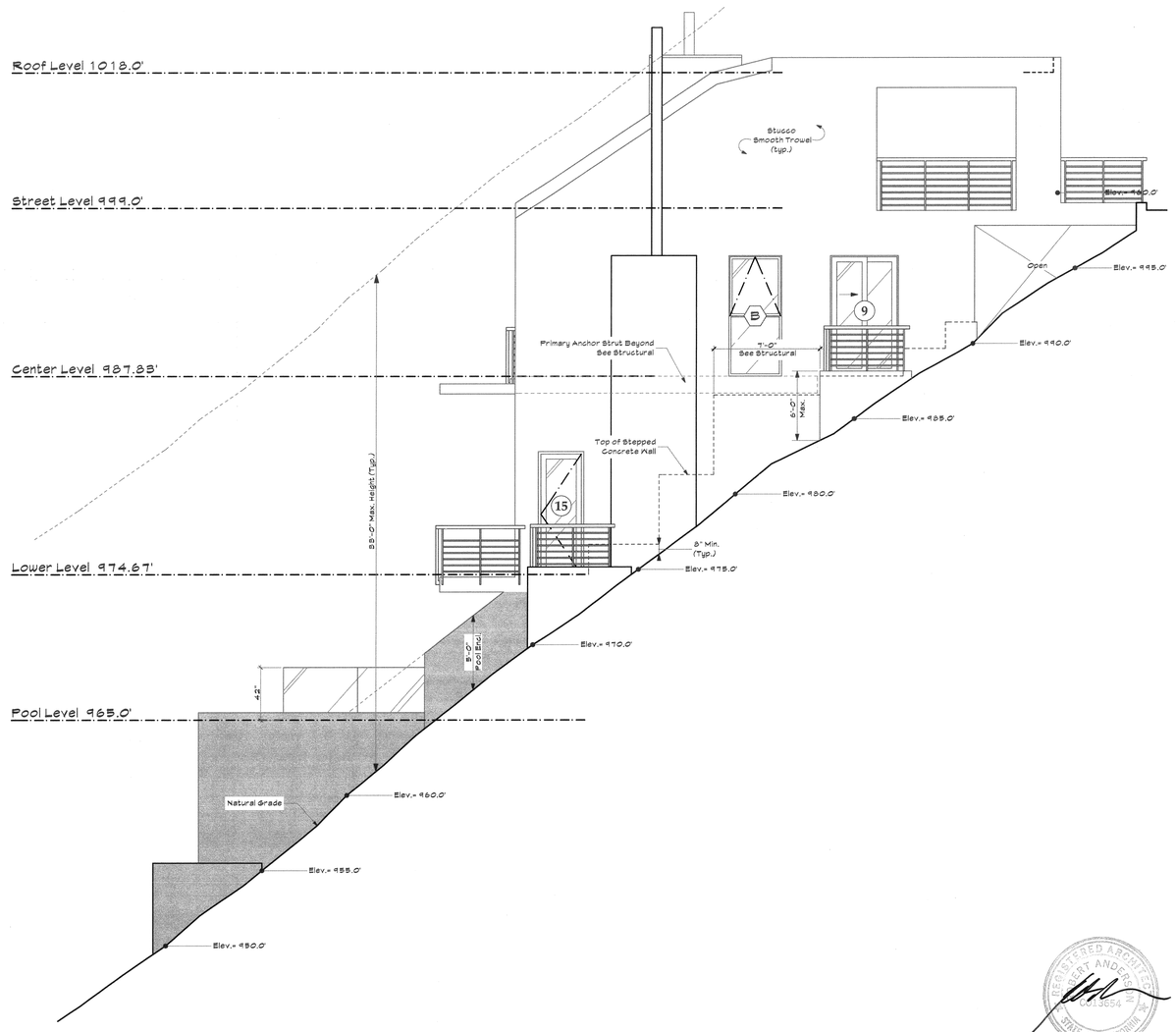
Ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimun N° 26 gage sheet seel or other approved material & there shall be no openings from the ducts into the garage

Other Penetrations of garage/dwelling ceiling and walls are to be protected as required by Section R302.11




## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"

## Legend

| | |
|---|---|
| E.G. | Fixed Glass, Finish Grade , Fuel Gas |
| F.F. | Finish Floor Elevation |
| D.W. | Dry Wall |
| H.B. | Hose Bib |
| M.C. | Medicine Cabinet |
| A.B. | Anchor Bolt |
| D.S. | Downspout |
| I.D. | Inside Diameter |
| O.D. | Outside Diameter |
| E.O.B. | Face of Block |
| E.O.S. | Face of Stud |
| N.I.C. | Not in Contract |
| N.T.S. | Not to Scale |
| U.N.O. | Unless Noted Otherwise |
| (1) | Door Reference Number |
| (A) | Window Reference Letter |
| | Detail Reference Number / Sheet Reference Location |
| | Section Reference Number / Sheet Reference Location |
| | Exterior Elevation Number / Sheet Reference Location |
| | Interior Reference Number / Sheet Reference Location |
| | Ref. Letter per Elevation |
| # | See "Green Building Code" Notes in Sheet GRN |


Department of Building and Safety
Green Building Division

This set of plans and specifications has been reviewed and is approved for compliance with state and local ordinances related to the Green Building Code.

This set of plans MUST be on the job site during construction.

It is unlawful to alter, change or deviate from these plans.

The stamping of this plan SHALL NOT be construed to be approval of violation of any provisions of any Ordinance or Law.

By: _____ Date: _____



Robert Anderson Architect
18169 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Pool Level Plan

1812 Crisler Way - HOUSE 96

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-18-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |
| 5 | 3-12-15 | DC |

DATE ISSUED 5-1-11

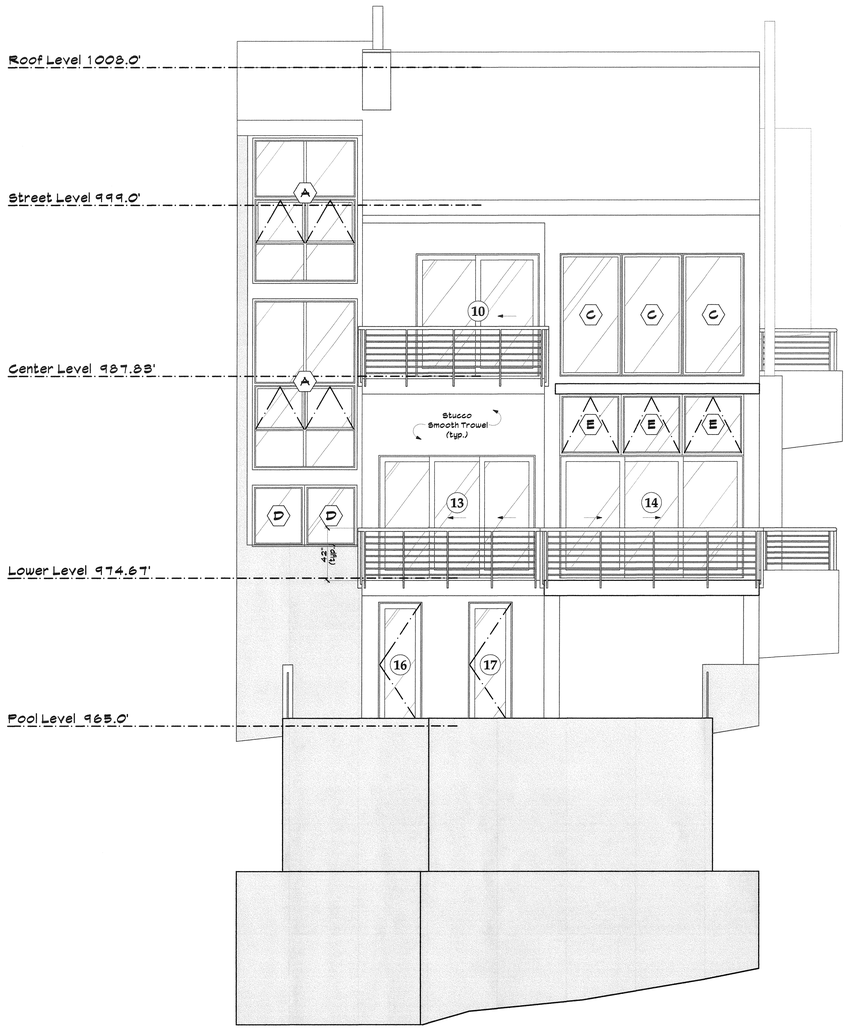
DATE PRINTED 3-12-15

PROJECT REF. NUMBER

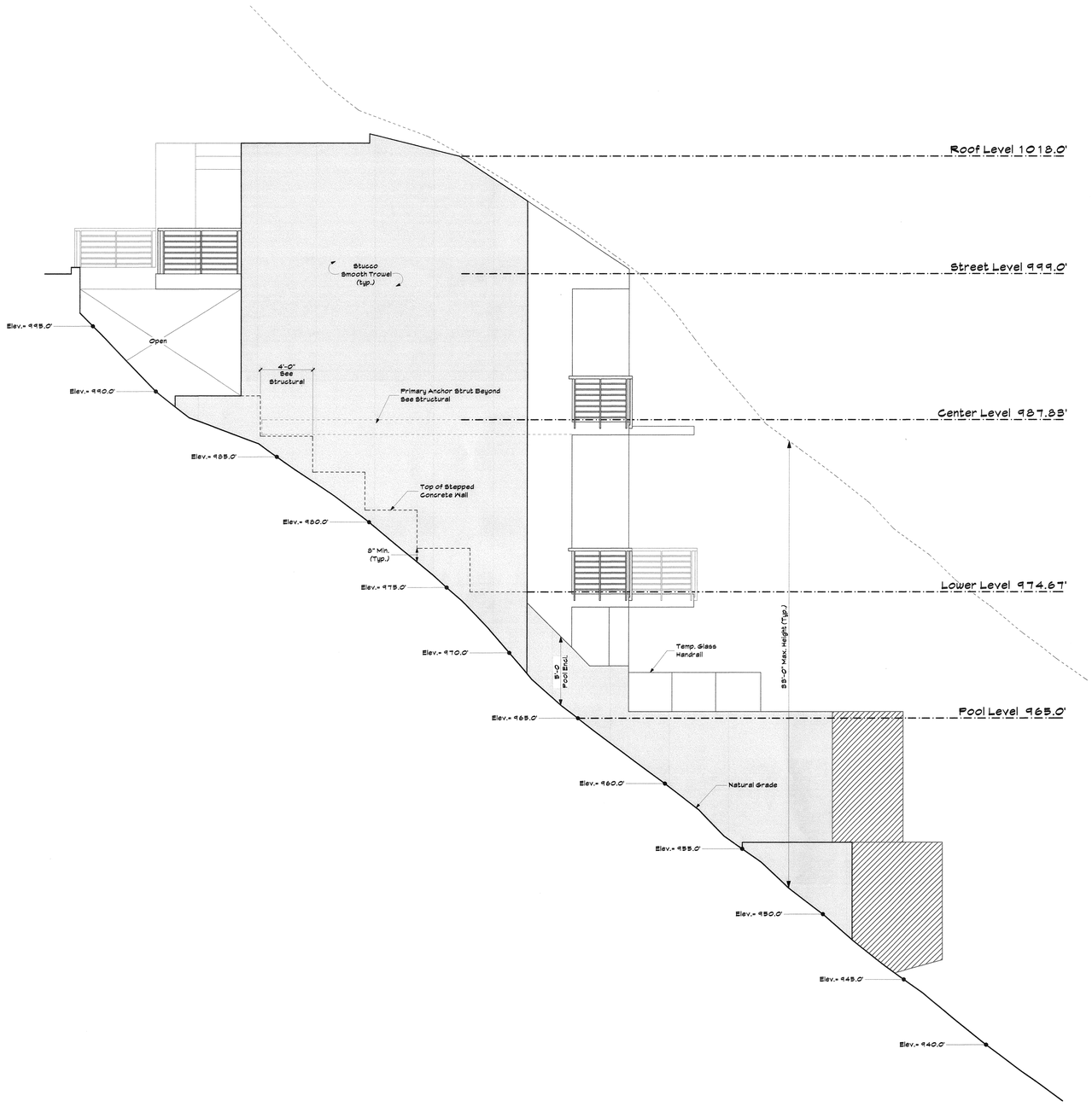
A-4

SHEET NUMBER 96

RECEIVED JUN 05 2015




## South Elevation




## West Elevation

## Exterior Elevation

Scale : 1/4" = 1'-0"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# Exterior Elevation

1812 Crisler Way - HOUSE 96

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-18-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 6-20-13

PROJECT REF. NUMBER

A-5

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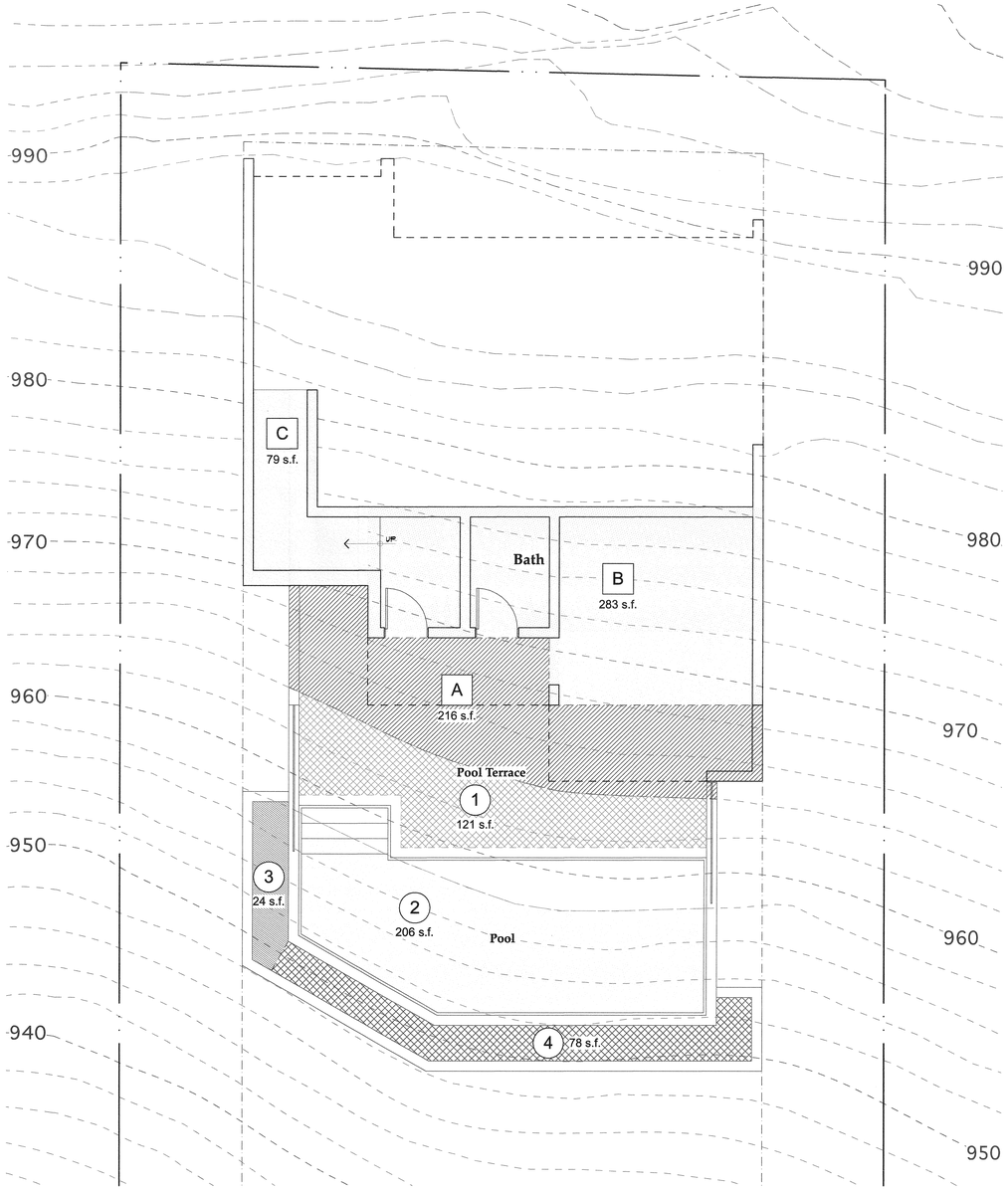
SHEET NUMBER 96




## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

A — 216 s.f. x 2.5 ÷ 27 = 20 yd³

- Exempted Areas (Under House Outline) :

B — 283 s.f. (x 2.75 = 990 ; x 3.5 = + 1132) ÷ 27 = 65.4 yd³

C — 79 s.f. x 2.75 ÷ 27 = 8 yd³

D — 121 s.f. (x 5 = 605 ; x 3 = + 363) ÷ 27 = 35.8 yd³

E — 483 s.f. (x 3 = 1499 ; x 4 = + 1932) ÷ 27 = 125 yd³

Total Exempt = 234.2 yd³

### Fill Calculation

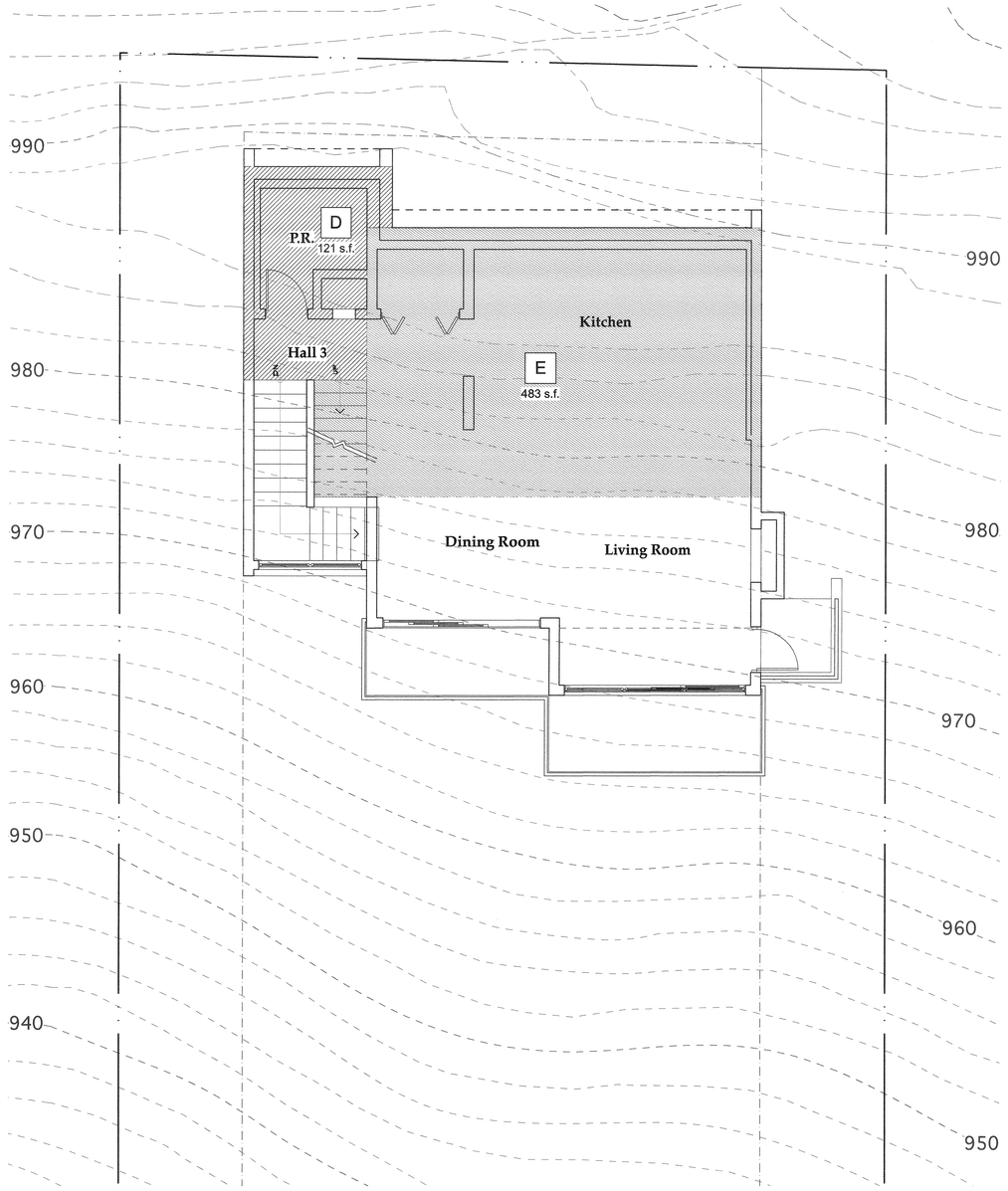
1 — 121 s.f. x 4 ÷ 27 = 18 yd³

2 — 206 s.f. x 3.5 ÷ 27 = 30.5 yd³

3 — 24 s.f. x 4.5 ÷ 27 = 4 yd³

4 — 78 s.f. (x 5 = 390 ; x 1 = + 78) ÷ 27 = 17.3 yd³

Total Fill = 66 yd³




## Grading Calculation (Lower Level)

### Cut, Fill & Export Calculation

- Total Cut (20 yd³) + Total Fill (66 yd³) + Pool (N/A) = 86 yd³ < 250 yd³ (Max. Allowed)
- Total Cut (20 yd³) + Total Exempt Cut (234.2 yd³) = 252.2 yd³ (Total Project Cut)
- Total Project Cut (252.2 yd³) - Total Fill (66 yd³) = 186.2 yd³ (TO EXPORT) < 250 yd³ (Max. Allowed)

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# Grading Calculation

1812 Crisler Way - HOUSE 96

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL
CHECKED BY DC
APPROVED BY RA

REVISIONS
NUMBER DATE BY

DATE ISSUED 3-16-15

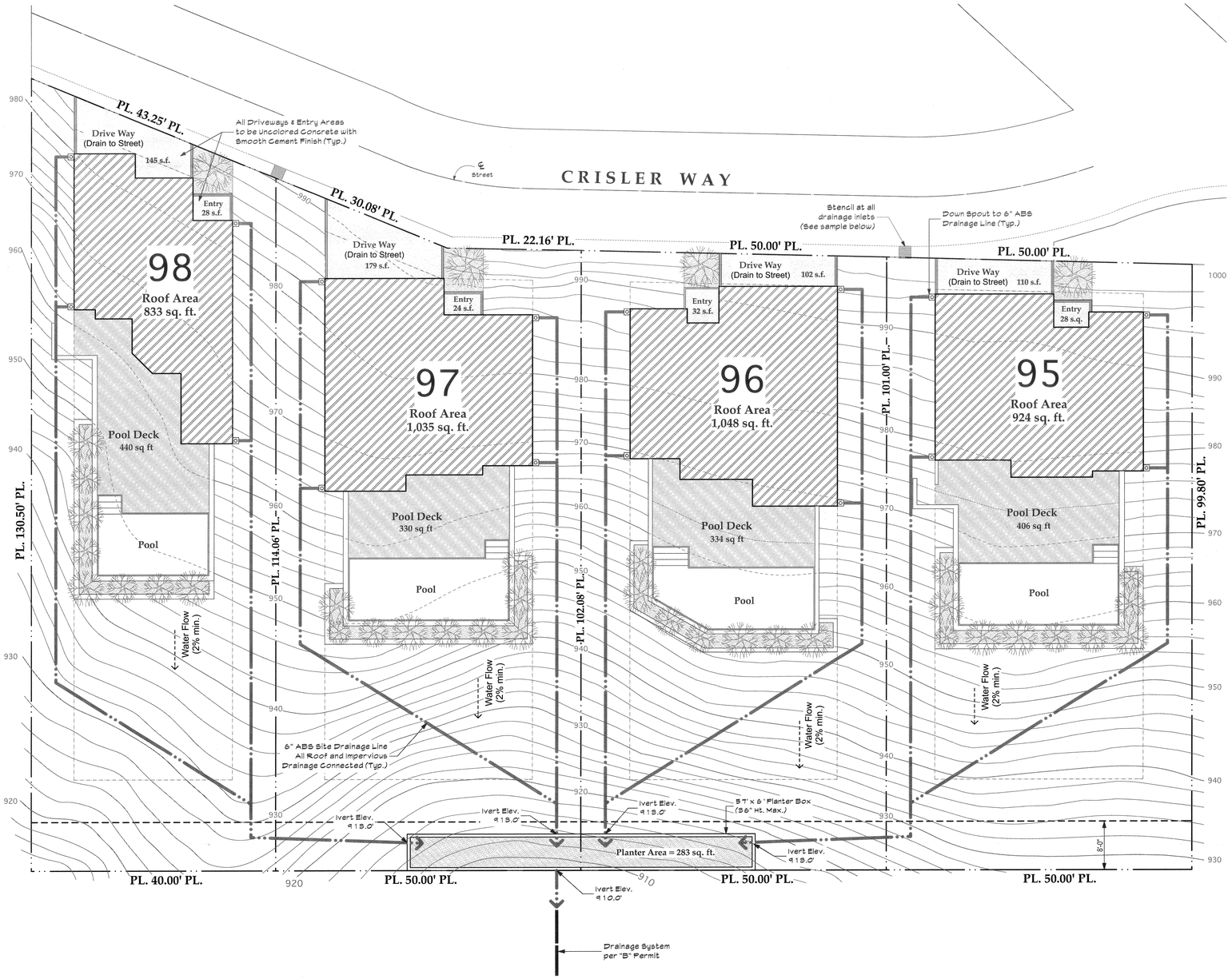
DATE PRINTED 3-16-15

PROJECT REF. NUMBER

A-8

SHEET NUMBER 96

RECEIVED JUN 05 2015




## Site Drainage Plan

### Site Paving Calculation

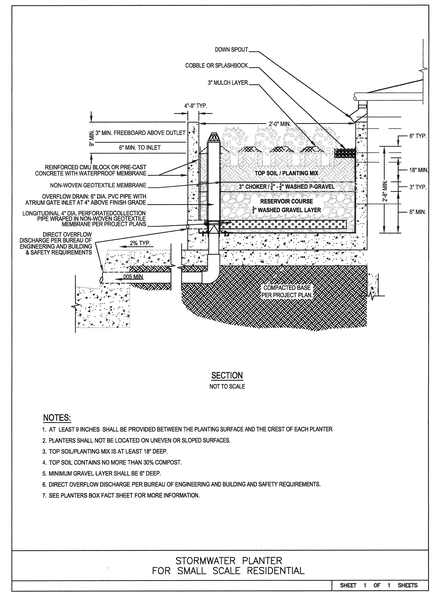
* All Driveways & Entry Areas to be Uncolored Concrete with Smooth Cement Finish (Solar Reflectance ≥ 0.30)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HOUSE 95 : | Pool Deck (406 sq. ft.) | + | Driveway (110 sq. ft.) | + | Entry (28 sq. ft.) | = | 544 sq. ft. | (25% = 136 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 110 | + | 28 | = | 138 sq. ft. | > | 136 sq. ft. | |
| HOUSE 96 : | Pool Deck (334 sq. ft.) | + | Driveway (102 sq. ft.) | + | Entry (32 sq. ft.) | = | 468 sq. ft. | (25% = 117 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 102 | + | 32 | = | 134 sq. ft. | > | 117 sq. ft. | |
| HOUSE 97 : | Pool Deck (330 sq. ft.) | + | Driveway (179 sq. ft.) | + | Entry (24 sq. ft.) | = | 533 sq. ft. | (25% = 133 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 179 | + | 24 | = | 203 sq. ft. | > | 133 sq. ft. | |
| HOUSE 98 : | Pool Deck (440 sq. ft.) | + | Driveway (145 sq. ft.) | + | Entry (28 sq. ft.) | = | 613 sq. ft. | (25% = 153 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 145 | + | 28 | = | 173 sq. ft. | > | 136 sq. ft. | |

### StormWater Planter Calculation

Total : 5,376 sq. ft. ( All Roofs : 3,840 s.f. + All Impervious Area: 1,536 s.f. )

Per Chart : 168 sq. ft. ( for the first 2,500 sq. ft. ) + 20 s.f. per every additional 500 sq. ft.
168 sq. ft. + ( 5,376 - 2,500 = 2,876 ÷ 500 ≈ 5.75 x 20 = 115 sq. ft. Additional ) = **283 sq. ft. Total needed**

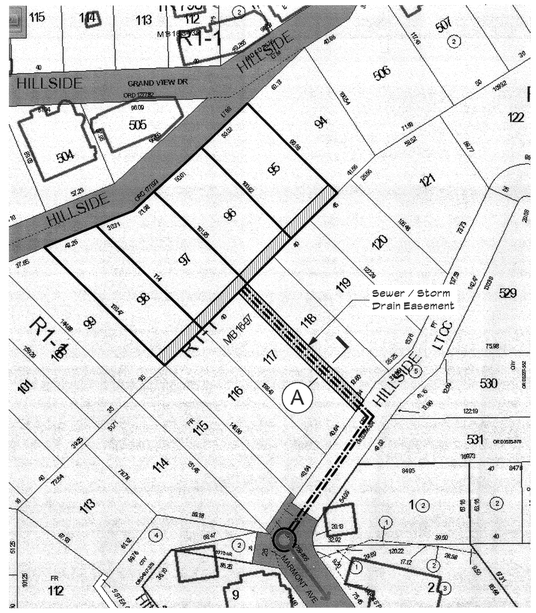



SECTION
NOT TO SCALE

NOTES:
1. AT LEAST 9 INCHES SHALL BE PROVIDED BETWEEN THE PLANTING SURFACE AND THE CREST OF EACH PLANTER
2. PLANTERS SHALL NOT BE LOCATED ON UNEVEN OR SLOPED SURFACES.
3. TOP SOIL/PLANTING MIX IS AT LEAST 18" DEEP.
4. TOP SOIL CONTAINS NO MORE THAN 30% COMPOST.
5. MINIMUM GRAVEL LAYER SHALL BE 8" DEEP.
6. DIRECT OVERFLOW DISCHARGE PER BUREAU OF ENGINEERING AND BUILDING AND SAFETY REQUIREMENTS.
7. SEE PLANTERS BOX FACT SHEET FOR MORE INFORMATION.

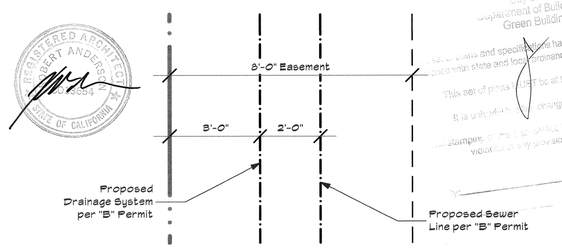
STORMWATER PLANTER
FOR SMALL SCALE RESIDENTIAL

SHEET 1 OF 1 SHEETS




## Vicinity Map

NOTE: Sewer / Storm Drain Easement on Lot 118 recorded on 2/11/15 # 20150151825




## A Enlarged Plan

Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

# StormWater Drainage Plan

Four HOUSES for:
CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 3-12-15 | DC |

DATE ISSUED 3-9-15

DATE PRINTED 3-12-15

PROJECT REF. NUMBER

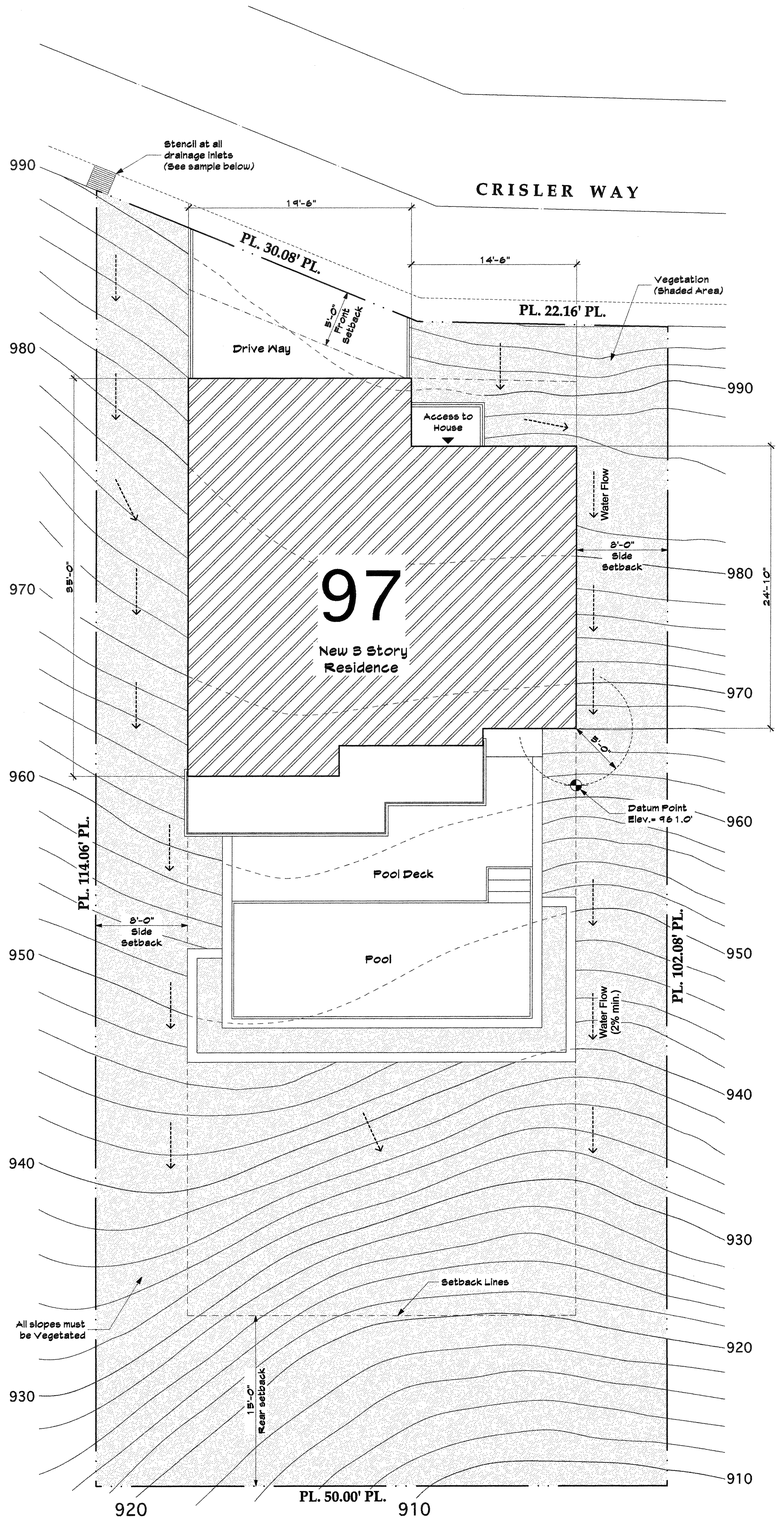
**A-1.1**

SHEET NUMBER

RECEIVED JUN 05 2015

# HOUSE 97

## 1806 Crisler Way Los Angeles, California 90046




**Site Plan**

Scale : 3/16" = 1'-0"

## General Notes

The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause construction delays and/or additional expenses.

An approved Seismic Gas Shutoff Valve will be installed on the fuel gas line on the down stream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping." (Per Ordinance 170,153) (Separate plumbing permit is required).

Plumbing fixtures are required to be connected to a sanitary sewer or to an approved sewage disposal system.

Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water and connected to an approved water supply.

Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet above the floor.

Provide ultra low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.

Provide 70 inch high non-absorbent wall adjacent to shower and approved shatterresistant materials for shower enclosure.

Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating (research report not required).

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A copy of the evaluation report and/or conditions of listing shall be made available at the job site.

Lots shall be graded to drain surface water away from foundation walls with a minimum fall of 6 inches within the first 10 feet.

Dampproofing, where required, shall be installed with materials and as required in Section R406.1.

Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.

An approved smoke alarm shall be installed in each sleeping room & hallway or area giving access to a sleeping room, and on each story and basement for dwellings with more than one story. Smoke alarms shall be interconnected so that actuation of one alarm will activate all the alarms within the individual dwelling unit. In new construction smoke alarms shall receive their primary power source from the building wiring and shall be equipped with battery back up and low battery signal.

An approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. Carbon monoxide alarm shall be provided outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s) and on every level of a dwelling unit including basements.

Protection of wood and wood based products from decay shall be provided in the locations specified per Section R317.1 by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA U1.

Provide anti-Graffiti finish within the first 9 feet, measured from grade, at exterior walls and doors.
Exception: Maintenance of building affidavit is recorded by the owner to covenant and agree with the City of Los Angeles to remove any graffiti within 7-days of the graffiti being applied.

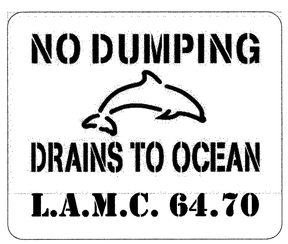
Provide Automatic Fire Sprinkler System Through-out in accordance with Section R313.3 or NFPA 13D.
System to be approved by Plumbing Div. prior to installation.

Where there is an excavation of a greater depth than are the walls or foundation of an adjoining building or structure and located closer to the property line than the depth of the excavation, the owner shall provide the Department of Building and Safety with evidence that the adjacent property owner(s) have been given a 30-day written notice of such intent to make an excavation.

Heater shall be capable of maintaining a min. room temperature of 68° F at a point 3 feet above the floor and 2 feet from ext. walls in all habitable rooms at the design temperature

**POOL NOTES**

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates, with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




STORMWATER MITIGATION PLAN
APPROVED WITH CONDITIONS
☐ Low Impact Development (LID)
☒ Standard Urban Stormwater Mitigation Plan (SUMP)
☐ Site Specific Mitigation Plan (SSMP)
This set of plans and specifications must be at job site during construction.
NOTE: Stormwater Observation Report (SOR) is required prior to issuance of Certificate of Occupancy or final sign-off.
By _____ Date 12/19/12
Watershed Protection Division
Bureau of Sanitation - Department of Public Works

## Project Data

| | | |
|---|---|---|
| Legal Description | : | Lot 97 , Tract 865 |
| Construction Type | : | V - (Fully Sprinklered - NFPA 13D) |
| Zone | : | R - 1 - H |
| Hillside Grading | : | YES |
| VHFHSZ | : | YES |
| Square Footage | : | |

| | |
|---|---|
| Carport | 336 s.f. |
| Street Level | 105 s.f. |
| Center Level | 684 s.f. |
| Lower Level | 792 s.f. |
| Total Habitable Area | 1,581 s.f. |

Maxium Total Height : 33'-0"

Residencial Floor Area (R.F.A.) Calcualtion :

Lot Size 5,278 s.f. (Min. 25%) = 1,319.5 s.f. + 20% Setback Bonus
= 1,583.4 s.f. RFA Max.

### Lot Coverage

| | |
|---|---|
| - Lot Size | 5,278 s.f. |
| - House Foot Print | 1,035 s.f. |
| - Pool / Pool Deck | 675 s.f. |
| Total : | 1,710 s.f. |

or 32.3% < 40%

## Sheet Schedule

| | |
|---|---|
| A-1 | Site Plan / Title Sheet |
| A-2 | Roof Plan & Street Level Plan |
| A-3 | Center Level & Lower Level Plan |
| A-4 | Pool Level Plan / Exterior Elevations |
| A-5 | Exterior Elevations |
| A-6 | Sections 1 & 2 |
| A-7 | Sections 3 & 4 |

**(In Back of Set)**

| | |
|---|---|
| S-1 | General Notes & Specifications |
| S-1.1 | Structural Observation & Typical Details |
| S-2 | Foundation Plans / Framing Plans |
| S-3 | Foundation Plans / Framing Plans |
| S-4 | Foundation Details |
| S-5 | Foundation Details |
| S-6 | Foundation Details |
| S-7 | Foundation Details |
| S-8 | Foundation Details |
| S-9 | Framing Details |
| S-10 | Framing Details |


Robert Anderson Architect
18180 KNOLL HILL
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818 488-1327
FAX 360-6134


**Site Plan / Title Sheet**

1806 Crisler Way - HOUSE 97

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 12-12-12 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 12-12-12

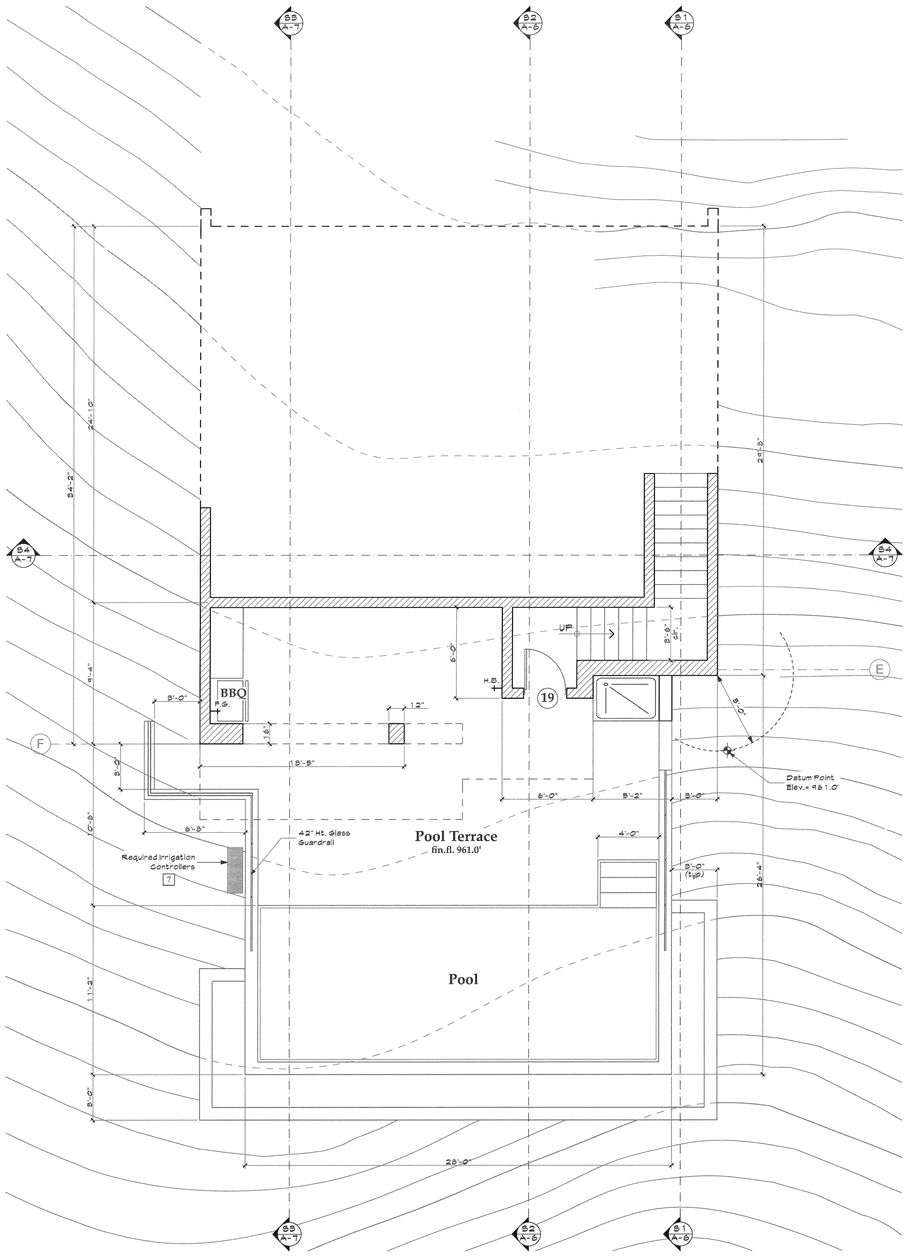
PROJECT REF. NUMBER

**A-1**

SHEET NUMBER



RTT JUN 05 2013

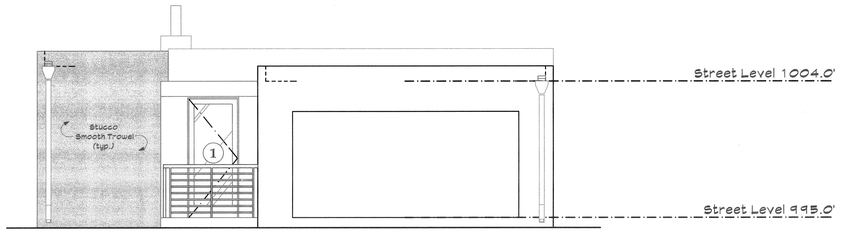



## Pool Level Plan

Scale : 1/4" = 1'-0"

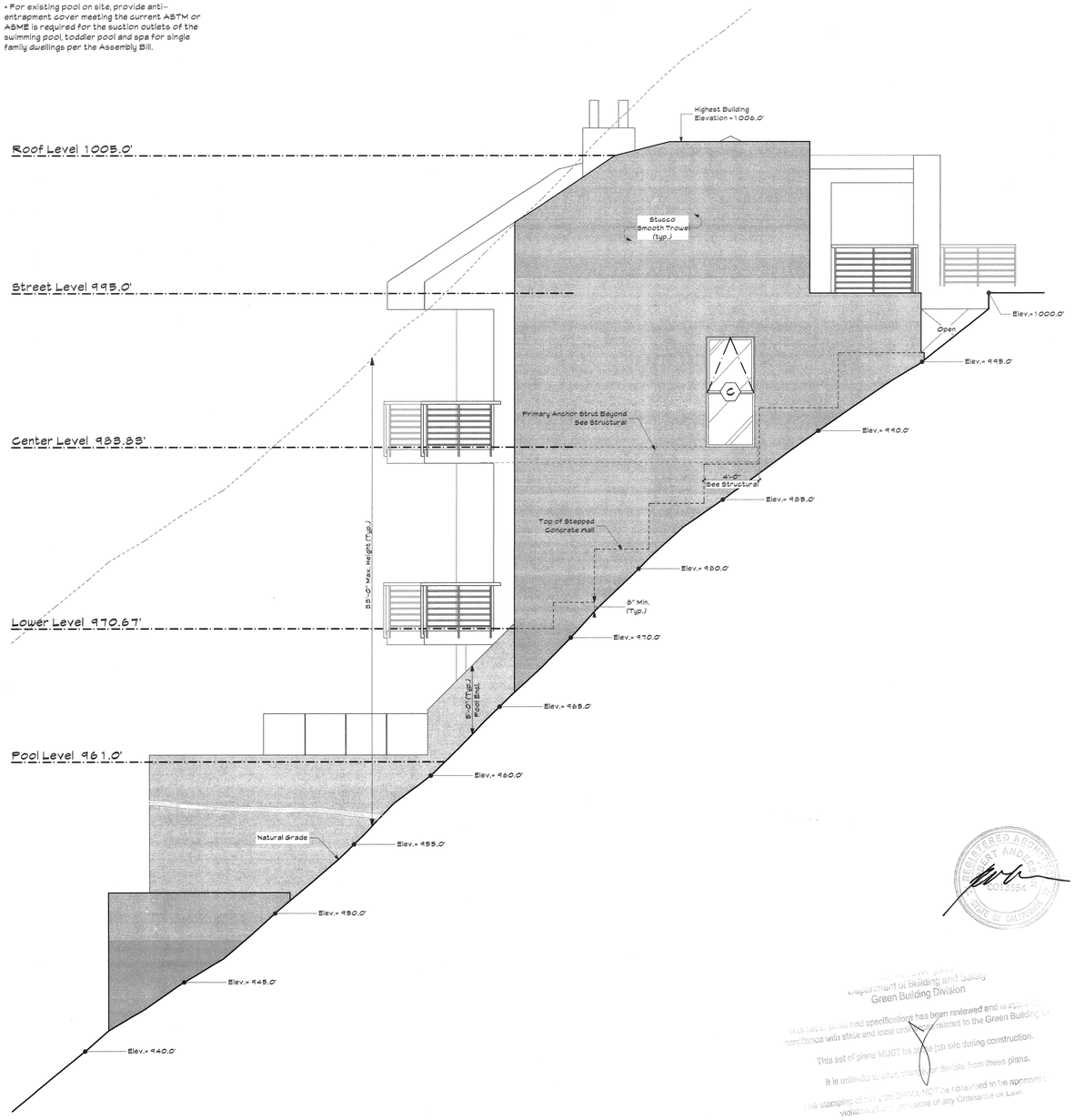
### POOL NOTES

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"

## Floor Plan Notes

2 x 6 Stud Walls

2 X Stud Walls, as can be a convination of 2x4's, 2x6's, etc.

SD — Los Angeles City Approved Smoke Detector hard wired w/ battery back up.

F — "Energy star" 50 CFM Exhaust Fan ducted to terminate outside of the building.

Provide Emergency exit door or window from sleeping rooms. Net clear window opening area shall be not less than 5.7 sq. ft. min. w/ net window opening height of 24" clear with a min. net width opening of 20" clear. Finish sill height max. 44" above floor.

Provide natural light in (habitable rooms) by means of exterior wall openings with an area not less than 10% of floor area with a minimun of 10 sq. ft.

Under-floor ventilation shall be not less than 1/150 of under floor area.

The plumbing fixtures and plumbing fittings Flow Rates shall meet table 4.303.1 on Form GRN 16 (See Sheet GRN).

Incombustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1,000 square feet. Draftstopping shall divide the concealed space into approximately equal areas.

Attic ventilation of 1/150 of the area of ventilated space (approximately 10 sq. in. for each 10 sq. ft. of attic area) is required.

Bathrooms, water closet compartments and other similar rooms shall be provided natural ventilation and with mechanical ventilation capable of 50 cfm exhausted directly to the outside. Energy Star Compliant

Ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimun N° 26 gage sheet seel or other approved material & there shall be no openings from the ducts into the garage

Other Penetrations of garage/dwelling ceiling and walls are to be protected as required by Section R302.11

Robert Anderson
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# Pool Level Plan

1806 Crisler Way - HOUSE 97

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |
| 5 | 3-12-15 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 3-12-15

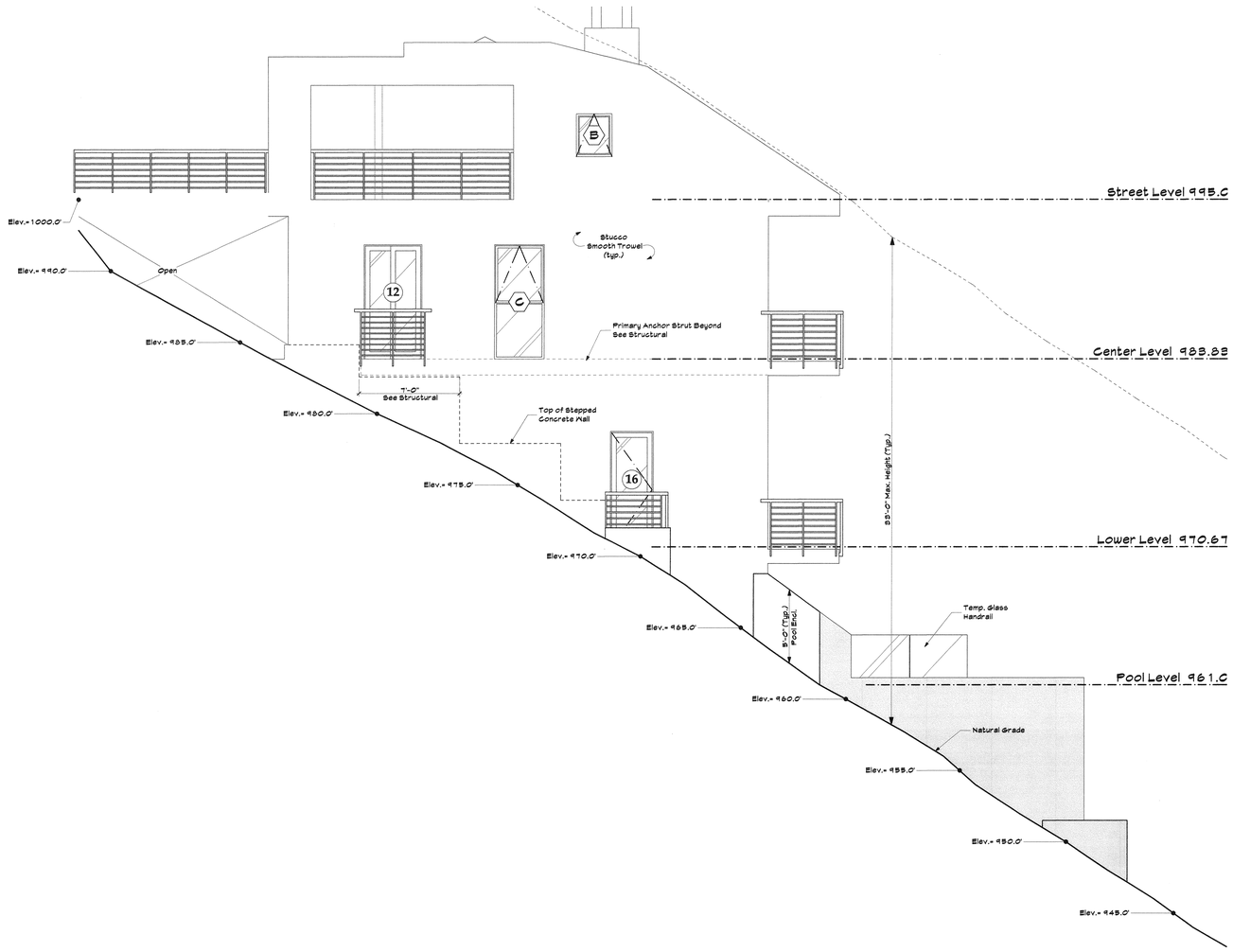
PROJECT REF. NUMBER

A-4

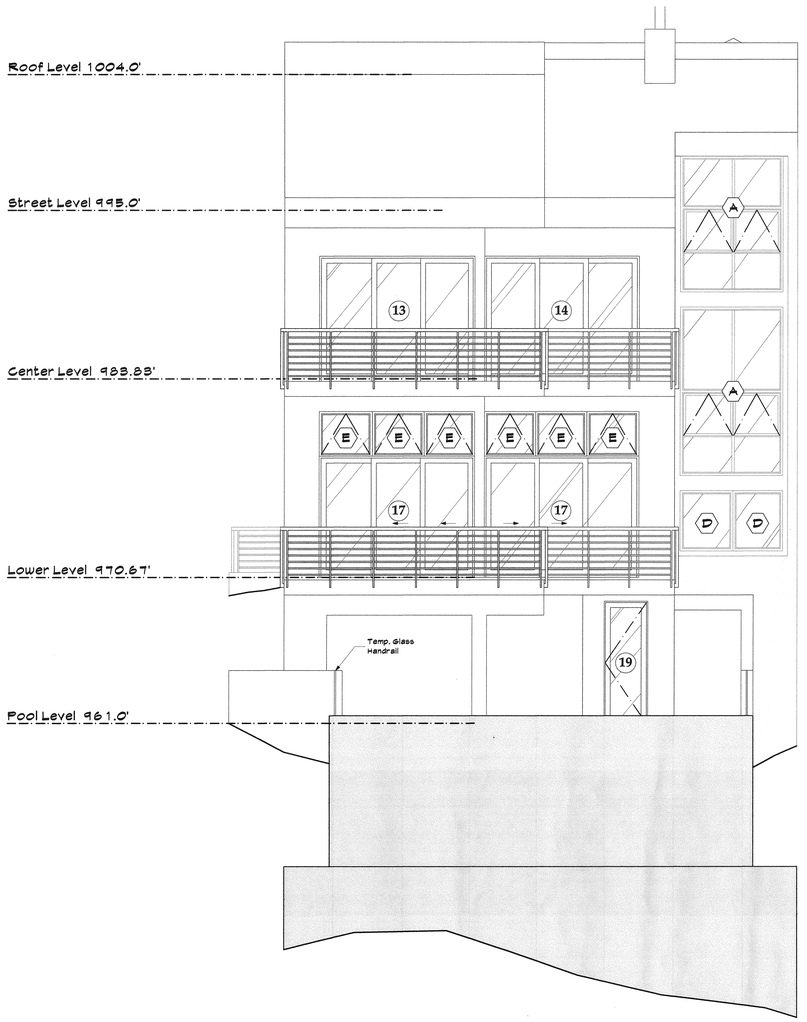
SHEET NUMBER

REGISTERED ARCHITECT
ROBERT ANDERSON
C035094
STATE OF CALIFORNIA

Department of Building and Safety
Green Building Division
Plans and specifications has been reviewed and is approved in accordance with state and local codes related to the Green Building Code.
This set of plans MUST be on the job site during construction.
It is unlawful to alter, change or deviate from these plans.
The stamping of this plan SHALL NOT be construed to be approval of any violation of any provisions of any Ordinance or Law.
By _____ Date _____




## South Elevation




## South Elevation

## Exterior Elevation

Scale : 1/4" = 1'-0"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FAX 360-6134


# Exterior Elevations

1806 Crisler Way - HOUSE 97

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |

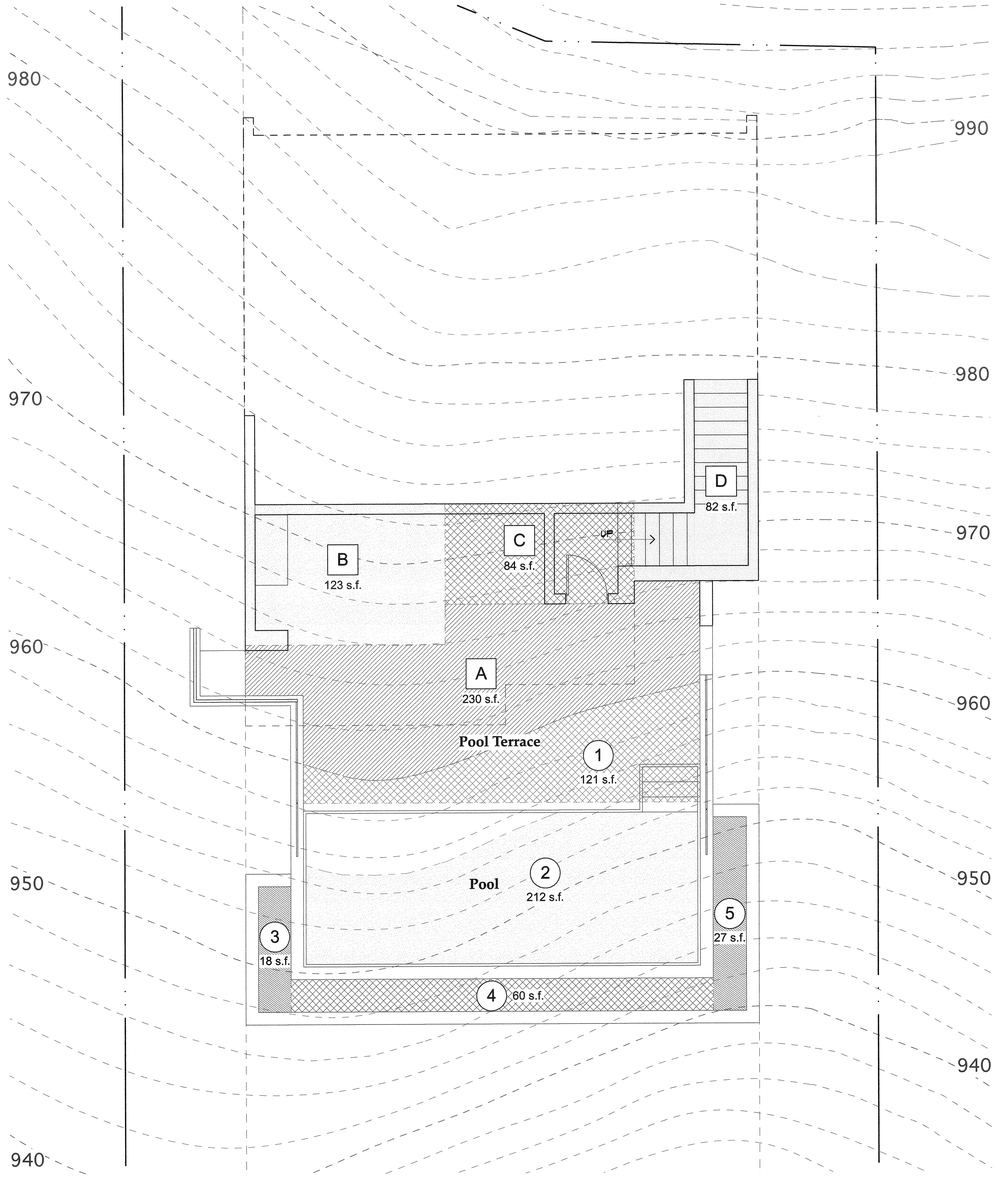
DATE ISSUED 5-1-11

DATE PRINTED 6-20-13

PROJECT REF. NUMBER

A-5

SHEET NUMBER 97




## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

A | 230 s.f. x 2.5 ÷ 27 = 21 $yd^3$

• Exempted Areas (Under House outline) :

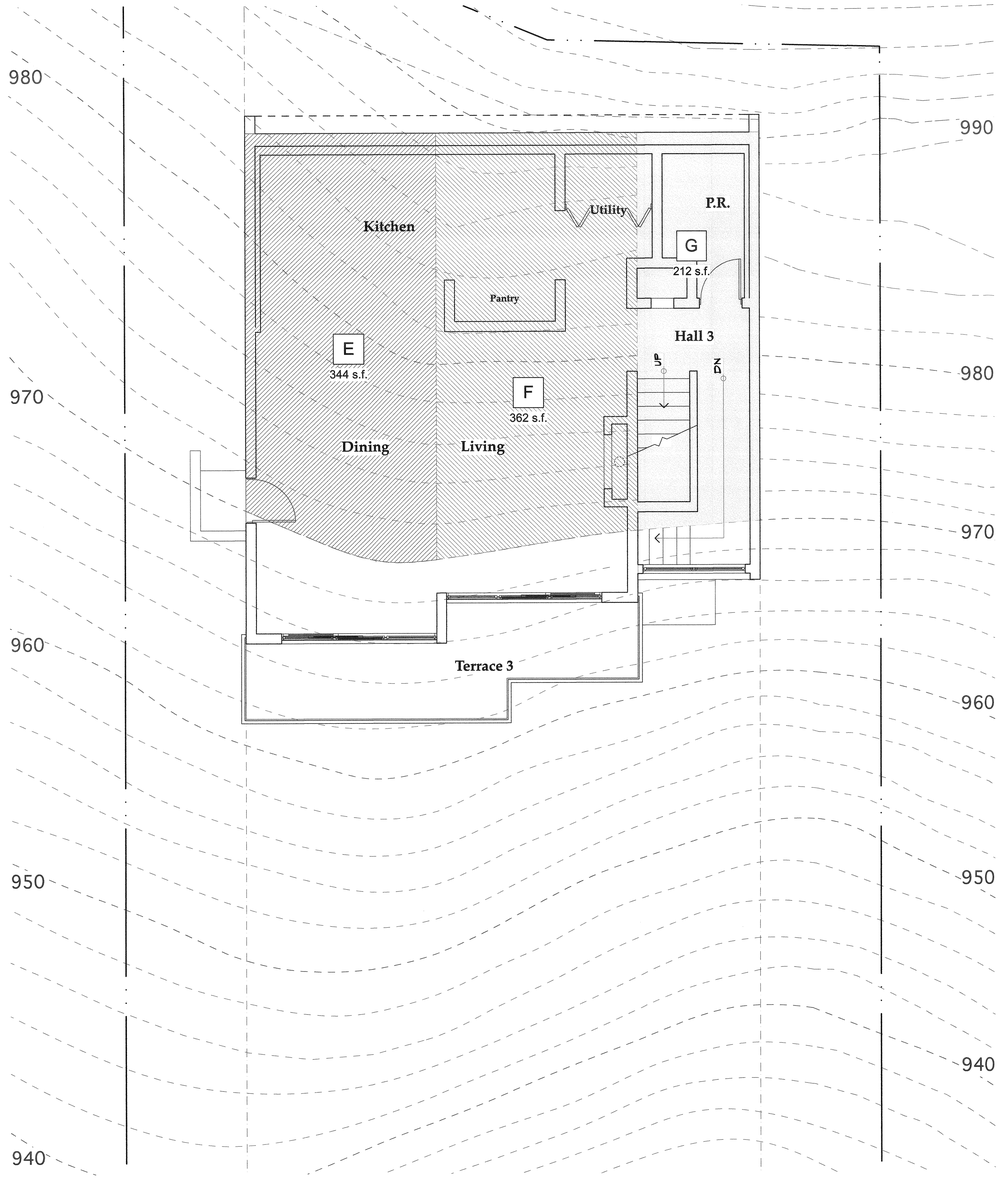
| | | |
|---|---|---|
| B | 123 s.f. x 2 ÷ 27 | = 9 $yd^3$ |
| C | 84 s.f. x 1.5 ÷ 27 | = 4.6 $yd^3$ |
| D | 82 s.f. x 2.5 ÷ 27 | = 7.6 $yd^3$ |
| E | 344 s.f. x 6 ÷ 27 | = 76.4 $yd^3$ |
| F | 362 s.f. x 7 ÷ 27 | = 93.8 $yd^3$ |
| G | 212 s.f. x 8 ÷ 27 | = 62.8 $yd^3$ |

Total Exempt = 254.2 $yd^3$

### Fill Calculation

| | | |
|---|---|---|
| 1 | 121 s.f. x 2.5 ÷ 27 | = 11.2 $yd^3$ |
| 2 | 212 s.f. x 4 ÷ 27 | = 31.4 $yd^3$ |
| 3 | 18 s.f. x 3 ÷ 27 | = 2 $yd^3$ |
| 4 | 60 s.f. ( x 1 = 60, x 5 = + 300 ) ÷ 27 | = 13.3 $yd^3$ |
| 5 | 27 s.f. x 4 ÷ 27 | = 4 $yd^3$ |

Total Fill = 61.9 $yd^3$




## Grading Calculation (Lower Level)

### Cut, Fill & Export Calculation

• Total Cut ( 21 $yd^3$ ) + Total Fill ( 61.9 $yd^3$ ) + Pool (N/A) = 82.9 $yd^3$ < 250 $yd^3$ ( Max. Allowed )

• Total Cut ( 21 $yd^3$ ) + Total Exempt Cut ( 254.2 $yd^3$ ) = 275.2 $yd^3$ ( Total Project Cut )

• Total Project Cut ( 275.2 $yd^3$ ) - Total Fill ( 61.9 $yd^3$ ) = 213.3 $yd^3$ ( TO EXPORT ) < 250 $yd^3$ ( Max. Allowed )


Robert Anderson
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18169 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
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FAX 360-6134


# Grading Calculation

1806 Crisler Way - HOUSE 97

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL
CHECKED BY DC
APPROVED BY RA

REVISIONS
NUMBER DATE BY

DATE ISSUED 3-16-15

DATE PRINTED 3-16-15

PROJECT REF. NUMBER

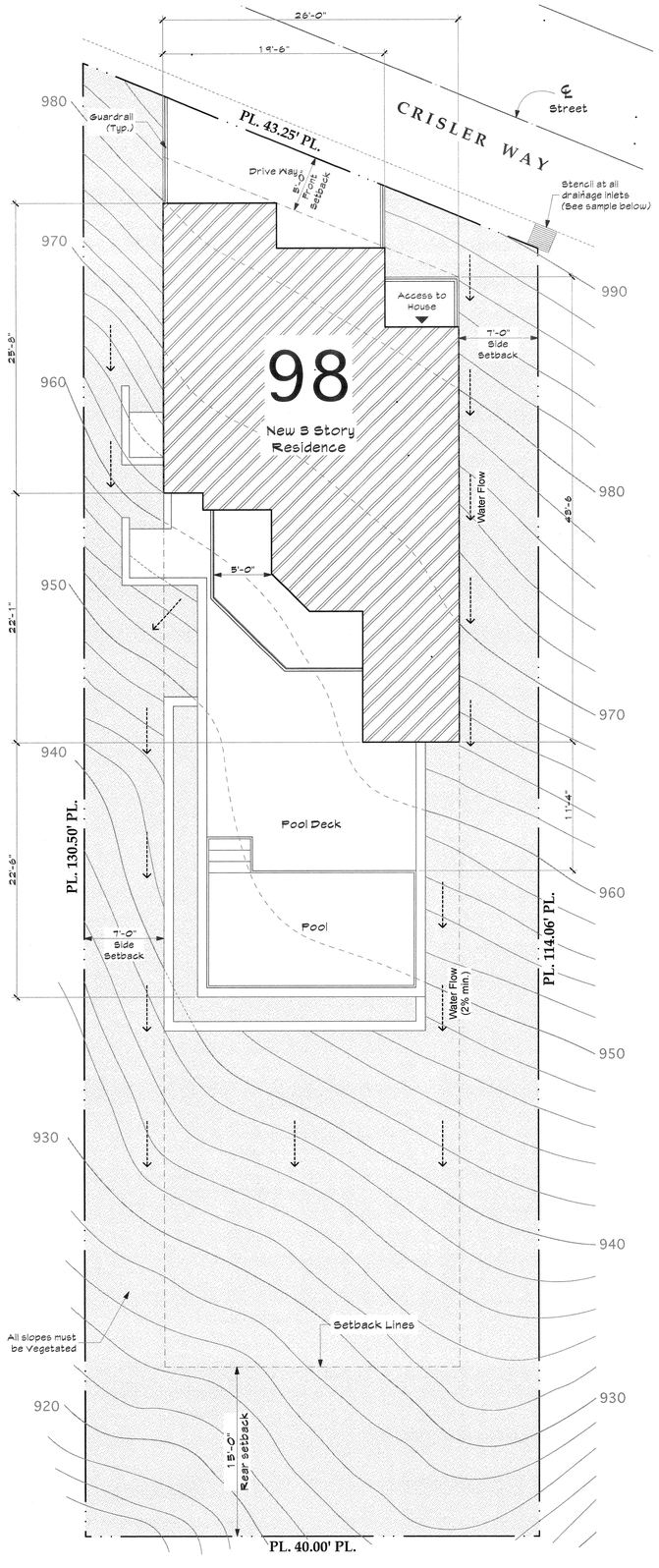
A-8

SHEET NUMBER 97

RT | JUN 05 2015

# HOUSE 98

## 1800 Crisler Way Los Angeles, California 90046




## Site Plan

Scale : 3/16" = 1'-0"

## General Notes

The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause construction delays and/or additional expenses.

An approved Seismic Gas Shutoff Valve will be installed on the fuel gas line on the down stream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping." (Per Ordinance 170,158) (Separate plumbing permit is required).

Plumbing fixtures are required to be connected to a sanitary sewer or to an approved sewage disposal system.

Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water and connected to an approved water supply.

Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet above the floor.

Provide ultra low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.

Provide 70 inch high non-absorbent wall adjacent to shower and approved shatterresistant materials for shower enclosure.

Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating (research report not required).

Water heater must be strapped to wall per seismic code.

Automatic garage door openers, if provided, shall be listed in accordance with UL 325.

Smoke detectors shall be provided for all dwelling units intended for human occupancy, upon the owner's application for a permit for alterations, repairs, or additions, exceeding one thousand dollars ($1,000).

Where a permit is required for alterations, repairs or additions exceeding one thousand dollars ($1,000) existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section R315.1. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained.

Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section R303.1 or shall be provided with artificial light that is adequate to provide an average illumination of 6 foot-candles over the area of the room at a height of 30 inches above the floor level.

A copy of the evaluation report and/or conditions of listing shall be made available at the job site.

Lots shall be graded to drain surface water away from foundation walls with a minimum fall of 6 inches within the first 10 feet.

Dampproofing, where required, shall be installed with materials and as required in Section R406.1.

Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.

An approved smoke alarm shall be installed in each sleeping room & hallway or area giving access to a sleeping room, and on each story and basement for dwellings with more than one story. Smoke alarms shall be interconnected so that actuation of one alarm will activate all the alarms within the individual dwelling unit. In new construction smoke alarms shall receive their primary power source from the building wiring and shall be equipped with battery back up and low battery signal.

An approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. Carbon monoxide alarm shall be provided outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s) and on every level of a dwelling unit including basements.

Protection of wood and wood based products from decay shall be provided in the locations specified per Section R317.1 by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA U1.

Provide anti-Graffiti finish within the first 9 feet, measured from grade, at exterior walls and doors.
Exception: Maintenance of building affidavit is recorded by the owner to covenant and agree with the City of Los Angeles to remove any graffiti within 7-days of the graffiti being applied.

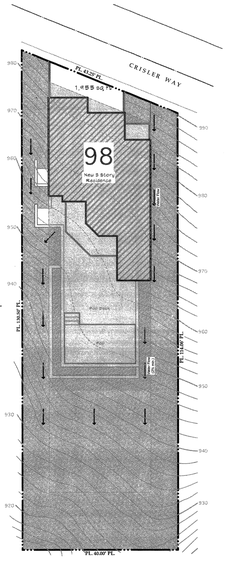
Provide Automatic Fire Sprinkler System Through-out in accordance with Section R313.3 or NFPA 13D. System to be approved by Plumbing Div. prior to installation.

Where there is an excavation of a greater depth than are the walls or foundation of an adjoining building or structure and located closer to the property line than the depth of the excavation, the owner shall provide the Department of Building and Safety with evidence that the adjacent property owner(s) have been given a 30-day written notice of such intent to make an excavation.

Heater shall be capable of maintaining a min. room temperature of 68° F at a point 3 feet above the floor and 2 feet from ext. walls in all habitable rooms at the design temperature

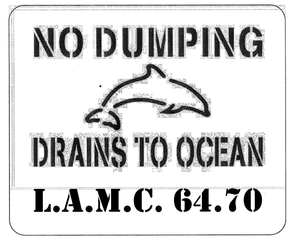
### POOL NOTES

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




## Lote Coverage

Scale : 1/16" = 1'-0"




## Project Data

| | | |
|---|---|---|
| Legal Description | : | Lot 98 , Tract 865 |
| Construction Type | : | V - (Fully Sprinklered - NFPA 13D) |
| Zone | : | R - 1 - H |
| Hillside Grading | : | YES |
| VHFHSZ | : | YES |
| Square Footage | : | |

| | |
|---|---|
| Carport | 335 s.f. |
| Street Level | 85 s.f. |
| Center Level | 497 s.f. |
| Lower Level | 639 s.f. |
| Total Habitable Area | 1,221 s.f. |

Maxium Total Height : 33'-0"

Residencial Floor Area (R.F.A.) Calcualtion :

Lot Size 4,890 s.f. (Min. 25%) = 1,222.5 s.f. RFA Max.

## Lot Coverage

| | |
|---|---|
| - Lot Size | 4,890 s.f. |
| - House Foot Print | 833 s.f. |
| - Pool / Pool Deck | 726 s.f. |
| Total : | 1,559 s.f. |

or 31.8% < 40%

## Sheet Schedule


| | |
|---|---|
| A-1 | Site Plan / Title Sheet |
| A-2 | Roof Plan & Street Level Plan |
| A-3 | Center Level & Lower Level Plan |
| A-4 | Pool Level Plan / Exterior Elevations |
| A-5 | Exterior Elevations |
| A-6 | Sections 1 & 2 |
| A-7 | Sections 3 & 4 |

(In Back of Set)

| | |
|---|---|
| S-1 | General Notes & Specifications |
| S-1.1 | Structural Observation & Typical Details |
| S-2 | Foundation Plans / Framing Plans |
| S-3 | Foundation Plans / Framing Plans |
| S-4 | Foundation Details |
| S-5 | Foundation Details |
| S-6 | Foundation Details |
| S-7 | Foundation Details |
| S-8 | Foundation Details |
| S-8.1 | Foundation Details |
| S-9 | Framing Details |
| S-10 | Framing Details |
| S-11 | Framing Details |
| H-1 | Hardy Panel Detail |
| H-2 | Hardy Panel Detail |


HYDRANTS AND ACCESS
LOS ANGELES FIRE DEPARTMENT
APPROVED
BRIAN L. CUMMINGS
FIRE CHIEF
BY
DATE 10-28-13

NO FRAMING SHALL BEGIN UNTIL:

A. ROADWAY IMPROVED TO FIRE DEPARTMENT SATISFACTION AND APPROVAL.
B. FIRE HYDRANTS HAVE BEEN INSTALLED AND ARE FULLY OPERATIONAL.

NO TEMPORARY CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL FIRE LANES ARE PAINTED AND POSTED.

Department of Building and Safety
Green Building Division


Robert Anderson
Architect
18180 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


1800 Crisler Way - HOUSE 98
CAC Development
4504 South Flower Street
Los Angeles, California 90037

Site Plan / Title Sheet

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 12-12-12 | DC |
| 5 | 6-20-13 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 6-20-13

PROJECT REF. NUMBER X

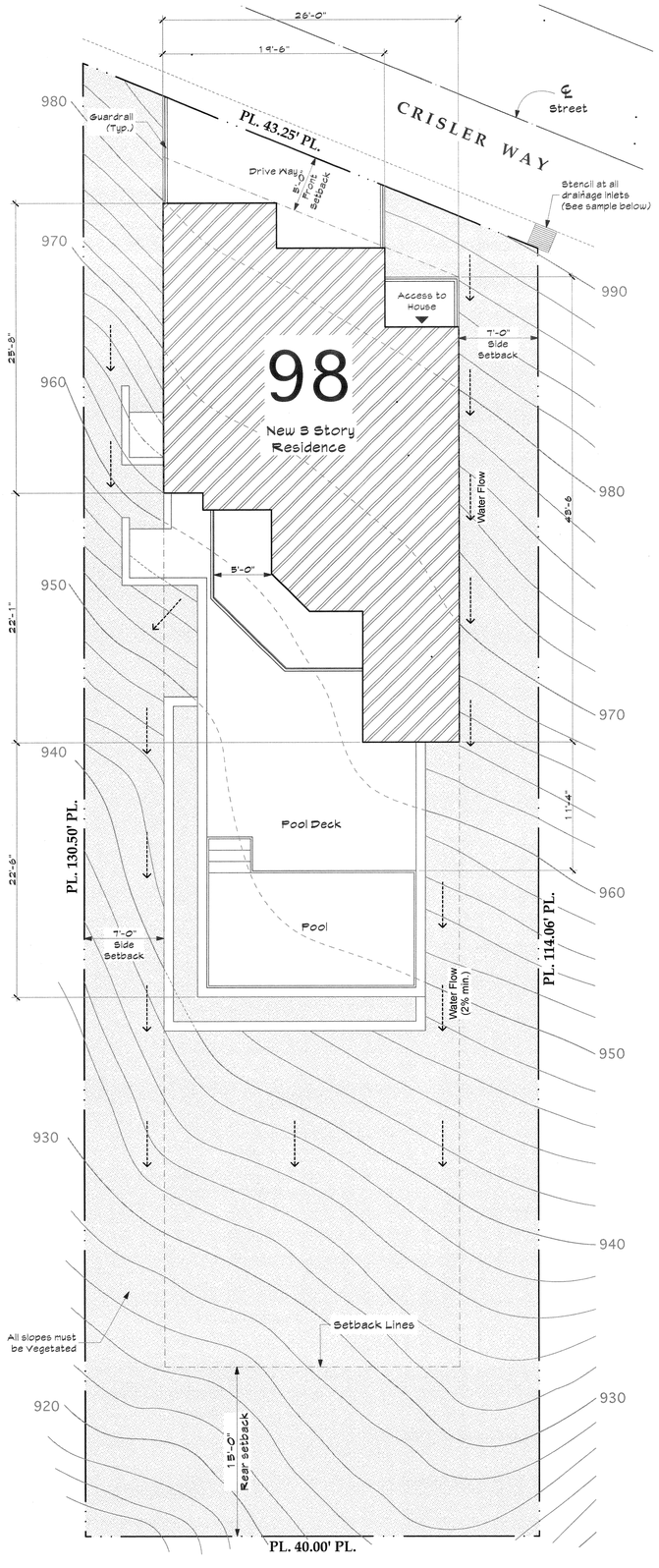
A-1

SHEET NUMBER 98

RT JUN 05 2015

# HOUSE 98

## 1800 Crisler Way Los Angeles, California 90046




## Site Plan

Scale : 3/16" = 1'-0"

## General Notes

The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause construction delays and/or additional expenses.

An approved Seismic Gas Shutoff Valve will be installed on the fuel gas line on the down stream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping." (Per Ordinance 170,158) (Separate plumbing permit is required).

Plumbing fixtures are required to be connected to a sanitary sewer or to an approved sewage disposal system.

Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water and connected to an approved water supply.

Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet above the floor.

Provide ultra low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.

Provide 70 inch high non-absorbent wall adjacent to shower and approved shatterresistant materials for shower enclosure.

Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating (research report not required).

Water heater must be strapped to wall per seismic code.

Automatic garage door openers, if provided, shall be listed in accordance with UL 325.

Smoke detectors shall be provided for all dwelling units intended for human occupancy, upon the owner's application for a permit for alterations, repairs, or additions, exceeding one thousand dollars ($1,000).

Where a permit is required for alterations, repairs or additions exceeding one thousand dollars ($1,000) existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section R315.1. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained.

Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section R303.1 or shall be provided with artificial light that is adequate to provide an average illumination of 6 foot-candles over the area of the room at a height of 30 inches above the floor level.

A copy of the evaluation report and/or conditions of listing shall be made available at the job site.

Lots shall be graded to drain surface water away from foundation walls with a minimum fall of 6 inches within the first 10 feet.

Dampproofing, where required, shall be installed with materials and as required in Section R406.1.

Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.

An approved smoke alarm shall be installed in each sleeping room & hallway or area giving access to a sleeping room, and on each story and basement for dwellings with more than one story. Smoke alarms shall be interconnected so that actuation of one alarm will activate all the alarms within the individual dwelling unit. In new construction smoke alarms shall receive their primary power source from the building wiring and shall be equipped with battery back up and low battery signal.

An approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. Carbon monoxide alarm shall be provided outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s) and on every level of a dwelling unit including basements.

Protection of wood and wood based products from decay shall be provided in the locations specified per Section R317.1 by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA U1.

Provide anti-Graffiti finish within the first 9 feet, measured from grade, at exterior walls and doors.
Exception: Maintenance of building affidavit is recorded by the owner to covenant and agree with the City of Los Angeles to remove any graffiti within 7-days of the graffiti being applied.

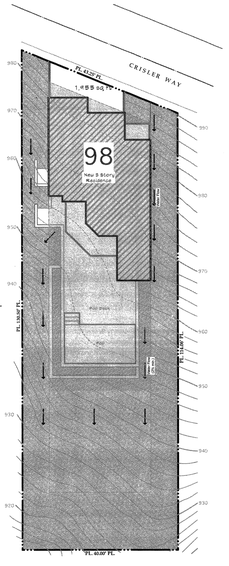
Provide Automatic Fire Sprinkler System Through-out in accordance with Section R313.3 or NFPA 13D. System to be approved by Plumbing Div. prior to installation.

Where there is an excavation of a greater depth than are the walls or foundation of an adjoining building or structure and located closer to the property line than the depth of the excavation, the owner shall provide the Department of Building and Safety with evidence that the adjacent property owner(s) have been given a 30-day written notice of such intent to make an excavation.

Heater shall be capable of maintaining a min. room temperature of 68° F at a point 3 feet above the floor and 2 feet from ext. walls in all habitable rooms at the design temperature

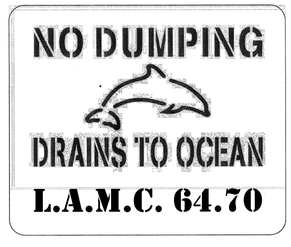
### POOL NOTES

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




## Lote Coverage

Scale : 1/16" = 1'-0"




## Project Data

| | | |
|---|---|---|
| Legal Description | : | Lot 98 , Tract 865 |
| Construction Type | : | V - (Fully Sprinklered - NFPA 13D) |
| Zone | : | R - 1 - H |
| Hillside Grading | : | YES |
| VHFHSZ | : | YES |
| Square Footage | : | |

| | |
|---|---|
| Carport | 335 s.f. |
| Street Level | 85 s.f. |
| Center Level | 497 s.f. |
| Lower Level | 639 s.f. |
| Total Habitable Area | 1,221 s.f. |

Maxium Total Height : 33'-0"

Residencial Floor Area (R.F.A.) Calcualtion :

Lot Size 4,890 s.f. (Min. 25%) = 1,222.5 s.f. RFA Max.

## Lot Coverage

| | |
|---|---|
| - Lot Size | 4,890 s.f. |
| - House Foot Print | 833 s.f. |
| - Pool / Pool Deck | 726 s.f. |
| Total : | 1,559 s.f. |

or 31.8% < 40%

## Sheet Schedule


| | |
|---|---|
| A-1 | Site Plan / Title Sheet |
| A-2 | Roof Plan & Street Level Plan |
| A-3 | Center Level & Lower Level Plan |
| A-4 | Pool Level Plan / Exterior Elevations |
| A-5 | Exterior Elevations |
| A-6 | Sections 1 & 2 |
| A-7 | Sections 3 & 4 |

(In Back of Set)

| | |
|---|---|
| S-1 | General Notes & Specifications |
| S-1.1 | Structural Observation & Typical Details |
| S-2 | Foundation Plans / Framing Plans |
| S-3 | Foundation Plans / Framing Plans |
| S-4 | Foundation Details |
| S-5 | Foundation Details |
| S-6 | Foundation Details |
| S-7 | Foundation Details |
| S-8 | Foundation Details |
| S-8.1 | Foundation Details |
| S-9 | Framing Details |
| S-10 | Framing Details |
| S-11 | Framing Details |
| H-1 | Hardy Panel Detail |
| H-2 | Hardy Panel Detail |


HYDRANTS AND ACCESS
LOS ANGELES FIRE DEPARTMENT
APPROVED
BRIAN L. CUMMINGS
FIRE CHIEF
BY
DATE 10-28-13

NO FRAMING SHALL BEGIN UNTIL:

A. ROADWAY IMPROVED TO FIRE DEPARTMENT SATISFACTION AND APPROVAL.
B. FIRE HYDRANTS HAVE BEEN INSTALLED AND ARE FULLY OPERATIONAL.

NO TEMPORARY CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL FIRE LANES ARE PAINTED AND POSTED.

Department of Building and Safety
Green Building Division


Robert Anderson
Architect
18180 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


1800 Crisler Way - HOUSE 98
CAC Development
4504 South Flower Street
Los Angeles, California 90037

Site Plan / Title Sheet

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 12-12-12 | DC |
| 5 | 6-20-13 | DC |

DATE ISSUED 5-1-11

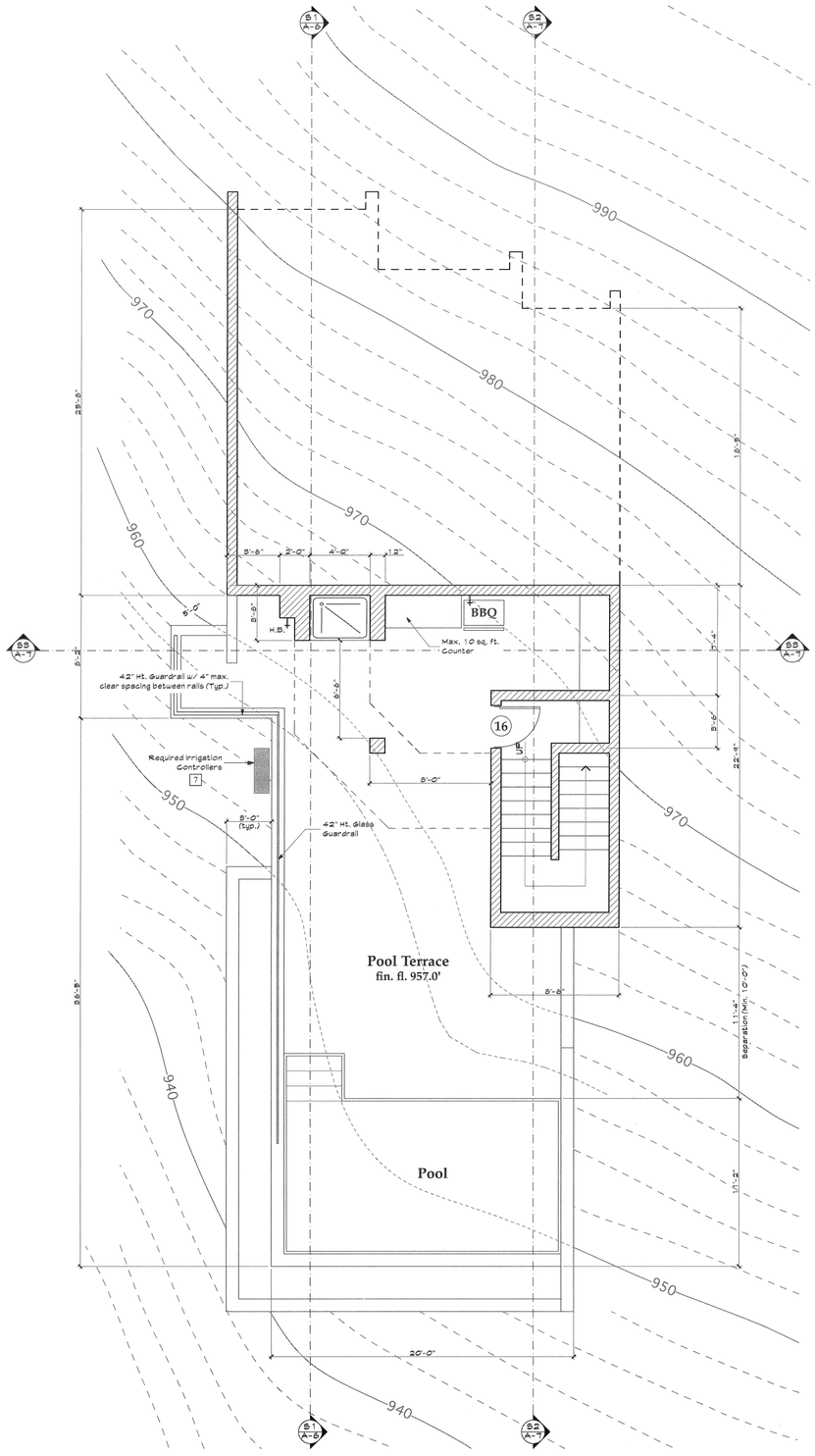
DATE PRINTED 6-20-13

PROJECT REF. NUMBER X

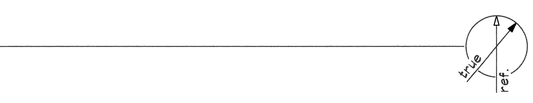
A-1

SHEET NUMBER 98

RT JUN 05 2015




## Pool Level Plan




## Floor Plans

Scale : 1/4" = 1'-0"

### POOL NOTES

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
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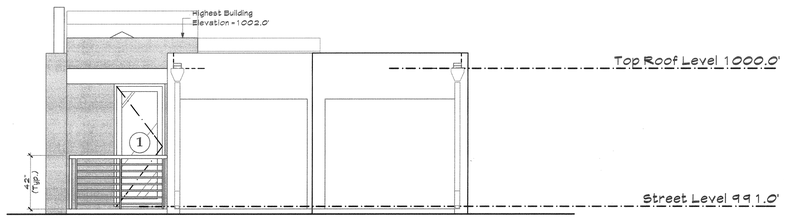
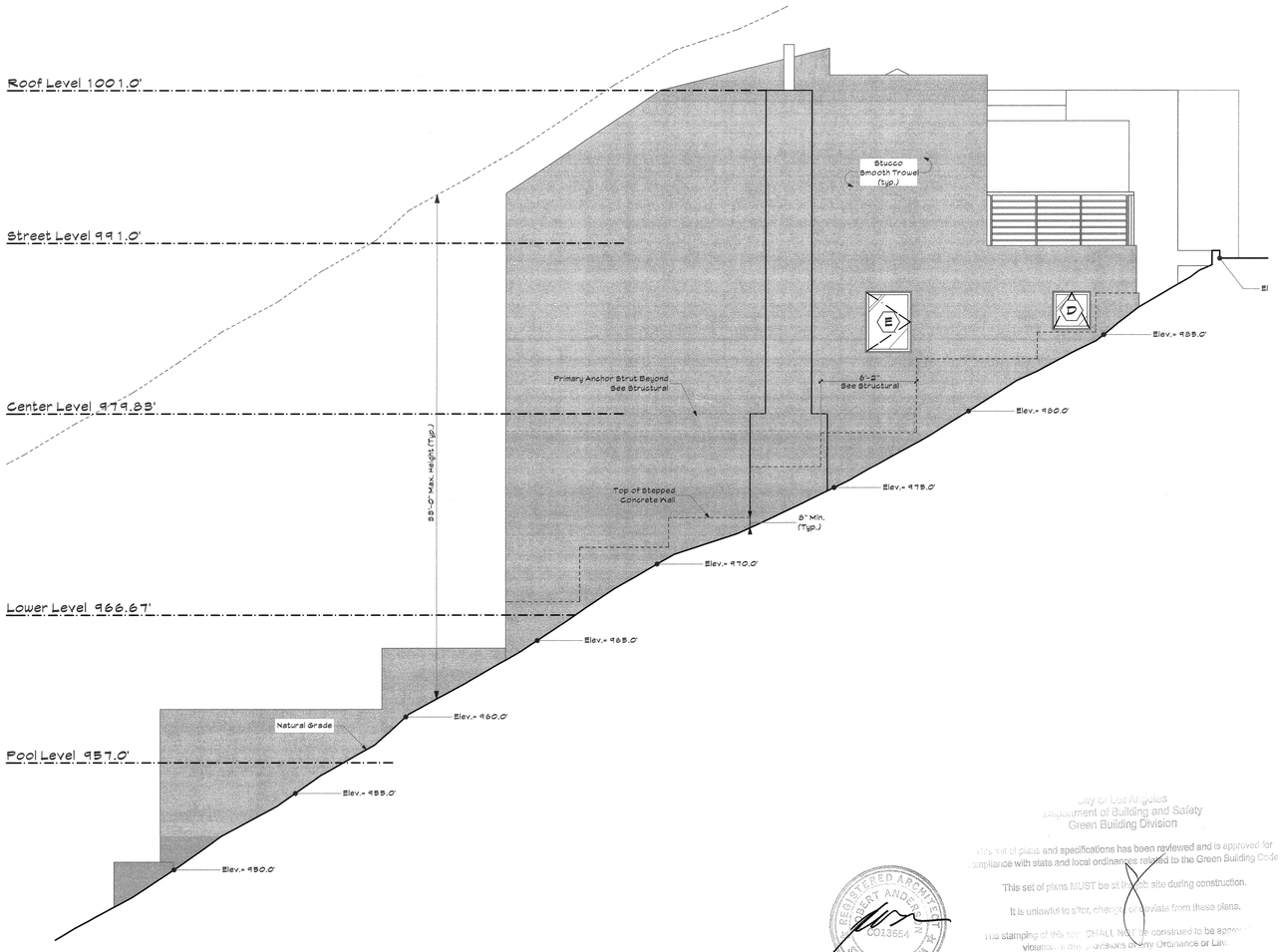



## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"

City of Los Angeles
Department of Building and Safety
Green Building Division

This set of plans and specifications has been reviewed and is approved for compliance with state and local ordinances related to the Green Building Code

This set of plans MUST be at the job site during construction.

It is unlawful to alter, change or deviate from these plans.

The stamping of this set SHALL NOT be construed to be approval of violation of the provisions of any Ordinance or Law.

By: _____

REGISTERED ARCHITECT ROBERT ANDERSON C013654 STATE OF CALIFORNIA

Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

# Pool Level Plan

1800 Crisler Way - HOUSE 98

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY: S.HAL
CHECKED BY: DC
APPROVED BY: RA

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |
| 5 | 3-12-15 | DC |

DATE ISSUED: 5-1-11

DATE PRINTED: 3-12-15

PROJECT REF. NUMBER

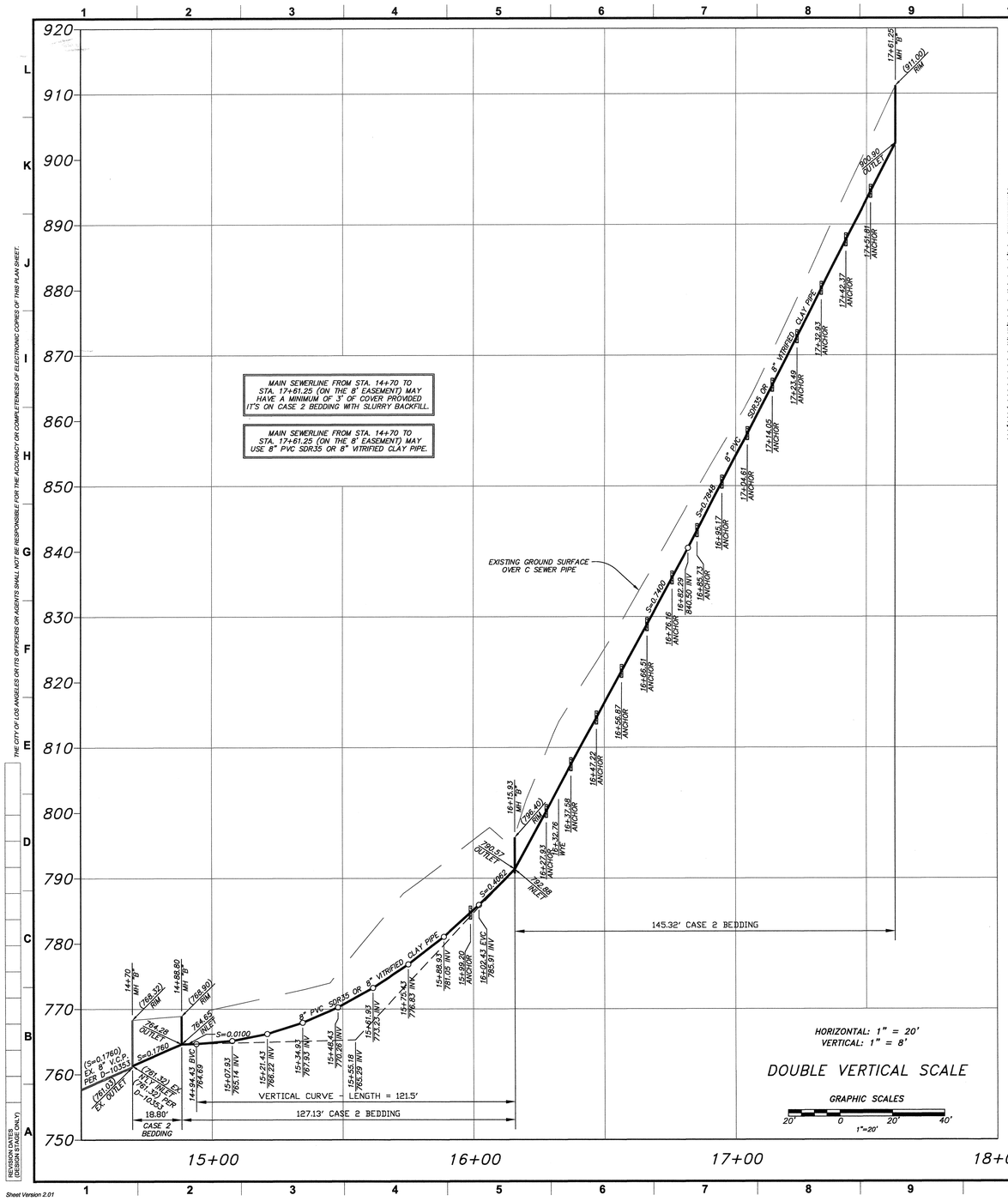
**A-4**

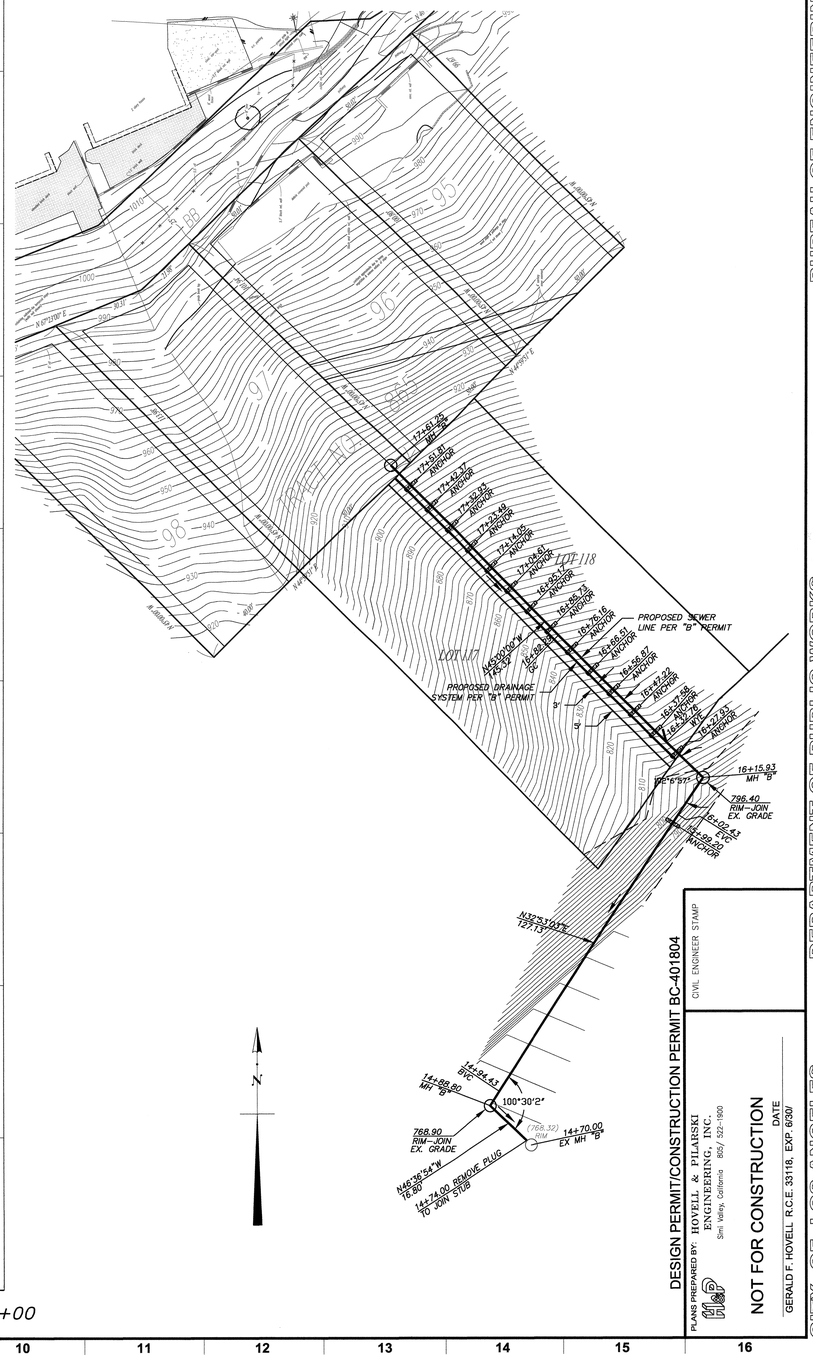
SHEET NUMBER 98

JUN 05 2015

# APPENDIX B

# Approved Sewer Plan and Profile

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REVISION DATES (CROSS OUT OBSOLETE ONLY)

Sheet Version 2.01

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
CITY OF LOS ANGELES

DESIGN PERMIT/CONSTRUCTION PERMIT BC-401804

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900

NOT FOR CONSTRUCTION
DATE
GERALD F. HOVELL R.C.E. 33118, EXP. 6/30/

CIVIL ENGINEER STAMP

VERTICAL CONTROL:
HORIZONTAL CONTROL: BMTP #12

SHEET TITLE: SEWER PLAN AND PROFILE

PROJECT: GRANDVIEW SEWER MAIN

ADDRESS: PROPERTIES SOUTH OF GRANDVIEW TO MARMONT AVENUE

D.M. 147B173
DR. M. 470

PROJECT NO.

DRAWING NO. 2

SHEET 2 OF 2 SHEETS

GARY LEE MOORE, P.E.
CITY ENGINEER

DESIGN GROUP

| | | |
|---|---|---|
| ENGINEER: | GERALD F. HOVELL | R.C.E. 33118 |
| DESIGNED BY: | JEFFREY GARON | |
| DRAWN BY: | JEFFREY GARON | |
| CHECKED BY: | | |
| APPROVED BY: | | |

LA DPW ENGINEERING
Serving the People of Los Angeles

| NO. | REVISIONS: | DATE: | BY: |
|---|---|---|---|
| | | | |

WORK ACCEPTED
SERIAL NO.

INDEX NO. D

B - PERMITS
BC 401804

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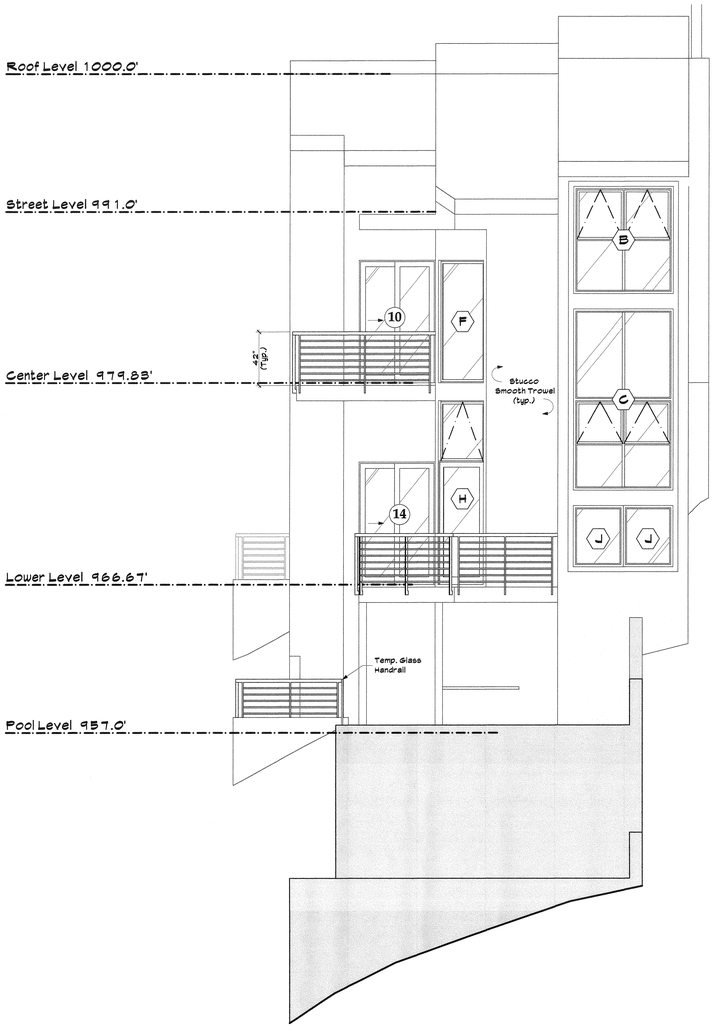



## South Elevation




## West Elevation

## Exterior Elevations

Scale : 1/4" = 1'-0"


Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Exterior Elevations

1800 Crisler Way - HOUSE 98
CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY: S.HAL
CHECKED BY: DC
APPROVED BY: RA

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |

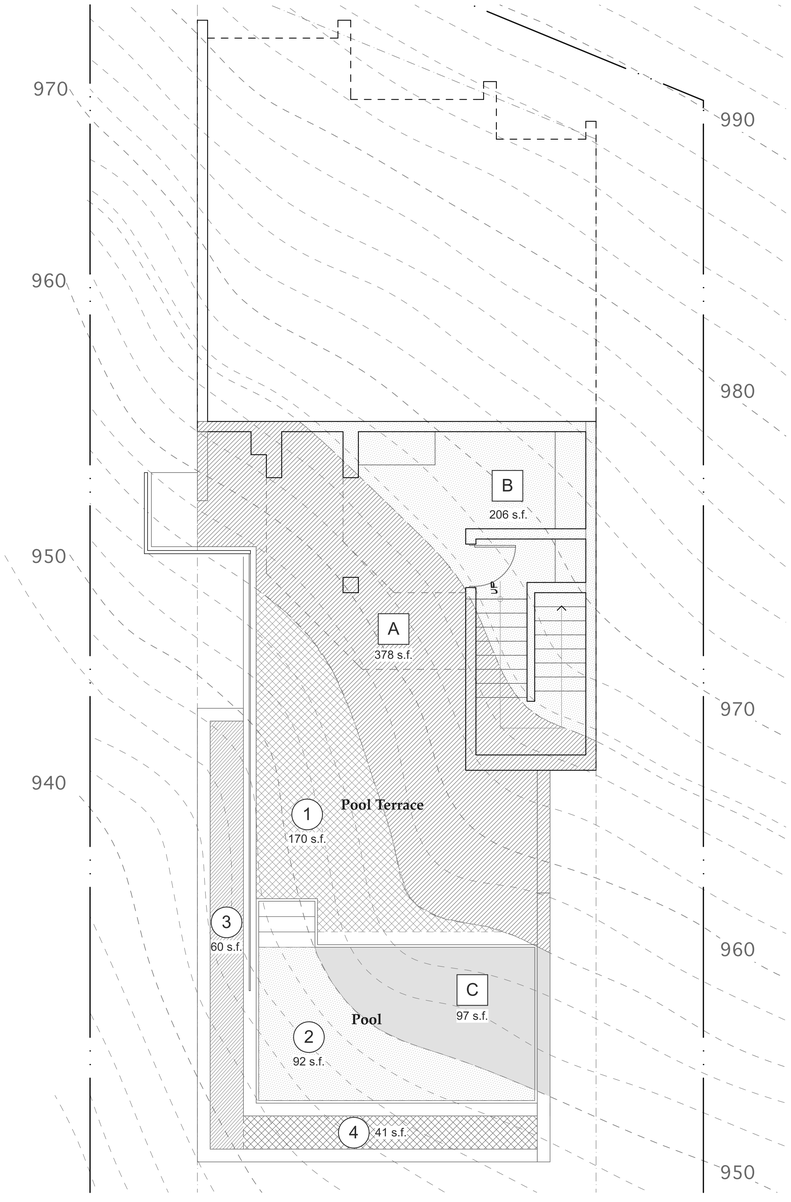
DATE ISSUED: 5-1-11

DATE PRINTED: 6-20-13

PROJECT REF. NUMBER

A-5

SHEET NUMBER 98




## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

A  293 s.f. x 4 ÷ 27 = 37.9 yd³

• Exempted Areas (Under House Outline) :

B  290 s.f. x 2.5 ÷ 27 = 32.2 yd³

C  97 s.f. x 1.25 ÷ 27 = 5.3 yd³

D  241 s.f. x 6.5 ÷ 27 = 5.8 yd³

E  246 s.f. x 6 ÷ 27 = 54.6 yd³

F  278 s.f. x 7.25 ÷ 27 = 74.5 yd³

Total Exempt = 224.6 yd³

### Fill Calculation

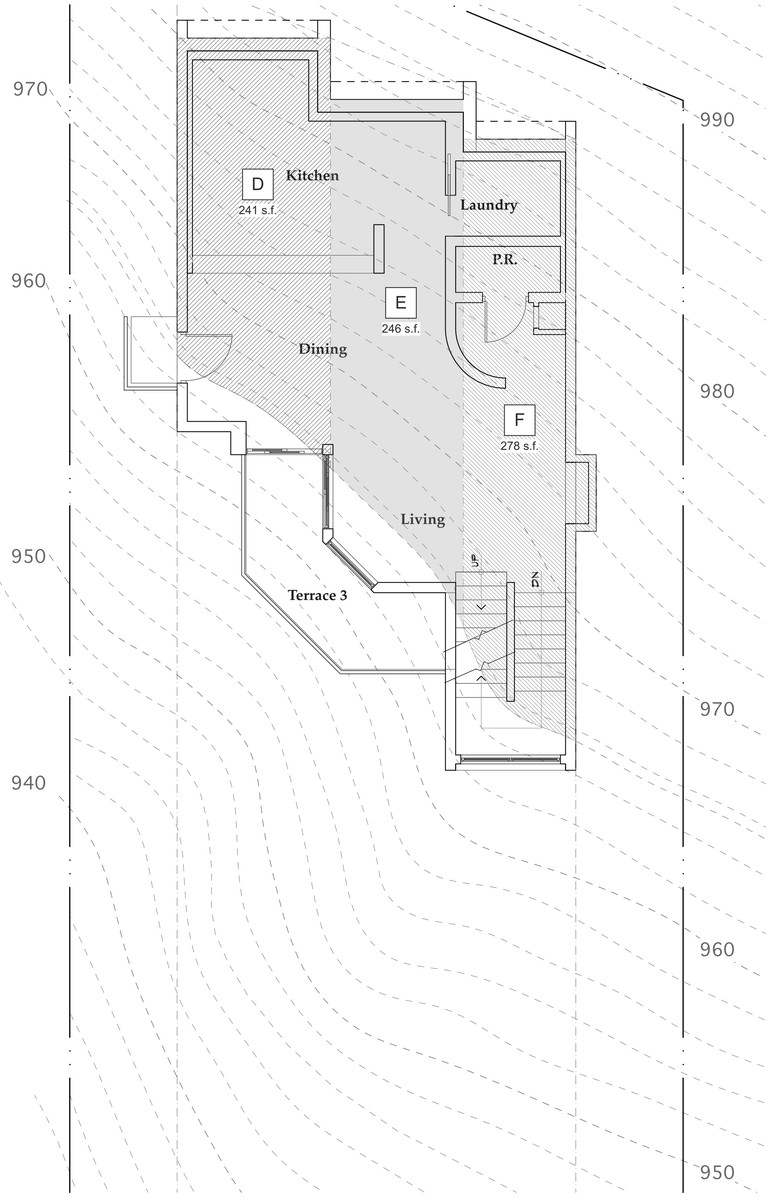
1  170 s.f. x 2.5 ÷ 27 = 15.7 yd³

2  92 s.f. x 3 ÷ 27 = 10.2 yd³

3  60 s.f. x 2.5 ÷ 27 = 5.5 yd³

4  41 s.f. x 2 ÷ 27 = 3 yd³

Total Fill = 34.4 yd³




## Grading Calculation (Lower Level)

### Cut, Fill & Export Calculation

• Total Cut ( 37.9 yd³ ) + Total Fill ( 34.4 yd³ ) + Pool (N/A) = 72.3 yd³ < 250 yd³ ( Max. Allowed )

• Total Cut ( 43.4 yd³ ) + Total Exempt Cut ( 224.6 yd³ ) = 268 yd³ ( Total Project Cut )

• Total Project Cut ( 268 yd³ ) - Total Fill ( 34.4 yd³ ) = 233.6 yd³ ( TO EXPORT ) < 250 yd³ ( Max. Allowed )


Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Grading Calculation

1800 Crisler Way - HOUSE 98

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL

CHECKED BY DC

APPROVED BY RA

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| | | |

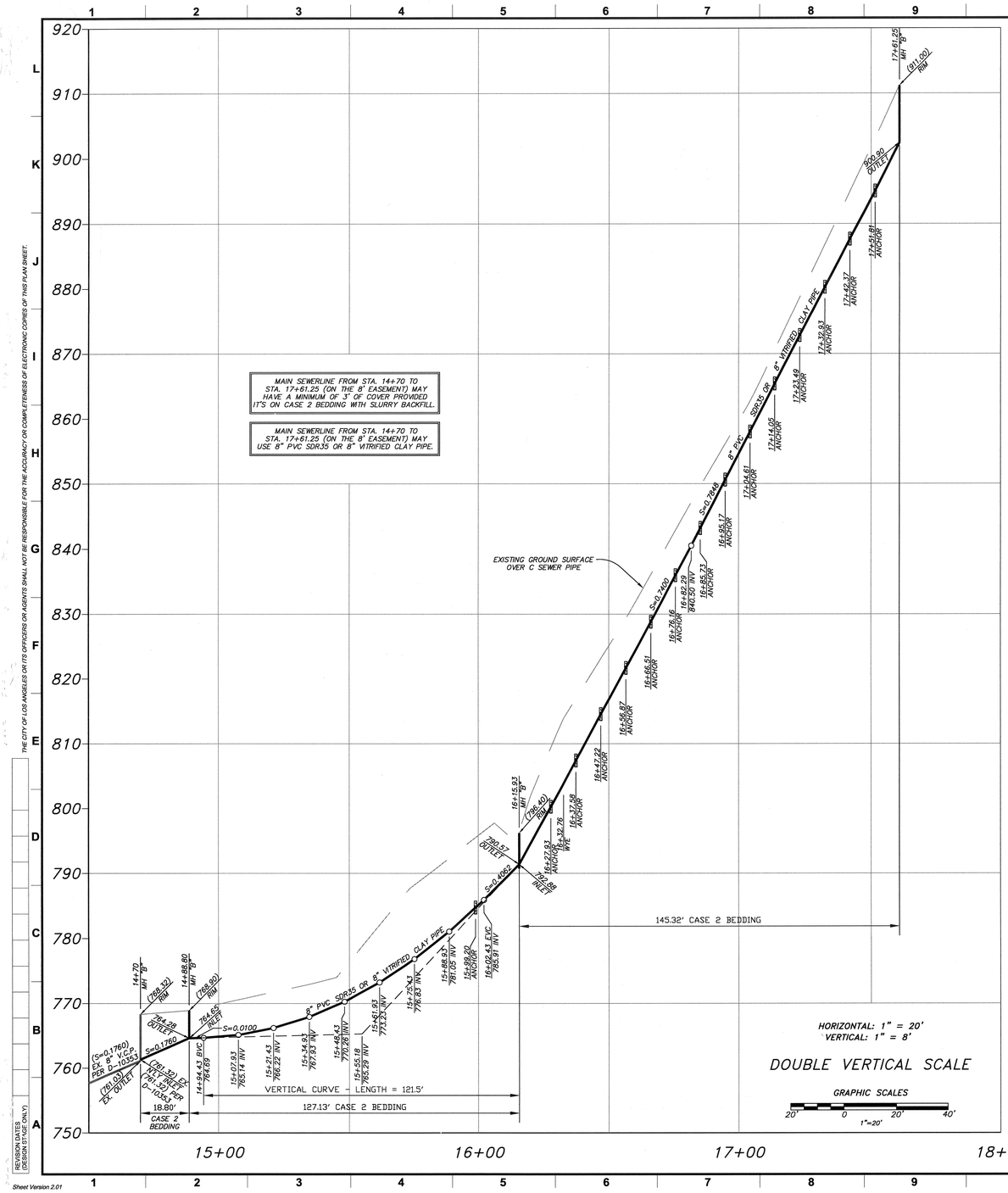
DATE ISSUED 10-30-15

DATE PRINTED 10-30-15

PROJECT REF. NUMBER

A-8

SHEET NUMBER 98

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DESIGN DATES (DESIGN STAGE ONLY)

Sheet Version 2.01

DESIGN PERMIT/CONSTRUCTION PERMIT BC-401804

CIVIL ENGINEER STAMP

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC. Simi Valley, California 805/ 522-1900

NOT FOR CONSTRUCTION

DATE

GERALD F. HOVELL R.C.E. 33118, EXP. 6/30/

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

VERTICAL CONTROL: BMTP #12

HORIZONTAL CONTROL:

SHEET TITLE: SEWER PLAN AND PROFILE

PROJECT: GRANDVIEW SEWER MAIN

D.M. 147B173

ADDRESS: PROPERTIES SOUTH OF GRANDVIEW TO MARMONT AVENUE

DR. M-470

PROJECT NO.

DRAWING NO. 2

SHEET 2 OF 2 SHEETS

BUREAU OF ENGINEERING

LA DPW ENGINEERING Serving the People ! Dedicated to Excellence

| NO | REVISIONS: | DATE | BY: |
|---|---|---|---|
| | | | |

SERIAL NO.

WORK ACCEPTED

INDEX NO. D

B - PERMITS BC 401804

GARY LEE MOORE, P.E. CITY ENGINEER

| DESIGN GROUP | |
|---|---|
| ENGINEER: | GERALD F. HOVELL R.C.E. 33118 |
| DESIGNED BY: | JEFFREY GARON |
| DRAWN BY: | JEFFREY GARON |
| CHECKED BY: | |
| APPROVED BY: | |

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APPENDIX C

# Approved Street Plan and Profile

## NOTICE TO CONTRACTORS

1. SPECIFICATIONS: ALL WORK SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AS ADOPTED BY THE BOARD OF PUBLIC WORKS OF THE CITY OF LOS ANGELES AND AS MODIFIED BY THE CORRESPONDING ISSUE OF BROWN BOOK AND TO THE SPECIAL PROVISIONS.

2. REPAIR AND/OR REPLACE ANY EXISTING BROKEN OR OFF-GRADE PAVEMENT, CONCRETE CURB GUTTER OR SIDEWALK IMMEDIATELY ADJACENT TO OR WITHIN THE AREA OF THIS IMPROVEMENT SATISFACTORY TO THE CITY ENGINEER.

3. INSPECTION: ALL WORK AND MATERIALS ARE SUBJECT TO INSPECTION PURSUANT TO SECTION 2-11 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. CALL 818-756-8335 BEFORE NOON OF THE WORKING DAY BEFORE INSPECTION IS REQUIRED.

4. THE CONTRACTOR, IN CONFORMANCE WITH LOS ANGELES CITY ORDINANCE NO. 150, 478 SHALL POTHOLE EXISTING SUBSURFACE INSTALLATIONS CARRYING UNSTABLE SUBSTANCES TO DETERMINE THEIR LOCATION AND ELEVATIONS PRIOR TO COMMENCING EXCAVATION.

5. STANDARD PLANS FOR THIS PROJECT:

| | |
|---|---|
| NOTICE TO CONTRACTORS- COMPREHENSIVE | S-610 |
| PIPE LAYING IN TRENCHES | S-251-1 |
| HOUSE CONNECTION SEWERS | S-110-1 |
| CURBSIDE GRATING CATCH BASIN | S-354-0 |
| TYPES OF CURB AND GUTTER | S-410-2 |
| EXTRUDED AC CURB | S-412-0 |
| DRIVEWAYS | S-440-3 |
| CONTACT EXPANSION AND WEAKENED PLANE JOINTS IN CONCRETE PAVEMENT | S-430-1 |
| STANDARD STREET DIMENSIONS | S-470-0 |
| METAL GUARD RAIL | S-462-2 |
| SYMBOLS FOR CONSTRUCTION NOTES | S-627-0 |

6. THE IMPROVEMENTS CONSIST OF WORK CALLED FOR ON THESE PLANS ONLY.

7. REMOVALS - A) REMOVE ALL EXISTING IMPROVEMENTS THAT INTERFERE WITH THE CONSTRUCTION OF THIS PROJECT.

   B) ALL INTERFERING UTILITIES SHALL BE REMOVED OR RELOCATED.

8. "NOTIFICATION" AT LEAST 10 DAYS BEFORE THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO NOTIFY ABUTTING PROPERTY OCCUPANTS OF THE PROPOSED CONSTRUCTION START DATE.

9. ADVANCE CONSTRUCTION NOTICE SIGNS: IN ADDITION TO SIGNS REQUIRED BY THE PROVISIONS OF THE "WORK AREA TRAFFIC CONTROL HANDBOOK", SIGNS FOR GIVING ADVANCE NOTICE TO MOTORISTS OF TRAFFIC DISRUPTION MUST BE FURNISHED AND PLACE D AS PART OF THIS PROJECT IN ACCORDANCE WITH STANDARD PLAN S-791.

10. ANY LOT DRAINING ONTO THE STREET SHALL DO SO AT A CONCRETE DRIVEWAY OR AN APPROVED OUTLET STRUCTURE.

11. PAVING OF ROADWAY AREAS SHALL BE WITHHELD UNTIL CONTEMPLATED UTILITY CHANGES OR INSTALLATIONS HAVE BEEN MADE UNDER CITY PERMIT.

12. A. TRAFFIC REQUIREMENTS. THE B-PERMITTEE SHALL PAY FOR THE RESTORATION OF ALL OBLITERATED PAVEMENT MARKINGS AND FOR THE REINSTALLATION OF ALL MISSING OR DAMAGED SIGNS, CURB MARKINGS AND UTILITY METERS. IN SOME CASES, THE CONTRACTOR MAY BE REQUIRED TO REINSTALL OBLITERATED AND RELATED PAVEMENT MARKINGS, TO THE SATISFACTION OF LADOT. THE CONTRACTOR SHALL CONTACT LADOT'S CITYWIDE INVESTIGATIONS AT (213) 580-5212 OR (818) 756-8949 PRIOR TO COMMENCING ANY WORK THAT REQUIRES SIGN AND/OR MARKING MAINTENANCE.

12. B. TRAFFIC LANE REQUIREMENTS. GRANDVIEW DRIVE MAINTAIN LOCAL AND EMERGENCY ACCESS AT ALL TIMES

13. DIG ALERT NOTE: BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN SERVICE ALERT INQUIRY I.D. NUMBER BY CALLING 1-800-422-4133. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE EXCAVATION WORK IS STARTED SO THAT UTILITY OWNERS CAN BE NOTIFIED. THE I.D. NUMBER MUST BE REPORTED TO THE BUREAU OF CONTRACTED ADMINISTRATION WHEN CALLING FOR INSPECTION: METRO (213) 485-3002, VALLEY (818) 756-8335. I.D. NUMBERS WILL NOT BE GIVEN TEN DAYS PRIOR TO STARTING EXCAVATION WORK.

14. WATER LINE CONNECTION TO BE BY SEPARATE PERMIT, CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXIST WATER LINE IN STREET AND ADJUST ANY METERS OR VALVES TO GRADE PER PLAN.

15. SEWER LATERAL CONNECTION TO BE BY SEPARATE PERMIT. CONTRACTOR TO VERIFY JOIN CONNECTION TO BUILDING PER ARCHITECT PLANS AND POTHOLE EXISTING SEWER ARCHITECT PLANS AND POTHOLE EXIST SEWER LINE FOR CONNECTION

16. TRENCH BACKFILL AND COMPACTION: TRENCH BACKFILL FOR THIS PROJECT SHALL BE MECHANICALLY COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 90%. JETTING OR FLOODING IS PROHIBITED.

17. THE CONTRACTOR SHALL COMPLY WITH ALL THE RECOMMENDATIONS OF THE SOILS REPORT BY PARMALEE/GEOLOGY, NO.PG 1091, DATED DEC. 9TH 2001, AND NO.PG 1224 DATED MAY 19,2002, AS APPROVED BY THE CITY OF LOS ANGELES THE SOILS REPORT WILL BE INCLUDED AND BE AN INTEGRAL PART OF THESE PLANS. "GEOLOGIC AND SOILS ENGINEERING UPDATE REPORT, PROPOSED TWO RESIDENCES, LOTS 95 & 96, TRACT 865, 8350 GRAND VIEW DRIVE, LOS ANGELES, CALIFORNIA." THIS REPORT, PREPARED BY PARMELEE/GEOLOGY, WAS DATED DECEMBER 9, 2001. ADDITIONAL INFORMATION WAS PRESENTED IN SUPPLEMENTAL REPORTS DATED MAY 19, 2002, APRIL 14, 2003, MAY 5, 2003, MAY 25, 2003, OCTOBER 3, 2003, NOVEMBER 11, 2003, AND NOVEMBER 26, 2003 ALSO PREPARED BY PARMELEE/GEOLOGY. IN ADDITION, SHEET 3 OF 4 OF THE PROJECT PLANS TITLED "IN CONNECTION WITH BUILDING PERMIT, (8350) GRAND VIEW DRIVE &, CRISLER WAY S/W CORNER." THIS DRAWING WAS PREPARED BY HOVELL & PILARSKI ENGINEERING INCORPORATED.

18. ALL RECOMMENDATIONS PRESENTED IN THE ABOVE REFERENCED REPORTS PREPARED BY BY PARMALEE/GEOLOGY SHALL BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROJECT.

19. GROUND SURFACE SLOPES ADJACENT TO THE PUBLIC RIGHT OF WAY SHALL BE CONSTRUCTED AT AT GRADIENTS OF 2 TO 1 (HORIZONTAL TO VERTICAL) OR FLATTER.

20. A REPRESENTATIVE FROM THE CONSULTANTS OFFICE WORKING UNDER A REGISTERED GEOLOGIST OR GEOTECHNICAL ENGINEER SHALL VERIFY THE DEPTH OF THE DRILLED HOLES AND LOG THE HOLES TO VERIFY THAT THE BEDROCK MATERIALS FOR DESIGN ARE ENCOUNTERED DURING CONSTRUCTION. TIP OF PILE ELEVATION SHALL BE RECORDED IN "AS-BUILT" PLANS.

21. PRIOR TO THE PLACEMENT OF FILL, BOTTOMS SHALL BE APPROVED BY A REPRESENTATIVE OF THE SOIL ENGINEER OF RECORD AND WITHIN PUBLIC RIGHT OF WAY AREAS BY A REPRESENTATIVE OF THE DEPARTMENT OF PUBLIC WORKS. FILL SOILS SHALL BE PROCESSED AND PLACE AS RECOMMENDED IN THE ABOVE REFERENCED REPORTS PREPARED BY PARMALEE/GEOLOGY. A REPRESENTATIVE OF SOIL ENGINEER SHALL PERFORM OBSERVATION AND TESTING OF FILL PLACEMENT.

22. EXCAVATION, BEDDING, AND BACKFILL OF NEW UTILITY PIPES WITHIN THE PUBLIC RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 306 "UNDERGROUND CONDUIT CONSTRUCTION" OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREENBOOK". FILL COMPACTION SHALL BE TESTED AND RECORDED BY THE GEOTECHNICAL ENGINEER OF RECORD. COMPACTION SHALL BE ACCOMPLISHED WITH MECHANICAL MEANS ONLY. DENSIFICATION BY FLOODING OR JETTING IS NOT ALLOWED.

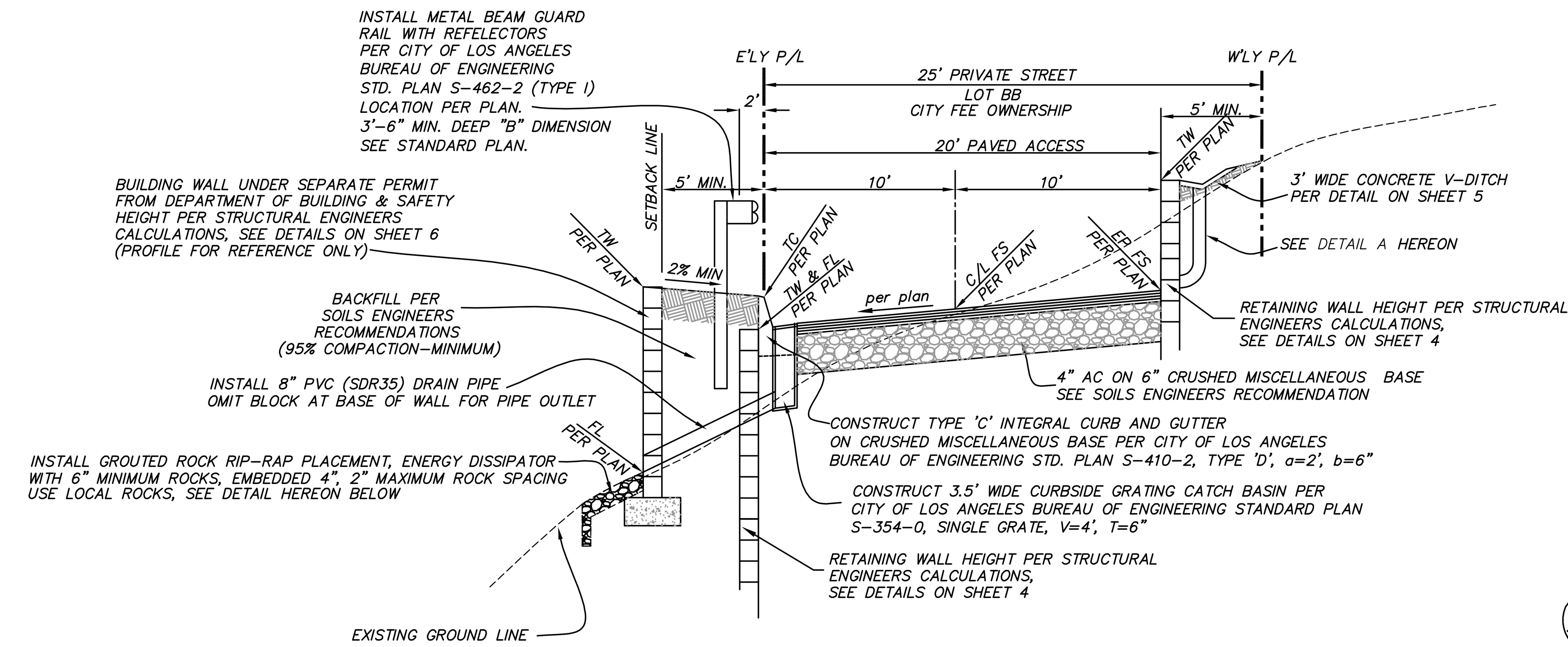
23. EXCAVATION FOR RETAINING WALLS SHALL BE MAPPED BY THE CONSULTING ENGINEERING GEOLOGIST EVERY FIVE VERTICAL FEET AS RECOMMENDED IN THE NOVEMBER 26, 2003 LETTER. IF ANY ADVERSELY ORIENTED PLANES OF WEAKNESS ARE FOUND, THE ENGINEERING GEOLOGIST AND ENGINEER SHALL DEVELOP ADDITIONAL RECOMMENDATIONS TO ELIMINATE THE SURCHARGE OR MODIFY THE DESIGN OF THE WALL. ALL MODIFICATIONS SHALL BE SUBMITTED TO PUBLIC WORKS FOR REVIEW AND APPROVAL.

24. THE GEOTECHNICAL CONSULTANT SHALL OBSERVE THE CONSTRUCTION OF THE RETAINING WALLS ALONG THE STREET RIGHT OF WAY INCLUDING CONSTRUCTION OF PILES, PLACEMENT OF DRAINAGE MATERIALS AND WALL BACKFILL. THE CONSULTANT SHALL VERIFY THE DEPTH TO THE TOP OF THE DESIGN BEDROCK MATERIALS AT EACH PILE LOCATION.

25. AT THE COMPLETION OF CONSTRUCTION, THE GEOTECHNICAL CONSULTANT SHALL PREPARE A WRITTEN REPORT DOCUMENTING THE EARTHWORK, INCLUDING PLACEMENT OF DRAINAGE MATERIALS AND WALL BACKFILL, AND CONSTRUCTION OF RETAING WALL PILES. THE REPORT SHALL BE SUBMITTED TO GEOTECHNICAL ENGINEERING DIVISION FOR REVIEW.

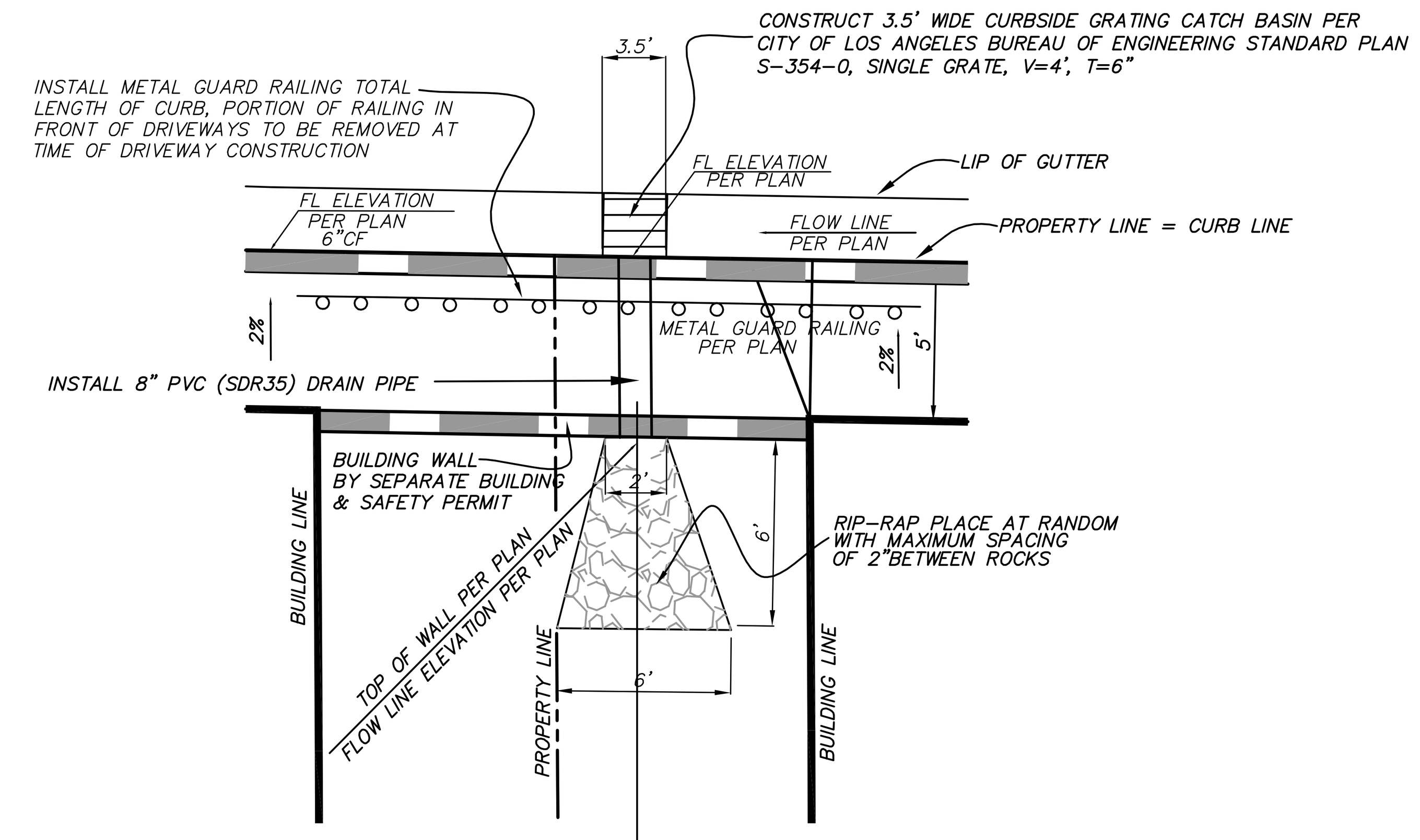
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISION DATES (DESIGN STAGE ONLY)



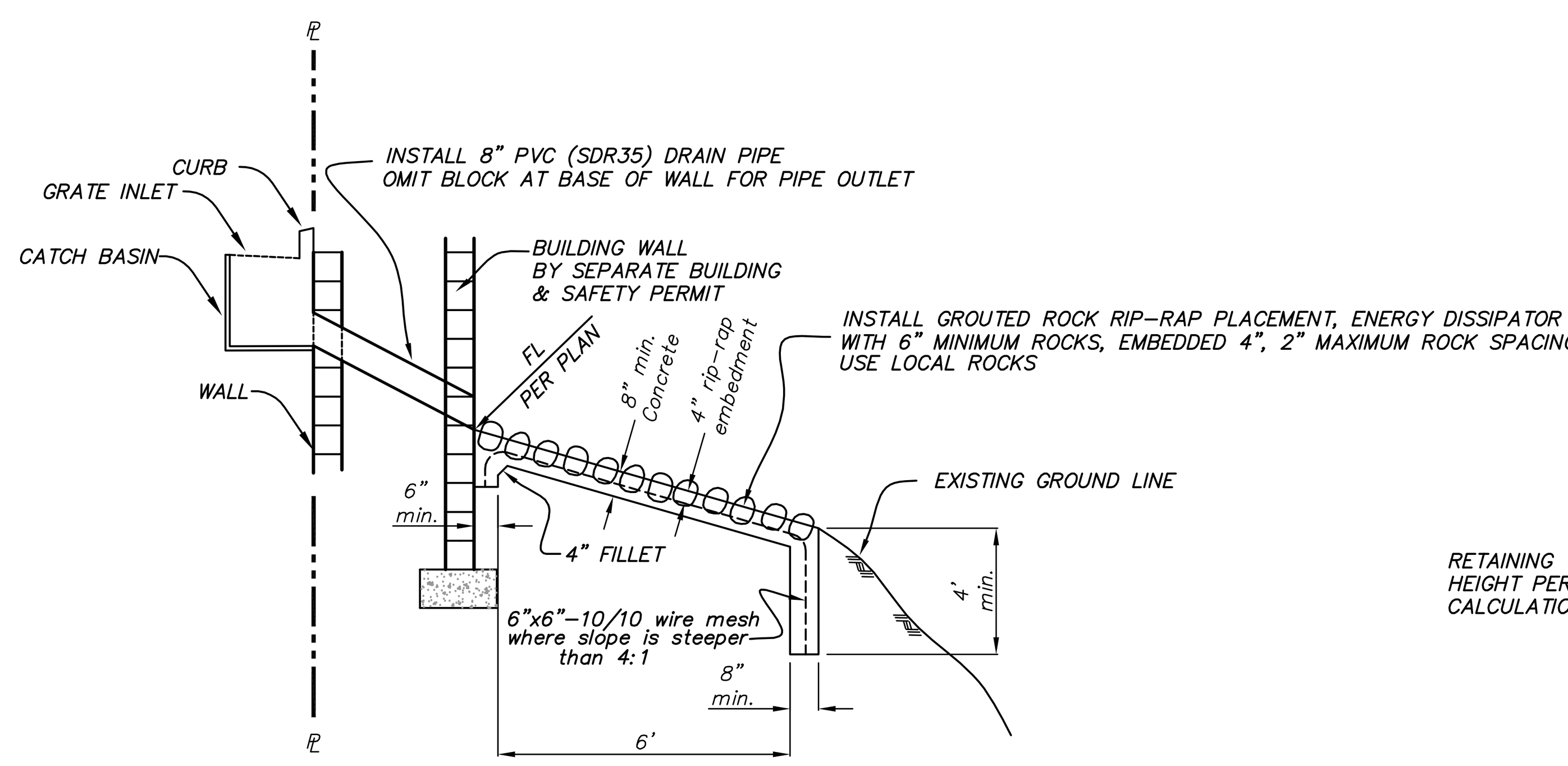

### TYPICAL SECTION

LOT BB (CITY LOT FOR PUBLIC USE)
PER CITY OF LOS ANGELES STD. PLAN S-470-0
ACCESS ROADWAY
Not to Scale




### DRAIN DETAIL

Location per plan
Not to Scale




### SECTION D

DRAIN SECTION
Not to Scale

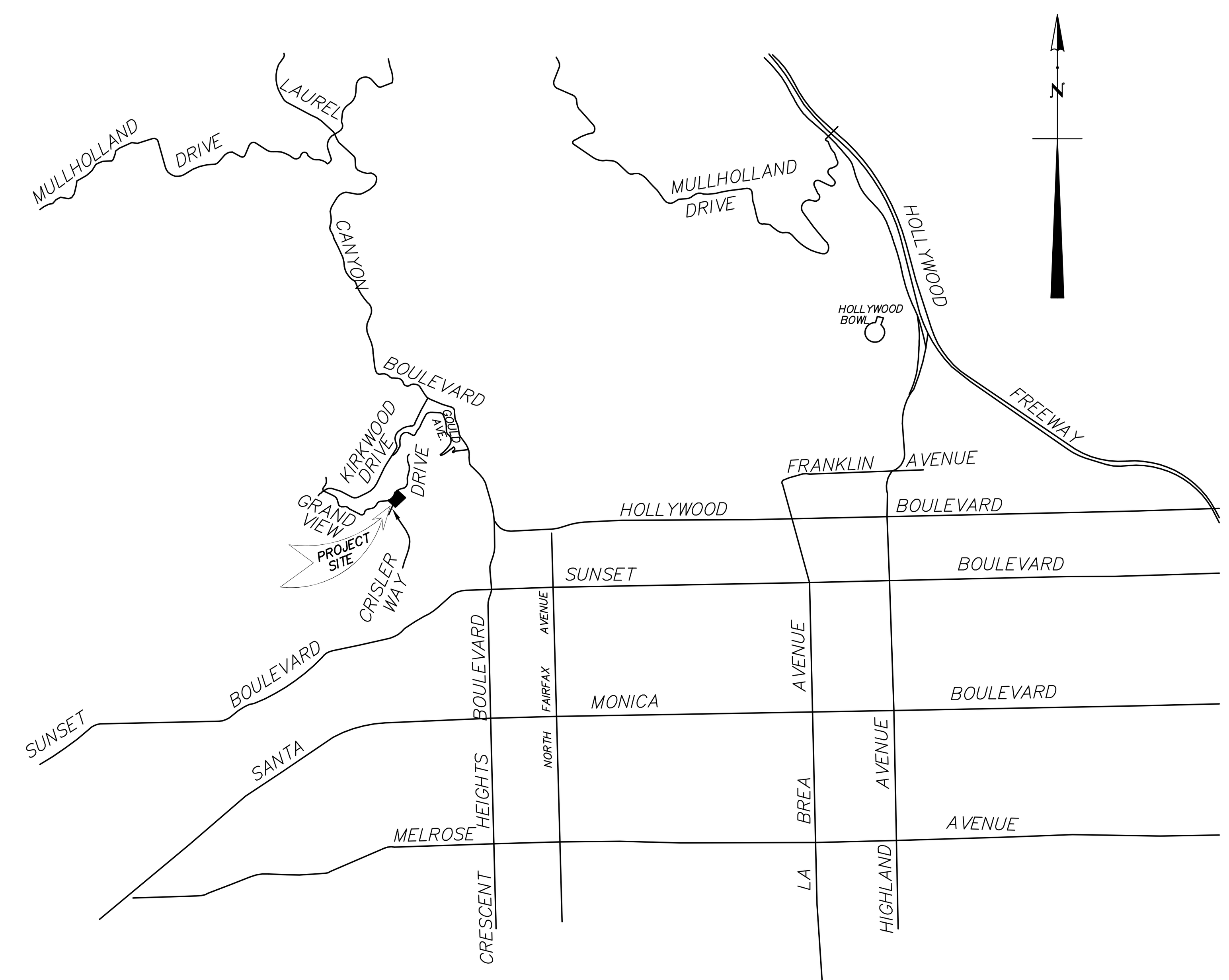
NOTE: DRAINAGE APPROVAL IS PER WAIVER OF DAMAGE NO. W15078 RECORDED AS DOCUMENT NO. 04-0964067

### BENCHMARKS:

| DESCRIPTION | BASIS |
|---|---|
| BMTP#12 SPIKE IN PP#828393H (N/SIDE,1' UP) S/SIDE OF GRANDVIEW DRIVE E/O HOUSE #8354 & OPPOSITE OF HOUSE #8353, SHOWN IN FIELD BOOK 40412, PAGE 257 | ELEV=1012.955 DATED:12/20/95 |
| BMTP#11 SPIKE IN PP#828392H (S/SIDE,1' UP) N/SIDE OF GRANDVIEW DRIVE BETWEEN HOUSE #8373 & HOUSE #8369, SHOWN IN FIELD BOOK 40412, PAGE 257 | ELEV=1010.925 DATED:12/20/95 |

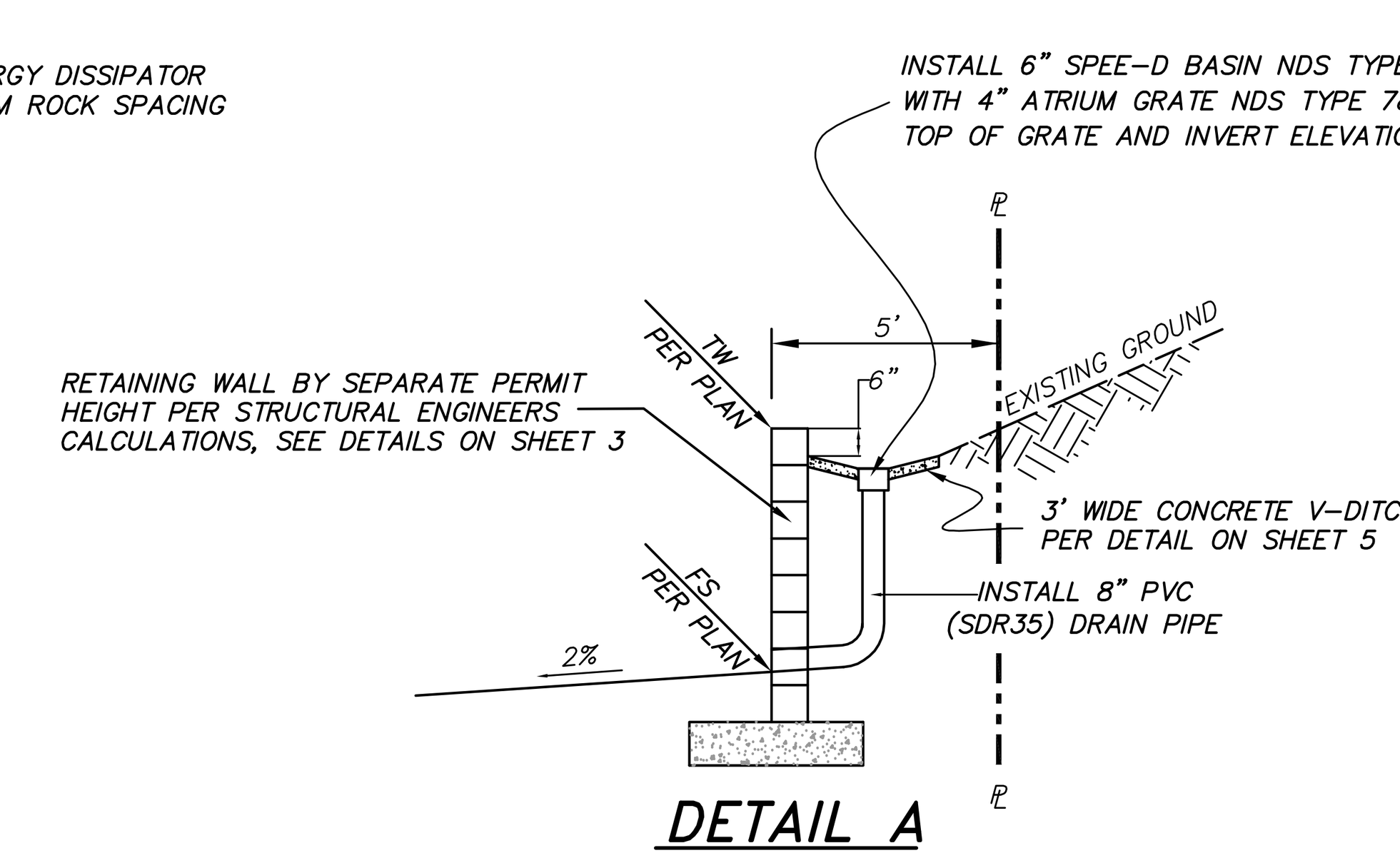
## INDEX TO SHEETS

| SHT. NO. | PLANS OF | FROM | TO |
|---|---|---|---|
| 1 | TITLE SHEET | | |
| 2 | STREET PLAN & PROFILES | GRAND VIEW DRIVE | 190' S'LY OF GRAND VIEW DRIVE |
| 3 | WALL PLAN | GRAND VIEW DRIVE | 190' S'LY OF GRAND VIEW DRIVE |
| 4 | WALL DETAIL | | |
| 5 | NORTHWESTERLY WALL PROFILE | | |
| 6 | SOUTHEASTERLY WALL PROFILE | | |



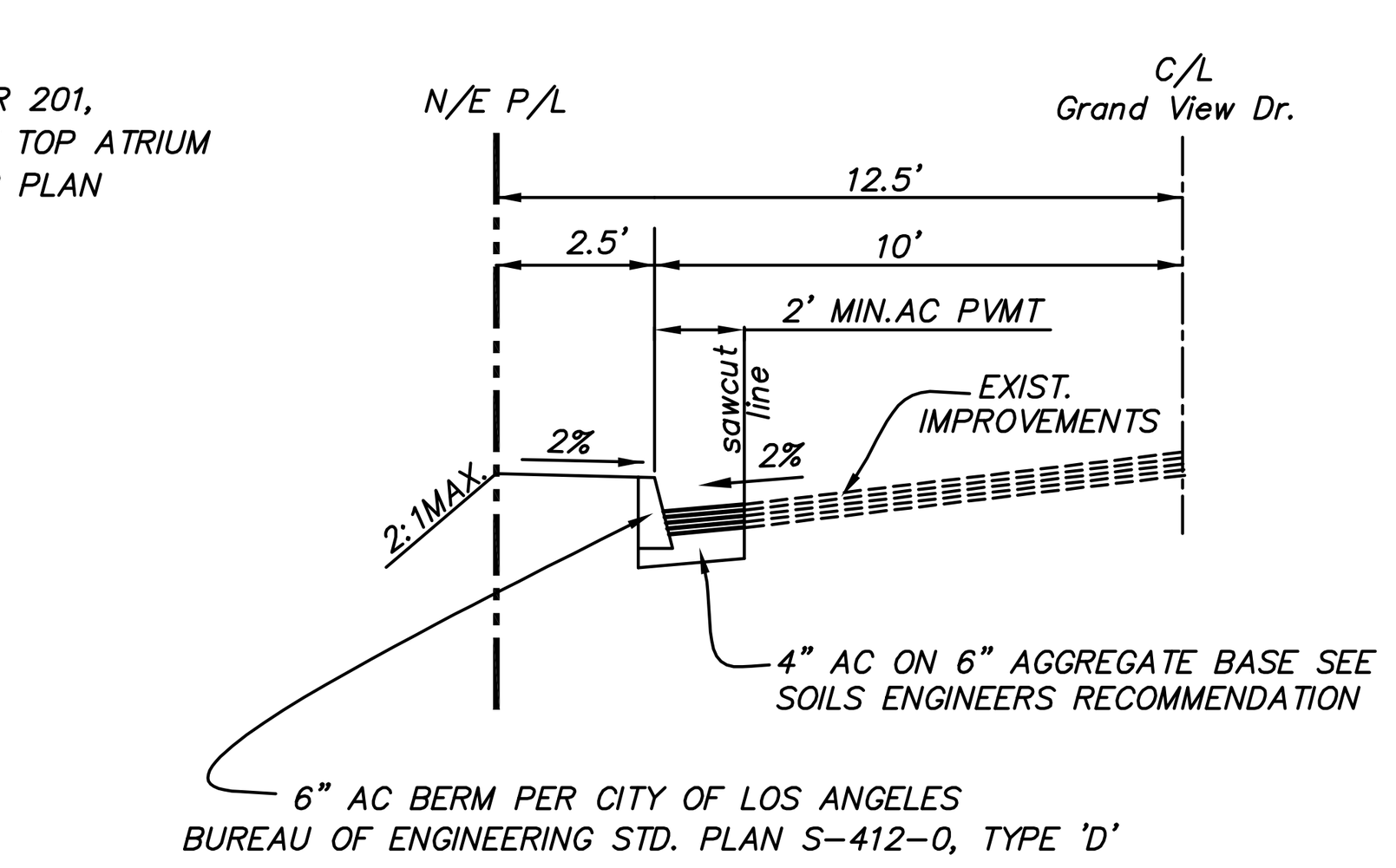

### LOCATION MAP:

Not to Scale




### DETAIL A

Not to Scale




### JOIN SECTION
### GRAND VIEW DRIVE

Not to Scale

DIGALERT
DIAL TOLL FREE
1-800-422-4133
AT LEAST TWO DAYS AFTER ISSUANCE OF I.D. NUMBER BEFORE YOU DIG
UNDERGROUND SERVICE ALERT(USA) OF SOUTHERN CALIFORNIA

**IN CONNECTION WITH BUILDING PERMIT**
**(8350) GRAND VIEW DRIVE &,**
**CRISLER WAY S/W CORNER**
**DESIGN PERMIT BD-401611**
**CONSTRUCTION PERMIT BC**

STRUCTURAL ENGINEERING DESIGNED BY: ALBERT SALVADOR, Sunnyvale, CA (650) 823-8328
ALBERT SALVADOR R.C.E. 60106 EXP.6/30/04 DATE
CIVIL ENGINEER STAMP

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC. Simi Valley, California 805/ 522-1900
GERALD F. HOVELL R.C.E. 33118 EXP.6/30/06 DATE
CIVIL ENGINEER STAMP

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING

GARY LEE MOORE, P.E. CITY ENGINEER
ACCEPTED BY:
PLAN CHECKER DATE
DIVISION/DISTRICT ENGINEER DATE

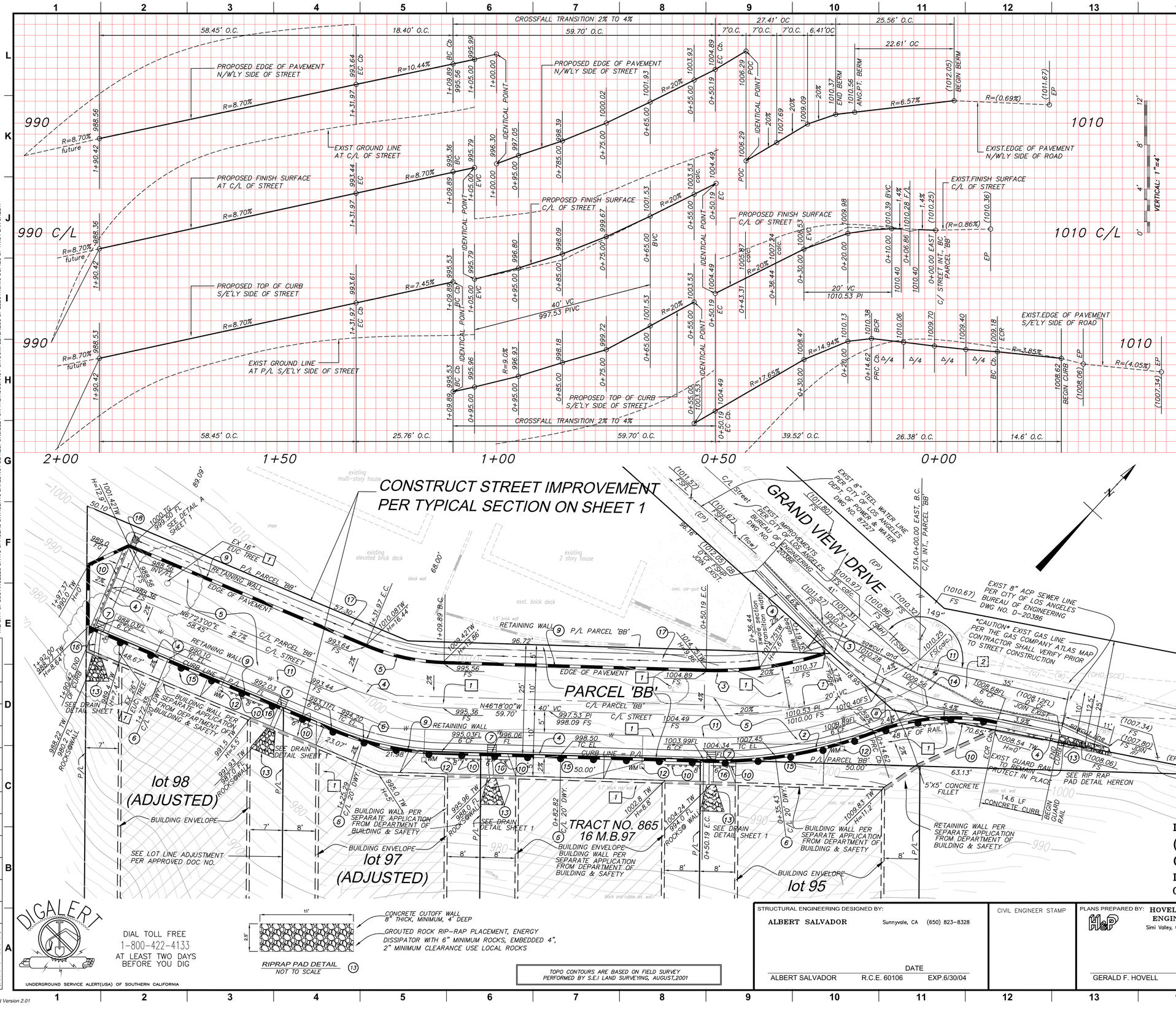
VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS
SHEET TITLE: STREET PLAN COVER SHEET
PROJECT:
ADDRESS: 8350 GRAND VIEW DR. & CRISLER WAY S/W CORNER
DM: 147B173
Dr. M: 470

LA DPW ENGINEERING — SERVING THE PRESENT; DESIGNING THE FUTURE

| NO. | REVISIONS: | DATE: | BY: |
|---|---|---|---|

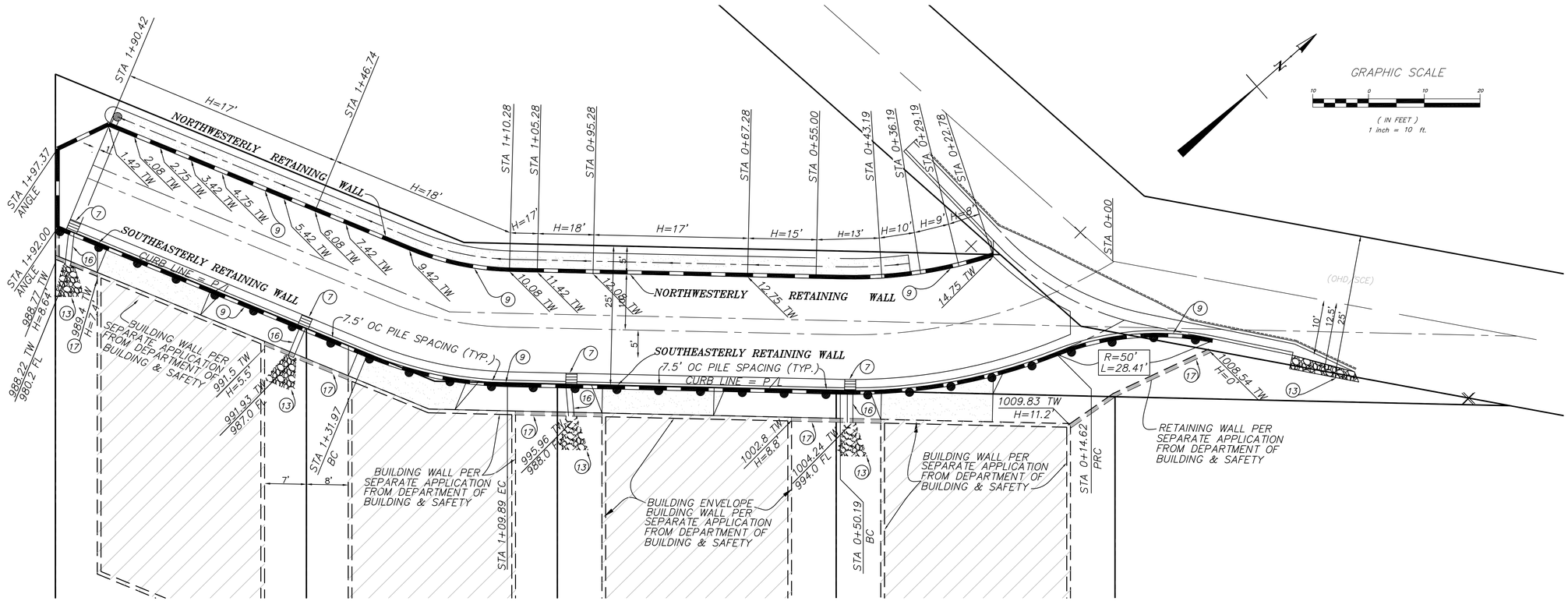
WORK ACCEPTED
SERIAL NO.
B - PERMITS BD-401611
INDEX NO. D-#

PROJECT NO. CXXXXX
DRAWING NO. 1
SHEET 1 OF 6 SHEETS





CONSTRUCT STREET IMPROVEMENT PER TYPICAL SECTION ON SHEET 1
GRAND VIEW DRIVE
PARCEL 'BB'
C/L PARCEL 'BB'
C/L STREET
EDGE OF PAVEMENT
RETAINING WALL
P/L PARCEL 'BB'
C/L STREET
P/L PARCEL 'BB'
TRACT NO. 865
16 M.B.97
lot 98
(ADJUSTED)
lot 97
(ADJUSTED)
lot 95
BUILDING ENVELOPE
SEE LOT LINE ADJUSTMENT PER APPROVED DOC NO.
BUILDING WALL PER SEPARATE APPLICATION FROM DEPARTMENT OF BUILDING & SAFETY
SEE DRAIN DETAIL SHEET 1
SEE DRAIN DETAIL SHEET T
EXIST 8" STEEL WATER LINE PER CITY OF LOS ANGELES DEP'T OF POWER & WATER DWG NO. 8727
EXIST. IMPROVEMENTS PER CITY OF LOS ANGELES BUREAU OF ENGINEERING DWG NO. D-20386
EXIST 8" ACP SEWER LINE PER CITY OF LOS ANGELES BUREAU OF ENGINEERING DWG NO. D-20386
*CAUTION* EXIST GAS LINE PER THE GAS COMPANY ATLAS MAP CONTRACTOR SHALL VERIFY PRIOR TO STREET CONSTRUCTION
EXIST GUARD RAIL TO REMAIN IN PLACE
5'X5' CONCRETE FILLET
14.6 LF CONCRETE CURB
RETAINING WALL PER SEPARATE APPLICATION FROM DEPARTMENT OF BUILDING & SAFETY
SEE RIP RAP PAD DETAIL HEREON
STA.0+00.00 EAST. B.C. C/L INT., PARCEL 'BB'
existing multi-story house
existing elevated brick deck
existing 2 story house
steps
block wall
conc. car-port
exst. brick deck
1.5 story house
EX 16" EUC TREE
EX 26" EUC TREE
EX 24" EUC TREE
EX 20" EUC TREE
EX 30" EUC TREE
EX 36" EUC TREE
EX 18" EUC TREE
EX 12" EUC TREE
EX 8" EUC TREE
EX 6" EUC TREE
EX 4" EUC TREE
EX 2" EUC TREE
EX 1" EUC TREE
EX 10" EUC TREE
EX 14" EUC TREE
EX 22" EUC TREE
EX 28" EUC TREE
EX 32" EUC TREE
EX 34" EUC TREE
EX 38" EUC TREE
EX 40" EUC TREE
EX 42" EUC TREE
EX 44" EUC TREE
EX 46" EUC TREE
EX 48" EUC TREE
EX 50" EUC TREE
EX 52" EUC TREE
EX 54" EUC TREE
EX 56" EUC TREE
EX




## CONSTRUCTION ITEMS:

7. CONSTRUCT 3.5' WIDE CURBSIDE GRATING CATCH BASIN PER CITY OF LOS ANGELES BUREAU OF ENGINEERING STANDARD PLAN S-354-0, SINGLE GRATE, V=4', T=6"
9. CONSTRUCT RETAINING WALL SEE WALL PROFILE ON SHEETS 5 & 6 TOP OF WALL ELEVATIONS PER PLAN, DETAILS ON SHEET 4.
13. INSTALL GROUTED ROCK RIP-RAP PLACEMENT WITH 6"MIN ROCKS AT 50% EMBEDMENT USE LOCAL ROCKS
15. CONSTRUCT CONCRETE CAISON WALLS PER STRUCTURAL ENGINEERS SPECIFICATIONS, SEE CAISSON DETAIL SHEET 4
16. INSTALL 8" PVC (SDR35) DRAINAGE PIPE, LENGTH=5' REMOVE BLOCK AT BASE OF WALL S NEEDED FOR PIPE
17. FUTURE RETAINING WALL BY SEPARATE PERMIT SEE WALL PROFILE ON SHEET 6 TOP OF WALL ELEVATIONS PER PLAN.

TOPO CONTOURS ARE BASED ON FIELD SURVEY PERFORMED BY S.E.I LAND SURVEYING, AUGUST,2001

DIGALERT

DIAL TOLL FREE
1-800-422-4133
AT LEAST TWO DAYS BEFORE YOU DIG

UNDERGROUND SERVICE ALERT(USA) OF SOUTHERN CALIFORNIA

## RETAINING WALL DESIGN DATA (FOR SHEET 4)

I. STRESSES

1. REINFORCED CONCRETE:
   - A. ALL CONCRETE (560-C-3250) ..... f'c = 3,250 PSI
   - B. FOR CONCRETE SOLDIER PILE ONLY (650-C-4000) ..... f'c = 4,000 PSI
   - C. REINFORCING STEEL (A615, GRADE 60) ..... fy = 60,000 PSI
2. CONCRETE BLOCK MASONRY:
   - A. ASTM - C90, GRADE N ..... f'm = 1,500 PSI
   - B. REINFORCING STEEL (A615, GRADE 60) ..... fy = 60,000 PSI

II. DESIGN LOAD:

1. EQUIVALENT FLUID PRESSURE ..... 43 PCF
2. SURCHARGE ON PILE (LIVE LOAD) ..... 100 PSF
3. SURCHARGE ON PILE FROM RETAINING WALL FOOTING ..... 147.5 PSF
4. SURCHARGE ON RETAINING WALL FROM:
   - A. HOUSE FOOTING (26' AWAY FROM RETAINING WALL) ..... 2 LB/FT
   - B. HOUSE FOOTING (12' AWAY FROM RETAINING WALL) ..... 11 LB/FT
   - C. WALL HEIGHT = 8' - 17' ..... 11 LB/FT
   - D. WALL HEIGHT = 18' ..... 2 LB/FT

III. DEAD LOADS:

1. CONCRETE ..... 150 PCF
2. SOIL ..... 115 PCF

IV. SOIL PROPERTY:

1. ALLOWABLE VERTICAL SOIL BEARING PRESSURE ..... 4000 PSF
2. PASSIVE LATERAL PRESSURE ..... 600 PCF/FT
3. FRICTION RESISTANCE COEFFICIENT ..... 0.6
4. SKIN FRICTION FOR THAT PORTION OF PILE IN CONTACT WITH BEDROCK ..... 750 PSF
5. MINIMUM EMBEDMENT IN THE GRANITE BEDROCK ..... 10'-0"
6. MINIMUM EMBEDMENT DEPTH OF FOOTING ..... 12"

REVISION DATES: (DESIGN STAGE ONLY)

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

Sheet Version 2.01

BUREAU OF ENGINEERING

LA DPW ENGINEERING Serving the Present ; Designing the Future

| NO. | REVISIONS: | DATE | BY: |
|---|---|---|---|
| | | | |

WORK ACCEPTED — SERIAL NO.

INDEX NO. D-#

B - PERMITS BD-401611

CIVIL ENGINEER STAMP

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900

GERALD F. HOVELL R.C.E. 33118 EXP.6/30/06
DATE

ACCEPTED BY :
GARY LEE MOORE, P.E. CITY ENGINEER
DATE

PLAN CHECKER DATE
DIVISION/DISTRICT ENGINEER DATE

CIVIL ENGINEER STAMP

STRUCTURAL ENGINEERING DESIGNED BY:
ALBERT SALVADOR
Sunnyvale, CA (650) 823-8328

ALBERT SALVADOR R.C.E. 60106 EXP.6/30/04
DATE

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS

SHEET TITLE: WALL PLAN

PROJECT: 8350 GRANDVIEW DR. & CRISLER WAY S/W CORNER

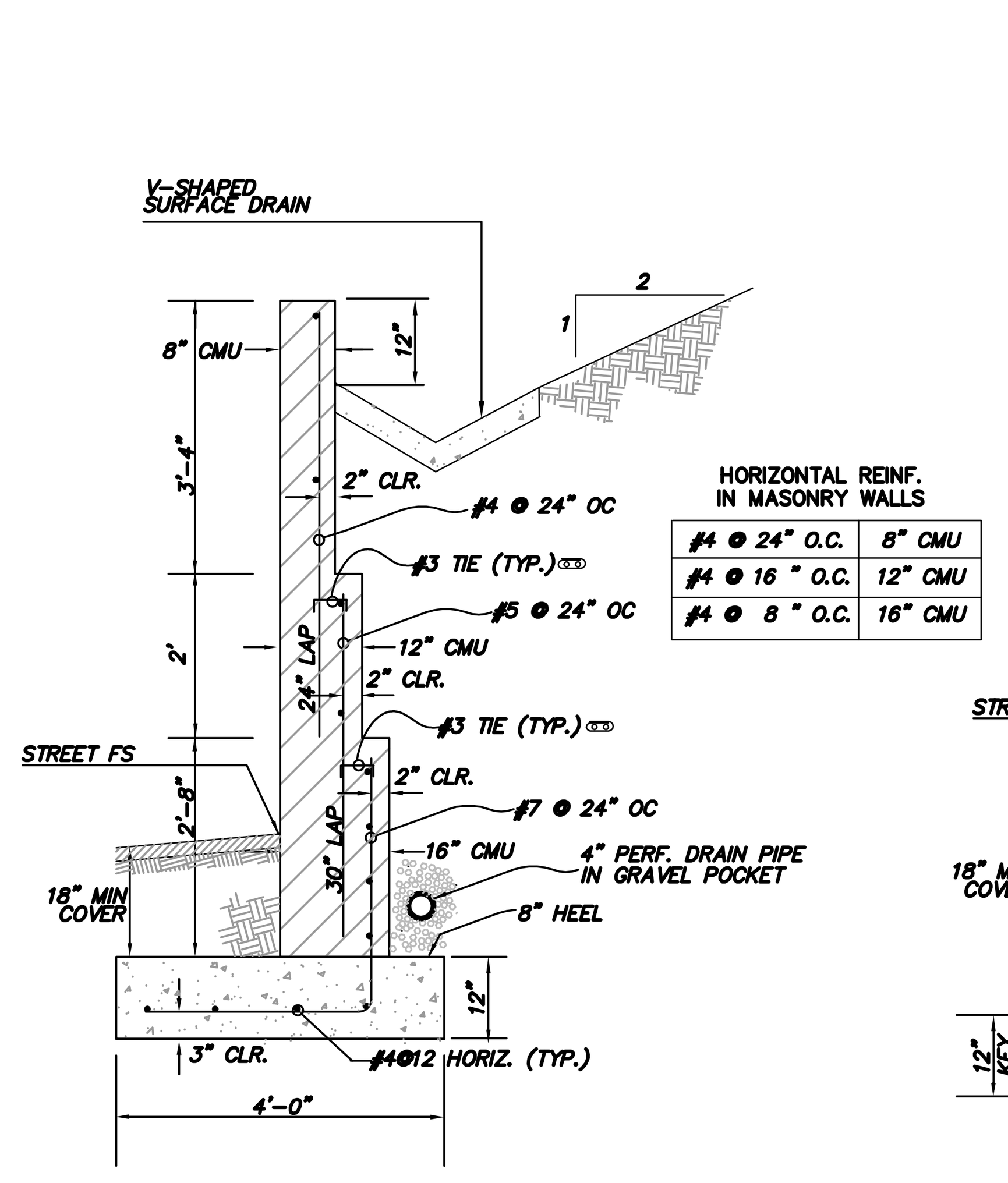
ADDRESS:
DM 34-173
DM 34-170

PROJECT NO. CXXXXX

DRAWING NO. 3

SHEET 3 OF 6 SHEETS

1860ST3.DWG 5/13/04 11:13:41 am



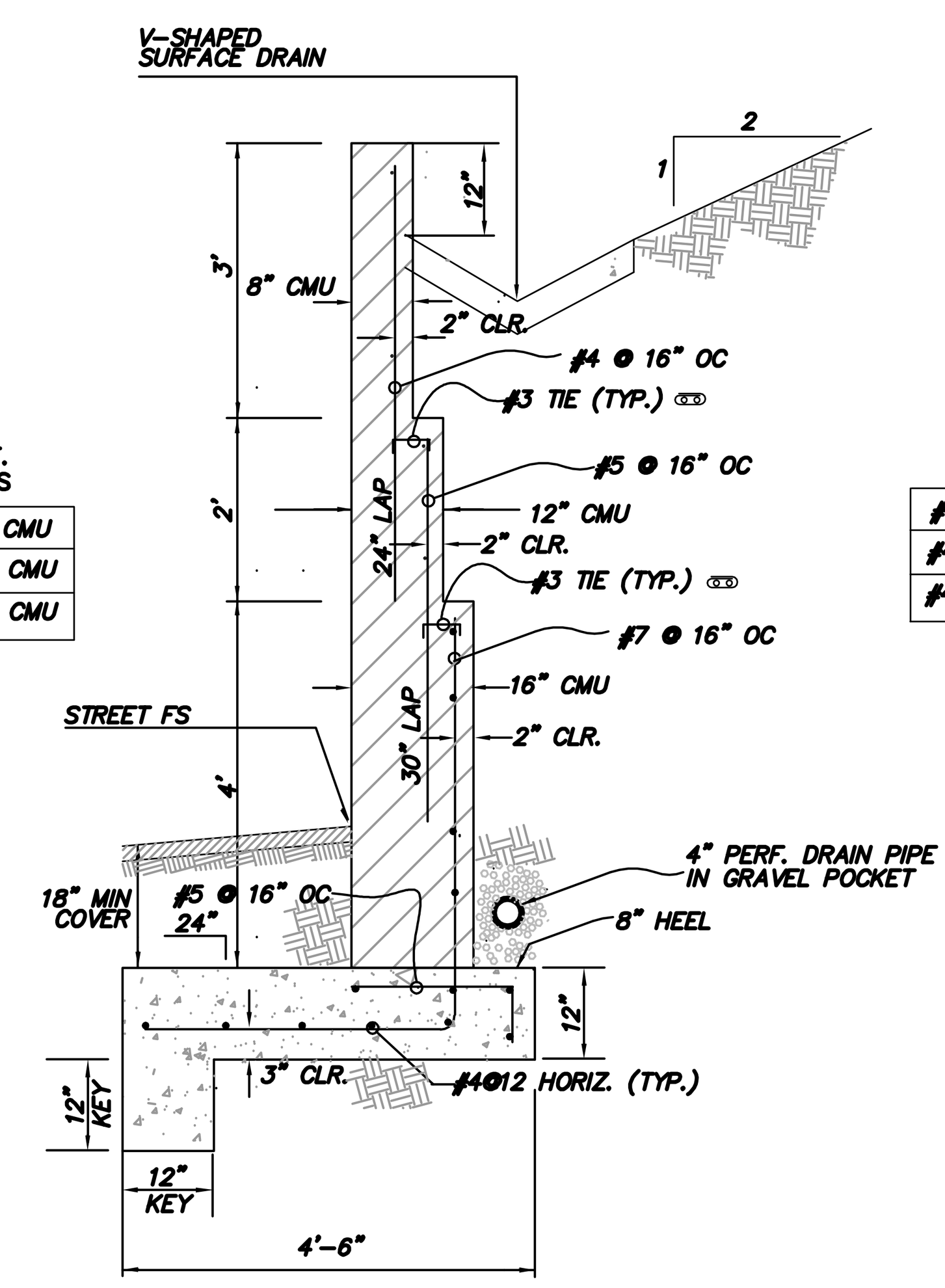

WALL H=8'

SECTION DETAIL

NOT TO SCALE

HORIZONTAL REINF. IN MASONRY WALLS

| | |
|---|---|
| #4 @ 24" O.C. | 8" CMU |
| #4 @ 16 " O.C. | 12" CMU |
| #4 @ 8 " O.C. | 16" CMU |




WALL H=9'

SECTION DETAIL

NOT TO SCALE

HORIZONTAL REINF. IN MASONRY WALLS

| | |
|---|---|
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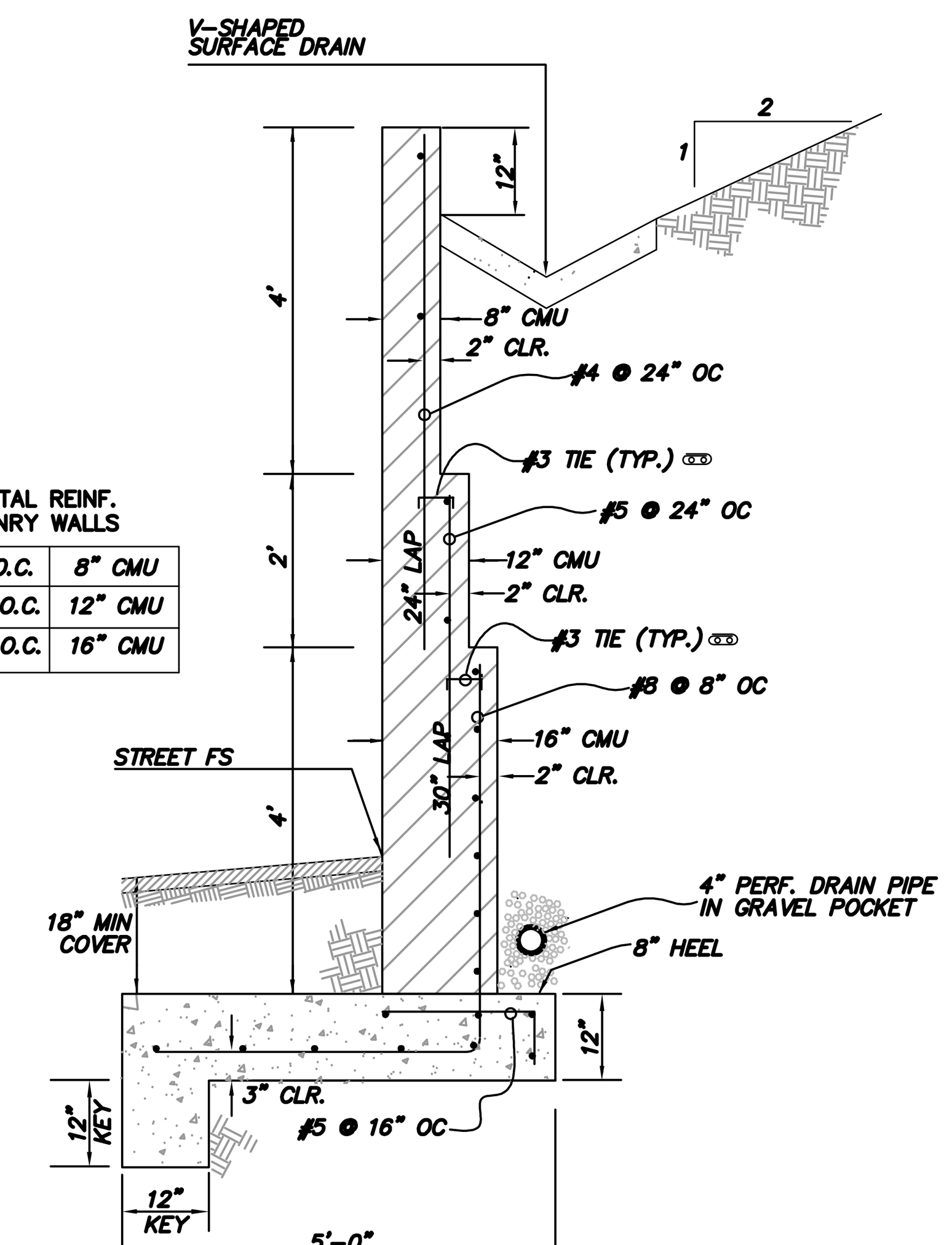
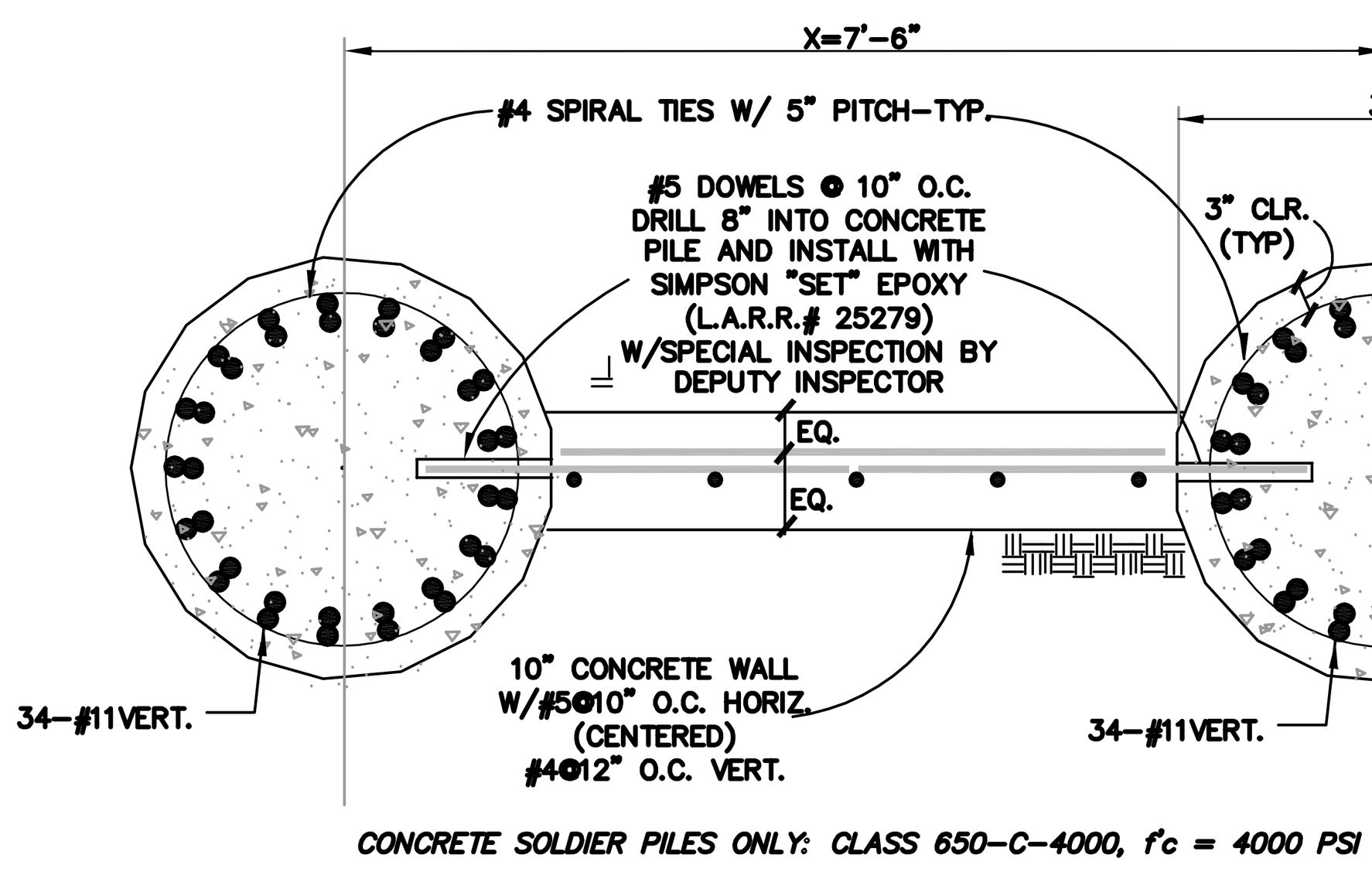
| #4 @ 16 " O.C. | 12" CMU |
| #4 @ 8 " O.C. | 16" CMU |




WALL H=10'

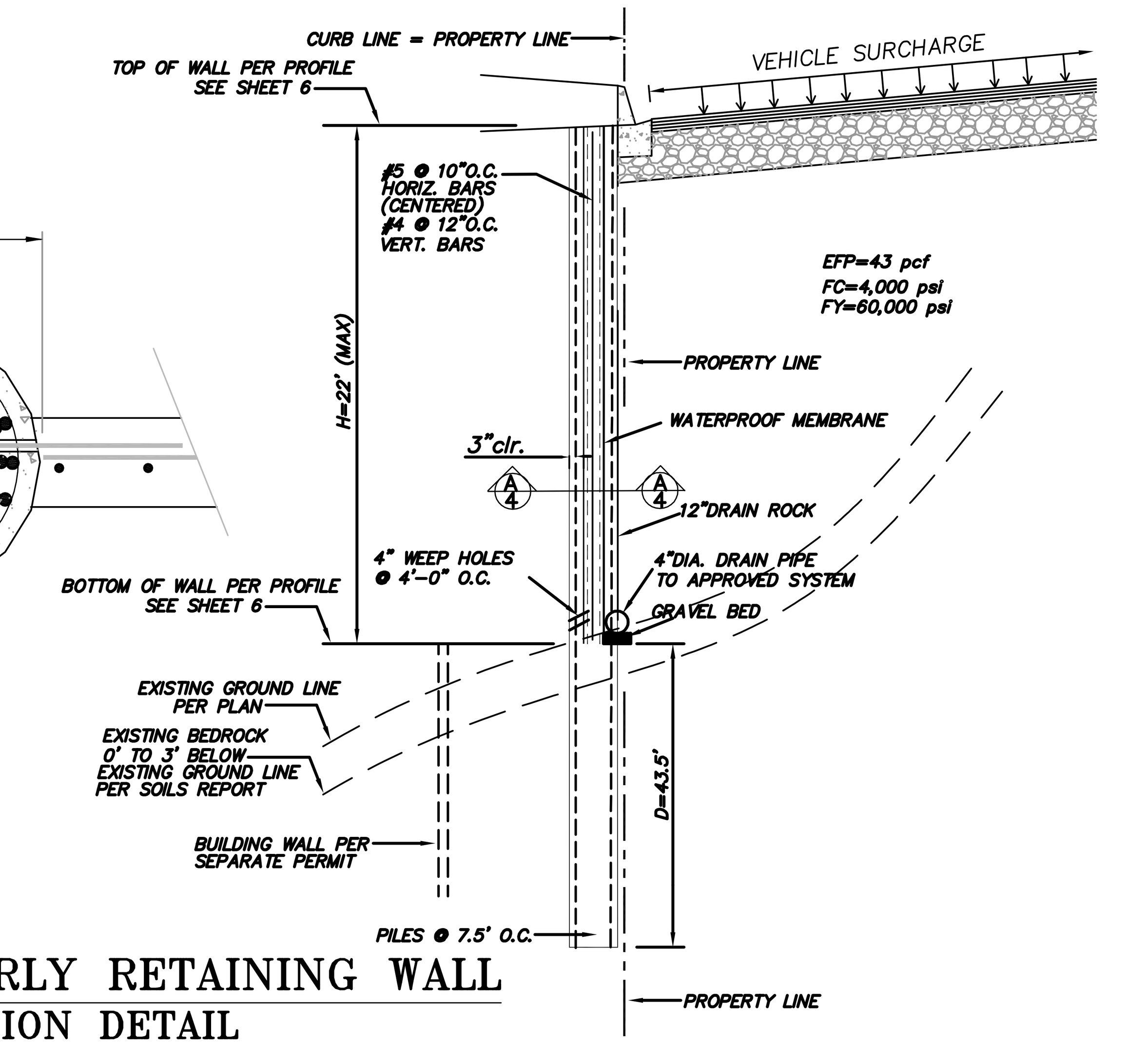
SECTION DETAIL

NOT TO SCALE




A PLAN TYPICAL SOLDIER PILES

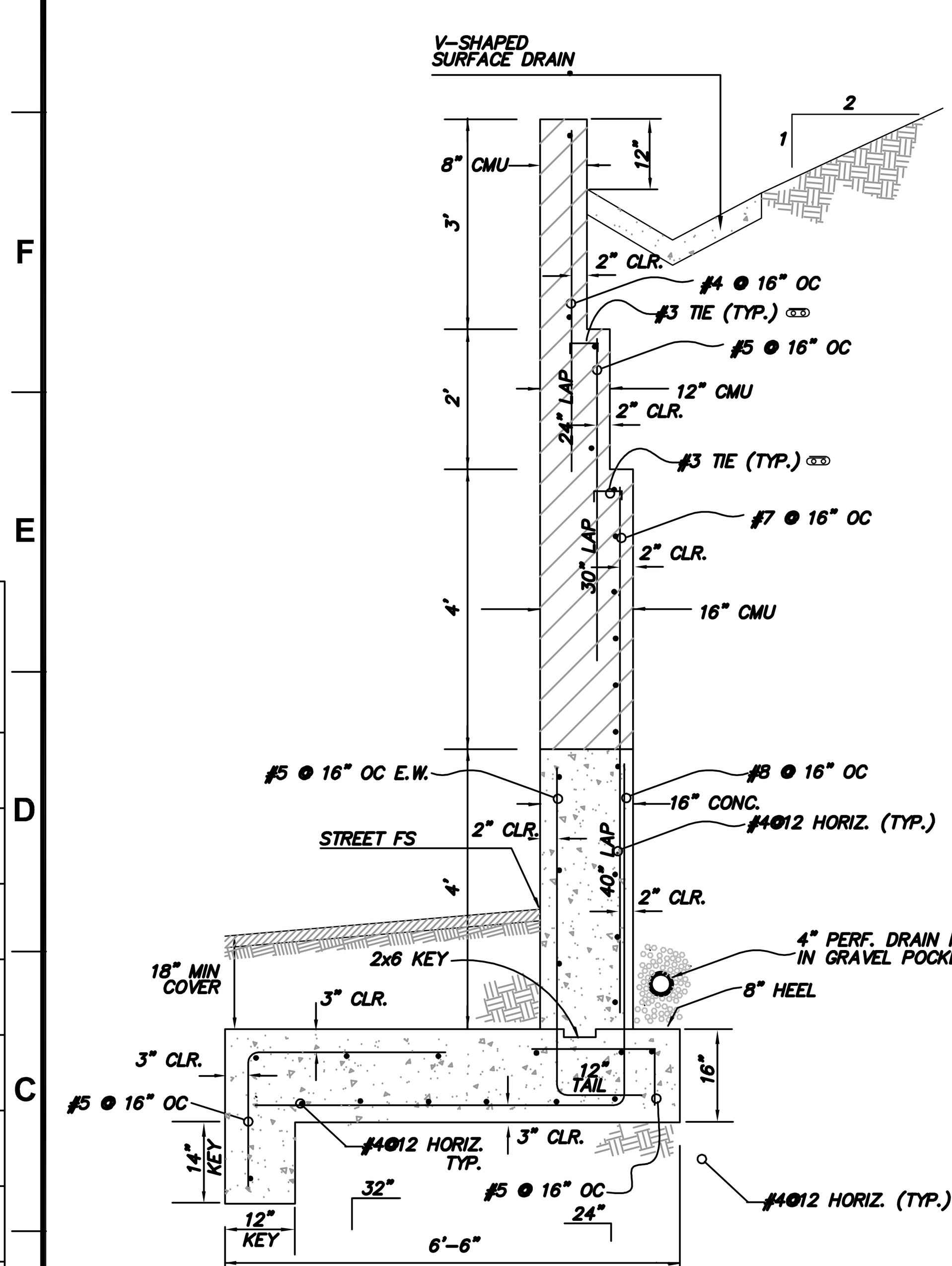
NOT TO SCALE




SOUTHEASTERLY RETAINING WALL

SECTION DETAIL

NOT TO SCALE



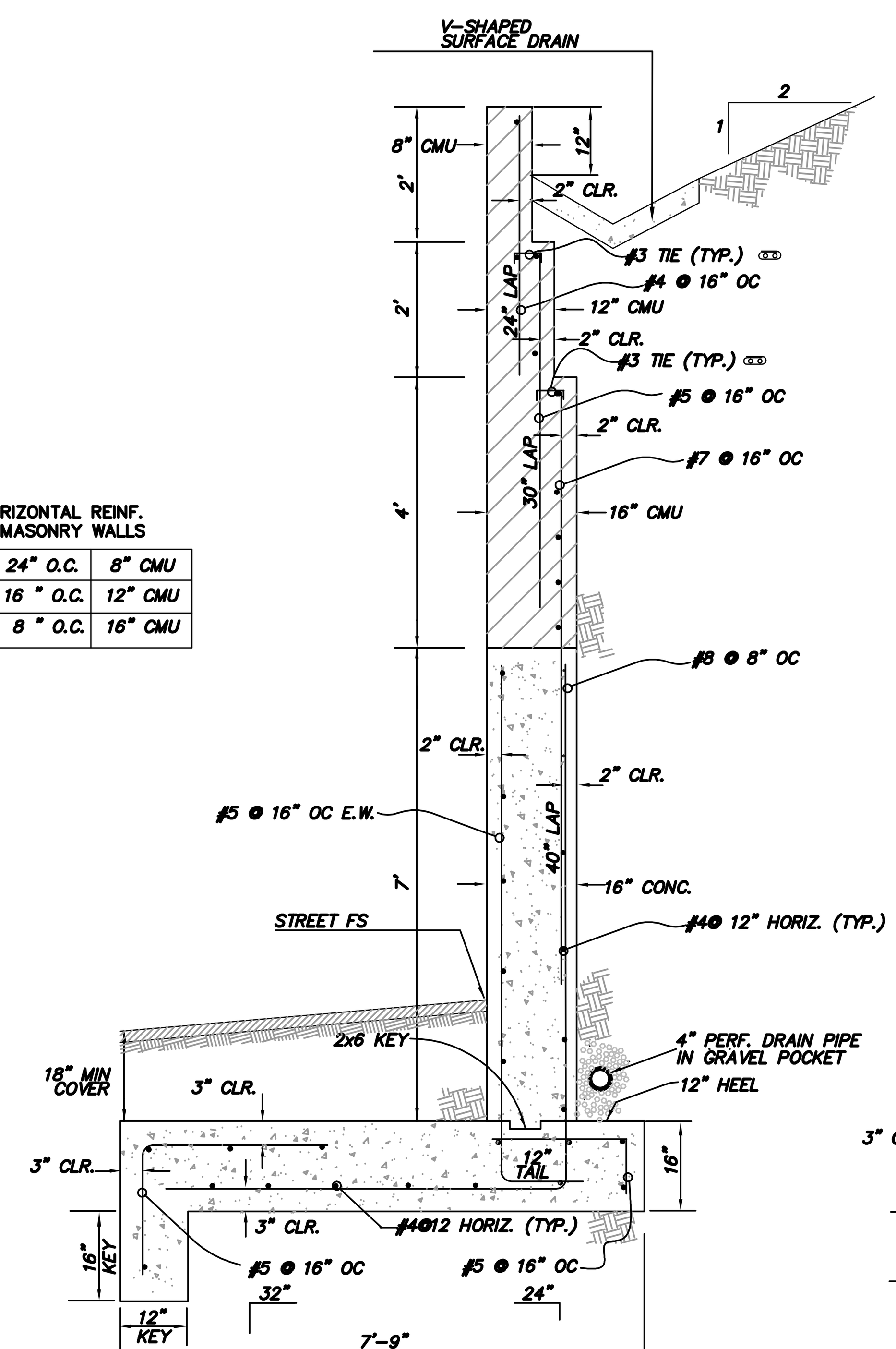

WALL H=13'

SECTION DETAIL

NOT TO SCALE

HORIZONTAL REINF. IN MASONRY WALLS

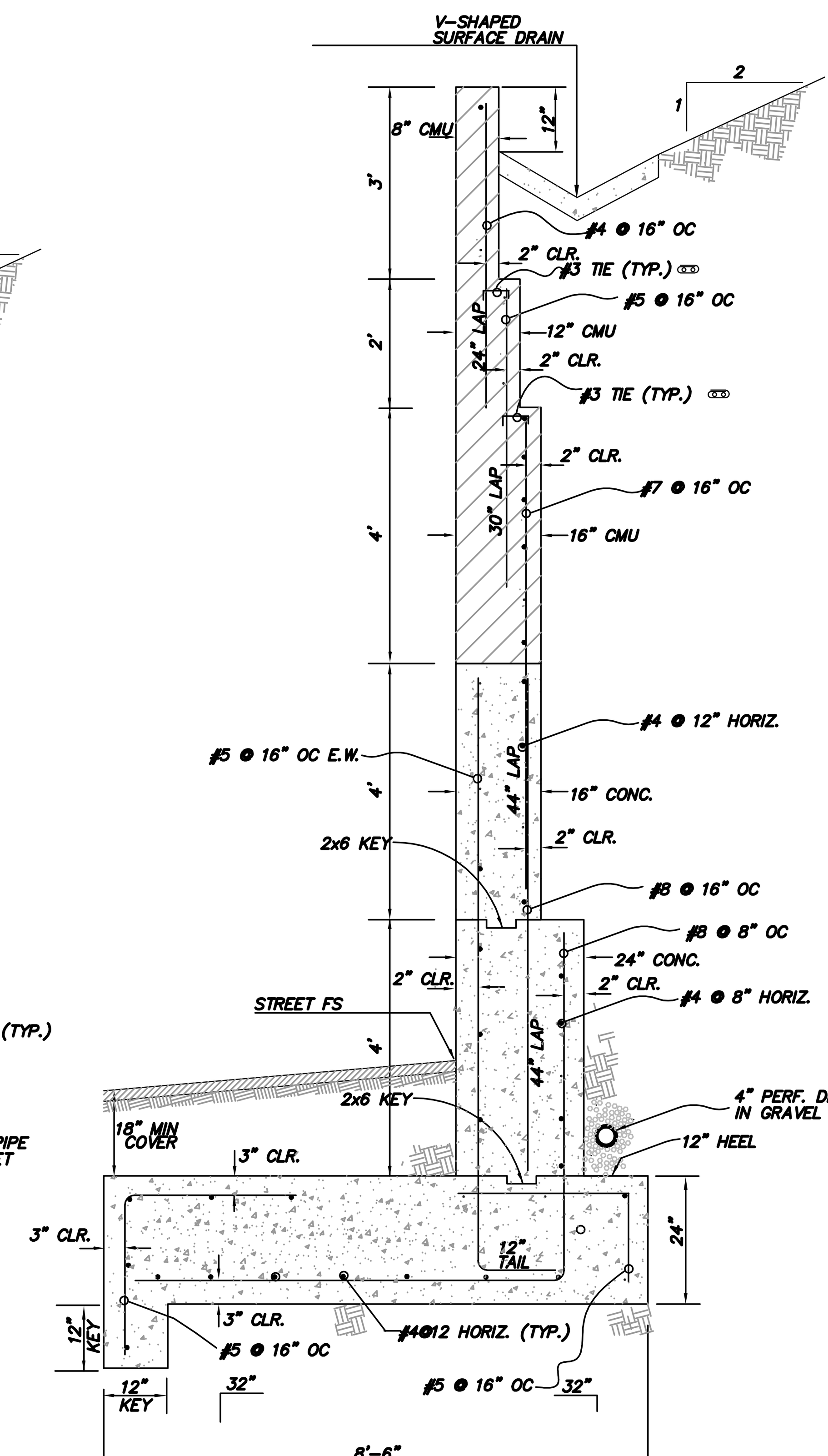
| | |
|---|---|
| #4 @ 24" O.C. | 8" CMU |
| #4 @ 16 " O.C. | 12" CMU |
| #4 @ 8 " O.C. | 16" CMU |




WALL H=15'

SECTION DETAIL

NOT TO SCALE



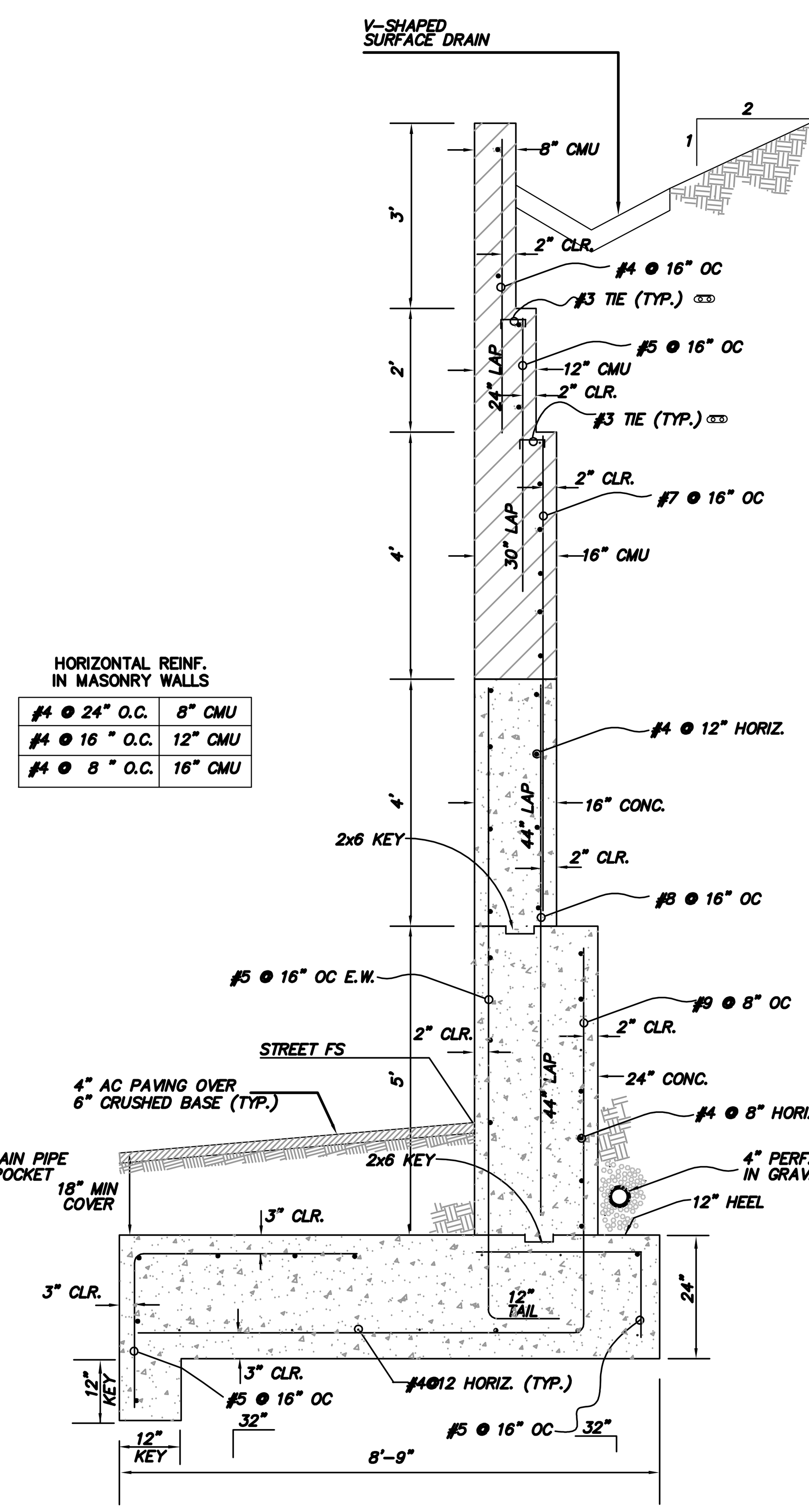

WALL H=17'

SECTION DETAIL

NOT TO SCALE

HORIZONTAL REINF. IN MASONRY WALLS

| | |
|---|---|
| #4 @ 24" O.C. | 8" CMU |
| #4 @ 16 " O.C. | 12" CMU |
| #4 @ 8 " O.C. | 16" CMU |




WALL H=18'

SECTION DETAIL

NOT TO SCALE

## GEOTECHNICAL RECOMMENDATIONS:

1. THE GEOLOGY/GEOTECHNICAL CONSULTANT SHALL PROVIDE RECOMMENDATIONS FOR REMOVAL AND ANY EXISTING FILL AND CREEP SUSCEPTIBLE SOILS BEHIND PROPOSED RETAINING WALLS AND BENEATH THE PROPOSED ROAD PRIOR TO THE PLACEMENT OF COMPACTED FILL. RECOMMENDATIONS SHALL BE PROVIDED FOR BENCHING OF FILL MATERIALS INTO BEDROCK.

2. THE FOLLOWING GENERAL GUIDELINES MAY BE USED AS A BASIS FOR QUALITY CONTROL OF SITE PREPARATION AND FILL PLACEMENT BEHIND THE RETAINING WALL AND UNDER THE PROPOSED STREET:
   A. REMOVE VEGETATION, EXISTING FILL, LOOSE SOILS, AND ALL OTHER DELETERIOUS MATERIALS PRIOR TO THE PLACEMENT OF FILL SOIL. THE BOTTOM TO RECEIVE FILL SOIL SHALL BE INSPECTED AND APPROVED BY THE REPRESENTATIVE OF PARMELEE/GEOLOGY PRIOR TO THE PLACEMENT OF ANY FILL SOIL. THE BOTTOM TO RECEIVE FILL SOIL SHALL ALSO BE INSPECTED AND APPROVED BY THE CITY INSPECTOR PRIOR TO THE PLACEMENT OF THE FILL SOIL.
   B. THE AREA TO RECEIVE FILL SOIL SHALL BE PROPERLY BENCHED INTO COMPETENT BEDROCK TO PROVIDE A GOOD BOND BETWEEN THE ORIGINAL GROUND AND THE FILL SOIL PRIOR TO PLACING ANY NEW FILL. THE BOTTOM TO RECEIVE FILL SOIL SHALL BE SCARIFIED A MINIMUM OF 6 INCHES, THROUGHLY MOISTENED TO NEAR THE OPTIMUM MOISTURE CONTENT AND THEN PROPERLY COMPACTED PRIOR TO PLACING FILL.
   C. FILL MATERIALS SHALL BE PLACE IN CONTROLLED LAYERS WHICH WHEN COMPACTED, SHALL NOT EXCEED 6 INCHES IN THICKNESS. ROCK GREATER THEN 6 INCHES IN THE LONGEST SIDE SHALL NOT BE PLACED IN COMPACTED FILL.
   D. ALL COMPACTED FILL SHALL BE THOUROUGHLY MIXED AND MOISTENED TO NEAR THE OPTIMUM MOISTURE CONTENT AND THEN COMPACTED TO MINIMUM DRY DENSITY 90% OF THE MAXIMUM DRY DENSITY PER ASTM TEST DESIGNATION D-1557-00.
   E. AT LEAST ONE (1) SOIL DENSITY TEST SHALL BE PERFORMED FOR EVERY TWO (2) FEET OF VERTICALL LIFT. IF THE TEST INDICATES A DRY DENSITY LESS THAN 95% OF THE MAXIMUM DRY DENSITY, THE TESTED LAYER SHALL BE REMOVED, RECOMPACTED AND RETESTED UNTIL A MINIMUM DRY DENSITY 95% OF THE MAXIMUM DRY DENSITY IS ACHIEVED.

3. THE PROPOSED RATAINING WALLS SHALL BE CONSTRUCTED WITH WEEP HOLES OR A PERFORATED PVC PIPE WITH GRAVEL ENVELOPE AT AND BEHIND THE BOTTOM OF THE RETAINING WALL. THE GRAVEL ENVELOPE FOR WEEP HOLES SHALL BE A MINIMUM OF ONE CUBIC FOOT. THE GRAVEL ENVELOPE FOR PERFORATED PIPE SHALL BE A MINIMUM OF ONE CUBIC FOOT PER LINEAR FOOT OF WIDTH. THE GRAVEL ENVELOPE SHALL BE WRAPPED WITH A FILTER FABRIC DESIGNED BY THE PROJECT CIVIL ENGINEER. ONE-FOOT THICK ZONE OF CLEAN, GRANULAR, FREE-DRAINING SOIL OR GRAVEL SHALL BE PLACED ABOVE THE DRAIN PIPE OR WEEP HOLE TO WITHIN TWO FEET OF THE FINISHED GRADE. COMPACTED FILL WITH LESS PERMEABLE SOIL SHALL BE PLACED FOR THE UPPER 2 FEET OF RETAINING WALL BACKFILL.

4. IT IS RECOMMENDED THAT FOOTINGS AND PILES BE FOUNDED INTO BEDROCK. COMPACTED FILL IS NOT TO BE USED TO PROVIDE PASSIVE PRESSURE. IF PASSIVE EARTH PRESSURE IS TO BE PROVIDED BY COMPACTED FILL, AN ALLOWABLE PASSIVE EARTH PRESSURE OF 300 POUNDS PER CUBIC FOOT (PCF), TO A MAXIMUM PASSIVE EARTH PRESSURE OF 3000 PSF CAN BE USED IN THE CALCULATION OF LATERAL RESISTANCE. THE ALLOWABLE PASSIVE EART PRESSURE MAY BE INCREASED BY 100% FOR ISOLATED PILES. PILES WITH SPACING GREATER THAN 3 TIMES OF PILE DIAMETER MAY BE CONSIDERED AS ISOLATED PILES.

## STRUCTURAL NOTES:

1. PRIOR TO CONSTRUCTION, VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND NOTIFY THE ENGINEER OF ANY DISCREPANCY.
2. POUR FOOTINGS AGAINST UNDISTURBED NATURAL GRADE. THE BOTTOM OF ALL FOOTINGS SHALL BE CLEAN OF ANY LOOSE MATERIAL AND ALL REINFORCEMENT SHALL BE FIRMLY TIED IN POSITION.
3. ALL CONCRETE SHALL BE CLASS 560-C-3250 UNLESS OTHERWISE INDICATED ON THE PLANS.
4. ALL BAR REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A615, WITH GRADE 60.
5. BAR SPACINGS ARE CENTER TO CENTER OF BARS. BAR CORNER IS THE CLEAR DISTANCE BETWEEN SURFACE OF BAR AND FACE OF CONCRETE AND SHALL BE 2" UNLESS OTHERWISE NOTED. REINFORCEMENT SHALL TERMINATE 2" FROM CONCRETE SURFACE UNLESS NOTED OTHERWISE. REINFORCEMENT SHALL EXTEND THROUGH CONSTRUCTION JOINTS.
6. UNLESS OTHERWISE DETAILED OR APPROVED BY THE ENGINEER:
   A. BARS MAY BE CONTINUOUS IN LIEU OF SPLICING.
   B. BARS SHOWN SPLICED SHALL BE CONTINUOUS AT ALL OTHER LOCATIONS. BARS SHOWN CONTINUOUS AND LONGER THAN 60-FEET MAY BE SPLICED IN 60-FOOT LENGHTS AT LOCATIONS DETERMINED BY THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE ENGINEER.
   C. SPLICES IN ADJACENT BARS SHALL BE STAGGERED AT LEAST ONE SPLICE LENGTH.
   D. FOR BAR SIZES #13 THROUGH #18, LAP DISTANCES SHALL BE 45 BAR DIAMETERS. FOR BAR OF SIZES #9 THROUGH #11, LAP DISTANCES SHALL BE 60 BAR DIAMETERS.
   E. HOOKED BARS SHALL BE STANDARD HOOKS PER THE LATEST ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
   F. LONGITUDINAL BARS SHALL BE LAPPED 20 BAR DIAMETERS AT SPLICE.
   G. DO NOT BACKFILL OR APPLY ANY LOAD ON THE WALL UNTIL THE CONCRETE AND GROUT HAVE DEVELOPED NOT LESS THAN THE SPECIFIED 28-DAY COMPRESSION STRENGTH.
   H. FLOODING OF BACKFILL IS NOT PERMITTED.
   I. PROVIDE A 48 HOUR FIELD INSPECTION NOTIFICATION FOR THE DRILLING OF THE PILES. PLEASE CONTACT GEOTECH ENGINEERING GROUP (CONTACT: MIKE BROWN) AT (213) 847-4008 48 HOURS PRIOR TO DRILLING OF PILES.
7. THE FOLLOWING ARE NOTES FOR MASONRY:
   A. CONTINUOUS INSPECTION SHALL BE PROVIDED IF FULL STRESSES ARE USED.
   B. ALL CONCRETE BLOCK MASONRY UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C90, GRADE N (f'm=1500 psi).
   C. ALL CONCRETE BLOCK MASONRY UNITS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 21 OF THE LOS ANGELES BUILDING CODE, LATEST EDITION.
   D. ALL CEMENT SHALL BE TYPE I PORTLAND CEMENT TESTED PER ASTM C-150.
   E. ALL CELLS SHALL BE FILLED SOLID WITH GROUT. SPECIFIED COMPRESSIVE STRENGTH OF OF THE GROUT, f'g SHALL NOT BE LESS THAN 2000 psi AT 28 DAYS.
   F. ALL MORTAR SHALL BE TYPE S AS SHOWN ON TABLE NO. 21-A OF CHAPTER 21 OF THE LOS ANGELES BUILDING CODE, LATEST EDITION.

## RETAINING WALL DESIGN CRITERIA

GOVERNING CODE: 1997 LOS ANGELES BUILDING CODE
SEISMIC ZONE: 4

FOUNDATION: BASED ON PARMELEE/GEOLOGY REPORT DATED MAY/19/02
ALLOWABLE BEARING PRESSURE: P=4000 PSF
SOIL PROFILE TYPE=SB
DISTANCE TO CLOSEST ACTIVE FAULT=5KM

CONCRETE: FC=3250 PSI (MIN) FOR RETAINING WALLS-SPECIAL INSP. REQ'D. FC=4000 PSI (MIN) FOR ALL PILES, U.N.O.
THE MINIMUM CEMENT CONTENT SHALL BE 5-1/2 SACKS PER CUBIC YARD.

MASONRY IS DESIGNED FOR 50% OF THE ALLOWABLE STRESSES. CONTINUOUS INSPECTION IS NOT REQUIRED, U.N.O.

PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CHAPTER 26 OF THE CODE.

STRUCTURAL ENGINEERING DESIGNED BY:
ALBERT SALVADOR Sunnyvale, CA (650) 823-8328
DATE
ALBERT SALVADOR R.C.E. 60106 EXP.6/1/04

CIVIL ENGINEER STAMP

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING

LA DPW ENGINEERING — SERVING THE PRESENT ; DESIGNING THE FUTURE

| NO. | REVISIONS: | DATE: | BY: |
|---|---|---|---|
| | | | |

WORK ACCEPTED — SERIAL NO.

B - PERMITS BD-401611

INDEX NO. D-#

GARY LEE MOORE, P.E. CITY ENGINEER

ACCEPTED BY:

PLAN CHECKER DATE

DIVISION/DISTRICT ENGINEER DATE

VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS

SHEET TITLE: STREET PLAN COVER SHEET

PROJECT:

ADDRESS: 8350 GRAND VIEW DR. & CRISLER WAY S/W CORNER
DM: 147B173
Dr. M: 470

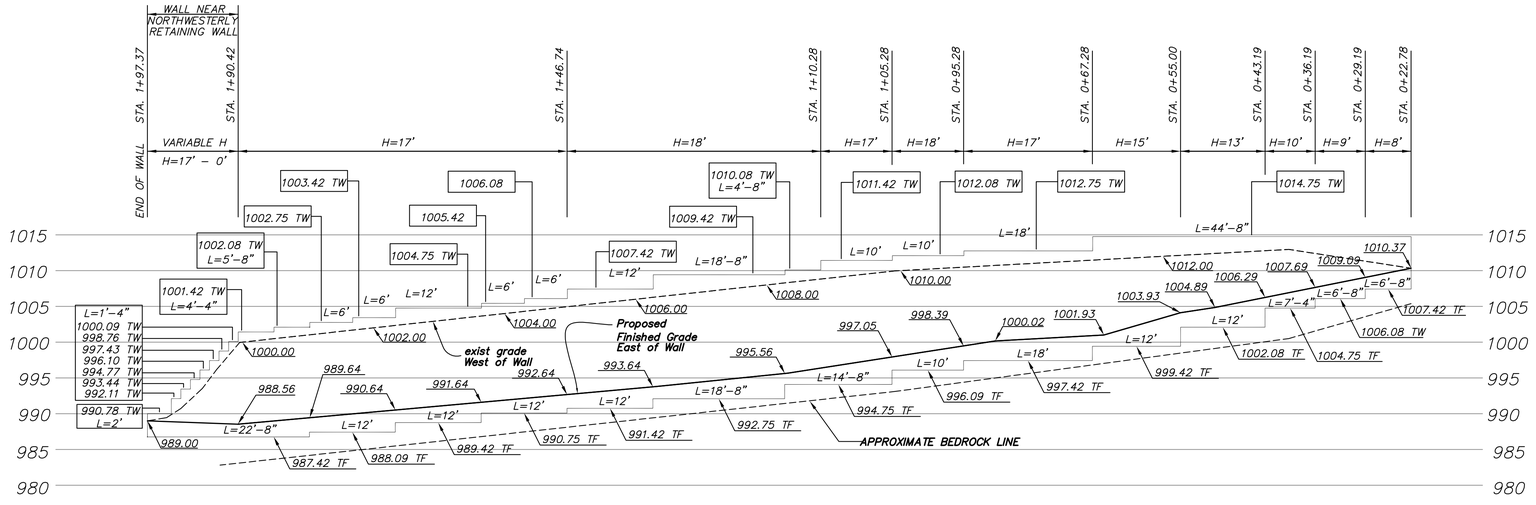
PROJECT NO. CXXXXX

DRAWING NO. 4

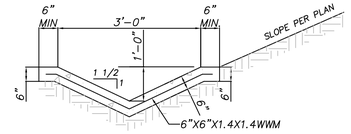
SHEET 4 OF 6 SHEETS

REVISION DATES (DESIGN STAGE ONLY)

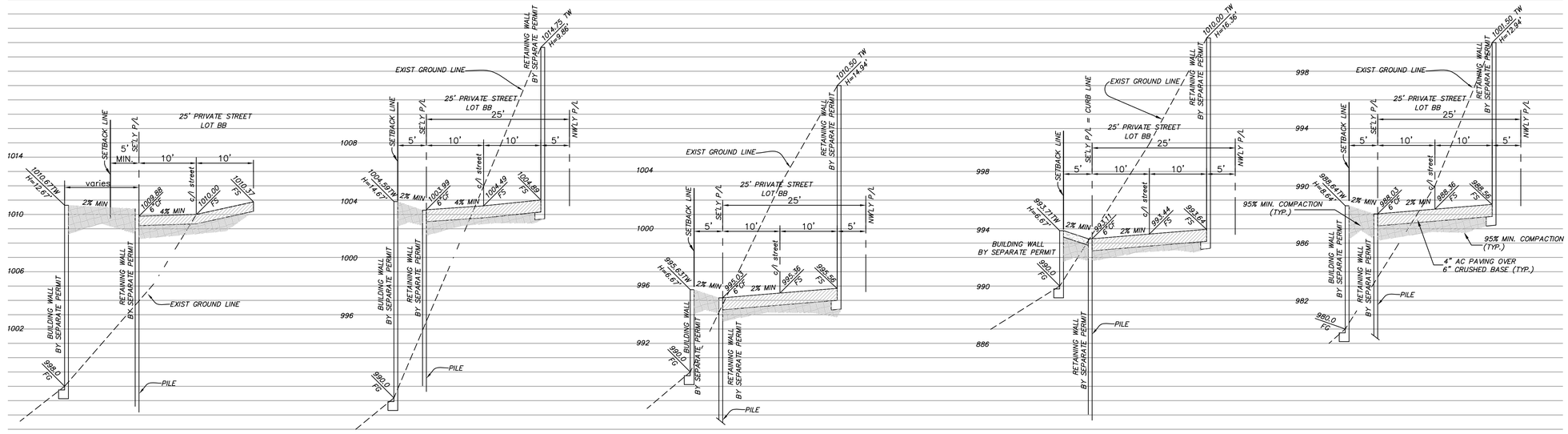
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.




## RETAINING WALL PROFILE
### ALONG NORTHWESTERLY PROPERTY LINE
SCALE: 1" = 10'




CONCRETE V–DITCH DETAIL
Not To Scale




SECTION STA.0+14.39 | SECTION STA.0+50.19 | SECTION STA.1+09.89 | SECTION STA.1+31.97 | SECTION STA.1+90.42

## SECTION DETAILS
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE 1" = 4'

IN CONNECTION WITH BUILDING PERMIT
(8350) GRAND VIEW DRIVE &,
CRISLER WAY S/W CORNER
DESIGN PERMIT BD-401611
CONSTRUCTION PERMIT BC

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REVISION DATES (DESIGN STAGE ONLY)

Sheet Version 2.01

BUREAU OF ENGINEERING
LA DPW ENGINEERING Serving the Present : Designing the Future

| NO. | REVISIONS: | DATE | BY: |
|---|---|---|---|
| | | | |

WORK ACCEPTED
SERIAL NO.
INDEX NO. D-#
B - PERMITS BD-401611

CIVIL ENGINEER STAMP

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900
GERALD F. HOVELL R.C.E. 33118 DATE EXP.6/30/06

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

GARY LEE MOORE, P.E. CITY ENGINEER
ACCEPTED BY:
PLAN CHECKER DATE
DIVISION/DISTRICT ENGINEER DATE

CIVIL ENGINEER STAMP

STRUCTURAL ENGINEERING DESIGNED BY:
ALBERT SALVADOR Sunnyvale, CA (650) 823–8328
ALBERT SALVADOR R.C.E. 60106 DATE EXP.6/30/04

VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS

SHEET TITLE: NORTHWESTERLY RETAINING WALL PROFILE & SECTION

PROJECT: 8350 GRANDVIEW DR. & CRISLER WAY S/W CORNER

ADDRESS: Zip 4 91343 Dir. M-470

PROJECT NO. CXXXXX
DRAWING NO. 5
SHEET 5 OF 6 SHEETS

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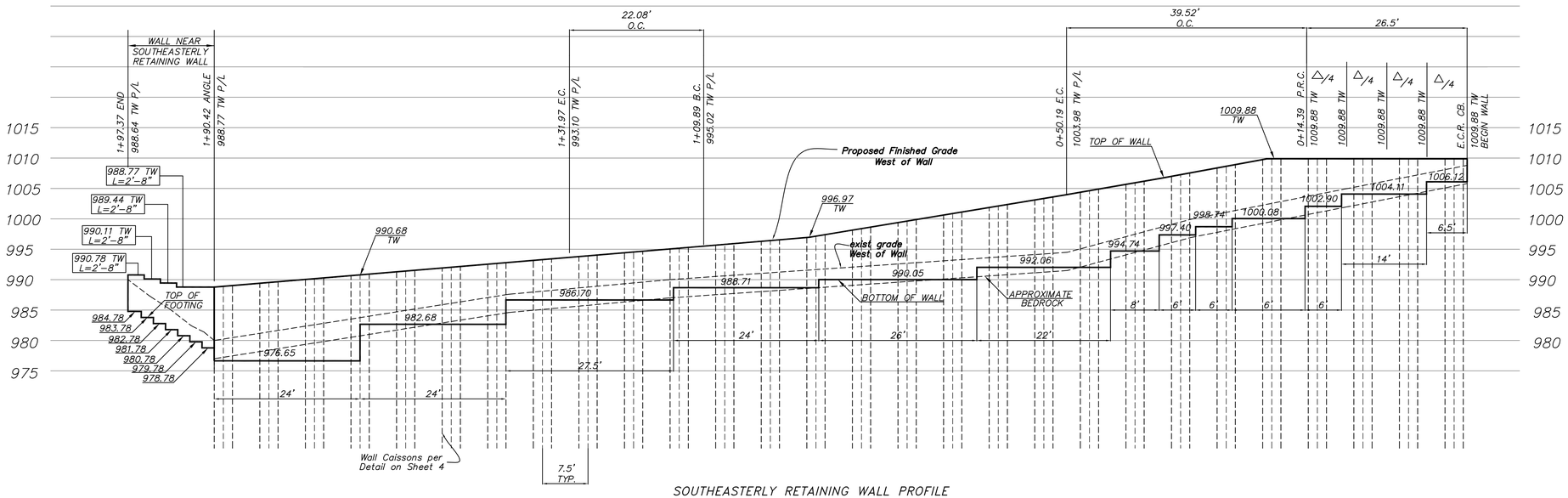
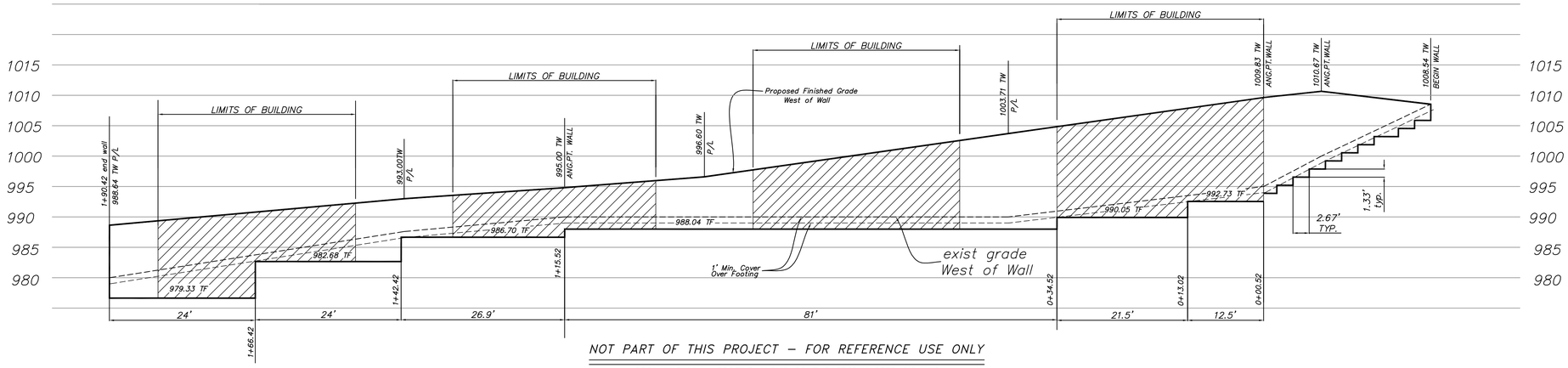



SOUTHEASTERLY RETAINING WALL PROFILE

ALONG SOUTHEASTERLY CURB LINE
SCALE: 1" = 10'




NOT PART OF THIS PROJECT – FOR REFERENCE USE ONLY

RETAINING WALL PROFILE ALONG SOUTHEASTERLY SETBACK LINE
SCALE: 1" = 10'

IN CONNECTION WITH BUILDING PERMIT
(8350) GRAND VIEW DRIVE &,
CRISLER WAY S/W CORNER
DESIGN PERMIT BD-401611
CONSTRUCTION PERMIT BC

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISION DATES (DESIGN STAGE ONLY)

Sheet Version 2.01

BUREAU OF ENGINEERING

LA DPW ENGINEERING Serving the Present ; Designing the Future

INDEX NO. D-#

B - PERMITS BD-401611

SERIAL NO.

WORK ACCEPTED

REVISIONS: NO. DATE BY:

CIVIL ENGINEER STAMP

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC. Simi Valley, California 805/ 522-1900

GERALD F. HOVELL R.C.E. 33118 EXP.6/30/06 DATE

ACCEPTED BY :

GARY LEE MOORE, P.E. CITY ENGINEER

PLAN CHECKER DATE

DIVISION/DISTRICT ENGINEER DATE

CIVIL ENGINEER STAMP

STRUCTURAL ENGINEERING DESIGNED BY: Sunnyvale, CA (650) 823-8328
ALBERT SALVADOR

ALBERT SALVADOR R.C.E. 60106 EXP.6/30/04 DATE

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS

SHEET TITLE: SOUTHEASTERLY RETAINING WALL PROFILE

PROJECT: 8530 GRANDVIEW DR. & CRISSLER WAY S/W CORNER

ADDRESS: Dist. 4 (818) 374-5073 Dist. 5 (310) 575-8473

PROJECT NO. CXXXXX

DRAWING NO. 6

SHEET 6 OF 6 SHEETS

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# Air Quality and Greenhouse Gas Impact Analyses

APPENDIX D

# Crisler Vertical Construction

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 4.00 | Dwelling Unit | 0.46 | 7,200.00 | 11 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2021 |
| **Utility Company** | Los Angeles Department of Water & Power | | | | |
| **CO2 Intensity (lb/MWhr)** | 1227.89 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot size

Construction Phase - 15 months

Trips and VMT - 24 worker trips, 3 vendor rt day

Off-road Equipment - forklift, skid steer loader

Crisler Vertical Construction - Los Angeles-South Coast County, Annual

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 100.00 | 325.00 |
| tblConstructionPhase | PhaseEndDate | 6/6/2019 | 3/30/2020 |
| tblConstructionPhase | PhaseStartDate | 1/18/2019 | 1/1/2019 |
| tblLandUse | LotAcreage | 1.30 | 0.46 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Skid Steer Loaders |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | PhaseName | | Building Construction |
| tblOffRoadEquipment | UsageHours | 6.00 | 8.00 |
| tblTripsAndVMT | VendorTripNumber | 0.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 24.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.0509 | 0.4390 | 0.5047 | 1.0400e-003 | 0.0393 | 0.0221 | 0.0613 | 0.0105 | 0.0203 | 0.0309 | 0.0000 | 94.7093 | 94.7093 | 0.0158 | 0.0000 | 95.1036 |
| 2020 | 0.0114 | 0.0992 | 0.1195 | 2.5000e-004 | 9.6300e-003 | 4.7300e-003 | 0.0144 | 2.5800e-003 | 4.3600e-003 | 6.9400e-003 | 0.0000 | 22.7220 | 22.7220 | 3.8200e-003 | 0.0000 | 22.8174 |
| **Maximum** | **0.0509** | **0.4390** | **0.5047** | **1.0400e-003** | **0.0393** | **0.0221** | **0.0613** | **0.0105** | **0.0203** | **0.0309** | **0.0000** | **94.7093** | **94.7093** | **0.0158** | **0.0000** | **95.1036** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.0509 | 0.2920 | 0.5047 | 1.0400e-003 | 0.0393 | 0.0221 | 0.0613 | 0.0105 | 0.0203 | 0.0309 | 0.0000 | 94.7092 | 94.7092 | 0.0158 | 0.0000 | 95.1036 |
| 2020 | 0.0114 | 0.0652 | 0.1195 | 2.5000e-004 | 9.6300e-003 | 4.7300e-003 | 0.0144 | 2.5800e-003 | 4.3600e-003 | 6.9400e-003 | 0.0000 | 22.7220 | 22.7220 | 3.8200e-003 | 0.0000 | 22.8174 |
| **Maximum** | **0.0509** | **0.2920** | **0.5047** | **1.0400e-003** | **0.0393** | **0.0221** | **0.0613** | **0.0105** | **0.0203** | **0.0309** | **0.0000** | **94.7092** | **94.7092** | **0.0158** | **0.0000** | **95.1036** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **33.64** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 1-1-2019 | 3-31-2019 | 0.1206 | 0.0844 |
| 2 | 4-1-2019 | 6-30-2019 | 0.1211 | 0.0845 |
| 3 | 7-1-2019 | 9-30-2019 | 0.1224 | 0.0854 |
| 4 | 10-1-2019 | 12-31-2019 | 0.1233 | 0.0862 |
| 5 | 1-1-2020 | 3-31-2020 | 0.1110 | 0.0769 |
| | | Highest | 0.1233 | 0.0862 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |
| Energy | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 24.1514 | 24.1514 | 5.4000e-004 | 2.0000e-004 | 24.2237 |
| Mobile | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.9155 | 0.0000 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0827 | 2.9067 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | **0.0559** | **0.0723** | **0.2453** | **7.1000e-004** | **0.0490** | **4.9800e-003** | **0.0540** | **0.0131** | **4.9500e-003** | **0.0181** | **1.4231** | **84.1693** | **85.5924** | **0.0675** | **4.4000e-004** | **87.4122** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |
| Energy | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 24.1514 | 24.1514 | 5.4000e-004 | 2.0000e-004 | 24.2237 |
| Mobile | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.9155 | 0.0000 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0827 | 2.9067 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | **0.0559** | **0.0723** | **0.2453** | **7.1000e-004** | **0.0490** | **4.9800e-003** | **0.0540** | **0.0131** | **4.9500e-003** | **0.0181** | **1.4231** | **84.1693** | **85.5924** | **0.0675** | **4.4000e-004** | **87.4122** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Building Construction | Building Construction | 1/1/2019 | 3/30/2020 | 5 | 325 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Building Construction | Skid Steer Loaders | 1 | 8.00 | 65 | 0.37 |
| Building Construction | Forklifts | 1 | 8.00 | 89 | 0.20 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Building Construction | 5 | 24.00 | 6.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Building Construction - 2019

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0319 | 0.3334 | 0.3373 | 4.7000e-004 | | 0.0212 | 0.0212 | | 0.0195 | 0.0195 | 0.0000 | 42.1381 | 42.1381 | 0.0133 | 0.0000 | 42.4714 |
| **Total** | **0.0319** | **0.3334** | **0.3373** | **4.7000e-004** | | **0.0212** | **0.0212** | | **0.0195** | **0.0195** | **0.0000** | **42.1381** | **42.1381** | **0.0133** | **0.0000** | **42.4714** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.3100e-003 | 0.0925 | 0.0253 | 2.0000e-004 | 4.9300e-003 | 5.8000e-004 | 5.5100e-003 | 1.4200e-003 | 5.6000e-004 | 1.9800e-003 | 0.0000 | 19.5801 | 19.5801 | 1.3100e-003 | 0.0000 | 19.6127 |
| Worker | 0.0157 | 0.0131 | 0.1422 | 3.7000e-004 | 0.0343 | 3.0000e-004 | 0.0346 | 9.1200e-003 | 2.8000e-004 | 9.3900e-003 | 0.0000 | 32.9912 | 32.9912 | 1.1300e-003 | 0.0000 | 33.0195 |
| **Total** | **0.0190** | **0.1056** | **0.1675** | **5.7000e-004** | **0.0393** | **8.8000e-004** | **0.0401** | **0.0105** | **8.4000e-004** | **0.0114** | **0.0000** | **52.5712** | **52.5712** | **2.4400e-003** | **0.0000** | **52.6322** |

## 3.2 Building Construction - 2019

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0319 | 0.1864 | 0.3373 | 4.7000e-004 | | 0.0212 | 0.0212 | | 0.0195 | 0.0195 | 0.0000 | 42.1380 | 42.1380 | 0.0133 | 0.0000 | 42.4713 |
| **Total** | **0.0319** | **0.1864** | **0.3373** | **4.7000e-004** | | **0.0212** | **0.0212** | | **0.0195** | **0.0195** | **0.0000** | **42.1380** | **42.1380** | **0.0133** | **0.0000** | **42.4713** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.3100e-003 | 0.0925 | 0.0253 | 2.0000e-004 | 4.9300e-003 | 5.8000e-004 | 5.5100e-003 | 1.4200e-003 | 5.6000e-004 | 1.9800e-003 | 0.0000 | 19.5801 | 19.5801 | 1.3100e-003 | 0.0000 | 19.6127 |
| Worker | 0.0157 | 0.0131 | 0.1422 | 3.7000e-004 | 0.0343 | 3.0000e-004 | 0.0346 | 9.1200e-003 | 2.8000e-004 | 9.3900e-003 | 0.0000 | 32.9912 | 32.9912 | 1.1300e-003 | 0.0000 | 33.0195 |
| **Total** | **0.0190** | **0.1056** | **0.1675** | **5.7000e-004** | **0.0393** | **8.8000e-004** | **0.0401** | **0.0105** | **8.4000e-004** | **0.0114** | **0.0000** | **52.5712** | **52.5712** | **2.4400e-003** | **0.0000** | **52.6322** |

## 3.2 Building Construction - 2020

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 7.1700e-003 | 0.0755 | 0.0823 | 1.2000e-004 | | 4.5600e-003 | 4.5600e-003 | | 4.2000e-003 | 4.2000e-003 | 0.0000 | 10.1082 | 10.1082 | 3.2700e-003 | 0.0000 | 10.1899 |
| **Total** | **7.1700e-003** | **0.0755** | **0.0823** | **1.2000e-004** | | **4.5600e-003** | **4.5600e-003** | | **4.2000e-003** | **4.2000e-003** | **0.0000** | **10.1082** | **10.1082** | **3.2700e-003** | **0.0000** | **10.1899** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.0000e-004 | 0.0208 | 5.6300e-003 | 5.0000e-005 | 1.2100e-003 | 1.0000e-004 | 1.3100e-003 | 3.5000e-004 | 9.0000e-005 | 4.4000e-004 | 0.0000 | 4.7698 | 4.7698 | 3.0000e-004 | 0.0000 | 4.7774 |
| Worker | 3.5500e-003 | 2.8600e-003 | 0.0316 | 9.0000e-005 | 8.4200e-003 | 7.0000e-005 | 8.4900e-003 | 2.2400e-003 | 7.0000e-005 | 2.3000e-003 | 0.0000 | 7.8440 | 7.8440 | 2.5000e-004 | 0.0000 | 7.8502 |
| **Total** | **4.2500e-003** | **0.0237** | **0.0372** | **1.4000e-004** | **9.6300e-003** | **1.7000e-004** | **9.8000e-003** | **2.5900e-003** | **1.6000e-004** | **2.7400e-003** | **0.0000** | **12.6138** | **12.6138** | **5.5000e-004** | **0.0000** | **12.6275** |

## 3.2 Building Construction - 2020

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 7.1700e-003 | 0.0415 | 0.0823 | 1.2000e-004 | | 4.5600e-003 | 4.5600e-003 | | 4.2000e-003 | 4.2000e-003 | 0.0000 | 10.1082 | 10.1082 | 3.2700e-003 | 0.0000 | 10.1899 |
| **Total** | **7.1700e-003** | **0.0415** | **0.0823** | **1.2000e-004** | | **4.5600e-003** | **4.5600e-003** | | **4.2000e-003** | **4.2000e-003** | **0.0000** | **10.1082** | **10.1082** | **3.2700e-003** | **0.0000** | **10.1899** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.0000e-004 | 0.0208 | 5.6300e-003 | 5.0000e-005 | 1.2100e-003 | 1.0000e-004 | 1.3100e-003 | 3.5000e-004 | 9.0000e-005 | 4.4000e-004 | 0.0000 | 4.7698 | 4.7698 | 3.0000e-004 | 0.0000 | 4.7774 |
| Worker | 3.5500e-003 | 2.8600e-003 | 0.0316 | 9.0000e-005 | 8.4200e-003 | 7.0000e-005 | 8.4900e-003 | 2.2400e-003 | 7.0000e-005 | 2.3000e-003 | 0.0000 | 7.8440 | 7.8440 | 2.5000e-004 | 0.0000 | 7.8502 |
| **Total** | **4.2500e-003** | **0.0237** | **0.0372** | **1.4000e-004** | **9.6300e-003** | **1.7000e-004** | **9.8000e-003** | **2.5900e-003** | **1.6000e-004** | **2.7400e-003** | **0.0000** | **12.6138** | **12.6138** | **5.5000e-004** | **0.0000** | **12.6275** |

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |
| Unmitigated | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |
| Total | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.547192 | 0.045177 | 0.202743 | 0.121510 | 0.016147 | 0.006143 | 0.019743 | 0.029945 | 0.002479 | 0.002270 | 0.005078 | 0.000682 | 0.000891 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 18.2868 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 18.2868 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| NaturalGas Mitigated | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |
| NaturalGas Unmitigated | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Single Family Housing | 109898 | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |
| **Total** | | **5.9000e-004** | **5.0600e-003** | **2.1500e-003** | **3.0000e-005** | | **4.1000e-004** | **4.1000e-004** | | **4.1000e-004** | **4.1000e-004** | **0.0000** | **5.8646** | **5.8646** | **1.1000e-004** | **1.1000e-004** | **5.8995** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Single Family Housing | 109898 | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |
| **Total** | | **5.9000e-004** | **5.0600e-003** | **2.1500e-003** | **3.0000e-005** | | **4.1000e-004** | **4.1000e-004** | | **4.1000e-004** | **4.1000e-004** | **0.0000** | **5.8646** | **5.8646** | **1.1000e-004** | **1.1000e-004** | **5.8995** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 32833.2 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| **Total** | | **18.2868** | **4.3000e-004** | **9.0000e-005** | **18.3242** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 32833.2 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| **Total** | | **18.2868** | **4.3000e-004** | **9.0000e-005** | **18.3242** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |
| Unmitigated | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 2.2500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0260 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0131 | 1.0400e-003 | 0.0254 | 6.0000e-005 | | 3.8200e-003 | 3.8200e-003 | | 3.8200e-003 | 3.8200e-003 | 0.4249 | 0.8165 | 1.2413 | 1.2700e-003 | 3.0000e-005 | 1.2816 |
| Landscaping | 1.2500e-003 | 4.8000e-004 | 0.0413 | 0.0000 | | 2.3000e-004 | 2.3000e-004 | | 2.3000e-004 | 2.3000e-004 | 0.0000 | 0.0674 | 0.0674 | 7.0000e-005 | 0.0000 | 0.0690 |
| **Total** | **0.0426** | **1.5200e-003** | **0.0668** | **6.0000e-005** | | **4.0500e-003** | **4.0500e-003** | | **4.0500e-003** | **4.0500e-003** | **0.4249** | **0.8839** | **1.3087** | **1.3400e-003** | **3.0000e-005** | **1.3506** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 2.2500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0260 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0131 | 1.0400e-003 | 0.0254 | 6.0000e-005 | | 3.8200e-003 | 3.8200e-003 | | 3.8200e-003 | 3.8200e-003 | 0.4249 | 0.8165 | 1.2413 | 1.2700e-003 | 3.0000e-005 | 1.2816 |
| Landscaping | 1.2500e-003 | 4.8000e-004 | 0.0413 | 0.0000 | | 2.3000e-004 | 2.3000e-004 | | 2.3000e-004 | 2.3000e-004 | 0.0000 | 0.0674 | 0.0674 | 7.0000e-005 | 0.0000 | 0.0690 |
| **Total** | **0.0426** | **1.5200e-003** | **0.0668** | **6.0000e-005** | | **4.0500e-003** | **4.0500e-003** | | **4.0500e-003** | **4.0500e-003** | **0.4249** | **0.8839** | **1.3087** | **1.3400e-003** | **3.0000e-005** | **1.3506** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| Unmitigated | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 0.260616 / 0.164301 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | | **2.9894** | **8.5600e-003** | **2.1000e-004** | **3.2674** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 0.260616 / 0.164301 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | | **2.9894** | **8.5600e-003** | **2.1000e-004** | **3.2674** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| Unmitigated | 0.9155 | 0.0541 | 0.0000 | 2.2681 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 4.51 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| **Total** | | **0.9155** | **0.0541** | **0.0000** | **2.2681** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 4.51 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| **Total** | | **0.9155** | **0.0541** | **0.0000** | **2.2681** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Crisler Vertical Construction

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 4.00 | Dwelling Unit | 0.46 | 7,200.00 | 11 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2021 |
| **Utility Company** | Los Angeles Department of Water & Power | | | | |
| **CO2 Intensity (lb/MWhr)** | 1227.89 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot size

Construction Phase - 15 months

Trips and VMT - 24 worker trips, 3 vendor rt day

Off-road Equipment - forklift, skid steer loader

Crisler Vertical Construction - Los Angeles-South Coast County, Summer

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 100.00 | 325.00 |
| tblConstructionPhase | PhaseEndDate | 6/6/2019 | 3/30/2020 |
| tblConstructionPhase | PhaseStartDate | 1/18/2019 | 1/1/2019 |
| tblLandUse | LotAcreage | 1.30 | 0.46 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Skid Steer Loaders |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | PhaseName | | Building Construction |
| tblOffRoadEquipment | UsageHours | 6.00 | 8.00 |
| tblTripsAndVMT | VendorTripNumber | 0.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 1.00 | 24.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 0.3894 | 3.3374 | 3.9258 | 8.0800e-003 | 0.3067 | 0.1690 | 0.4757 | 0.0822 | 0.1557 | 0.2379 | 0.0000 | 814.3305 | 814.3305 | 0.1333 | 0.0000 | 817.6639 |
| 2020 | 0.3557 | 3.0767 | 3.7884 | 7.9900e-003 | 0.3067 | 0.1479 | 0.4546 | 0.0822 | 0.1362 | 0.2184 | 0.0000 | 796.6815 | 796.6815 | 0.1317 | 0.0000 | 799.9729 |
| **Maximum** | **0.3894** | **3.3374** | **3.9258** | **8.0800e-003** | **0.3067** | **0.1690** | **0.4757** | **0.0822** | **0.1557** | **0.2379** | **0.0000** | **814.3305** | **814.3305** | **0.1333** | **0.0000** | **817.6639** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 0.3894 | 2.2108 | 3.9258 | 8.0800e-003 | 0.3067 | 0.1690 | 0.4757 | 0.0822 | 0.1557 | 0.2379 | 0.0000 | 814.3305 | 814.3305 | 0.1333 | 0.0000 | 817.6639 |
| 2020 | 0.3557 | 2.0143 | 3.7884 | 7.9900e-003 | 0.3067 | 0.1479 | 0.4546 | 0.0822 | 0.1362 | 0.2184 | 0.0000 | 796.6815 | 796.6815 | 0.1317 | 0.0000 | 799.9729 |
| **Maximum** | **0.3894** | **2.2108** | **3.9258** | **8.0800e-003** | **0.3067** | **0.1690** | **0.4757** | **0.0822** | **0.1557** | **0.2379** | **0.0000** | **814.3305** | **814.3305** | **0.1333** | **0.0000** | **817.6639** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **34.13** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |
| Energy | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| Mobile | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |
| **Total** | **1.2932** | **0.4767** | **3.4324** | **9.0300e-003** | **0.2880** | **0.3126** | **0.6007** | **0.0771** | **0.3124** | **0.3895** | **37.4677** | **478.2323** | **515.6999** | **0.1322** | **3.1900e-003** | **519.9566** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |
| Energy | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| Mobile | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |
| **Total** | **1.2932** | **0.4767** | **3.4324** | **9.0300e-003** | **0.2880** | **0.3126** | **0.6007** | **0.0771** | **0.3124** | **0.3895** | **37.4677** | **478.2323** | **515.6999** | **0.1322** | **3.1900e-003** | **519.9566** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Building Construction | Building Construction | 1/1/2019 | 3/30/2020 | 5 | 325 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Building Construction | Skid Steer Loaders | 1 | 8.00 | 65 | 0.37 |
| Building Construction | Forklifts | 1 | 8.00 | 89 | 0.20 |

### Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Building Construction | 5 | 24.00 | 6.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

## 3.2 Building Construction - 2019

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2445 | 2.5549 | 2.5844 | 3.5900e-003 | | 0.1623 | 0.1623 | | 0.1493 | 0.1493 | | 355.9331 | 355.9331 | 0.1126 | | 358.7484 |
| **Total** | **0.2445** | **2.5549** | **2.5844** | **3.5900e-003** | | **0.1623** | **0.1623** | | **0.1493** | **0.1493** | | **355.9331** | **355.9331** | **0.1126** | | **358.7484** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0249 | 0.6944 | 0.1843 | 1.5700e-003 | 0.0384 | 4.4300e-003 | 0.0428 | 0.0111 | 4.2300e-003 | 0.0153 | | 167.2888 | 167.2888 | 0.0107 | | 167.5568 |
| Worker | 0.1199 | 0.0881 | 1.1572 | 2.9200e-003 | 0.2683 | 2.3100e-003 | 0.2706 | 0.0711 | 2.1300e-003 | 0.0733 | | 291.1087 | 291.1087 | 0.0100 | | 291.3587 |
| **Total** | **0.1448** | **0.7825** | **1.3414** | **4.4900e-003** | **0.3067** | **6.7400e-003** | **0.3134** | **0.0822** | **6.3600e-003** | **0.0886** | | **458.3975** | **458.3975** | **0.0207** | | **458.9155** |

## 3.2 Building Construction - 2019

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2445 | 1.4283 | 2.5844 | 3.5900e-003 | | 0.1623 | 0.1623 | | 0.1493 | 0.1493 | 0.0000 | 355.9331 | 355.9331 | 0.1126 | | 358.7484 |
| **Total** | **0.2445** | **1.4283** | **2.5844** | **3.5900e-003** | | **0.1623** | **0.1623** | | **0.1493** | **0.1493** | **0.0000** | **355.9331** | **355.9331** | **0.1126** | | **358.7484** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0249 | 0.6944 | 0.1843 | 1.5700e-003 | 0.0384 | 4.4300e-003 | 0.0428 | 0.0111 | 4.2300e-003 | 0.0153 | | 167.2888 | 167.2888 | 0.0107 | | 167.5568 |
| Worker | 0.1199 | 0.0881 | 1.1572 | 2.9200e-003 | 0.2683 | 2.3100e-003 | 0.2706 | 0.0711 | 2.1300e-003 | 0.0733 | | 291.1087 | 291.1087 | 0.0100 | | 291.3587 |
| **Total** | **0.1448** | **0.7825** | **1.3414** | **4.4900e-003** | **0.3067** | **6.7400e-003** | **0.3134** | **0.0822** | **6.3600e-003** | **0.0886** | | **458.3975** | **458.3975** | **0.0207** | | **458.9155** |

## 3.2 Building Construction - 2020

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2239 | 2.3599 | 2.5703 | 3.6000e-003 | | 0.1427 | 0.1427 | | 0.1312 | 0.1312 | | 348.1996 | 348.1996 | 0.1126 | | 351.0149 |
| **Total** | **0.2239** | **2.3599** | **2.5703** | **3.6000e-003** | | **0.1427** | **0.1427** | | **0.1312** | **0.1312** | | **348.1996** | **348.1996** | **0.1126** | | **351.0149** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0213 | 0.6382 | 0.1672 | 1.5600e-003 | 0.0384 | 3.0000e-003 | 0.0414 | 0.0111 | 2.8700e-003 | 0.0139 | | 166.2148 | 166.2148 | 0.0101 | | 166.4684 |
| Worker | 0.1105 | 0.0786 | 1.0508 | 2.8300e-003 | 0.2683 | 2.2400e-003 | 0.2705 | 0.0711 | 2.0700e-003 | 0.0732 | | 282.2671 | 282.2671 | 8.9000e-003 | | 282.4896 |
| **Total** | **0.1318** | **0.7168** | **1.2181** | **4.3900e-003** | **0.3067** | **5.2400e-003** | **0.3119** | **0.0822** | **4.9400e-003** | **0.0871** | | **448.4819** | **448.4819** | **0.0190** | | **448.9580** |

## 3.2 Building Construction - 2020

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.2239 | 1.2975 | 2.5703 | 3.6000e-003 | | 0.1427 | 0.1427 | | 0.1312 | 0.1312 | 0.0000 | 348.1996 | 348.1996 | 0.1126 | | 351.0149 |
| **Total** | **0.2239** | **1.2975** | **2.5703** | **3.6000e-003** | | **0.1427** | **0.1427** | | **0.1312** | **0.1312** | **0.0000** | **348.1996** | **348.1996** | **0.1126** | | **351.0149** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0213 | 0.6382 | 0.1672 | 1.5600e-003 | 0.0384 | 3.0000e-003 | 0.0414 | 0.0111 | 2.8700e-003 | 0.0139 | | 166.2148 | 166.2148 | 0.0101 | | 166.4684 |
| Worker | 0.1105 | 0.0786 | 1.0508 | 2.8300e-003 | 0.2683 | 2.2400e-003 | 0.2705 | 0.0711 | 2.0700e-003 | 0.0732 | | 282.2671 | 282.2671 | 8.9000e-003 | | 282.4896 |
| **Total** | **0.1318** | **0.7168** | **1.2181** | **4.3900e-003** | **0.3067** | **5.2400e-003** | **0.3119** | **0.0822** | **4.9400e-003** | **0.0871** | | **448.4819** | **448.4819** | **0.0190** | | **448.9580** |

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |
| Unmitigated | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |
| Total | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.547192 | 0.045177 | 0.202743 | 0.121510 | 0.016147 | 0.006143 | 0.019743 | 0.029945 | 0.002479 | 0.002270 | 0.005078 | 0.000682 | 0.000891 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| NaturalGas Unmitigated | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Single Family Housing | 301.091 | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| **Total** | | **3.2500e-003** | **0.0278** | **0.0118** | **1.8000e-004** | | **2.2400e-003** | **2.2400e-003** | | **2.2400e-003** | **2.2400e-003** | | **35.4225** | **35.4225** | **6.8000e-004** | **6.5000e-004** | **35.6330** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Single Family Housing | 0.301091 | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| **Total** | | **3.2500e-003** | **0.0278** | **0.0118** | **1.8000e-004** | | **2.2400e-003** | **2.2400e-003** | | **2.2400e-003** | **2.2400e-003** | | **35.4225** | **35.4225** | **6.8000e-004** | **6.5000e-004** | **35.6330** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |
| Unmitigated | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0123 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.1426 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.0481 | 0.0830 | 2.0342 | 5.1900e-003 | | 0.3056 | 0.3056 | | 0.3056 | 0.3056 | 37.4677 | 72.0000 | 109.4677 | 0.1117 | 2.5400e-003 | 113.0189 |
| Landscaping | 0.0100 | 3.8200e-003 | 0.3307 | 2.0000e-005 | | 1.8200e-003 | 1.8200e-003 | | 1.8200e-003 | 1.8200e-003 | | 0.5942 | 0.5942 | 5.8000e-004 | | 0.6086 |
| **Total** | **1.2131** | **0.0868** | **2.3649** | **5.2100e-003** | | **0.3074** | **0.3074** | | **0.3074** | **0.3074** | **37.4677** | **72.5942** | **110.0619** | **0.1123** | **2.5400e-003** | **113.6275** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0123 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.1426 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.0481 | 0.0830 | 2.0342 | 5.1900e-003 | | 0.3056 | 0.3056 | | 0.3056 | 0.3056 | 37.4677 | 72.0000 | 109.4677 | 0.1117 | 2.5400e-003 | 113.0189 |
| Landscaping | 0.0100 | 3.8200e-003 | 0.3307 | 2.0000e-005 | | 1.8200e-003 | 1.8200e-003 | | 1.8200e-003 | 1.8200e-003 | | 0.5942 | 0.5942 | 5.8000e-004 | | 0.6086 |
| **Total** | **1.2131** | **0.0868** | **2.3649** | **5.2100e-003** | | **0.3074** | **0.3074** | | **0.3074** | **0.3074** | **37.4677** | **72.5942** | **110.0619** | **0.1123** | **2.5400e-003** | **113.6275** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Crisler Grading and Prep Construction

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 4.00 | Dwelling Unit | 0.46 | 7,200.00 | 11 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2021 |
| **Utility Company** | Los Angeles Department of Water & Power | | | | |
| **CO2 Intensity (lb/MWhr)** | 1227.89 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 20180 sf

Construction Phase - 12 months

Off-road Equipment - skid steer loader, excavator, drill rig, roller, paver8

Construction Off-road Equipment Mitigation -

Trips and VMT - 24 worker trips, 3 vendor

Crisler Grading and Prep Construction - Los Angeles-South Coast County, Annual

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 2.00 | 256.00 |
| tblLandUse | LotAcreage | 1.30 | 0.46 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblTripsAndVMT | VendorTripNumber | 0.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 23.00 | 24.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.1463 | 1.5322 | 1.4810 | 3.1700e-003 | 0.1349 | 0.0676 | 0.2025 | 0.0633 | 0.0622 | 0.1255 | 0.0000 | 286.1247 | 286.1247 | 0.0766 | 0.0000 | 288.0399 |
| **Maximum** | **0.1463** | **1.5322** | **1.4810** | **3.1700e-003** | **0.1349** | **0.0676** | **0.2025** | **0.0633** | **0.0622** | **0.1255** | **0.0000** | **286.1247** | **286.1247** | **0.0766** | **0.0000** | **288.0399** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.1463 | 1.5322 | 1.4810 | 3.1700e-003 | 0.0761 | 0.0676 | 0.1437 | 0.0310 | 0.0622 | 0.0932 | 0.0000 | 286.1244 | 286.1244 | 0.0766 | 0.0000 | 288.0396 |
| **Maximum** | **0.1463** | **1.5322** | **1.4810** | **3.1700e-003** | **0.0761** | **0.0676** | **0.1437** | **0.0310** | **0.0622** | **0.0932** | **0.0000** | **286.1244** | **286.1244** | **0.0766** | **0.0000** | **288.0396** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **43.58** | **0.00** | **29.03** | **51.04** | **0.00** | **25.74** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| 1 | 1-1-2019 | 3-31-2019 | 0.4214 | 0.4214 |
| 2 | 4-1-2019 | 6-30-2019 | 0.4253 | 0.4253 |
| 3 | 7-1-2019 | 9-30-2019 | 0.4300 | 0.4300 |
| | | Highest | 0.4300 | 0.4300 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |
| Energy | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 24.1514 | 24.1514 | 5.4000e-004 | 2.0000e-004 | 24.2237 |
| Mobile | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.9155 | 0.0000 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0827 | 2.9067 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | **0.0559** | **0.0723** | **0.2453** | **7.1000e-004** | **0.0490** | **4.9800e-003** | **0.0540** | **0.0131** | **4.9500e-003** | **0.0181** | **1.4231** | **84.1693** | **85.5924** | **0.0675** | **4.4000e-004** | **87.4122** |

## 2.2 Overall Operational

**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |
| Energy | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 24.1514 | 24.1514 | 5.4000e-004 | 2.0000e-004 | 24.2237 |
| Mobile | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.9155 | 0.0000 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0827 | 2.9067 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | **0.0559** | **0.0723** | **0.2453** | **7.1000e-004** | **0.0490** | **4.9800e-003** | **0.0540** | **0.0131** | **4.9500e-003** | **0.0181** | **1.4231** | **84.1693** | **85.5924** | **0.0675** | **4.4000e-004** | **87.4122** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/1/2019 | 12/24/2019 | 5 | 256 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Bore/Drill Rigs | 1 | 6.00 | 221 | 0.50 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Grading | Pavers | 1 | 6.00 | 130 | 0.42 |
| Grading | Rollers | 1 | 8.00 | 80 | 0.38 |
| Grading | Skid Steer Loaders | 1 | 8.00 | 65 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 9 | 24.00 | 6.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Grading - 2019

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0964 | 0.0000 | 0.0964 | 0.0530 | 0.0000 | 0.0530 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1276 | 1.4287 | 1.3168 | 2.6100e-003 | | 0.0668 | 0.0668 | | 0.0614 | 0.0614 | 0.0000 | 234.5606 | 234.5606 | 0.0742 | 0.0000 | 236.4159 |
| **Total** | **0.1276** | **1.4287** | **1.3168** | **2.6100e-003** | **0.0964** | **0.0668** | **0.1631** | **0.0530** | **0.0614** | **0.1144** | **0.0000** | **234.5606** | **234.5606** | **0.0742** | **0.0000** | **236.4159** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.2500e-003 | 0.0907 | 0.0248 | 2.0000e-004 | 4.8400e-003 | 5.7000e-004 | 5.4100e-003 | 1.4000e-003 | 5.5000e-004 | 1.9400e-003 | 0.0000 | 19.2050 | 19.2050 | 1.2800e-003 | 0.0000 | 19.2370 |
| Worker | 0.0154 | 0.0128 | 0.1395 | 3.6000e-004 | 0.0337 | 3.0000e-004 | 0.0340 | 8.9400e-003 | 2.7000e-004 | 9.2100e-003 | 0.0000 | 32.3591 | 32.3591 | 1.1100e-003 | 0.0000 | 32.3870 |
| **Total** | **0.0186** | **0.1035** | **0.1643** | **5.6000e-004** | **0.0385** | **8.7000e-004** | **0.0394** | **0.0103** | **8.2000e-004** | **0.0112** | **0.0000** | **51.5641** | **51.5641** | **2.3900e-003** | **0.0000** | **51.6240** |

### 3.2 Grading - 2019

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0376 | 0.0000 | 0.0376 | 0.0207 | 0.0000 | 0.0207 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1276 | 1.4287 | 1.3168 | 2.6100e-003 | | 0.0668 | 0.0668 | | 0.0614 | 0.0614 | 0.0000 | 234.5603 | 234.5603 | 0.0742 | 0.0000 | 236.4156 |
| **Total** | **0.1276** | **1.4287** | **1.3168** | **2.6100e-003** | **0.0376** | **0.0668** | **0.1043** | **0.0207** | **0.0614** | **0.0821** | **0.0000** | **234.5603** | **234.5603** | **0.0742** | **0.0000** | **236.4156** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 3.2500e-003 | 0.0907 | 0.0248 | 2.0000e-004 | 4.8400e-003 | 5.7000e-004 | 5.4100e-003 | 1.4000e-003 | 5.5000e-004 | 1.9400e-003 | 0.0000 | 19.2050 | 19.2050 | 1.2800e-003 | 0.0000 | 19.2370 |
| Worker | 0.0154 | 0.0128 | 0.1395 | 3.6000e-004 | 0.0337 | 3.0000e-004 | 0.0340 | 8.9400e-003 | 2.7000e-004 | 9.2100e-003 | 0.0000 | 32.3591 | 32.3591 | 1.1100e-003 | 0.0000 | 32.3870 |
| **Total** | **0.0186** | **0.1035** | **0.1643** | **5.6000e-004** | **0.0385** | **8.7000e-004** | **0.0394** | **0.0103** | **8.2000e-004** | **0.0112** | **0.0000** | **51.5641** | **51.5641** | **2.3900e-003** | **0.0000** | **51.6240** |

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |
| Unmitigated | 0.0127 | 0.0657 | 0.1763 | 6.1000e-004 | 0.0490 | 5.2000e-004 | 0.0495 | 0.0131 | 4.9000e-004 | 0.0136 | 0.0000 | 56.2274 | 56.2274 | 3.0000e-003 | 0.0000 | 56.3024 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |
| Total | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.547192 | 0.045177 | 0.202743 | 0.121510 | 0.016147 | 0.006143 | 0.019743 | 0.029945 | 0.002479 | 0.002270 | 0.005078 | 0.000682 | 0.000891 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 18.2868 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 18.2868 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| NaturalGas Mitigated | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |
| NaturalGas Unmitigated | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Single Family Housing | 109898 | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |
| **Total** | | **5.9000e-004** | **5.0600e-003** | **2.1500e-003** | **3.0000e-005** | | **4.1000e-004** | **4.1000e-004** | | **4.1000e-004** | **4.1000e-004** | **0.0000** | **5.8646** | **5.8646** | **1.1000e-004** | **1.1000e-004** | **5.8995** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Single Family Housing | 109898 | 5.9000e-004 | 5.0600e-003 | 2.1500e-003 | 3.0000e-005 | | 4.1000e-004 | 4.1000e-004 | | 4.1000e-004 | 4.1000e-004 | 0.0000 | 5.8646 | 5.8646 | 1.1000e-004 | 1.1000e-004 | 5.8995 |
| **Total** | | **5.9000e-004** | **5.0600e-003** | **2.1500e-003** | **3.0000e-005** | | **4.1000e-004** | **4.1000e-004** | | **4.1000e-004** | **4.1000e-004** | **0.0000** | **5.8646** | **5.8646** | **1.1000e-004** | **1.1000e-004** | **5.8995** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 32833.2 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| **Total** | | **18.2868** | **4.3000e-004** | **9.0000e-005** | **18.3242** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Single Family Housing | 32833.2 | 18.2868 | 4.3000e-004 | 9.0000e-005 | 18.3242 |
| **Total** | | **18.2868** | **4.3000e-004** | **9.0000e-005** | **18.3242** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |
| Unmitigated | 0.0426 | 1.5100e-003 | 0.0668 | 7.0000e-005 | | 4.0500e-003 | 4.0500e-003 | | 4.0500e-003 | 4.0500e-003 | 0.4249 | 0.8839 | 1.3087 | 1.3300e-003 | 3.0000e-005 | 1.3506 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 2.2500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0260 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0131 | 1.0400e-003 | 0.0254 | 6.0000e-005 | | 3.8200e-003 | 3.8200e-003 | | 3.8200e-003 | 3.8200e-003 | 0.4249 | 0.8165 | 1.2413 | 1.2700e-003 | 3.0000e-005 | 1.2816 |
| Landscaping | 1.2500e-003 | 4.8000e-004 | 0.0413 | 0.0000 | | 2.3000e-004 | 2.3000e-004 | | 2.3000e-004 | 2.3000e-004 | 0.0000 | 0.0674 | 0.0674 | 7.0000e-005 | 0.0000 | 0.0690 |
| **Total** | **0.0426** | **1.5200e-003** | **0.0668** | **6.0000e-005** | | **4.0500e-003** | **4.0500e-003** | | **4.0500e-003** | **4.0500e-003** | **0.4249** | **0.8839** | **1.3087** | **1.3400e-003** | **3.0000e-005** | **1.3506** |

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 2.2500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0260 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.0131 | 1.0400e-003 | 0.0254 | 6.0000e-005 | | 3.8200e-003 | 3.8200e-003 | | 3.8200e-003 | 3.8200e-003 | 0.4249 | 0.8165 | 1.2413 | 1.2700e-003 | 3.0000e-005 | 1.2816 |
| Landscaping | 1.2500e-003 | 4.8000e-004 | 0.0413 | 0.0000 | | 2.3000e-004 | 2.3000e-004 | | 2.3000e-004 | 2.3000e-004 | 0.0000 | 0.0674 | 0.0674 | 7.0000e-005 | 0.0000 | 0.0690 |
| **Total** | **0.0426** | **1.5200e-003** | **0.0668** | **6.0000e-005** | | **4.0500e-003** | **4.0500e-003** | | **4.0500e-003** | **4.0500e-003** | **0.4249** | **0.8839** | **1.3087** | **1.3400e-003** | **3.0000e-005** | **1.3506** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| Unmitigated | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 0.260616 / 0.164301 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | | **2.9894** | **8.5600e-003** | **2.1000e-004** | **3.2674** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Single Family Housing | 0.260616 / 0.164301 | 2.9894 | 8.5600e-003 | 2.1000e-004 | 3.2674 |
| **Total** | | **2.9894** | **8.5600e-003** | **2.1000e-004** | **3.2674** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| Unmitigated | 0.9155 | 0.0541 | 0.0000 | 2.2681 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 4.51 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| **Total** | | **0.9155** | **0.0541** | **0.0000** | **2.2681** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Single Family Housing | 4.51 | 0.9155 | 0.0541 | 0.0000 | 2.2681 |
| **Total** | | **0.9155** | **0.0541** | **0.0000** | **2.2681** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

### Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

### User Defined Equipment

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Crisler Grading and Prep Construction

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Single Family Housing | 4.00 | Dwelling Unit | 0.46 | 7,200.00 | 11 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 33 |
| **Climate Zone** | 9 | | | **Operational Year** | 2021 |
| **Utility Company** | Los Angeles Department of Water & Power | | | | |
| **CO2 Intensity (lb/MWhr)** | 1227.89 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 20180 sf

Construction Phase - 12 months

Off-road Equipment - skid steer loader, excavator, drill rig, roller, paver8

Construction Off-road Equipment Mitigation -

Trips and VMT - 24 worker trips, 3 vendor

Crisler Grading and Prep Construction - Los Angeles-South Coast County, Summer

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 2.00 | 256.00 |
| tblLandUse | LotAcreage | 1.30 | 0.46 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 0.00 | 1.00 |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblOffRoadEquipment | PhaseName | | Grading |
| tblTripsAndVMT | VendorTripNumber | 0.00 | 6.00 |
| tblTripsAndVMT | WorkerTripNumber | 23.00 | 24.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 1.1420 | 11.9441 | 11.6286 | 0.0249 | 1.0594 | 0.5283 | 1.5877 | 0.4960 | 0.4862 | 0.9822 | 0.0000 | 2,478.3881 | 2,478.3881 | 0.6598 | 0.0000 | 2,494.8837 |
| **Maximum** | **1.1420** | **11.9441** | **11.6286** | **0.0249** | **1.0594** | **0.5283** | **1.5877** | **0.4960** | **0.4862** | **0.9822** | **0.0000** | **2,478.3881** | **2,478.3881** | **0.6598** | **0.0000** | **2,494.8837** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 1.1420 | 11.9441 | 11.6286 | 0.0249 | 0.6003 | 0.5283 | 1.1286 | 0.2436 | 0.4862 | 0.7298 | 0.0000 | 2,478.3881 | 2,478.3881 | 0.6598 | 0.0000 | 2,494.8837 |
| **Maximum** | **1.1420** | **11.9441** | **11.6286** | **0.0249** | **0.6003** | **0.5283** | **1.1286** | **0.2436** | **0.4862** | **0.7298** | **0.0000** | **2,478.3881** | **2,478.3881** | **0.6598** | **0.0000** | **2,494.8837** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **43.34** | **0.00** | **28.92** | **50.89** | **0.00** | **25.70** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |
| Energy | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| Mobile | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |
| **Total** | **1.2932** | **0.4767** | **3.4324** | **9.0300e-003** | **0.2880** | **0.3126** | **0.6007** | **0.0771** | **0.3124** | **0.3895** | **37.4677** | **478.2323** | **515.6999** | **0.1322** | **3.1900e-003** | **519.9566** |

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |
| Energy | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| Mobile | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |
| **Total** | **1.2932** | **0.4767** | **3.4324** | **9.0300e-003** | **0.2880** | **0.3126** | **0.6007** | **0.0771** | **0.3124** | **0.3895** | **37.4677** | **478.2323** | **515.6999** | **0.1322** | **3.1900e-003** | **519.9566** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Grading | Grading | 1/1/2019 | 12/24/2019 | 5 | 256 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

### OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Grading | Bore/Drill Rigs | 1 | 6.00 | 221 | 0.50 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Grading | Pavers | 1 | 6.00 | 130 | 0.42 |
| Grading | Rollers | 1 | 8.00 | 80 | 0.38 |
| Grading | Skid Steer Loaders | 1 | 8.00 | 65 | 0.37 |

### Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Grading | 9 | 24.00 | 6.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Grading - 2019

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.7528 | 0.0000 | 0.7528 | 0.4138 | 0.0000 | 0.4138 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.9972 | 11.1616 | 10.2871 | 0.0204 | | 0.5216 | 0.5216 | | 0.4798 | 0.4798 | | 2,019.9906 | 2,019.9906 | 0.6391 | | 2,035.9682 |
| **Total** | **0.9972** | **11.1616** | **10.2871** | **0.0204** | **0.7528** | **0.5216** | **1.2743** | **0.4138** | **0.4798** | **0.8936** | | **2,019.9906** | **2,019.9906** | **0.6391** | | **2,035.9682** |

## 3.2 Grading - 2019

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0249 | 0.6944 | 0.1843 | 1.5700e-003 | 0.0384 | 4.4300e-003 | 0.0428 | 0.0111 | 4.2300e-003 | 0.0153 | | 167.2888 | 167.2888 | 0.0107 | | 167.5568 |
| Worker | 0.1199 | 0.0881 | 1.1572 | 2.9200e-003 | 0.2683 | 2.3100e-003 | 0.2706 | 0.0711 | 2.1300e-003 | 0.0733 | | 291.1087 | 291.1087 | 0.0100 | | 291.3587 |
| **Total** | **0.1448** | **0.7825** | **1.3414** | **4.4900e-003** | **0.3067** | **6.7400e-003** | **0.3134** | **0.0822** | **6.3600e-003** | **0.0886** | | **458.3975** | **458.3975** | **0.0207** | | **458.9155** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 0.2936 | 0.0000 | 0.2936 | 0.1614 | 0.0000 | 0.1614 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.9972 | 11.1616 | 10.2871 | 0.0204 | | 0.5216 | 0.5216 | | 0.4798 | 0.4798 | 0.0000 | 2,019.9906 | 2,019.9906 | 0.6391 | | 2,035.9682 |
| **Total** | **0.9972** | **11.1616** | **10.2871** | **0.0204** | **0.2936** | **0.5216** | **0.8151** | **0.1614** | **0.4798** | **0.6412** | **0.0000** | **2,019.9906** | **2,019.9906** | **0.6391** | | **2,035.9682** |

### 3.2 Grading - 2019

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0249 | 0.6944 | 0.1843 | 1.5700e-003 | 0.0384 | 4.4300e-003 | 0.0428 | 0.0111 | 4.2300e-003 | 0.0153 | | 167.2888 | 167.2888 | 0.0107 | | 167.5568 |
| Worker | 0.1199 | 0.0881 | 1.1572 | 2.9200e-003 | 0.2683 | 2.3100e-003 | 0.2706 | 0.0711 | 2.1300e-003 | 0.0733 | | 291.1087 | 291.1087 | 0.0100 | | 291.3587 |
| **Total** | **0.1448** | **0.7825** | **1.3414** | **4.4900e-003** | **0.3067** | **6.7400e-003** | **0.3134** | **0.0822** | **6.3600e-003** | **0.0886** | | **458.3975** | **458.3975** | **0.0207** | | **458.9155** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |
| Unmitigated | 0.0769 | 0.3621 | 1.0557 | 3.6400e-003 | 0.2880 | 3.0000e-003 | 0.2910 | 0.0771 | 2.8000e-003 | 0.0799 | | 370.2155 | 370.2155 | 0.0192 | | 370.6961 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Single Family Housing | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |
| Total | 38.08 | 39.64 | 34.48 | 129,129 | 129,129 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Single Family Housing | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 0.547192 | 0.045177 | 0.202743 | 0.121510 | 0.016147 | 0.006143 | 0.019743 | 0.029945 | 0.002479 | 0.002270 | 0.005078 | 0.000682 | 0.000891 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| NaturalGas Unmitigated | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Single Family Housing | 301.091 | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| **Total** | | **3.2500e-003** | **0.0278** | **0.0118** | **1.8000e-004** | | **2.2400e-003** | **2.2400e-003** | | **2.2400e-003** | **2.2400e-003** | | **35.4225** | **35.4225** | **6.8000e-004** | **6.5000e-004** | **35.6330** |

### 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Single Family Housing | 0.301091 | 3.2500e-003 | 0.0278 | 0.0118 | 1.8000e-004 | | 2.2400e-003 | 2.2400e-003 | | 2.2400e-003 | 2.2400e-003 | | 35.4225 | 35.4225 | 6.8000e-004 | 6.5000e-004 | 35.6330 |
| **Total** | | **3.2500e-003** | **0.0278** | **0.0118** | **1.8000e-004** | | **2.2400e-003** | **2.2400e-003** | | **2.2400e-003** | **2.2400e-003** | | **35.4225** | **35.4225** | **6.8000e-004** | **6.5000e-004** | **35.6330** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |
| Unmitigated | 1.2131 | 0.0868 | 2.3649 | 5.2100e-003 | | 0.3074 | 0.3074 | | 0.3074 | 0.3074 | 37.4677 | 72.5942 | 110.0619 | 0.1123 | 2.5400e-003 | 113.6275 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0123 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.1426 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.0481 | 0.0830 | 2.0342 | 5.1900e-003 | | 0.3056 | 0.3056 | | 0.3056 | 0.3056 | 37.4677 | 72.0000 | 109.4677 | 0.1117 | 2.5400e-003 | 113.0189 |
| Landscaping | 0.0100 | 3.8200e-003 | 0.3307 | 2.0000e-005 | | 1.8200e-003 | 1.8200e-003 | | 1.8200e-003 | 1.8200e-003 | | 0.5942 | 0.5942 | 5.8000e-004 | | 0.6086 |
| **Total** | **1.2131** | **0.0868** | **2.3649** | **5.2100e-003** | | **0.3074** | **0.3074** | | **0.3074** | **0.3074** | **37.4677** | **72.5942** | **110.0619** | **0.1123** | **2.5400e-003** | **113.6275** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.0123 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.1426 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 1.0481 | 0.0830 | 2.0342 | 5.1900e-003 | | 0.3056 | 0.3056 | | 0.3056 | 0.3056 | 37.4677 | 72.0000 | 109.4677 | 0.1117 | 2.5400e-003 | 113.0189 |
| Landscaping | 0.0100 | 3.8200e-003 | 0.3307 | 2.0000e-005 | | 1.8200e-003 | 1.8200e-003 | | 1.8200e-003 | 1.8200e-003 | | 0.5942 | 0.5942 | 5.8000e-004 | | 0.6086 |
| **Total** | **1.2131** | **0.0868** | **2.3649** | **5.2100e-003** | | **0.3074** | **0.3074** | | **0.3074** | **0.3074** | **37.4677** | **72.5942** | **110.0619** | **0.1123** | **2.5400e-003** | **113.6275** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# AIR QUALITY and GHG IMPACT ANALYSES

# CRISLER WAY RESIDENCES PROJECT

# LOS ANGELES, CALIFORNIA

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Date:

December 14, 2018

Project No.: P18-046 A

# CLIMATE AND METEOROLOGY

West Los Angeles is located near the western edge of the Los Angeles Coastal Plain within the South Coast Air Basin. The air basin is bounded by the Pacific Ocean to the west, the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and San Diego County to the south. The terrain, abundant sunshine, and temperature inversions, combined with high levels of human activity, cause the South Coast Air Basin to be naturally conducive to the formation of air pollution. Prevailing daytime winds come to Beverly Hills from the Pacific Ocean. Because prevailing winds entering the basin follow the southern edge of the Santa Monica Mountains, West Los Angeles is typically upwind of much of the air basin and typically has better air quality than most areas located further inland.

The weather is characterized by mild winters, when most rainfall occurs, and warm, dry summers. Average daytime temperature ranges from highs of about 80 degrees (F) in July, August and September, to 60 degrees in January and February. The warmest periods occur when Santa Ana conditions cause breezes to flow offshore from the inland deserts. Rainfall typically averages around 13 inches per year.

The topography and climate of Southern California combine to produce unhealthful air quality in the SCAB. Low temperature inversions, light winds, shallow vertical mixing, and extensive sunlight, in conjunction with topographical features such as adjacent mountain ranges that hinder dispersion of air pollutants, combine to create degraded quality, especially in inland valleys of the basin.

# AIR QUALITY SETTING

## AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule, which extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted in 1997 for these pollutants.

Planning and enforcement of the federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that the U.S. EPA did not require specific congressional authorization to adopt national clean air standards.[1] The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their required attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to “non-attainment” for the 8-hour ozone standard.

[1] Whitman v. American Trucking Associations, Inc., 531 U.S. 457 (2001)

## Table 1

# Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards [1] | | National Standards [2] | | |
|---|---|---|---|---|---|---|
| | | Concentration [3] | Method [4] | Primary [3,5] | Secondary [3,6] | Method [7] |
| **Ozone ($O_3$)[8]** | 1 Hour | 0.09 ppm (180 µg/m$^3$) | Ultraviolet Photometry | — | Same as Primary Standard | Ultraviolet Photometry |
| | 8 Hour | 0.070 ppm (137 µg/m$^3$) | | 0.070 ppm (137 µg/m$^3$) | | |
| **Respirable Particulate Matter (PM10)[9]** | 24 Hour | 50 µg/m$^3$ | Gravimetric or Beta Attenuation | 150 µg/m$^3$ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 µg/m$^3$ | | — | | |
| **Fine Particulate Matter (PM2.5)[9]** | 24 Hour | — | — | 35 µg/m$^3$ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 12 µg/m$^3$ | Gravimetric or Beta Attenuation | 12.0 µg/m$^3$ | 15 µg/m$^3$ | |
| **Carbon Monoxide (CO)** | 1 Hour | 20 ppm (23 mg/m$^3$) | Non-Dispersive Infrared Photometry (NDIR) | 35 ppm (40 mg/m$^3$) | — | Non-Dispersive Infrared Photometry (NDIR) |
| | 8 Hour | 9.0 ppm (10 mg/m$^3$) | | 9 ppm (10 mg/m$^3$) | — | |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/m$^3$) | | — | — | |
| **Nitrogen Dioxide ($NO_2$)[10]** | 1 Hour | 0.18 ppm (339 µg/m$^3$) | Gas Phase Chemiluminescence | 100 ppb (188 µg/m$^3$) | — | Gas Phase Chemiluminescence |
| | Annual Arithmetic Mean | 0.030 ppm (57 µg/m$^3$) | | 0.053 ppm (100 µg/m$^3$) | Same as Primary Standard | |
| **Sulfur Dioxide ($SO_2$)[11]** | 1 Hour | 0.25 ppm (655 µg/m$^3$) | Ultraviolet Fluorescence | 75 ppb (196 µg/m$^3$) | — | Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method) |
| | 3 Hour | — | | — | 0.5 ppm (1300 µg/m$^3$) | |
| | 24 Hour | 0.04 ppm (105 µg/m$^3$) | | 0.14 ppm (for certain areas)[11] | — | |
| | Annual Arithmetic Mean | — | | 0.030 ppm (for certain areas)[11] | — | |
| **Lead[12,13]** | 30 Day Average | 1.5 µg/m$^3$ | Atomic Absorption | — | — | High Volume Sampler and Atomic Absorption |
| | Calendar Quarter | — | | 1.5 µg/m$^3$ (for certain areas)[12] | Same as Primary Standard | |
| | Rolling 3-Month Average | — | | 0.15 µg/m$^3$ | | |
| **Visibility Reducing Particles[14]** | 8 Hour | See footnote 14 | Beta Attenuation and Transmittance through Filter Tape | **No National Standards** | | |
| **Sulfates** | 24 Hour | 25 µg/m$^3$ | Ion Chromatography | | | |
| **Hydrogen Sulfide** | 1 Hour | 0.03 ppm (42 µg/m$^3$) | Ultraviolet Fluorescence | | | |
| **Vinyl Chloride[12]** | 24 Hour | 0.01 ppm (26 µg/m$^3$) | Gas Chromatography | | | |

**See footnotes on next page ...**

## Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour $SO_2$ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 $SO_2$ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

## Table 2
## Health Effects of Major Criteria Pollutants

| Pollutants | Sources | Primary Effects |
|---|---|---|
| Carbon Monoxide (CO) | • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust.<br>• Natural events, such as decomposition of organic matter. | • Reduced tolerance for exercise.<br>• Impairment of mental function.<br>• Impairment of fetal development.<br>• Death at high levels of exposure.<br>• Aggravation of some heart diseases (angina). |
| Nitrogen Dioxide ($NO_2$) | • Motor vehicle exhaust.<br>• High temperature stationary combustion.<br>• Atmospheric reactions. | • Aggravation of respiratory illness.<br>• Reduced visibility.<br>• Reduced plant growth.<br>• Formation of acid rain. |
| Ozone ($O_3$) | • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. | • Aggravation of respiratory and cardiovascular diseases.<br>• Irritation of eyes.<br>• Impairment of cardiopulmonary function.<br>• Plant leaf injury. |
| Lead (Pb) | • Contaminated soil. | • Impairment of blood function and nerve construction.<br>• Behavioral and hearing problems in children. |
| Respirable Particulate Matter (PM-10) | • Stationary combustion of solid fuels.<br>• Construction activities.<br>• Industrial processes.<br>• Atmospheric chemical reactions. | • Reduced lung function.<br>• Aggravation of the effects of gaseous pollutants.<br>• Aggravation of respiratory and cardio respiratory diseases.<br>• Increased cough and chest discomfort.<br>• Soiling.<br>• Reduced visibility. |
| Fine Particulate Matter (PM-2.5) | • Fuel combustion in motor vehicles, equipment, and industrial sources.<br>• Residential and agricultural burning.<br>• Industrial processes.<br>• Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics. | • Increases respiratory disease.<br>• Lung damage.<br>• Cancer and premature death.<br>• Reduces visibility and results in surface soiling. |
| Sulfur Dioxide ($SO_2$) | • Combustion of sulfur-containing fossil fuels.<br>• Smelting of sulfur-bearing metal ores.<br>• Industrial processes. | • Aggravation of respiratory diseases (asthma, emphysema).<br>• Reduced lung function.<br>• Irritation of eyes.<br>• Reduced visibility.<br>• Plant injury.<br>• Deterioration of metals, textiles, leather, finishes, coatings, etc. |

Source: California Air Resources Board, 2002.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted in 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the exposure period for the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide ($NO_{2)}$ that is more stringent than the corresponding federal standard, and strengthened the state one-hour $NO_2$ standard.

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted. In December, 2012, the federal annual standard for PM-2.5 was reduced from 15 $\mu g/m^3$ to 12 $\mu g/m^3$ which matches the California AAQS. The severity of the basin's non-attainment status for PM-2.5 may be increased by this action and thus require accelerated planning for future PM-2.5 attainment.

In response to continuing evidence that ozone exposure at levels just meeting federal clean air standards is demonstrably unhealthful, EPA had proposed a further strengthening of the 8-hour standard. A new 8-hour ozone standard was adopted in 2015 after extensive analysis and public input. The adopted national 8-hour ozone standard is 0.07 ppm which matches the current California standard. It will require three years of ambient data collection, then 2 years of non-attainment findings and planning protocol adoption, then several years of plan development and approval. Final air quality plans for the new standard are likely to be adopted around 2022. Ultimate attainment of the new standard in ozone problem areas such as Southern California might be after 2025.

In 2010 a new federal one-hour primary standard for nitrogen dioxide ($NO_2$) was adopted. This standard is more stringent than the existing state standard. Based upon air quality monitoring data in the South Coast Air Basin, the California Air Resources Board has requested the EPA to designate the basin as being in attainment for this standard. The federal standard for sulfur dioxide ($SO_2$) was also recently revised. However, with minimal combustion of coal and mandatory use of low sulfur fuels in California, $SO_2$ is typically not a problem pollutant.

## BASELINE AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the project area are best documented from measurements made by the SCAQMD. The South Coast AQMD operates an air quality monitoring station in West Los Angeles at the VA Hospital which monitors regional air pollutants such as ozone as well as species such as carbon monoxide (CO) and nitrogen oxides (NOx). Measurements of 10-micron diameter or less particulate matter (PM-10) are not made at the West Los Angeles site and are not available from any AQMD site that would be representative. The geographically closest air monitoring station for PM-10 or PM-2.5 data is in downtown Los Angeles. Table 3 provides the last five years of data from these resources.

Ozone, the primary ingredient in photochemical smog, is an important pollution problem in the Los Angeles basin. However, near Western Los Angeles, there have been only four violations in the past five years of the federal 8-hour standard. Three days in the last five years have exceeded the California one-hour standard. The state 8-hour standard has been exceeded only eleven times in the last five years. The hourly ozone maximum was highest in 2014, but there has been some improvement since. The Western Los Angeles ozone air quality problem is much less severe than in inland valleys of the basin.

The downtown Los Angeles area experiences occasional violations of standards for 10-micron diameter respirable particulate matter (PM-10). High dust levels occur during Santa Ana wind conditions, as well as from the trapped accumulation of soot, roadway dust and byproducts of atmospheric chemical reactions during warm season days with poor visibility. In downtown Los Angeles, approximately six percent of all days in the recent past experienced a violation of the State PM-10 standard. The three-times less stringent federal PM-10 standard has not been exceeded in the past five years.

In downtown Los Angeles, the current federal 24-hour AAQS for ultra-fine particulate matter (PM-2.5) has been exceeded slightly more than one percent of all days since 2012.

More localized pollutants such as carbon monoxide, nitrogen oxides, etc. are low near the project site because background levels never exceed allowable levels. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants such as NOx or CO without any threat of violating applicable AAQS.

## Table 3

### Project Area Air Quality Monitoring Summary 2012-2016
**(Days Standards Were Exceeded and Maximum Observed Levels)**

| Pollutant/Standard | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| **Ozone** | | | | | |
| 1-Hour > 0.09 ppm (S) | 0 | 0 | 1 | 2 | 0 |
| 8-Hour > 0.07 ppm (S) | 1 | 1 | 6 | 3 | 2 |
| 8- Hour > 0.075 ppm (F) | 0 | 0 | 4 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.093 | 0.088 | 0.116 | 0.102 | 0.085 |
| Max. 8-Hour Conc. (ppm) | 0.073 | 0.075 | 0.094 | 0.072 | 0.073 |
| **Carbon Monoxide** | | | | | |
| 8-Hour > 9. ppm (S, F) | 0 | 0 | 0 | 0 | 0 |
| Max 8-Hour Conc. (ppm) | 1.4 | 1.3 | 1.3 | 1.4 | 1.1 |
| **Nitrogen Dioxide** | | | | | |
| 1-Hour > 0.18 ppm (S) | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.061 | 0.051 | 0.064 | 0.068 | 0.054 |
| **Respirable Particulates (PM-10) [1]** | | | | | |
| 24-Hour > 50 $\mu g/m^3$ (S) | 4/60 | 1/60 | 3/58 | 26/335 | 32/359 |
| 24-Hour > 150 $\mu g/m^3$ (F) | 0/60 | 0/60 | 0/58 | 0/335 | 0/359 |
| Max. 24-Hr. Conc. ($\mu g/m^3$) | 80. | 57. | 66. | 88. | 87. |
| **Fine Particulates (PM-2.5) [1]** | | | | | |
| 24-Hour > 35 $\mu g/m^3$ (F) | 4/342 | 1/344 | 6/341 | 7/342 | 6/341 |
| Max. 24-Hr. Conc. ($\mu g/m^3$) | 58.7 | 43.1 | 59.9 | 56.4 | 59.9 |

S=State Standard
F=Federal Standard

(S) - State ambient standard; (F) - Federal ambient standard

Source: SCAQMD West Los Angeles Station (VA Hospital)
[1] = downtown Los Angeles

## AIR QUALITY PLANNING

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAAA) required that all states with air-sheds with "serious" or worse ozone problems submit a revision to the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised and approved over the past decade. The most current regional attainment emissions forecast for ozone precursors (ROG and NOx) and for carbon monoxide (CO) and for particulate matter are shown in Table 4. Substantial reductions in emissions of ROG, NOx and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air "blueprint" in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. As previously noted, the attainment date was to "slip" from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 requires control technologies that do not exist yet, the SCAQMD requested a voluntary "bump-up" from a "severe non-attainment" area to an "extreme non-attainment" designation for ozone. The extreme designation will allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on "black-box" measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from "severe-17" to "extreme." This reclassification sets a later attainment deadline (2024), but also requires the air basin to adopt even more stringent emissions controls.

**Table 4**
**South Coast Air Basin Emissions Forecasts (Emissions in tons/day)**

| Pollutant | 2015[a] | 2020[b] | 2025[b] | 2030[b] |
|---|---|---|---|---|
| **NOx** | 357 | 289 | 266 | 257 |
| **VOC** | 400 | 393 | 393 | 391 |
| **PM-10** | 161 | 165 | 170 | 172 |
| **PM-2.5** | 67 | 68 | 70 | 71 |

[a]2015 Base Year.
[b]With current emissions reduction programs and adopted growth forecasts.
Source: California Air Resources Board, 2013 Almanac of Air Quality[i]

In other air quality attainment plan reviews, EPA had disapproved part of the SCAB PM-2.5 attainment plan included in the AQMP. EPA stated that the current attainment plan relied on PM-2.5 control regulations that had not yet been approved or implemented. It was expected that a number of rules that were pending approval would remove the identified deficiencies. If these issues were not resolved within the next several years, federal funding sanctions for transportation projects could result. The 2012 AQMP included in the current California State Implementation Plan (SIP) was expected to remedy identified PM-2.5 planning deficiencies.

The federal Clean Air Act requires that non-attainment air basins have EPA approved attainment plans in place. This requirement includes the federal one-hour ozone standard even though that standard was revoked almost ten years ago. There was no approved attainment plan for the one-hour federal standard at the time of revocation. Through a legal quirk, the SCAQMD is now required to develop an AQMP for the long since revoked one-hour federal ozone standard. Because the current SIP for the basin contains a number of control measures for the 8-hour ozone standard that are equally effective for one-hour levels, the 2012 AQMP was believed to satisfy hourly attainment planning requirements.

AQMPs are required to be updated every three years. The 2012 AQMP was adopted in early 2013. An updated AQMP was required for completion in 2016. The 2016 AQMP was adopted by the SCAQMD Board in March, 2017, and has been submitted the California Air Resources Board for forwarding to the EPA. The 2016 AQMP acknowledges that motor vehicle emissions have been effectively controlled and that reductions in NOx, the continuing ozone problem pollutant, may need to come from major stationary sources (power plants, refineries, landfill flares, etc.) . The current attainment deadlines for all federal non-attainment pollutants are now as follows:

| | |
|---|---|
| 8-hour ozone (70 ppb) | 2032 |
| Annual PM-2.5 (12 $\mu g/m^3$) | 2025 |
| 8-hour ozone (75 ppb) | 2024 (old standard) |
| 1-hour ozone (120 ppb) | 2023 (rescinded standard) |
| 24-hour PM-2.5 (35 $\mu g/m^3$) | 2019 |

The key challenge is that NOx emission levels, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the above deadlines to be met. Unless additional stringent NOx control measures are adopted and implemented, ozone attainment goals may not be met.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing residential use projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

# AIR QUALITY IMPACT

## STANDARDS OF SIGNIFICANCE

Air quality impacts are considered "significant" if they cause clean air standards to be violated where they are currently met, or if they "substantially" contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following five tests of air quality impact significance. A project would have a potentially significant impact if it:

a. Conflicts with or obstructs implementation of the applicable air quality plan.

b. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.

c. Results in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

d. Exposes sensitive receptors to substantial pollutant concentrations.

e. Creates objectionable odors affecting a substantial number of people.

### Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

### Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based upon a

specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects with daily emissions that exceed any of the following emission thresholds are recommended by the SCAQMD to be considered significant under CEQA guidelines.

**Table 5**
**Daily Emissions Thresholds**

| Pollutant | Construction | Operations |
|---|---|---|
| ROG | 75 | 55 |
| NOx | 100 | 55 |
| CO | 550 | 550 |
| PM-10 | 150 | 150 |
| PM-2.5 | 55 | 55 |
| SOx | 150 | 150 |
| Lead | 3 | 3 |

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

### Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation

- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.

- Project could generate vehicle trips that cause a CO hot spot.

## CONSTRUCTION ACTIVITY IMPACTS

CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

Although exhaust emissions will result from on and off-site equipment, the exact types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. Estimated construction emissions were modeled using CalEEMod2016.3.2 to identify maximum daily emissions for each pollutant during project construction.

The proposed project entails construction of 4 single family homes on an approximate 0.5 acre lot. Grading will be balanced on-site. The modeled prototype construction equipment fleet and schedule is shown in Table 6 and was obtained from the project engineer.

**Table 6**
**Crisler Way 4-Residences**
**Construction Activity Off-Road Equipment**

| Phase Name and Duration | Equipment |
|---|---|
| Site Preparation, Grading, and Roadway Improvement (12 months) | 1 skid steer loader |
| | 1 excavator |
| | 1 bore/drill rig |
| | 1 roller |
| | 1 paver |
| Vertical Construction (15 months) | 1 rough terrain forklift |
| | 1 skid steer loader |

Utilizing the indicated equipment fleet and durations shown in Table 6 the following worst-case daily construction emissions are calculated by CalEEMod and are listed in Table 7.

**Table 7**
**Construction Activity Emissions**
**Maximum Daily Emissions (pounds/day)**

| Maximal Construction Emissions | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
|---|---|---|---|---|---|---|
| Year 2019 Site Prep/Grade | 1.1 | 11.9 | 11.6 | 0.0 | 1.6 | 1.0 |
| Year 2019 Vertical Construction | 0.4 | 3.3 | 3.9 | 0.0 | 0.5 | 0.2 |
| Year 2020 Vertical Construction | 0.4 | 3.1 | 3.9 | 0.0 | 0.4 | 0.2 |
| **Total Year 2019** | **1.5** | **15.2** | **15.5** | **0.0** | **2.1** | **1.2** |
| **Total Year 2020** | **0.4** | **3.1** | **3.9** | **0.0** | **0.4** | **0.2** |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |

*Caleemod output in appendix. Only unmitigated conditions were necessary and are reflected in this report. Possible mitigation modeling is exclusively for dust control (watering site 2-3 times per day) if necessary and only effects particulate emissions.

Peak daily construction activity emissions are estimated be below SCAQMD CEQA thresholds without the need for added mitigation.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

## LOCALIZED SIGNIFICANCE THRESHOLDS

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for a project is optional. For the proposed project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500 meter source-receptor distances. For this project the nearest sensitive receptors are modeled with the most conservative distance of 25 meters.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for 1, 2 and 5 acre sites for varying distances. For this project, the most stringent thresholds for a 1-acre site were applied.

For an LST analysis, only emissions occurring on-site are evaluated while emissions occurring off-site such as those associated with on-road truck haul for vendor deliveries or on-road construction crew commuting are excluded. The following thresholds and emissions in Table 8 are determined (pounds per day):

**Table 8**
**LST and Project Emissions (pounds/day)**

| LST 1.0 acres/25 meters NW Coastal LA County | CO | NOx | PM-10 | PM-2.5 |
|---|---|---|---|---|
| **Max Allowable On-Site Emissions** | 1,531 | 103 | 4 | 3 |
| Max Project Emissions 2019 | 16 | 15 | 2 | 1 |
| Max Project Emissions 2020 | 4 | 3 | 1 | 1 |

CalEEMod Output in Appendix

LSTs were compared to the maximum daily construction activities. As seen above, emissions will meet the LST for construction thresholds without the application of any mitigation measures. LST impacts are less-than-significant.

## OPERATIONAL IMPACTS

Operational emissions were calculated using CalEEMod2016.3.2 for an assumed project build-out year of 2021 as a target for full occupancy. The project would generate 38 daily weekday trips and 40 Saturday trips using default trip generation data in CalEEMod for single family housing in the project area. In addition to mobile sources from vehicles, general development causes smaller amounts of "area source" air pollution to be generated from on-site energy consumption (primarily landscaping) and from off-site electrical generation (lighting). These sources represent a minimal percentage of the total project NOx and CO burdens, and a few percent of other pollutants. The inclusion of such emissions adds negligibly to the total significant project-related emissions burden as shown in Table 9.

**Table 9**
**Daily Operational Impacts**

| | Operational Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| **Source** | **ROG** | **NOx** | **CO** | **$SO_2$** | **PM-10** | **PM-2.5** |
| Area | 1.2 | 0.1 | 2.4 | 0.0 | 0.3 | 0.3 |
| Energy | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mobile | 0.1 | 0.4 | 1.0 | 0.0 | 0.3 | 0.1 |
| **Total** | **1.3** | **0.5** | **3.4** | **0.0** | **0.6** | **0.4** |
| SCAQMD Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Exceeds Threshold? | No | No | No | No | No | No |

Source: CalEEMod2016.3.2 Output in Appendix

As seen in Table 9 the project would not cause any operational emissions to exceed their respective SCAQMD CEQA significance thresholds. Operational emission impacts are judged to be less than significant. No impact mitigation for operational activity emissions is considered necessary to support this finding.

# CONSTRUCTION EMISSIONS MINIMIZATION

Construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds. Nevertheless, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air basin and proximity to existing residential use. Voluntary practices include:

### Fugitive Dust Control

- Apply soil stabilizers or moisten inactive areas.
- Address previously disturbed areas if subsequent construction is delayed.
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Trucks hauling dirt, sand, or loose material and require shall comply with Vehicle Code Section 23114.
- Sweep streets daily if visible soil material is carried out from the construction site

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Best practice combustion emissions control options include:

### Exhaust Emissions Control

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

# GREENHOUSE GAS EMISSIONS

"Greenhouse gases" (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as "global warming." These greenhouse gases contribute to an increase in the temperature of the earth's atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statues and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07.

AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California's reputation as a "national and international leader on energy conservation and environmental stewardship." It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate "early action" control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California's GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been

developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

## THRESHOLDS OF SIGNIFICANCE

In response to the requirements of SB97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March, 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or,

- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of project-related GHG emissions, making a determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

Emissions identification may be quantitative, qualitative or based on performance standards. CEQA guidelines allow the lead agency to "select the model or methodology it considers most appropriate." The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) $CO_2$ equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT $CO_2e$ for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

## PROJECT RELATED GHG EMISSIONS GENERATION

### Construction Activity GHG Emissions

The project is assumed to require two years for construction. During project construction, the CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual $CO_2e$ emissions identified in Table 10.

**Table 10**
**Construction Emissions (Metric Tons $CO_2e$)**

| | **$CO_2e$** |
|---|---|
| 2019 Grading/Prep | 288.0 |
| 2019 Construction | 95.1 |
| 2020 Construction | 22.8 |
| Total | 405.9 |
| **Amortized** | **13.5** |

CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less-than-significant.

### Project Operational GHG Emissions

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional $CO_2e$ emissions are summarized in the CalEEMod2016.3.2 output files found in the appendix of this report.

The total operational and annualized construction emissions for the proposed project for an opening year of 2021 with full occupancy are identified in Table 11.

**Table 11**
**Proposed Uses Operational Emissions**

| **Consumption Source** | MT $CO_2e$ |
|---|---|
| Area Sources | 1.4 |
| Energy Utilization | 24.2 |
| Mobile Source | 56.3 |
| Solid Waste Generation | 2.3 |
| Water Consumption | 3.3 |
| Construction | 13.5 |
| **Total** | **101.0** |
| Guideline Threshold | 3,000 |
| Exceeds Threshold? | No |

Total project GHG emissions are substantially below the proposed significance threshold of 3,000 MT suggested by the SCAQMD. Hence, the project will not result in generation of a significant level of greenhouse gases.

## CONSISTENCY WITH GHG PLANS, PROGRAMS AND POLICIES

The City of Los Angeles published a climate action plan in 2007 titled "GreenLA." In order to provide detailed information on action items discussed in GreenLA, the City published an implementation document titled "ClimateLA." ClimateLA presents the existing GHG inventory for the City, includes enforceable GHG reduction requirements, provides mechanisms to monitor and evaluate progress, and includes mechanisms that allow the plan to be revised in order to meet targets. By 2030, the plan aims to reduce GHG emissions by 35 percent from 1990 levels, which were estimated to be approximately 54.1 million metric tons. Therefore, the City will need to lower annual GHG emissions to approximately 35.1 million metric tons per year by 2030. This voluntary plan identifies over 50 action items, grouped into focus areas, to reduce emissions.

To achieve these reductions the City has developed strategies that focus on energy, water use, transportation, land use, waste, open space and greening, and economic factors. While the emphasis is first on municipal facilities and operations, several measures address programs to reduce emissions in the community.

The 2014 City of Los Angeles Green Building Code, incorporating the requirements of the 2014 CALGreen statewide code, includes a wide variety of energy conservation measures applicable to new residential development. Because these are code requirements, they should be considered project design features (PDFs) and not discretionary GHG emissions mitigation measures. The mandatory requirements for new residential construction (with some minor exceptions), include:

- Storm water drainage and retention during construction
- Proper site drainage through grading and paving
- At least one on-site electric vehicle charging station
- Cool roofs to reduce "heat-island" effect
- Solar ready wiring systems
- Low flow plumbing fixtures
- Drought-responsive outdoor water use
- Irrigation controllers
- Rodent proofing
- Construction waste reduction (>50%)
- Approved fireplaces (no-wood burning)

- Low VOC paints, coatings, adhesives, carpets
- Moisture control of building materials
- Exhaust fans (Energy Star-rated) in every bathroom
- High efficiency heating, venting and air conditioning

CALGreen also limits transmission heat loss and solar heat gain of windows. Except for unique windows, the code can only be met by dual-paned or better windows. Similarly, the state code requires high efficiency seals on doors to the outside. There are, to be sure, elective measures that can be implemented that exceed the minimums required by city/State codes. However, the scope of the proposed project is sufficiently limited such that the GHG emissions thresholds will not be exceeded. With implementation of the above PDFs, GHG impacts will not exceed advisory emissions thresholds. The proposed project will not interfere with compliance with plans and policies under AB-32.

# CALEEMOD2016.3.2 COMPUTER MODEL OUTPUT

- **DAILY SUMMER EMISISONS**
- **ANNUAL EMISSIONS**

[i] Almanac and Air Quality 2013 Edition, Regional Trends and Forecasts, https://www.arb.ca.gov/aqd/almanac/almanac13/chap413.htm

# APPENDIX E

# Biological Resources Data

# Appendix E
# Biological Resources Data

Date of Biological Survey: October 13, 2016
Tyler Barns, Envicom Corporation

On October 13, 2016, Envicom Corporation Biologist Mr. Tyler Barns conducted a biological resources survey of APNs 5556-022-002 through 5556-022-004, hereafter referred to as the study area.

**Methodology**
The biological resources survey involved a search for special-status and regulated biological resources, including rare, threatened, and endangered plant and wildlife species, natural communities of special concern, and locally protected species, including city-protected trees. Surveys of non-vascular plants (lichens, mosses, liverworts, and hornworts) were not undertaken. Ornamentals within the study area were generally not identified to species. Casual observations of wildlife have been recorded based on sight or sign including, tracks, scat, or vocal recognition. The survey evaluated biological resources within areas potentially subject to ground or vegetation disturbance by the proposed Project, including, but not limited to, the proposed residential envelope and other areas subject to temporary construction disturbance. Some areas within the southern portion of the study area were not accessible due to terrain. Inaccessible areas were surveyed using binoculars, where possible.

**Environmental Setting**
The study area includes large areas of natural vegetation as well as smaller enclaves of landscape plantings along the perimeter near residential development. The site is not located within a designated wildlife corridors or habitat linkages identified in the South Coast Missing Linkages analysis conducted by South Coast Wildlands (2008) but it is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map (SMMC 2017). The study area is situated within the lower elevation inland foothills of the Santa Monica Mountains, at elevations ranging from approximately 780 to 1,015 feet (237 – 309m) above mean sea level. The study area is generally dry and exposed, although portions of the site situated on westerly slopes of the steep hillsides support more mesic vegetation when compared to the remainder of the site. The average high/low summer temperatures in the lower elevation inland foothills of the Santa Monica Mountains are 80/50°F, average high/low winter temperatures are 70/40°F, and precipitation is approximately 19 inches per year. The soils within the study area are of the Topanga-Mipolomol-Sapwi association (30 to 75 percent slopes), which are comprised of gravely loam, channery loam, loam, stony clay loam, and gravely loamy sand derived from colluvium and/or residuum weathered from sandstone, shale, and slate.

**Existing Conditions**
The primary vegetation community within the study area is Laurel Sumac / Fountain Grass Swards Association (*Malosma laurina*/*Pennisetum setaceum*), a non-native herbaceous association. The community is dominated solely by fountain grass in the herbaceous layer but includes native laurel sumac in the shrub layer at low cover. The vegetation was thinned as part of an earlier fuel modification process (i.e., vegetation was trimmed to approximately six inches in height). Land uses adjacent to the site include residential development to the north, west, east and south. Several landscape ornamental plantings, such as Pride of Madeira (*Echium candicans*), iceplant (*Carpobrotus edulis*), and various agave (*Agave* sp.) are located northeast of the study area, along Grand View Drive. In addition, non-native tuna cactus (*Opuntia ficus-indica*) and native coastal prickly pear (*Opuntia littoralis*) to a much lesser extent occur throughout the study area.

**Table 1**
**Vascular Plants Observed During Survey**

| **GROUP**<br>**Family**<br>***Scientific Name*** | **Common Name** |
|---|---|
| **FLOWERING PLANTS-DICOTS** | |
| Anacardiaceae | |
| *Malosma laurina* | laurel sumac |
| Apocynaceae | |
| **Nerium oleander* | oleander |
| Asteraceae | |
| *Isocoma menziesii* var. *vernonioides* | coastal goldenbush |
| *Stephanomeria virgata* | tall stephanomeria |
| Brassicaceae | |
| **Hirschfeldia incana* | hoary mustard |
| Cactaceae | |
| **Opuntia ficus-indica* | tuna cactus |
| *Opuntia littoralis* | prickly pear |
| Juglandaceae | |
| *Juglans californica* | California black walnut |
| Myrtaceae | |
| **Eucalyptus citriodora* | lemon-scented gum |
| **Eucalyptus* sp. | eucalyptus |
| Nyctaginaceae | |
| **Bougainvillea spectabilis* | Bougainvillea |
| Oleaceae | |
| **Olea* sp. | olive |
| Rhamnaceae | |
| *Ceanothus megacarpus* | big-pod ceanothus |
| *Rhamnus ilicifolia* | hollyleaf redberry |
| **FLOWERING PLANTS-MONOCOTS** | |
| Agavaceae | |
| *Agave* sp. | agave (landscape) |
| *Hesperoyucca whipplei* | chaparral yucca |
| Arecaceae | |
| **Washingtonia* sp. | fan palm |
| Poaceae | |
| **Pennisetum setaceum* | fountain grass |
| *Stipa lepida* | foothill needle grass |
| *Non-native species | |

**Table 2**
**Bird Species Observed During Survey**

| Common Name | *Scientific Name* |
|---|---|
| **BIRDS** | |
| American crow | *Corvus brachyrhynchos* |
| Anna's hummingbird | *Calypte anna* |
| Bewick's wren | *Thryomanes bewickii* |
| house finch | *Haemorhous mexicanus* |
| rock dove | *Columba livia* |
| spotted towhee | *Pipilo maculatus* |
| yellow-rumped warbler | *Setophaga coronata* |
| **MAMMALS** | |
| mule deer (scat) | *Odocoileus hemionus* |

# Cultural Resources Record Search Results

APPENDIX F

November 22, 2016

CAC Development
18193 Knollhill
Granada Hills, California 91344

Attn: Mr. Robert Anderson

Subj: **Envicom Corporation: Record Search Request for a Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, City of Los Angeles, California (Envicom Project #16-674-101)**

Dear Mr. Anderson:

On November 16, 2016, Envicom Corporation completed a Phase I(a) cultural resource assessment of the proposed residential subdivision located near Crisler Way in the City of Los Angeles, California (**Figure 1**).

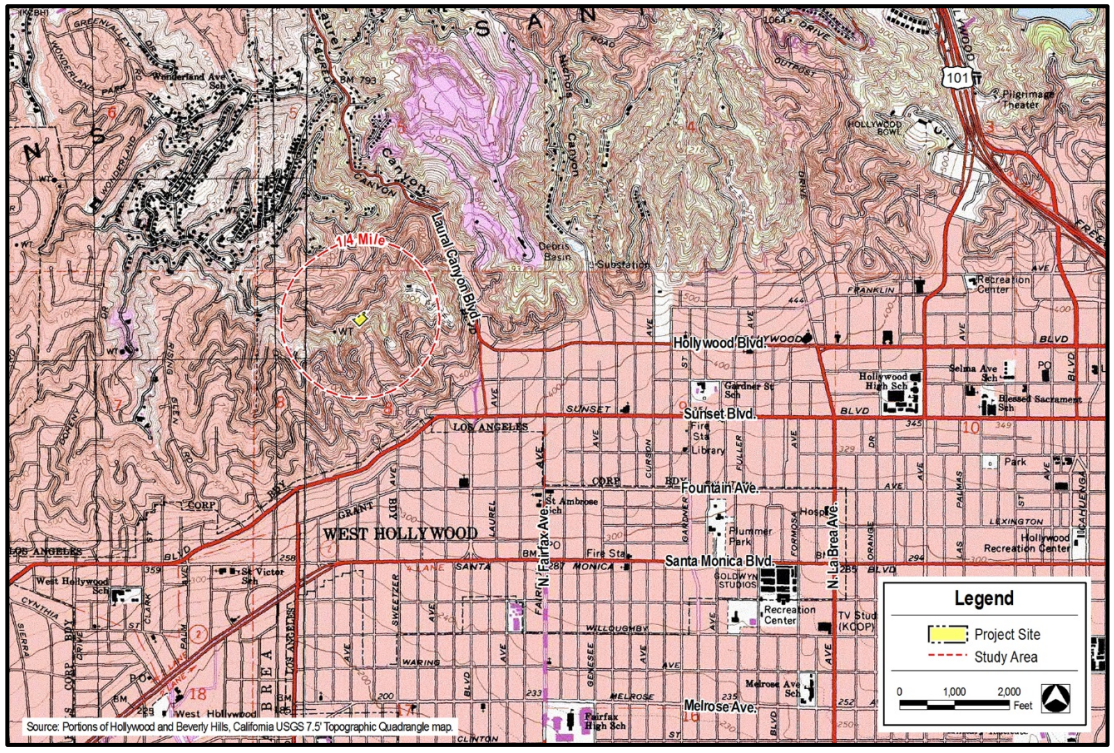



***Figure 1: Proposed residential project is currently open space behind a private residence, though abandoned concrete walls from older residential support buildings or retaining walls are present.***

The Project is fully contained on the Hollywood USGS quad, however, the 1/4 mile study area radius for record searches is on portions of both the Hollywood and Beverley Hills quads. The general location is as follows:

**Range = 14W**
**Township = 1S**
**Section = 8**

The cultural resource Phase I(a) assessment for the project included a record search from the South Central Coast Information Center (SCCIC) at California State University Fullerton, project scoping letters to the Native American Heritage Commission (NAHC), project scoping letters to potentially interested Tribal Groups provided by the NAHC, and a physical pedestrian survey of the property.

## RECORD SEARCH RESULTS

Envicom requested a cultural resource records search from the SCCIC on October 26th, 2016. The record search included the project site and a surrounding 0.25-mile study area to provide cultural resource context for the report. The record search findings were obtained on November 10th, 2016, and were negative for cultural resources within the project area. There was a single historic resource (19-190574, The Aubrey Leech House, a Historic Residence) within the study area. Archaeological information from the SCCIC is considered confidential, and is not replicated in this report.

The SCCIC also noted that ten (10) general area reports for the region existed. No cultural resources – archaeological or built environment – were identified within the Project area.

**Overview Reports for the Area in General:**

**LA-02816**
King, Chester
1993 Native American Placenames in the Vicinity of the Pacific Pipeline; Part 2: Gaviota to the San Fernando Valley. Topanga Anthropological Consultants.

**LA-03511**
Romani, John F.
1977 Assessment of the Archaeological Impact by the Development of the Waste Water Facilities Plan W.o. 31389 Northridge Archaeological Research Center, CSUN

**LA-03583**
Bucknam, Bonnie M.
1974 The Los Angeles Basin and Vicinity; a Gazetteer and Compilation of Archaeological Site Information. Archaeological Research, Inc.

**LA-03773**
Singer, Clay A.
1978 Preliminary Assessment of Potential Impacts and Evaluation of Cultural Resources Along Proposed Transit System Alignment Alternatives in the City of Los Angeles, Los Angeles County, California. Archaeological Resource Management Corp.

**LA-03796**
No Author
1989 Technical Report of Cultural Resources Studies for the Proposed Wtg-west, Inc. Los Angeles to San Francisco and Sacramento, California Fiber Optic Cable Project. BioSystems Analysis, Inc.

**LA-04323**
Hill, James N.
1985 Cultural Evolution in the Archaic/mesolithic: a Research Design for the Los Angeles Basin. Archaeological Resource Management Corp.

**LA-07568**
Bernor, Raymond L.
1978 Paleontological Resource Survey and Impact Evaluation for a Proposed Rapid Transit System in the City of Los Angeles, Los Angeles County, California. Archaeological Resource Management Corp.

**LA-11484**
Walker, E.F. and Robinson, Eugene
No Date Partial List of Indian Village Sites in Lost (sic) Angeles County, with a few in Orange County. Handwritten in "Reconnaissance Sites 15F" looseleaf notebook of Mr. E.F. Walker, Southwest Museum, Los Angeles, California. Southwest Museum.

**LA-11747**
Sakai, Rodney
2006 Programmatic Agreement Compliance Report, twenty-first Reporting Period, July 1, 2005-- March 31, 2006 Historic Resources Group

**LA-11748**
Sakai, Rodney
2003 Programmatic Agreement Compliance Report Fifteenth Reporting Period July 1—December 31, 2002 SHPO & Advisory Council on Historic Preservation

The Native American Heritage Commission was contacted on October 26th, 2016, with a response from the NAHC being received on November 16th, 2016. The NAHC record search was negative for findings, and provided contact information for five (5) Tribal Groups to be contacted for additional information. This information is provided in **Appendix A**.

All five (5) Tribal Groups on the NAHC list were contacted on November 17th, 2016. As of the completion of this draft report, no Tribal Group representative has responded. If additional responses come in, the project manager will be provided with the results. All correspondence with the NAHC and Tribal Groups is provided in Appendix A of this report.

**PROJECT SITE PHASE I(a) ASSESSMENT**

A pedestrian site survey at a Phase I(a) level involves only the visual examination of the surface for cultural resources, without subsurface testing. Subsurface testing to define cultural resource presence/absence or site boundaries falls under a Phase I(b), and is normally only used when the potential exists for cultural resources to have site components at depth.

The project "Area of Direct Impacts" (ADI) for this project is approximately 0.5-acre area within the boundary of the City of Los Angeles, CA, which currently is undeveloped land. The property is bounded at the road level by residential buildings, downslope by residential buildings, and by undeveloped land on the slope margins.

The project ADI was visited on October 17th, 2016, by Dr. Wayne Bischoff of Envicom. The purpose of a pedestrian survey is to assess if cultural resources exist on the Project property that have not previously been recorded in the SCCIC information center or other depositories. The Project undeveloped property is on a steep slope of roughly 70-degrees, with evidence of modern slope retention features (concrete and stone walls, straw wattles, sand bags, iron posts, etc. Vegetation is sparse, and consists mostly of cactus and grasses. Surface visibility was good, with roughly 50% to 60% of the ground surface visible.

Overall, the area would not have been conducive for the location of prehistoric or historic cultural resources due to the extreme slope (**Figure 2 and 3**). The landscape was examined for evidence of prehistoric quarrying, trails, or rock shelters; all of which are prehistoric cultural resources that can be present on such steep slopes. None were noted.

As to historic resources, the upper part of the subject property had been used in the past for the placement of retaining walls, or garages or similar outbuildings (**Figure 4 and 5**). Poured concrete and concrete cinder block support walls were still present, as were concrete post features. None of these historic features were overwhelmingly diagnostic, but probably dated to the 1960s through the 1990s. Though historic, it was the author's professional opinion that these resources did not warrant the creation of a California Department of Recreation Site Record due to the ambiguity of the feature age, the lack of integrity, and the probable support structure purpose of the walls. Such ancillary historic features from the mid to late 19th Century – retaining walls, landscaping features, water control features, or utility lines – are commonly not formally recorded as historic sites due to the abundance of such features on the landscape.

Historic artifacts on the surface included a mixture of modern metal can and glass bottle fragments, iron rebar related to the slope retention features, concrete fragments, brick fragments, plastic irrigation piping, and other slope "toss" material. None of the visible historic material suggested the presence of a historic archaeological cultural resource, and all appeared to be refuse

from several decades of sporadic trash accumulation events from the road and residences above the slope, or are the results of the degradation of slope retention features.

Dr. Bischoff concluded that no previously unrecorded prehistoric or historic archaeological cultural resources could be identified on the property. Further, he concluded that no historic features that should be considered built environment resources were located on the property.



***Figure 1: The Project Property (foreground) is Located on an Extreme Slope.***



***Figure 2: Residential Houses are at the Bottom of the Steep Slope. Wattles and Sandbags Cover the Landscape to Prevent Erosion.***




***Figure 3: Historic Poured Concrete and Cinder Block Walls are Present of Unknown Age.***



***Figure 4: Historic Concrete Block Walls of Unknown Age.***

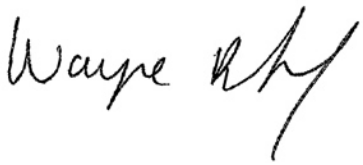
## RECOMMENDATIONS

The results of the SCCIC record search were negative for cultural or built environment resources within the project ADI. The NAHC request for information was also negative for cultural resources. To date, the letters to Native American tribal representatives have been negative for cultural resources.

The pedestrian survey of the Project property was negative for cultural resources, with the recommendation that formal DPR cultural resource forms not be completed for the existing historic retaining walls or garage supports due to the lack of integrity and definable age of construction.

Due to the steep slope, the lack of cultural resources, and the good visibility of the property surface, Envicom does not recommend further archaeological or Native American monitoring during construction or grading activities.

Warmest Regards,



Dr. Wayne Bischoff
Director of Cultural Resources

**Attachments:**
Appendix A: NAHC and Tribal Group Scoping Letters and Response Letters
Appendix B: Resume for Wayne Bischoff, Ph.D.

# APPENDIX A
# NAHC and Tribal Group Scoping Letters and Responses

ENVICOM CORPORATION

October 26th, 2016

Native American Heritage Commission
1550 Harbor Boulevard, Room 100
West Sacramento, CA 95691

Subj: **Envicom Corporation: Record Search Request for a Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, City of Los Angeles, California (Envicom Project #16-674-101)**

Greetings,

Envicom is requesting a record review of your records for cultural resources for the Project area, plus a 0.25-mile buffer. We also request a list of Tribal Group representatives who should be contacted regarding this project.

The Project is located at:

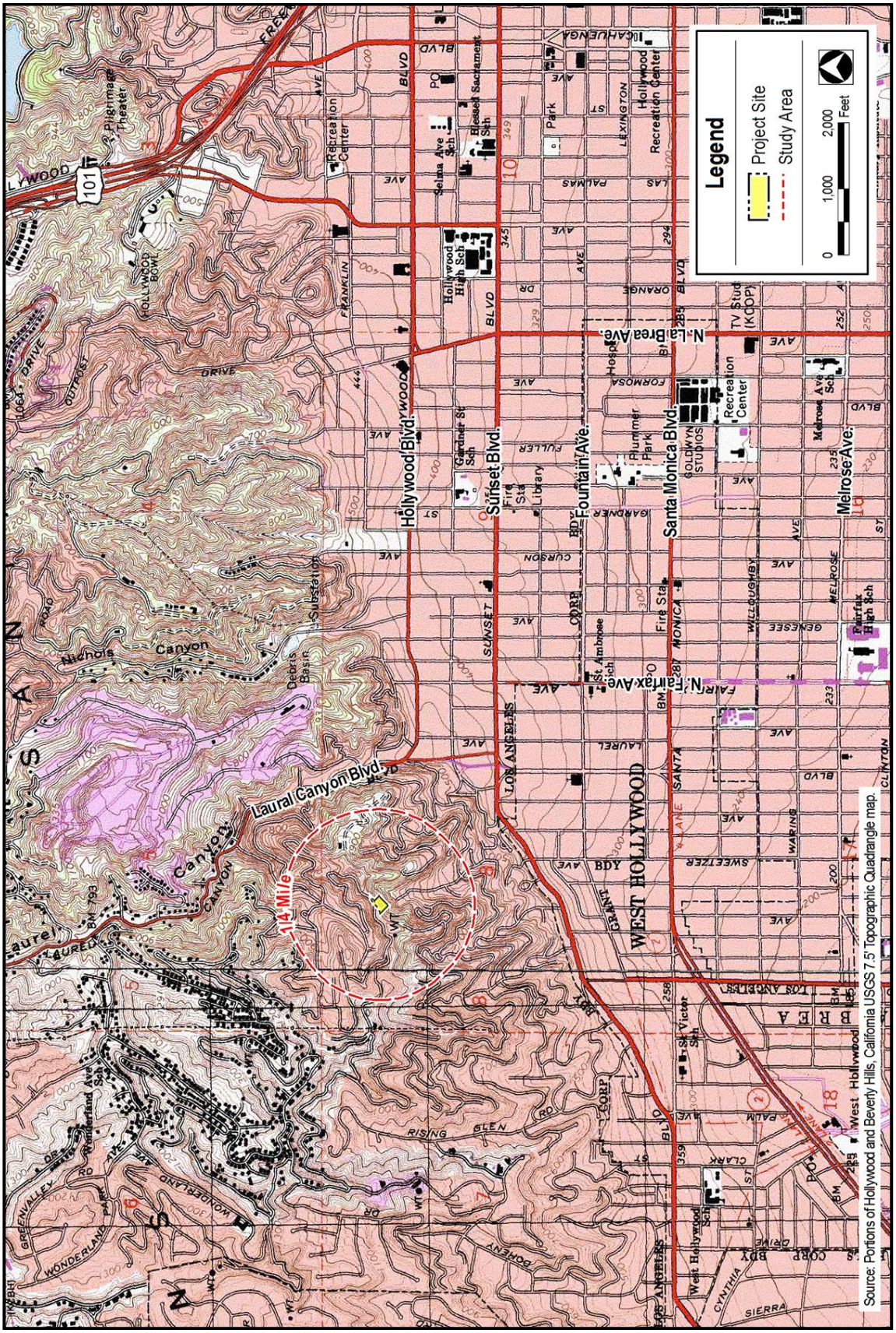
**The Project is fully contained on the Hollywood USGS quad, however, the 1/4 mile radius extends west, and is on portions of both the Hollywood and Beverley Hills quads.**
**Range = 14W**
**Township = 1S**
**Section = 8**

Envicom appreciates the NAHC's help with this request. For correspondence or questions regarding this Project, please contact Wayne Bischoff at 818-879-4700 (wbischoff@envicomcorporation.com).

Sincerely,

Dr. Wayne Bischoff
Director of Cultural Resources

**Attachment:**
Project vicinity map on 1:24,000 topographic map


Legend
Project Site
Study Area
0
1,000
2,000
Feet
Hollywood Blvd.
Sunset Blvd.
Santa Monica Blvd.
Melrose Ave.
N. La Brea Ave.
N. Fairfax Ave.
Fountain Ave.
Laural Canyon Blvd.
Nichols Canyon
WEST HOLLYWOOD
BEVERLY HILLS
Hollywood High Sch
Recreation Center
Hollywood Bowl
Pilgrimage Theater
Fire Sta
Library
Plummer Park
Fairfax High Sch
West Hollywood
West Hollywood Sch
Source: Portions of Hollywood and Beverly Hills, California USGS 7.5' Topographic Quadrangle map.

**NATIVE AMERICAN HERITAGE COMMISSION**
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX

November 9, 2016

Dr. Wayne Bischoff
Envicom

Resent 11/16/16 to
waynebischoff@gmail.com

Sent by E-mail: wbischoff@envicomcorporation.com

RE: Proposed Residential Subdivision at 1800, 1806, and 1818 Crisler Way Project, City of Los Angeles; Hollywood and Beverly Hills USGS Quadrangles, Los Angeles County, California

Dear Dr. Bischoff:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent of the reference codes below is to avoid or mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

> **Within 14 days** of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
   - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
   - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measurers.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the project with negative results.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

**Native American Heritage Commission**
**Native American Contact List**
**Los Angeles County**
**11/9/2016**

***Gabrieleno Band of Mission Indians - Kizh Nation***
Andrew Salas, Chariperson
P.O. Box 393 Gabrielino
Covina, CA, 91723
Phone: (626) 926 - 4131
gabrielenoindians@yahoo.com

***Gabrieleno/Tongva San Gabriel Band of Mission Indians***
Anthony Morales, Chairperson
P.O. Box 693 Gabrielino
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626)286-1262
GTTribalcouncil@aol.com

***Gabrielino /Tongva Nation***
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., Gabrielino
#231
Los Angeles, CA, 90012
Phone: (951)807-0479
sgoad@gabrielino-tongva.com

***Gabrielino Tongva Indians of California Tribal Council***
Robert F. Dorame, Chairperson
P.O. Box 490 Gabrielino
Bellflower, CA, 90707
Phone: (562)761-6417
Fax: (562)761-6417
gtongva@verizon.net

***Gabrielino-Tongva Tribe***
Linda Candelaria, Co-Chairperson
1999 Avenue of the Stars, Suite Gabrielino
1100
Los Angeles, CA, 90067
Phone: (626) 676 - 1184

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, Los Angeles County.

November 16, 2016

Gabrielino-Tongva Tribe
1999 Avenue of the Stars, Suite 1100
Los Angeles, CA 90067

Attn: Ms. Linda Candelaria, Co-Chairperson

Subj: **Envicom Corporation: Record Search Request for a Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, City of Los Angeles, California (Envicom Project #16-674-101)**

Dear Ms. Candelaria:

Envicom is requesting a review of your records for cultural resources for the proposed project located in the Santa Monica Mountains (see attached map). The Project is fully contained on the Hollywood USGS quad, however, the 1/4 mile radius extends west, and is on portions of both the Hollywood and Beverley Hills quads.

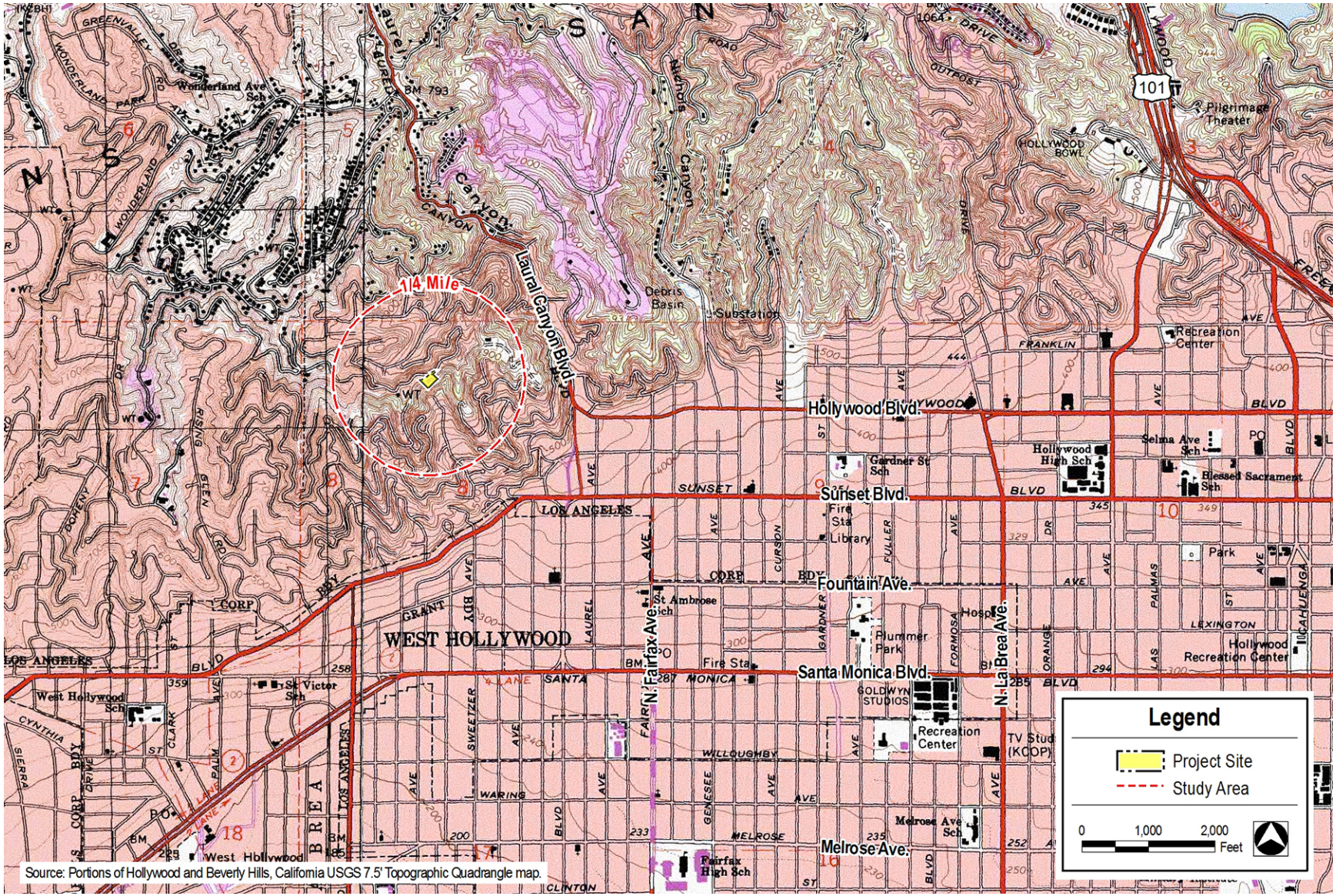
**Range = 14W**
**Township = 1S**
**Section = 8**

Envicom appreciates your help with this request. For correspondence or questions regarding this Project, please contact Wayne Bischoff at 818-879-4700 (wbischoff@envicomcorporation.com).

Sincerely,

Dr. Wayne Bischoff
Director of Cultural Resources

**Attachment:**
Project vicinity map on 1:24,000 topographic map




Source: Portions of Hollywood and Beverly Hills, California USGS 7.5' Topographic Quadrangle map.

November 16, 2016

Gabrielino Tongva Indians of
California Tribal Council
P.O. Box 490
Bellflower, CA 90707

Attn: Mr. Robert F. Dorame, Chairperson

Subj: **Envicom Corporation: Record Search Request for a Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, City of Los Angeles, California (Envicom Project #16-674-101)**

Dear Mr. Dorame:

Envicom is requesting a review of your records for cultural resources for the proposed project located in the Santa Monica Mountains (see attached map). The Project is fully contained on the Hollywood USGS quad, however, the 1/4 mile radius extends west, and is on portions of both the Hollywood and Beverley Hills quads.

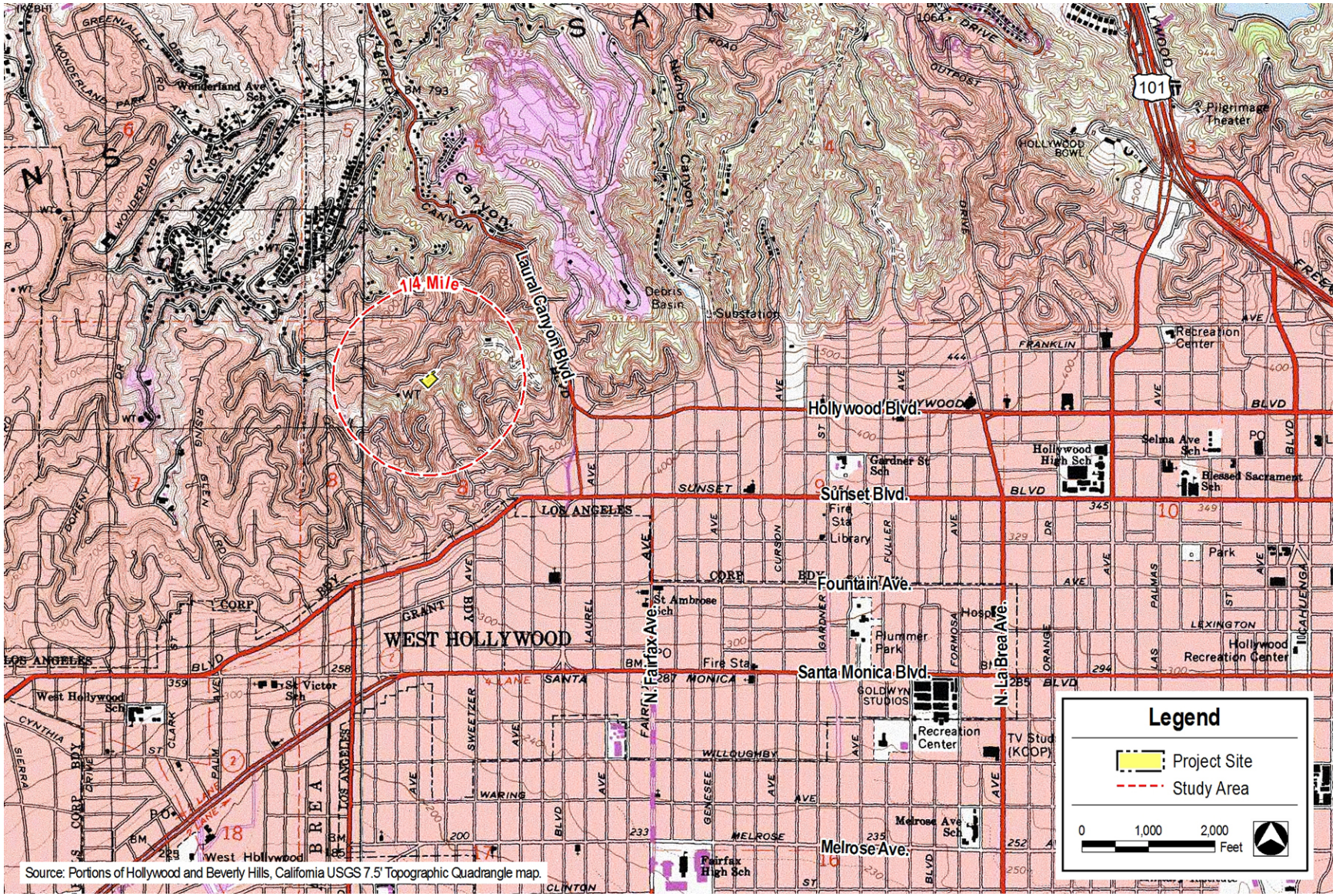
**Range = 14W**
**Township = 1S**
**Section = 8**

Envicom appreciates your help with this request. For correspondence or questions regarding this Project, please contact Wayne Bischoff at 818-879-4700 (wbischoff@envicomcorporation.com).

Sincerely,

Dr. Wayne Bischoff
Director of Cultural Resources

**Attachment:**
Project vicinity map on 1:24,000 topographic map




Source: Portions of Hollywood and Beverly Hills, California USGS 7.5' Topographic Quadrangle map.

November 16, 2016

Gabrielino/Tongva Nation
106 1/2 Judge John Aiso Street, #231
Los Angeles, CA 90012

Attn: Ms. Sandonne Goad, Chairperson

Subj: **Envicom Corporation: Record Search Request for a Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, City of Los Angeles, California (Envicom Project #16-674-101)**

Dear Ms. Goad:

Envicom is requesting a review of your records for cultural resources for the proposed project located in the Santa Monica Mountains (see attached map). The Project is fully contained on the Hollywood USGS quad, however, the 1/4 mile radius extends west, and is on portions of both the Hollywood and Beverley Hills quads.

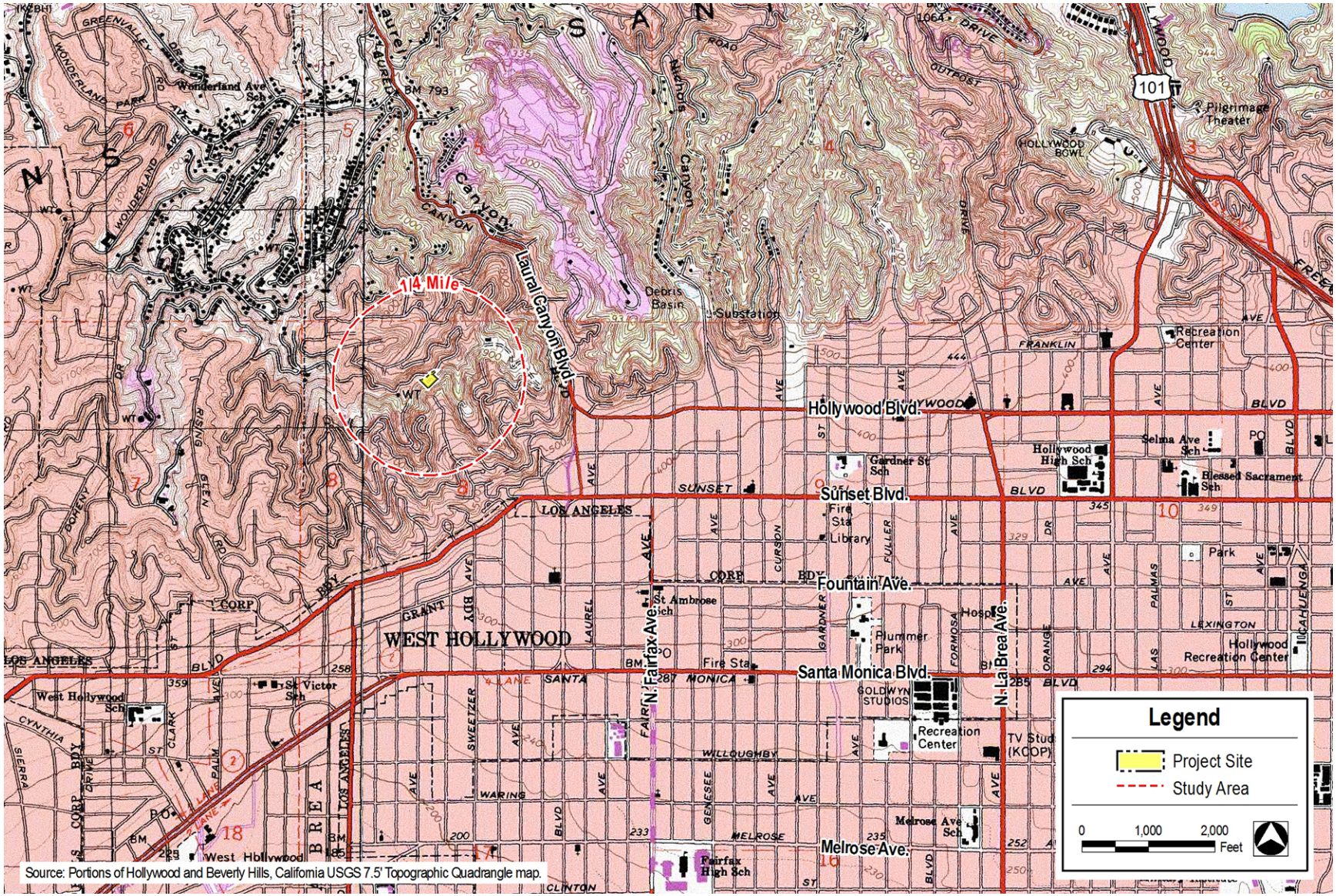
**Range = 14W**
**Township = 1S**
**Section = 8**

Envicom appreciates your help with this request. For correspondence or questions regarding this Project, please contact Wayne Bischoff at 818-879-4700 (wbischoff@envicomcorporation.com).

Sincerely,

Dr. Wayne Bischoff
Director of Cultural Resources

**Attachment:**
Project vicinity map on 1:24,000 topographic map




Source: Portions of Hollywood and Beverly Hills, California USGS 7.5' Topographic Quadrangle map.

November 16, 2016

***Via US Mail and Email: GTiribalcouncil@aol.com***
Gabrieleno/Tongva San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA, 91778

Attn: Mr. Anthony Morales, Chairperson

Subj: **Envicom Corporation: Record Search Request for a Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, City of Los Angeles, California (Envicom Project #16-674-101)**

Dear Mr. Morales:

Envicom is requesting a review of your records for cultural resources for the proposed project located in the Santa Monica Mountains (see attached map). The Project is fully contained on the Hollywood USGS quad, however, the 1/4 mile radius extends west, and is on portions of both the Hollywood and Beverley Hills quads.

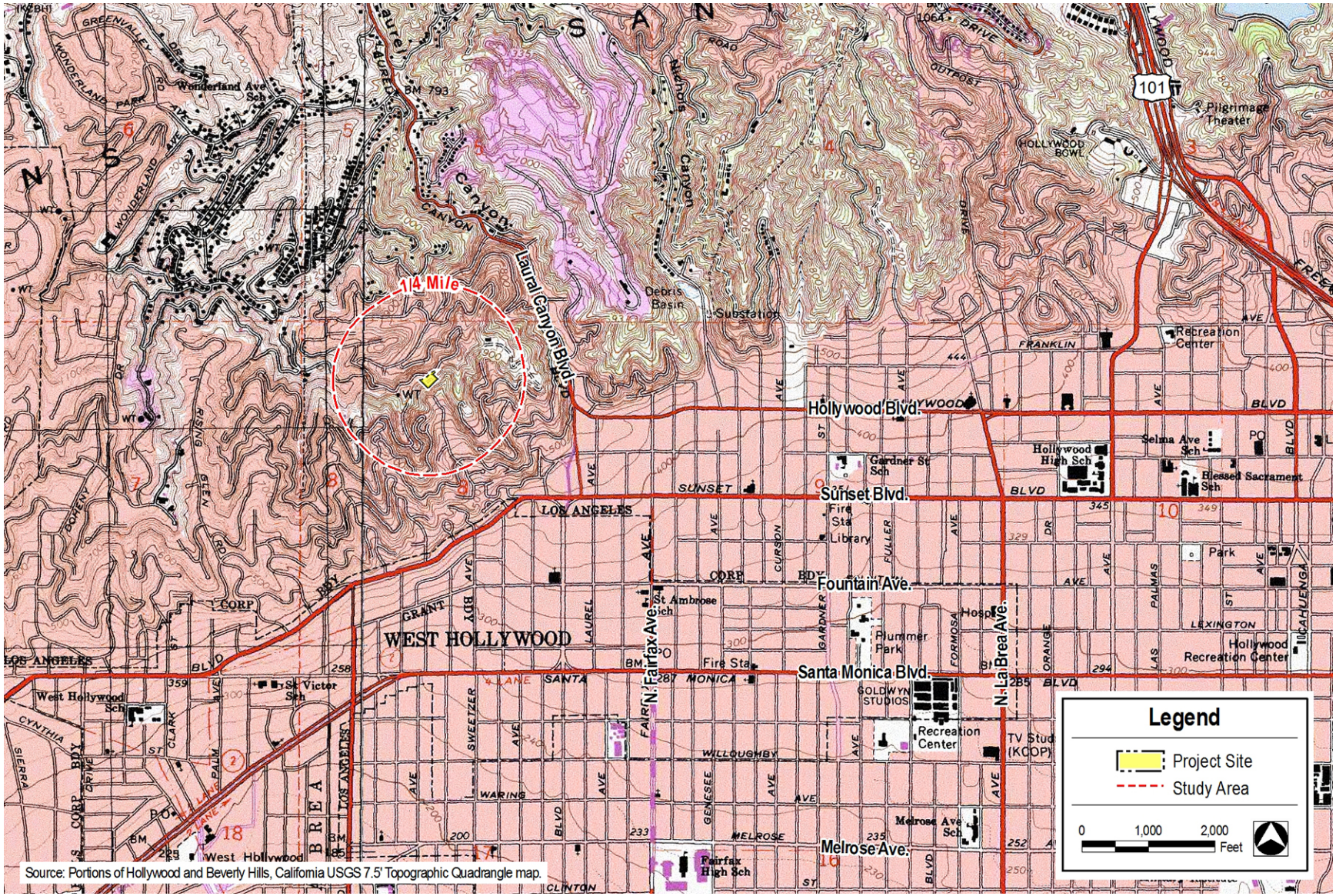
**Range = 14W**
**Township = 1S**
**Section = 8**

Envicom appreciates your help with this request. For correspondence or questions regarding this Project, please contact Wayne Bischoff at 818-879-4700 (wbischoff@envicomcorporation.com).

Sincerely,

Dr. Wayne Bischoff
Director of Cultural Resources

**Attachment:**
Project vicinity map on 1:24,000 topographic map




Source: Portions of Hollywood and Beverly Hills, California USGS 7.5' Topographic Quadrangle map.

November 16, 2016

Gabrieleno Band of Mission
Indians – Kizh Nation
P.O. Box 393
Covina, CA 91723

Attn: Mr. Andrew Salas, Chairperson

Subj: **Envicom Corporation: Record Search Request for a Residential Subdivision Project at 1800, 1806, 1812, and 1818 Crisler Way, City of Los Angeles, California (Envicom Project #16-674-101)**

Dear Mr. Salas:

Envicom is requesting a review of your records for cultural resources for the proposed project located in the Santa Monica Mountains (see attached map). The Project is fully contained on the Hollywood USGS quad, however, the 1/4 mile radius extends west, and is on portions of both the Hollywood and Beverley Hills quads.

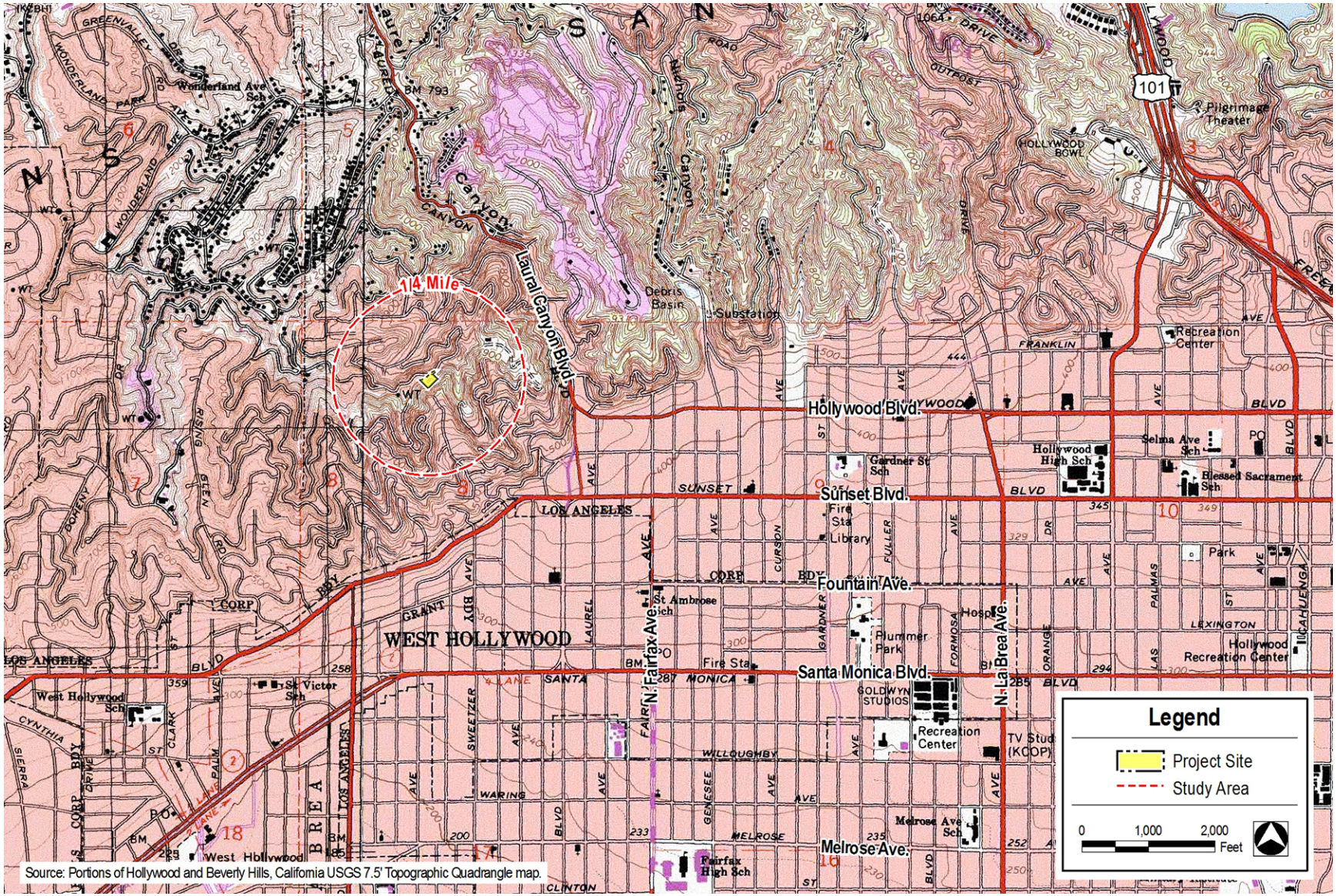
**Range = 14W**
**Township = 1S**
**Section = 8**

Envicom appreciates your help with this request. For correspondence or questions regarding this Project, please contact Wayne Bischoff at 818-879-4700 (wbischoff@envicomcorporation.com).

Sincerely,

Dr. Wayne Bischoff
Director of Cultural Resources

**Attachment:**
Project vicinity map on 1:24,000 topographic map




Source: Portions of Hollywood and Beverly Hills, California USGS 7.5' Topographic Quadrangle map.

# APPENDIX B
# Resume for Dr. Wayne Bischoff, Ph.D.

## Wayne Bischoff, Ph.D.

*Envicom Director of Cultural Resources*

Dr. Bischoff has over 20 years' experience managing cultural resource projects and ensuring compliance with Section 106 of the National Historic Preservation Act (NHPA), the California Environmental Quality Act (CEQA), the National Environmental Protection Act (NEPA), and state, county, city, and local government cultural laws, guidelines, and procedures. He has managed cultural, paleontological, and built environment projects throughout Southern California, including the Counties of Los Angeles, Kern, Ventura, Imperial, San Diego, Orange, Santa Barbara, Riverside, and San Bernardino. Dr. Bischoff has been the principal or project manager for hundreds of cultural resource projects in California, including literature searches, surveys, evaluations, and data recoveries, built environment and historic architectural inventories, HABS projects, paleontological surveys, and historic structure evaluations.

Dr. Bischoff's project experience includes extensive experience with transmission lines, renewable energy projects, and public works projects, including storm and sewer projects, recharge basins, wetlands restoration, highways and bridges, dams and levees, park and trail development, and educational facilities. He also has broad experience with residential and commercial developments projects, Department of Defense projects (Army, Navy, Marines, and National Guard), telecommunication lines, and projects with Army Corps of Engineers (ACOE) and California Coastal Commission (CCC) oversight.

Dr. Bischoff has extensive experience with state and federal agencies, including the State Historic Preservation Office, the Bureau of Land Management (BLM), the GSA, the USDA, Fish and Wildlife, the California Public Utilities Commission (CPUC), the National Park Service (NPS), the U.S. Forest Service (USFS), Federal Highway Administration (FHA), and CALTRANS. He has also written sections of CEQA and NEPA documents, MNDs, and Memorandums of Agreements/Understanding (MOA/MOU), and is a Native American AB-52/SB-18 consultation expert. Dr. Bischoff has worked with all the Tribal Groups Southern California, and has provided Native American consultation for the City of Los Angeles, numerous project clients, and many cities and municipalities throughout Southern California.

***Development Projects:***

- **Pepperdine University Archaeological Collections Inventory, Los Angeles, CA.** Project Manager for assessing and inventorying the Pepperdine University Archaeological Collection for final storage (Spring 2016)
- **Conrad N. Hilton Foundation Trails Project Cultural Assessment, Agoura Hills, Los Angeles County, CA.** Project Manager for the assessment of new pedestrian access trails linking off-site office space with the Foundation campus buildings. (Spring 2016)
- **Pepperdine University Campus Life Project: Cultural Resource Monitoring, Los Angeles, CA.** Principal and Project Manager for cultural resource monitoring of Phase I of the Pepperdine Campus Life housing, facilities, and trail development project. (Spring 2016)

- **Deer Lake Residential Development Cultural Monitoring, Simi Valley, Los Angeles, CA.** Principal and Project Manager for the cultural monitoring of eight cultural resources within the project development boundary. Included the writing of a Construction Phase Management and Monitoring Plan. (Spring 2016)
- **Pepperdine University Campus Life Project: Updated Cultural Resources Record Search.** Principal and Project Manager for an updated record search and letter report for the Pepperdine Campus Life housing, facilities, and trail development project. (December 2015 – January 2016)
- **CA-LAN-321 Cultural Resource Phase II Evaluation, Agoura Hills, Los Angeles County, CA.** Principal and Project Manager for the evaluation of CA-LAN-321, a large (8-acre core area) prehistoric Chumash regional ceremonial center that will be negatively impacted in part by construction of the Phase 3 building of the Conrad N. Hilton Foundation campus. This site has an overall size of over 80-acres, and was used by prehistoric Native Americans from 400 A.D. to the late 1700s. Evaluation tasks included the excavation of 51-test units, 60-shovel test pits, extensive surface collection, and surface feature mapping, as well as artifact analysis and the writing of a professional report of findings. Hundreds of prehistoric features and tens of thousands of artifacts were recovered, many of which have a prehistoric Chumash ceremonial context Chumash (June 2015 – Current)
- **Canyon Park Homes, Sylmar, Los Angeles County, CA.** Native American Tribal Group consultation and pre-construction monitoring for this 80-acre residential property development, as well as EIR section writing. (February 2015 – Current)
- **Paradise Valley Development Project Environmental Impact Report and Impact Statement, Riverside County, CA.** Author of the cultural section for this EIR for a housing and mixed use development of over 2200-acres east of Indio, California. Also reviewed original techical documents, and incorporated legal and agency comments. Mitigation measures included the management and monitoring of dozens of cultural resources, sensitive soils, and paleontological resources. (October 2014 – Current)
- **CA-LAN-321 Project Compliance Plans, and Native American and Lead Agency Consultation, Agoura Hills, Los Angeles County, CA.** Tasks included the authoring of a cultural resource Treatment and Data Recovery Plan, a cultural resource Management Plan, and a Curation Plan for all artifacts, as well as the organization of meetings with the Chumash Tribal Groups and the Lead Agency. (April 2015 – Current)
- **Floral Canyon Residential Development Cultural Resource Survey, North Hollywood, CA.** Principal and Project Manager for this Phase Ia cultural resource survey of an 8-acrea property. (September – December 2015).
- **Lynn Road Residentitial Development Project, Newbury Park, CA.** Principal and Project Manager for the Phase Ia and Phase Ib survey of this 10-acre parcel. A large Middle-Period seasonal settlement was discovered, which required subsurface testing and extensive mapping of surface hearths, yucca roasters, and dwelling features. (September – October 2015).
- **Marinette Road Residential Development, Pacific Palisades, Los Angeles County, CA.** Principal and project manager for this development project, which included a record search, site survey, Tribal Group scoping letters, and agency consultation. The major challenge was that the project property was within the Will Rogers State Monument and National Register site boundary. (February 2015 – May 2015)

- **Hilton Property Phase 3 Construction Site Phase Ib Cultural Resources Survey, Agoura Hills, Los Angeles County, CA.** Principal and Project manager for this extensive preliminary survey project, including excavation of over 200 shovel test pits and 4 test units to define the boundaries of a prehistoric ceremonial site of over 80-acres in size, used by Chumash Native Americans from 400 A.D. to the late 1700s. Recordation of over 190-features and 11,500 artifacts. Second phase will include data recovery tasks and an ammended Environmental Impact Report. (February 2014 – March 2015)
- **Blessed Theresa Church Construction, City of Winchester, Riverside County, CA.** Cultural consultation including cultural/paleo monitoring issues. (April 2014 – July 2014)
- **Village at Los Carneros, City of Goleta, Santa Barbara County, CA.** Reviewed all previous technical studies and wrote part of the cultural sections of the Environmental Impact Report for this residential house development project. (March 2014 – April 2014)
- **3121 Old Topanga Canyon Road Phase I Survey and Literature Search, City of Calabasas, Los Angles County, CA.** Principal and Project manager for this residential development project, including NAHC letters, literature review, site survey, paleontolgoical survey and literature search, final technical report, and the writing of the cultural resources section of the Environmental Impact Report. (March 2013 – April 2013)
- **Grove Lumber Facility Cultural and Paleontological Technical Studies, Thatcher Engineering, City of Perris, Riverside County, CA.** Principal for the cultural technical studies for this development project, including cultural and paleontological record searches, NAHC letters, and a cultural study (October 2013 – October 2013)
- **Newport Beach Yacht Club Evaluation, Community Development Department, City of Newport Beach, Orange County, CA.** Principal for this historic architecture project involving the built environment evaluation of the Newport Beach Yacht House. (October 2013 – October 2013)
- **Blossom Plaza Historic Structure Evaluation, China Town, City of Los Angeles, CA.** Principal for this historic architecture project involving the updating of technical reports and a standing structure evaluation. (July 2013 – September 2013)
- **Moreno Valley Residential Building Evaluation, City of Moreno Valley, Riverside, CA.** Principal for the architectural assessment of the J. Langdon Ranch located at 11761 Davis Street, in the city of Moreno Valley, Riverside County, California. (April 2013)
- **Indian Wells Tennis Court Development Project, Indian Wells, Riverside County, CA.** Principal Provided technical review of the planning documents cultural section, as well as oversaw Native American Heritage Commission communication for this project to enhance the Indian Wells Tennis Garden complex. (December 2012 – April 2013)
- **Scripps Hospital Paleontological and Archaeological Monitoring, Worley-Parsons, City of Encinitas, CA.** Principal Investigator. Dr. Bischoff managed QA/QC review, budgets, and professional standards for the cultural and paleontological monitoring of this large development project. (2011 - 2013)

*Energy Projects*

- **Beacon Solar, Hecate Energy and LADWP, Kern County, CA.** Business Developer for the archaeology and biological monitoring, pre-construction surveys, and desert totoise fence monitoring for this large, 2000-acre solar project for the Los Angeles Department of Water and Power. (July – October 2013).
- **Q-Cells Solar Survey, Palm Springs, Riverside County, CA.** Principal and Project Manager for a cultural survey and record search of 36-acres north of Palm Springs for solar development. (October 2013 – October 2013)
- **Pacific Gas and Electric NERC Support Monitoring, sub to URS, Northern and Central California.** Principal and Project Manager for this 4-year project in support of the national NERC power pole reliablity project for PG&E. Involves cultural, biological, and paleontological monitoring and field surveys. (October 2013 – October 2013)
- **Gold Bar Transmission Line Survey, McEwen Mining, Eureka County, NV.** Principal and Project Manager for this 2,577-acre cultural survey for the develelopment of a 33-mile transmisstion line to service the Gold Bar Mine in Nevada. Bureau of Land Management was the principal Federal agency. (April 2013 – October 2013).
- **East Kern Wind Resource Area (EKWRA) Power Pole Replacement Project, Environmental Intelligence / Southern California Edison, Kern County, CA.** Principal and Project Manager. This two-year project included cultural resource surveys, the evaluation of numerous cultural sites, and cultural and paleontological monitoring for the construction of over 130-miles of new power poles and fiber optics lines to service Tehachapi Moutain wind farms. (January 2013 – October 2013)
- **Pure Source Power, Victorville, San Bernardino, CA.** Principal and Project Manager for a cultural survey and record search of 140-acres north of Palm Springs for solar development. (September 2013 – October 2013)
- **Dry Ranch Solar Project, Silverado Power, Los Angeles County, CA.** Principal. Dr. Bischoff managed this 64-acre solar project near Lancaster, which included a record search, field survey, and cultural report to meet CEQA compliance. This project included coordination with Southern California Edison for a gen-tie line and telecom attachments. (March - April 2013)
- **Plainview Solar Project, Silverado Power, Los Angeles County, CA.** Principal. Dr. Bischoff managed this 114-acre solar project near Lancaster, which included a record search, field survey, and cultural report to meet CEQA compliance. (April - May 2013)
- **Silverleaf Solar Project, Cultural and Paleontolgoical Survey, Agile Engergy, Imperial County, CA.** Principal and Project Manager. Dr. Bischoff provided general review and quality control for a large solar project south of San Diego. This project involved an over 2,000-acre survey of proposed solar fields and 5-miles of electrical transmission gen-tie lines. The bureau of Land Management was the principal Federal agency. (November 2011 - July 2012)
- **Desert Harvest Solar Project, Build Environment Survey, eneXco Energy, Riverside County, CA.** Project Manager. Dr. Bischoff was the project manager for the built environment survey of 1,600-acre solar field and 12-miles of electrical transmission gen-tie lines. This included the production of a separate technical report for the Bureau of Land Management that included a historic structure inventory, assessment of signficance, and an indirect effects analysis. (November 2011 - June 2012)

- **Silverleaf Solar Project, Built Environment Survey, Agile Engergy, Imperial County, CA.** Project Manager. Project Manager. Dr. Bischoff was the project manager for the built environment survey of 2,000-acre solar field and 5-miles of electrical transmission gen-tie lines. This included the production of a separate technical report for the Bureau of Land Management that included a historic structure inventory, assessment of signficance, and an indirect effects analysis. (November 2011 - July 2012)
- **IVSC2 Solar Project, County of Imperial, Imperial County, CA.** Principal and Project Manager. Dr. Bischoff provided oversight of the 140-acre solar project east of the Salton Sea. This project was notable for the quick response time required to field a survey crew and complete a draft report for the County (Sept-Oct 2012)
- **Desert Harvest Solar Project, Cultural and Paleontological Resource Survey, eneXco Energy, Riverside County, CA.** Principal and Project Manager. Dr. Bischoff provided general review and quality control for a large solar project northeast of Blythe, CA. This project involved an over 1,600-acre survey of proposed solar fields and 12-miles of electrical transmission gen-tie lines. Bureau of Land Management was the principal Federal agency. (November 2011 - July 2012)
- **Desert Harvest Solar Project, Build Environment Survey, eneXco Energy, Riverside County, CA.** Project Manager. Dr. Bischoff was the project manager for the built environment survey of 1,600-acre solar field and 12-miles of electrical transmission gen-tie lines. This included the production of a separate technical report for the Bureau of Land Management that included a historic structure inventory, assessment of signficance, and an indirect effects analysis. (November 2011 - June 2012)
- **Tehachapi Renewable Transmission Project (TRTP), Southern California Edison, Kern, Los Angeles, and San Bernardino Counties, CA.** Principal and Project Manager. Dr. Bischoff was responsible for all office and field operations that ensured the successful inventory and management of cultural resources related to this 300-mile transmission line project, including the management of standing historical structures and paleontological resources. He managed an annual budget in excess of $4 million, a staff of up to 40 persons, wrote compliance documents (Programmatic Agreement Appendices, ARPA permits, Project Agency Yearly Reports, and Management Plans), and managed hazmat situations. Dr. Bischoff completed over 150 individual projects in southern California including survey, evaluation, mitigation, and resource monitoring. He wrote individual budgets for project-specific tasks, as well as construction-related administrative tasks, each with different scopes of work and budget amounts. He reconciled all budgets on a monthly basis and coordinated them with the master construction schedule. Dr. Bischoff managed field compliance with NEPA, with TRTP-specific environmental agency agreements, and with the cultural section of the project EIR/EIS and Programmatic Agreement. He also met legal and agency guidelines for Section 106, CEQA, NAGPRA, and TRTP Cultural Resource Management Plan. The Angeles National Forest was the lead Federal Agency, but the CPUC and other Federal and California State Agencies were also involved. (November 2009 - June 2011)

- **East Kern Wind Resource Area (EKWRA) Power Pole Replacement Project, Southern California Edison, Kern County, CA.** Principal and Project Manager. Dr. Bischoff managed original technical studies for a project designed to replace hundreds of power poles in the Tehachapi Mountains area in support of new wind farm construction. He conducted large area surveys, some on BLM properties, and developed a management plan for dozens of archaeological sites. Bureau of Land Management was the principal Federal agency. (February 2010 - June 2011)
- **Operations and Maintenance Contract, Southern California Edison. Southern California.** I acted as the Principal for all work orders issued to our office under the O/M contract. A major task under this contract was the response to the Crown Fire in 2010. I worked directly with SCE during and immediately after the fire to evaluate and protect cultural resources. (Jan 2010 - June 2011)
- **Crown Fire Survey and Cultural Site Update, Southern California Edison, Los Angeles County, CA.** Project Manager. Dr. Bischoff led the cultural response to the Crown Fire, which included surveying and updating known cultural sites as part of the SCE post-fire power pole and access road inspection. (August – Sept. 2010)

***Telecommunication Projects:***

- **AT&T Fiber-optics Renewal Project, Evaluations, Mitigations, and Monitoring, AT&T, San Bernardino County, CA.** Cultural Principal and Project Manager. Dr. Bischoff will provide project management, technical writing, and quality control for the cultural and paleontological evaluations, data recoveries, and monitoring efforts for the AT&T fiber renewal project. This project involved the survey of over 90 miles of proposed new fiber-optic line between Barstow and Las Vegas, NV, and the management of over 100-cultural sites. Bureau of Land Management and Mojave National Preserve were the principal Federal agencies. (July 2013 – October)
- **Fiber Node Evaluations, Freedom Communications, Orange County, CA.** Cultural Principal. Dr. Bischoff provided general project management and quality control for the cultural background record searches and surveys for dozens of telecommunication sites throughout the City of Irvine as part of the Freedom Communications site development project. Dozens more sites are expected to be tested in the coming year. (April 2012 – October 2013)
- **San Diego Churches and Public Building Historic Structure Evaluations, DePratti Inc., City of San Diego, CA.** Principal Investigator. Dr. Bischoff acted as Principal and QA/QC manager for this project, which involved the evaluation of dozens of historic structures as part of the DePratti Communication telecommunication attachment project in the City of San Diego. (November 2011 – October 2013)
- **The Plunge Evaluation, DePratti Inc., City of San Diego, San Diego County, CA.** Principal for this historic architecture project involving the structural evaluation and National Register documentation for The Plunge historic salt-water bath house in San Diego. (September 2013 – September 2013)

- **AT&T Fiber-optics Renewal Project, Surveys, Literature Searches, and Technical Studies, AT&T, San Bernardino County, CA.** Cultural Principal and Project Manager. Dr. Bischoff provided general project management and quality control for the cultural, paleontological, and ethnographic surveys, literature searches, and technical studies. This project involved the survey of over 90 miles of proposed new fiber-optic line between Barstow and Las Vegas, NV, and the management of over 100-cultural sites. Bureau of Land Management and Mojave National Preserve were the principal Federal agencies. (April 2012 – July 2013)
- **Digital West Fiber Line Feasibility Study, San Luis Obispo to Los Angeles, Counties of San Luis Obispo, Sanata Barbara, Ventura, and Los Angeles, CA.** Project Manager for this large feasibility study for placing a new fiber line down the US 101 freeway cooridor. Biological, cultural, paleontological, and permitting constraints were all examined. (April 2012 – July 2013)
- **Digital 395 Broadband Stimulus Project, Praxis and California Broadband Corporation, California and Nevada.** Cultural Director. Dr. Bischoff acted as the California report manager of the cultural division, directed fieldwork, and authored management documents and reports. This project involved the new installation of over 650 miles of fiber-optic line across California and Nevada. The programmatic agreement of this complex project included 10 federal, state, and tribal agencies, with another seven acting as interested parties, and the management, evaluation, and monitoring of over 170 cultural sites. NTIAA was the Principal Federal Agency, but also involved twelve other California and Nevada State and Federal agencies and Tribal Groups (November 2011 – April 2012)

***Defense Projects:***

- **Fort Irwin Cell Tower Geotech Boring Monitoring, Northrop-Grumman and Fort Irwin Army Post, San Bernardino County, CA.** Principal. This project involves the cultural and paleo monitoring of sensitive areas as part of the construction of over 24 new cell tower locations. (October 2013 – October 2013)
- **Edwards Airforce Base Telecommunication Cultural Monitoring, Team Fischel Company, Edwards AFB, Kern County, CA.** Project Manager and Principal for the cultural monitoring of 40-miles of telecommunication trenching on Edwards AFB, including pre-construction meetings and a final monitoring report. (May 2013 – Sept. 2013)
- **Fort Irwin Cell Tower Surveys and Monitoring, Northrop-Grumman and Fort Irwin Army Post, San Bernardino County, CA.** Principal. This project involves the cultural and paleo survey of over 24 new cell tower locations and associated access roads on Fort Irwin, as well as construction phase monitoring. (April 2013 – October 2013)
- **Marine Corps Base, Camp Pendleton, Cultural Resources Consultation, Marine Corps Base, Pendleton, San Diego County, CA.** On-Call Senior Cultural Resources Consultant. Dr. Bischoff provided senior-level cultural resource consultation related to Camp Pendleton's Basewide Utilities Infrastructure Improvements project. He provided consulting on cultural resource management for several waste treatment and utility line systems as part of the Camp's "Grow the Force" initiative. (2011 – October 2013)

*Water Projects:*

- **Pacoima Spreading Grounds Improvement Project, LACDPW, Los Angeles County, CA.** Cultural Principal. Dr. Bischoff managed the cultural resources record search and CEQA cultural section mitigation measures of an EIR for the improvement of the Pacoima spreading grounds and related canal resources. (April 2013 – October 2013)
- **Devil's Gate Reservoir Sediment Removal and Management Project, LACDPW, Los Angeles County, CA.** Principal of Cultural Resources. This project involved removal of sediment within the Devil's Gate Reservoir area, which required a preliminary cultural survey and record search under CEQA, as well as an EIR. Dr. Bischoff served as the cultural principal for the project and provided a recommended plan for dealing with sedimentary soils vs. native soils, monitoring criteria, and potential discovery situations. Dr. Bischoff helped write Environmental Impact Report sections, and worked with the Gabrieleno Tribal Group in the protection of archaeological and tribal cultural resources. (2011 – October 2013)
- **Peck Road Spreading Basin Improvement Project, LACDPW, Los Angeles County, CA.** Cultural Principal. Dr. Bischoff managed the cultural resources record searches, field survey, paleontological survey, and CEQA cultural section mitigation measures of an MND for the improvement of the Peck Road Spreading Basin, including a related new water discharge pipe. (June 2013 – September 2013)
- **Marina Del Rey Waterline Replacement Project Cultural Monitoring, LACDPW, Los Angeles County, CA.** Cultural Principal. This project with the Los Angeles Department of Public Works involved the cultural monitoring for the Marina Del Rey 18-inch Waterline Replacement. Chambers Group also provided a qualified archaeological monitor at the project site during excavation activities during construction. (March - May 2013)
- **Dieguto Wetlands Restoration Monitoring, Southern California Edison, Del Mar, San Diego County, CA.** Principal Investigator and Project Manager. This project involved the extensive rehabilitation of Southern California Edison property as part of the Dieguto Wetlands Restoration project. (April 2012 - January 2013)
- **Los Penasquitos Wetlands Monitoring, AMEC, Del Mar, San Diego County, CA.** Principal Investigator. Dr. Bischoff managed the monitoring tasks, budgets, and professional standards for this project near the City of Del Mar as part of the Torrey Pines State Nature Reserve restoration. (October - December 2012)
- **San Gorgonio Creek Water Recharge Basin Construction Monitoring, Beaumont Cherry Valley Water District, Cherry Valley, Riverside County, CA.** Principal and Project Manager. This project involved paleontological and archaeological construction monitoring during construction, including emergency evaluation and monitoring when early 19$^{Th}$ Century structures and materials were unexpectedly encountered during earth moving. (February 2012 – April 2012)
- **Penmar Golf Course Water Quality Improvement Project, Pacific Hydrotech and City of Santa Monica, Santa Monica, CA.** Principal Investigator. Dr. Bischoff managed QA/QC review, budgets, and professional standards for the project in the City of Venice. Penmar was a multi-year waterline and tank improvement project in which evidence of ethnic Japanese barrios and fossil Pleistocene animal bones were discovered. (November 2011 - November 2012)

- **Oxford Retention Basin Flood Protection Project, LACDPW, Los Angeles County, CA.** Principal and Project Manager. The Oxford Basin in Marina Del Rey was receiving enhancement, and Dr. Bischoff managed the completion of the cultural survey, literature review, and construction monitoring for the project. (2011 - 2012)
- **San Jose Salt Barge HAER Documentation Project, USACE and Santa Clara Valley Water District, City of San Jose, CA.** Principal. Dr. Bischoff consulted on the excavation and evaluation of a shallow-water shipwreck discovered during a wetlands rehabilitation project. This project involved USACE, San Francisco District as lead agency and the Water District as client. (January – February 2011)

***Public Works Projects:***

- **Agoura Hills Trails Expansion Project, City of Agoura Hills, Los Angeles, CA.** Principal and Project Manager for assessing the Pepperdine University Archaeological Collection for final storage (Spring 2016)
- **Oakwood Schools Built Enviroment and Archaeological Assessment.** Principal and Project Manager for the Phase I built environment and archaeological assessment of the project property prior to the construction of a new middle and high school campus. Challenging tasks were assessing indirect effects of the project on an adjacent historic district, and addressing a modern human cremation garden in the report (November 2015 – February 2016)
- **City of Thousand Oaks Environmental On-Call (Including Cultural Resources), Los Angeles County, CA.** Envicom was selected as one of a limited number of on-call environmental firms for the City. (June 2015 – Current)
- **City of Pomona Environmental On-Call (Including Cultural Resources), Los Angeles County, CA.** Envicom successful won inclusion as one of six on-call environmental firms for the City. (October 2014 – Current)
- **San Bernardino County Cultural, Historic Architecture, and Paleontology On-Call, San Bernardino, CA.** Envicom successful won inclusion in the limited on-call pool. (October 2014 – Current)
- **Veterans Administration, VISN 21 On-Call, Western States, Teamed with KAL Architectes.** This project will provide cultural and biological technical services for Veterans Administration projects from October 2013 to October 2018. (October 2013 – October 2013)
- **Historic Structure Evaluations for Statewide Weatherization Efforts, sub to ICF for the State of California, All Counties, CA.** Project Manager and Principal. This project involves meeting NEPA compliance for low-income subsidized weatherization efforts throughout the State of California. Hundreds of structures will be evaluated as part of this project by a Chambers Architectural Historian using a abbreviated format. (November 2011 to October 2013)
- **CEQA Services for Improvements to Polytechnic and Wilson High Schools, LBUSD, City of Long Beach, CA.** Cultural Principal. Dr. Bischoff provided oversight and incorporation of the historic architecture technical reports into the project CEQA documents. (June 2013 – August 2013)

- **Mill Creek Crew Room Cultural Monitoring, Angeles National Forest (ANF), Los Angeles County, CA.** The County of Los Angeles Department of Public Works proposed to replace the crew room building within the Angeles Forest Mill Creek Summit Maintenance Yard facility. This CEQA/NHPA project involved the preparation of a treatment and discovery plan document, ARPA permitting, constant consultation with the ANF, construction monitoring, and a final monitoring report. (April – July 2013)
- **Review of Technical Report and CEQA Documents Relating to the Proposed Demolition of Santa Ana Public Building #16, City of Santa Ana, Santa Ana, CA.** Principal. This project involved the review of technical documents, mitigation measures, and CEQA documents relating to the demolition of a 1950s public building in the City of Santa Ana. (May 2013 – July 2013)
- **Roosevelt School, LBUSD, City of Long Beach, CA.** Cultural Principal. Dr. Bischoff provided oversight, authorship, and counsel on the EIR for the demolition of the Roosevelt Elementary School in Long Beach. This proved to be a complex project, involving an historic built environment resource evaluation and mitigation plan, legal investigation, and extensive responses to public comments. This process resulted in a HABS/HAER mitigation project. (November 2011 - June 2012)

***Transportation Projects:***

- **Foothill Toll Road Cultural and Paleontological Monitoring, Ghiradelli and Associates, Orange County, CA.** Principal and Project Manager for cultural monitoring related to the upgrade of all tollroad payment stations in Orange County. (October 2013 – October 2013)
- **9th Street Extension Historic Structure Inventory and Evaluation, City of Holtville, Imperial County, CA.** Principal and Project Manager. Dr. Bischoff managed and provided QA/QC for this project involving a Caltrans inventory of project APE historic built environment resources, and the historic evaluation of a canal feature. Final deliverables included a Historic Resources Evaluation Report and a Historic Property Survey Report to CALTRANS standards. (June 2013 – August 2013)
- **Francisquito Bridges Replacement (3-Total), LADWP/CALTRANS, Los Angeles County, CA.** Principal. Dr. Bischoff managed and oversaw the completion of this project in the Angeles Forest. This project involved the replacement of three existing bridges on San Francisquito Canyon Road over San Francisquito Canyon Creek. The proposed improvement project involved widening the two lane bridges, improvement of approachment roadway, and the placement and installation of retaining walls, concrete barriers with tubular-steel handrails, and metal beam guardrails. (2011 – September 2013)
- **Murrieta Whitewood Road Extension, City of Murrieta, Riverside County, CA.** Principal and Project Manager. This road extension project involved a cultural resource survey and records search, a paleontolgoical field study, and native american Consultation due to the historic use of the nearby Murrieta Hot Springs by local Native Americans. (April – June 2012)
- **Nuevo Road/ I-215 Interchange Improvement in the City of Perris, CALTRANS, Riverside County, CA.** Principal. Dr. Bischoff managed and provided QA/QC for this project involving street widening and additional improvements at the Nuevo Road/ I-215 interchange. Final deliverables included a record search and a survey report to CALTRANS standards. (2011 – 2012)

- **Soledad Canyon Road Bridge Replacement Project, LACDPW, Los Angeles County, CA.** Principal. LADPW intends to replace a bridge on Soledad Canyon Road. Chambers Group completed a record search and NAHC records review for potential archaeological resources. This project is on-going and may in the future involve further work, including cultural and historic structure surveys and evaluation. (2011 – 2012)

***Mining Projects:***

- **Mining Projects, Quality Control and Management Support – Ormat, Enviroscientists, Newmont, McEwen, Midway, Reno, Nevada.** Dr. Bischoff was directly involved with the management of dozens of mining-related surveys, monitoring, and site evaluation projects conducted from the Chambers Group Reno, Nevada, office. Bureau of Land Management was the principal Federal agency. (2011 – October 2013)
- **Ruth Mine Reclamation Cultural Survey and Evaluation, ERRG and USACE, Inyo County, CA.** Principal. Dr. Bischoff oversaw the Intensive Phase I mapping of the Ruth Mine site, evaluation of several site features, and negotiations with the United States Corps of Engineers and the BLM. Extensive mapping of Mine features and structures were completed as part of this project. Bureau of Land Management was the principal Federal agency. (2011 - 2012)

# Geology and Soils Report Approval Letter

APPENDIX G

# C. Y. GEOTECH, INC.

## Engineering Geology and Geotechnical Engineering

9428 Eton Avenue, Unit M, Chatsworth, CA 91311
Tel: (818) 341-1899 Fax: (818) 341-1897 Email: cygeotech@sbcglobal.net

March 31, 2015 P.N. CYG-14-7350

CAC Development
1504 South Flower Street
Los Angeles, CA 90049

Subject: Response to City of Los Angeles Geology and Soils Report Correction Letter Dated March 23, 2015, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818 Crisler Way, Los Angeles, California

Dear Mr. Robert,

As requested, C. Y. Geotech (CYG), Inc. has prepared this report in response to the City of Los Angeles geology and soils report correction letter dated March 23, 2015 (Log# 79258-01). A copy of the city review letter is attached at the end of this report. For your convenience, the responses are presented following each review comment.

City Review Comment 1:
Please provide a copy of the report submitted to and approved by Public Works for review by LADBS. Please also provide a copy of the approval letter from Public Works.

Response to Review Comment 1:
A copy of the report submitted to and approved by the Public Works was enclosed in Appendix A of this report.

City Review Comment 2:
Will a cross lot drainage easement be feasible to convey site water as discussed in the previous item 5 response? Note: If a cross lot drainage easement is required, the surveyed metes and bounds of the proposed easement for this purpose on the offsite properties to benefit the subject properties will require written notarized consent from all property owners involved and shall be recorded at the Los Angeles County Recorder's office.

Response to Review Comment 2:
The cross lot drainage easement is feasible. The cross lot drainage easement has been approved and recorded as the County records.

City Review Comment 3:
Show the location and label all proposed shoring on the plot plan and cross sections. Note: It appears that shoring locations were shown to support the proposed street but not the proposed building excavations.

Response to Review Comment 3:
The construction concept and procedures for the construction of the proposed single family residences are listed below:

1. Soldier piles are to be installed along the property lines as shown on Plate 1 in the referenced CYG report dated November 26, 2014.

2. Excavation for the building pad areas will be extended all the way to the soldier piles along the property lines.

3. Building walls will be built. The subterraneous building wall portions will be constructed as retaining walls.

4. The spaces between the subterraneous building wall and the soldier along the property lines will be backfilled to the finish grade as proposed.

With the above-mentioned construction concept and procedures, no shoring system or soldier piles are required for the construction the building walls.

City Review Comment 4:
Verify whether or not the horizontal seismic coefficient used in the 09/19/2012 report is still applicable to the 2014 LABC and / or revise seismic slope stability analysis.

Response to Review Comment 4:
The building permit application was submitted in 2012 and the permit process is still valid and has not expired. Therefore, the horizontal seismic coefficient in the 09/19/2012 report is still applicable to this project.

City Review Comment 5:
Provide design seismic earth pressure for retaining walls exceeding a height of six feet in accordance with 2014 LABC.

Response to Review Comment 5:
The building permit application was submitted in 2012 and the permit process is still valid and has not expired. Therefore, the earth pressures recommended in 09/19/2012 report are still applicable to this project.

We appreciate the opportunity for providing this professional service. If you have any questions regarding this report, please do not hesitate to contact us.

Very truly yours,
C. Y. Geotech, Inc.










John T. Tsao
RCE 46886/CEG 1783

Paul Cai
RCE 80352

Encl: References
City of Los Angeles Correction Letter Dated March 23, 2015
Appendix A, Supporting Documents

cc: (5) Addressee

## REFERENCES


1. Parmelee/Geology, December 9, 2001, Geologic and Soils Engineering Update Report, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

2. City of Los Angeles Approval Letter Dated February 20, 2002 (Log# 35753).

3. Parmelee/Geology, May 19, 2002, Geologic and Soils Engineering Report, Proposed Two Residences, Lots 97 and 98, Tract 865, Adjacent to 8350 Grandview Drive, Los Angeles, California.

4. City of Los Angeles Approval Letter Dated June 27, 2002 (Log# 36891).

5. Parmelee/Geology, March 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

6. Parmelee/Geology, April 14, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

7. City of Los Angeles Inter-Department Correspondence, April 25, 2003, 8350 Grandview Drive (BD 401611).

8. Parmelee/Geology, May5, 2003, Response to City Review Letter Dated April 25, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

9. City of Los Angeles Inter-Department Correspondence, May 14, 2003, 8350 Grandview Drive (BD 401611).

10. Parmelee/Geology, May25, 2003, Response to City Review Letter Dated May 14, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

11. Parmelee/Geology, October 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

12. Parmelee/Geology, November 26, 2003, Additional Information, Proposed Two Residences, Lots 95, 96, 97 and 98, Tract 865, 8350 Grandview Drive, Los Angeles, California.

13. Geomatrix, Inc., September 19, 2012, Geologic and Soils Engineering Update Report, Proposed Four Hillside Residences and Street Improvement, Lot 95, 96, 97 and 98, Tract 865, 8350, 8354, 8358 and 8362 Grand View Court, Los Angeles, California.

14. City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013 (Log# 79258).

15. C. Y. Geotech, Inc., November 10, 2014, Letter of Change of Geologist and Soils Engineer of Record, Proposed Four Single Family Residences, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California.

16. C. Y. Geotech, Inc., November 26, 2014, Response to City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

17. City of Los Angeles Geology and Soils Report Correction Letter Dated March 23, 2015 (Log# 79258-01).

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS
PRESIDENT

E. FELICIA BRANNON
VICE-PRESIDENT

JOSELYN GEAGA-ROSENTHAL
GEORGE HOVAGUIMIAN
JAVIER NUNEZ

# CITY OF LOS ANGELES
CALIFORNIA

ERIC GARCETTI
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

RAYMOND S. CHAN, C.E., S.E.
GENERAL MANAGER

FRANK BUSH
EXECUTIVE OFFICER

## GEOLOGY AND SOILS REPORT CORRECTION LETTER

March 23, 2015

LOG # 79258-01
SOILS/GEOLOGY FILE - 2

Aaron Cohen
1504 S. Flower Street
Los Angeles, CA 90015

TRACT: 865
LOTS: 98 / 97 / 96 / 95
LOCATION: 1800 / 1806 / 1812 / 1818 Crisler Way

| CURRENT REFERENCE REPORT/LETTER(S) | REPORT No. | DATE OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Addendum Report | CYG-14-7350 | 11/26/2014 | C.Y. Geotech, Inc. |
| Oversized Docs. | " | " | " |
| Responsibility Letter | " | 11/10/2014 | " |

| PREVIOUS REFERENCE REPORT/LETTER(S) | REPORT No. | DATE OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Dept. Correction Letter | 79258 | 01/30/2013 | LADBS |
| Geology/Soil Report | PG 1091 | 09/19/2012 | GeoMatrix |
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | " |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |

The referenced current report concerning the proposed construction of a new, multi-level dwelling with pool on each of the subject lots, has been reviewed by the Grading Division of the Department of Building and Safety. Crisler Way (currently unimproved) adjacent to the subject lots will be improved, as part of the proposed development. Retaining walls are proposed as part of the building construction and for the street improvement. The drainage improvements proposed currently are not acceptable. The review of the subject current report cannot be completed at this time and will be continued upon submittal of an addendum to the report which shall include, but need not be limited to, the following:


AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

The review of the subject reports cannot be completed because the stability or safety of the proposed development cannot be determined at this time. The review will be continued upon submittal of an addendum to the reports which includes, but need not be limited to, the following:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2014 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. Please provide a copy of the report submitted to and approved by Public Works for review by LADBS. Please also provide a copy of the approval letter from Public Works.

2. Will a cross lot drainage easement be feasible to convey site water as discussed in the previous item 5 response? Note: If a cross lot drainage easement is required, the surveyed metes and bounds of the proposed easement for this purpose on the offsite properties to benefit the subject properties will require written notarized consent from all property owners involved and shall be recorded at the Los Angeles County Recorder's office.

3. Show the location and label all proposed shoring on the plot plan and cross sections. Note: It appears that shoring locations were shown to support the proposed street but not the proposed building excavations.

4. Verify whether or not the horizontal seismic coefficient used in the 09/19/2012 report is still applicable to the 2014 LABC and / or revise seismic slope stability analysis.

5. Provide design seismic earth pressure for retaining walls exceeding a height of six feet in accordance with 2014 LABC.

The geologist and soils engineer shall prepare a report containing the corrections indicated in this letter. The report shall be in the form of an itemized response. It is recommended that once all correction items have been addressed in a response report, to contact the report review engineer and/or geologist to schedule a verification appointment to demonstrate compliance with all the corrections. Do not schedule an appointment until all corrections have been addressed. Bring three copies of the response report, including one unbound wet-signed original for microfilming in the event that the report is found to be acceptable.

CASEY LEE JENSEN (213)
Engineering Geologist Associate II

YING LIU
Structural Engineering Associate II

CLJ/YL:clj/yl
Log No. 79258-01
213-482-0480/90

cc: Robert Anderson, Applicant
C.Y. Geotech, Inc., Project Consultant
LA District Office

## APPENDIX A

## SUPPORTING DOCUMENTS

1. **Letter from CAC Development**
2. **Letter from Project Structural Engineer (#1) Including Public Work Approval Document**
3. **Document for Drainage Easement (#2)**
4. **Sequences of Excavation and Construction (#3)**
5. **Documents for Building Permit Application (#4 & #5)**

CAC DEVELOPMENT

# Crisler Way Project

April 8, 2015

To: Engineers – Jensen and Lui
Grading Division DB&S

Log # 79258-01

Properties Located at: 1800 /1806 /1812 /1818 Cristler Way, Los Angeles, CA 90046

Please attached responses to the Correction Letter dated March 23, 2015

1. Please provide a copy of the report submitted to and approved by Public Works for review by LADBS. Please also provide a copy of the approval letter from Public Works.

Please see attached Structural Engineer, for both the Roadway and the Houses Comment, and the approved "B" Permit and Bond. We have this phase of the project indexed.

2. Will a cross lot drainage easement be feasible to convey site water as discussed in the previous item 5 response? Note: If a cross lot drainage easement is required, the surveyed metes and bounds of the proposed easement for this purpose on the offsite properties to benefit the subject properties will require written notarized consent from all property owners involved and shall be recorded at the Los Angeles County Recorder's office.

Please see attached Civil Engineer's recorded document for Sewer and Storm Water, also note that we have clearances from Sanitation Dept. for this work.

3. Show the location and label all proposed shoring on the plot plan and cross sections. Note: It appears that shoring locations were shown to support the proposed street but not the proposed building excavations.

Please see attached Structural Engineer, for both the Roadway and the Houses Comment on the construction sequence.

4. Verify whether or not the horizontal seismic coefficient used in the 09/19/2012 report is still applicable to the 2014 LABC and / or revise seismic slope stability analysis.

5. Provide design seismic earth pressure for retaining walls exceeding a height of six feet in accordance with 2014 LABC.

Please see attached submittal applications for the project, these have not expired and pre-date the change in the code before 2014.

Appreciate your consideration.

Regards –

**Robert Anderson AIA**
CAC DEVELOPMENT
Architect / Partner 818.335.0028 cell

#1

# STEVEN W. MEZEY & associates

STRUCTURAL ENGINEERING

April 3, 2015

Mr. Robert Anderson
CAC Development
18169 Knoll Hill,
Granada Hills, CA 91344

Re:1800/1806/1812/1818 Crisler Way
Los Angeles, 90069

Dear Mr. Anderson,

In response to items 1 and 3, of the March 23, 2015 City of Los Angeles Geology and Soils Report Correction Letter, the following explanation is provided.

Lateral surcharge from the existing residences located up-slope of the proposed retaining walls abutting the proposed street has been considered in the the design of the retaining walls.

The future residences which are located down-slope of the proposed street shall be constructed after the following sequence of excavation and construction is performed:

1. The permanent soldier pile retaining walls supporting the street shall be constructed.
2. The soil down slope of the soldier piles shall be removed to the depth necessary for the construction of the foundation system of the proposed single family residences.
3. The shotcrete between the soldier piles shall be installed.
4. The adjacent retaining wall for the proposed single family residences shall be constructed 5' to 15' from soldier pile wall per plan.
5. The drainage system and waterproofing for the residence retaining walls shall be installed.
6. The earth between the residence retaining wall and soldier pile retaining wall shall be backfilled and compacted per the approved soil report.

In summary, the permanent street soldier piles perform as a temporary retaining ~~wall system~~ for the construction of the residence retaining walls and foundation.

Please don't hesitate to call if you have any questions.

Sincerely,

Steven W. Mezey
Structural Engineer
SE2665

REGISTERED PROFESSIONAL ENGINEER
STEVEN W. MEZEY
No. 2665
APR 03 2015
Exp 9-30-15
STRUCTURAL
STATE OF CALIFORNIA

15230 BURBANK BLVD., SUITE 105, VAN NUYS, CA 91411 VOICE (818) 908-1554 FAX (818) 908-0904

# CLASS "B" APPLICATION / PERMIT (DESIGN PHASE)

ISSUED UNDER SECTIONS 62.105 TO 62.116
INCLUSIVE, LOS ANGELES MUNICIPAL CODE (SEE REVERSE HEREOF)

DISTRICT: WEST LA

Work Order(s): BR402571

I HEREBY REQUEST PERMISSION TO CONSTRUCT THE IMPROVEMENTS DESCRIBED BELOW UNDER PRIVATE CONTRACT AND, IF PERMISSION IS GRANTED, I AGREE TO CONSTRUCT SAME IN ACCORDANCE WITH PLANS AND/OR SPECIFICATIONS APPROVED BY THE CITY ENGINEER. I ALSO ACKNOWLEDGE THAT I HAVE REVIEWED THE GENERAL INFORMATION PRESENTED ON THE REVERSE OF THIS APPLICATION, AND AGREE TO THE PROVISIONS STATED THEREON.

SHEET NO. 1 OF 2 SHEETS

DATE ISSUED: 09/07/2012

DATE EXPIRES: 09/07/2014

MJR PROJECT/PROJECT: EBPER/ EBPERGEN

PROGRAM: 7804

ENGR DIST.: E6201850

REIMB FLG: YES

DIR/INDIR: D

**STREETS AND LIMITS TO BE IMPROVED**
(SEE CONSTRUCTION TOTALS AT RIGHT)
GRAND VIEW DRIVE & CRISLER WAY (S.W. CORNER)

ESTIMATED 2% SURCHARGE = $696.00
ESTIMATED 7% SURCHARGE = $2,436.00

**INDICATE SCOPE**
GRADING, PAVEMENT, CURB & GUTTER, DRIVEWAY, STORM DRAINS. (DEPOSITED $3,000.00 ON 9/7/2012.) (REQUIRED INSPECTION DEPOSIT AMOUNT = $37,932.00)THIS PERMIT SUPERCEDED THE CLOSED BC401611,P-35874 WAS APPROVED PER BC401611,PAID $53,737.00 ON 02/17/2015

| ENGR. PLAN CHECK DEPOSIT | Number of Trees | Wells | TREE PLANTING FEE | District Map Number | DIVISION INDEX | DRAINAGE MAP | COUNCIL DISTRICT |
|---|---|---|---|---|---|---|---|
| $0.00 | 0 | 0 | $0.00 | 148.5 A 175 | | 470 | 5 |

| SANDBLASTING FEE | DOT SIGN DEPOSIT | TRAFFIC DEPOSIT | PROPOSED R/W NO. | SPECIAL REFERENCES |
|---|---|---|---|---|
| $0.00 | $0.00 | $0.00 | | P-35874 |

| CONST. - INSPECTION DEPOSIT | TOTAL FEE DEPOSIT |
|---|---|
| $34,800.00 | $37,932.00 |

| TYPE OF PROJECT | TOTAL BOND DEPOSIT |
|---|---|
| Street Improvement | $580,000.00 |

| IMPROVEMENT BOND NO. | |
|---|---|
| CAO140257 | |

| LIABILITY INSURANCE NO. | LIAB. INSUR. EXPIR. DATE |
|---|---|
| | |

PRIVATE ENGINEER
HOVEL & PILARSKI

STREET ADDRESS
4525 INDUSTRIAL ST. SUITE 4L

| CITY | ZIP | PHONE NO. |
|---|---|---|
| SIMI VALLEY | 93062 | 805-572-1900 |

OWNER-APPLICANT (SEE REVERSE)
AARON COHEN

STREET ADDRESS
1504 S. FLOWER ST.

| CITY | STATE | ZIP |
|---|---|---|
| LOS ANGELES | CA | 90015 |

| (AREA CODE) PHONE NO. | DATE SIGNED BY APPLICANT |
|---|---|
| 818-335-0028 | |

SIGNATURE (SEE REVERSE BEFORE SIGNING)

APPLICANT'S NAME (ADD TITLE IF OFFICER)
ROBERT ANDERSON

| DISTRICT/DIVISION OFFICE | ISSUED BY: |
|---|---|
| | KATHLEEN HUGHEY |
| TIME | DATE |

| CONSTRUCTION ITEMS | ESTIMATED COST |
|---|---|
| GRADING | $112,500.00 |
| DPW ENGINEERING | |
| PAVING CURB/ GUT. /SDWLK | $371,500.00 |
| SEWER | $0.00 |
| PERMIT DEPOSIT | |
| STORM DRAIN | $20,000.00 |
| | $53,737.00 |
| STREET LIGHTS | $0.00 |
| TRAFFIC SIGNALS | $0.00 |
| Total Fee: | $53,737.00 |
| SUBTOTAL Check: | $504,000.00 $53,737.00 |
| HAVE A NICE Day | |
| + % PCF | $75,600.00 |
| CONSTRUCTION ESTIMATE | $580,000.00 |
| + % CIF | $0.00 |
| BOND ESTIMATE | $580,000.00 |

REGISTER RECEIPT VALIDATION

**Job Address:**
8350 GRAND VIEW DR.

DIST. ENGR. Mike Patonai DATE 02/17/15
Mike Patonai, P.E.

Permit Title:
In conn. w/ building permit GRAND VIEW DR. (8350) & CRISLER WAY S.W. CORNER (IN CONN.W/ BLDG. PERMIT)

Reference Number 8910 Job Address: 8350 GRAND VIEW DR.

**GENERAL INFORMATION**

This form shall be used for all Class "B" Permits. It is not necessary to repeat the STREETS AND LIMITS breakdown on CONSTRUCTION B-PERMITS that are preceded by checking only permits.

1. **LIABILITY INSURANCE** and performance bonds are only required for approval of construction B-Permits.

2. **OWNER-APPLICANT** must be the owner of the affected property, and must be the same as the performance bond principal. Contractors for governmental agencies under faithful performance bonds shall be entered as OWNER-APPLICANT. Applicant issued to CORPORATIONS shall be executed by the President, Vice-President, Secretary or Asst. Secretary, and the CORPORATE SEAL shall be impressed.

3. **SAFETY ORDERS** Sec. 6500 of the STATE LABOR OR CODE requires the APPLICANT to obtain a **STATE A DIVISION OF INDUSTRIAL SAFETY (DIS) PERMIT** and a copy of **STATE INDUSTRIAL SAFETY ORDERS** BEFORE BEGINNING WORK ON ANY TRENCH OR EXCAVATION FIVE FEET OR DEEPER into which a person must descend. City personnel will not enter such excavations until the required permit and safety orders have been obtained and are displayed on the job site.

4. PCF percentage factors apply to possible construction change orders.CIF percentage factors apply to cost increases through the life of the project. (See CONSTRUCTION ITEMS on the reverse side of this application.)

5. **PLAN CHECKING DEPOSITS** are subject to charges for blueprints, engineering, testing, traffic signal design, street lighting design, and administrative service.

**CONSTRUCTION PERMIT DEPOSITS** may be charged against for blueprints, engineering, testing, surveying, inspection, administrative services, emergency light and barricade services, street tree planting and maintenance, street lighting burn tests, Street Name signs, traffic warning and regulatory signs, sandblasting and painting of traffic markings, erosion control, etc. Unused fees are refunded after closure of the permit. The applicant will be billed for unreimbursed charges (fee deficits).

6. **DESIGN OFFICE** will determine if applicant must dedicate a right of way to the City for construction purposes. The applicant shall open a right of way work order and deposit necessary fee with the REAL ESTATES SECTION, DEVELOPEMENT SERVICES DIVISION, BUREAU OF ENGINEERING.

7. NOT MORE THAN ONE TRACT OR PARCEL MAP SHALL BE ASSIGNED TO A SINGLE B-PERMIT.

**8. PERMITTEE SHALL STOP WORK AND CONTACT THE PERMITTING AGENCY PRIOR TO CUTTING OR EXCAVATING ANY DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK.**

**9. ANY DAMAGE TO DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK MUST BE REPAIRED IN KIND OR RECONSTRUCTED IN KIND BY THE PERMITTEE, AS DIRECTED BY THE PERMITTING AGENCY, IN A MANNER SATISFACTORY TO THE CITY ENGINEER AND THE INSPECTOR OF PUBLIC WORKS.**

THIS CONSTRUCTION B-PERMIT MUST BE ON THE JOB SITE AT ALL TIMES.

**THIS PERMIT VALID ONLY IF ACCOMPANIED BY A DIS PERMIT AND SAFETY ORDERS** (SEE NOTE 3 ABOVE). DIS PERMIT MAY BE OBTAINED FROM STATE DIVISION OF INDUSTRIAL SAFETY, 3460 WILSHIRE BOULEVARD, LOS ANGELES. **NOTE: GOVERNMENTAL AGENCIES AND PUBLIC UTILITIES UNDER PUC CONTROL ARE EXEMPT.** PRIVATE CONTRACTORS ACTING AS PERMITTEE FOR SUCH AGENCIES ARE NOT EXEMPT.

NOTE: CHARGES AGAINST THE PERMIT FEE DEPOSIT WILL BE COMPILED APPROXIMATELY 6 TO 8 WEEKS AFTER THE DATE FINAL INSPECTION IS COMPLETED. THE B-PERMIT WILL BE CLOSED AND THE IMPROVEMENT BOND EXONERATED AFTER ALL PERMIT FEE CHARGES HAVE BEEN ACCUMULATED AND PAID.

"CORRECTED ORIGINAL"

APPROVED FOR THE
CITY ENGINEER BY
BOND CONTROL

City of Los Angeles
DEPARTMENT OF PUBLIC WORKS
Office of the City Engineer

Premium: $11,600.00/2 Years

Bond #8026615
SURETY'S BOND NO.

WEST LA
District/Division Design Office
Council District No. 5
Date Issued: 11/21/2013

CAO 1402573
CAO-RISK MGMT. NO.
DATE APPROVED 9/18/2014

## GENERAL IMPROVEMENT PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, **AARON COHEN, ISAAC M. COHEN, ANDREA R. COHEN AND GRANDVIEW LOTS, LLC**

as PRINCIPAL and Developers Surety and Indemnity Company a corporation incorporated under the laws of the State of Iowa and authorized by the laws of the State of California to execute bonds and undertakings as sole surety, as SURETY, are held and firmly bound unto the City of Los Angeles, in the JUST and FULL SUM of **FIVE HUNDRED EIGHTY THOUSAND AND NO/100 Dollars ($580,000.00)**, lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION of the foregoing obligation is such that WHEREAS the above bounden PRINCIPAL has applied for a building permit, zone change, zone variance, conditional use of property, street or alley vacation, legal lot access, or has voluntarily offered to dedicate and/or improve certain public easements, and said PRINCIPAL, in conjunction therewith, has agreed to construct and install all of the following public improvements, to wit: construct and install **STREETS, STORM DRAINS.**

Said improvements to be located at or in, and adjoining: **8350 GRAND VIEW DR. - GRAND VIEW DR. (8350) & CRISLER WAY S.W. CORNER (IN CONN.W/ BLDG. PERMIT)**

Said work shall be performed under permit or permits to be issued by the Board of Public Works of the CITY, hereinafter called the BOARD, in accordance with the standards and specifications of the BOARD, as amended, and to the approval of the City Engineer. The PRINCIPAL agrees to pay for such inspection of work and improvements as may be required by the BOARD, and further agrees to furnish all necessary final plans, profiles and standard specifications in a form that will be sufficient to be processed and be approved by the City Engineer not later than six (6) months prior to the date specified for the completion of the required work, which shall be on or before: **December 21, 2015.**

Continuation Sheet For:

## GENERAL IMPROVEMENT PERFORMANCE BOND

or within any lawful extension of said term by the City Engineer, or as otherwise provided by law. If it is deemed necessary to extend the time within which to complete said work, it is understood and agreed that such extension of time shall be subject to a revision of the estimated improvement costs, and that the required improvements shall be constructed and installed in accordance with the standards and specifications of the BOARD in effect at the time such extension of time is granted. This bond is further conditioned upon and guarantees due compliance with all of the applicable provisions of ARTICLES 2 and 7 of CHAPTER 1, and Sections 62.105 through 62.118, inclusive, of the Municipal Code of the CITY, as amended.

NOW, THEREFORE, if the above bounden PRINCIPAL shall well and truly perform the work specified hereinabove in all respects within the time specified for such performance, or with any lawful extension thereof, this obligation shall be void upon the delivery to the PRINCIPAL and SURETY of a CERTIFICATE OF ACCEPTANCE, signed by the City Engineer of the CITY certifying that all of the requirements for which this bond is a guarantee have been completed to the satisfaction of the City Engineer; otherwise, this obligation shall be and remain in full force and effect until exonerated or canceled by the City Engineer.

IN WITNESS WHEREOF, this instrument has been duly executed by the above named PRINCIPAL and SURETY on September 5, 20 14.

Principal Signatories

**AARON COHEN, ISAAC M. COHEN, ANDREA R. COHEN AND GRANDVIEW LOTS, LLC**

SURETY: Developers Surety and Indemnity Company

By: _____ (Attorney-in-Fact)

Steven A. Swarer, Attorney-in-Fact

Surety's Address: 17771 Cowan #100, Irvine, CA 92614

GRANDVIEW
SEWER / STORM
EASEMENT
#2

Recording requested by
Wishire Escrow Co.
4270 Wilshire Blvd.
Los Angeles, CA 90010

When recorded mail to:
Wishire Escrow Co.
4270 Wilshire Blvd.
Los Angeles, CA 90010

COPY of Document Recorded
20150051325 2/11/15
Has not been compared with original.
Original will be returned when
processing has been completed.
LOS ANGELES COUNTY REGISTRAR - RECORDER

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**GRANT OF EASEMENT**

**Preamble**

This Agreement made this 16th day of January, 2015 by and between Cilgia Halprin, as Trustee of the Cilgia Halprin Family Trust hereafter referred to as "Grantor" and Grandview Lots, LLC, hereafter referred to as "Grantees."

**Recitals**

WHEREAS, Grantor is the owner of the certain real property described herein as Lot 118, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the County Recorder, County of Los Angeles, State of California, and

WHEREAS, Grantees are the owner of the certain real property described herein as all or a portion of Lots 95, 96, 97 and 98, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the County Recorder, County of Los Angeles, State of California, and

WHEREAS, Grantees desires to acquire certain rights from Grantor;

NOW, THEREFORE, it is agreed as follows:

**Grant of Easement**

1. For valuable consideration in the amount of $25,000 Grantor hereby grants to Grantees a nonexclusive easement as hereinafter described.

**Character of Easement**

2. Grantor hereby grants unto Grantees, for the benefit of Lots 95, 96, 97 and 98, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the

PLEASE CONFORM
21F

County Recorder, County of Los Angeles, State of California and all successor Owners thereof, a perpetual and permanent appurtenant non-exclusive easement under, upon and across the Easement Area for the sole purpose of erecting, installing and maintaining storm and sanitary sewer pipelines.

**Easement Area**

3. The easement granted herein is located as follows: The southwesterly 8 feet of Lot 118, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the County Recorder, County of Los Angeles, State of California and shown on Exhibit B attached hereto and made a part hereof.

**Description of Easement**

3. The easement granted herein is the right to erect, install, build, and maintain storm and sanitary sewer pipelines under, upon and across the Easement Area described herein.

**Maintenance of Easement**

4. Grantees and all successor Owners thereof, at their sole cost and expense, shall keep and maintain the Improvements within the Easement Area in a clean, safe and first class condition, including, without limitation, keeping the improvements free of debris, rubbish, blockage and other hazards that can or may affect Grantor's use or enjoyment of the Easement Area and shall maintain the Improvements in compliance with all applicable laws, rules and ordinances pertaining to the Easement Area; provided, however, that any repair or maintenance cost resulting from negligent acts or omissions or intentional misconduct by Grantor or their Permittee's shall be the sole responsibility of the Grantor.

**Reasonable Use of the Easements**

5. The easements granted and reserved in this Agreement shall be used and enjoyed by Grantees and all successor Owners thereof in such a manner as to not unreasonably interfere with, obstruct or delay the conduct and operations of the Grantor upon the Easement Area.

**Indemnification**

6. Grantees and all successor Owners thereof using or permitting the use of the Easement Area shall and do hereby agree to indemnify, defend and hold the Grantor harmless for, from and against any and all costs, expenses (including, without limitation, attorneys' fees and litigation costs), damages, claims, liabilities, liens, encumbrances and charges incurred by such Grantor arising out of or alleged to have arisen from the use, maintenance and repair of the Easement Area, as applicable, for a breach of this Agreement.

**Insurance**

7. Grantees and all successor Owners thereof shall maintain a policy of general liability and fire insurance, covering the Easement Area.

**Lender Protection**

8. No default under this Agreement shall defeat or render invalid the lien of any mortgage or deed of trust made in good faith and for value, but all of the easements and other provisions of this Agreement shall be binding and effective against any successor Owners whose title is acquired by foreclosure, trustees sale, conveyance in lieu thereof or otherwise.

**Run With The Land**

9. The easements and the other provisions of this Agreement shall run with and be appurtenant to and binding upon the Grantor and Grantees and all successors in title to same.

**No Rights for Third Parties**

10. This Agreement shall not be construed as creating any rights in the general public nor as dedicating for public use any portion of the Easement Area. Nothing contained in this Agreement shall be deemed to grant or confirm to any other person, other than those specifically named in this Agreement, the right to assert or exercise a separate or independent right to enforce this Agreement, or a separate or independent right to enjoy any of the benefits or privileges granted, it being understood that such rights are forever expressly held, retained and shall be exercised solely by and through the Grantor and Grantees and all successor Owners thereof.

**Integration and Modification**

11. This Agreement constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof and all prior or contemporaneous agreements and understandings, oral or written, are hereby superseded and merged herein. The provisions hereof may be abrogated, modified, rescinded or amended in whole or in part only by written instrument executed by the parties hereto of their successors in interest and recorded with the County Recorder for Los Angeles County, California.

**Partial Invalidity**

12. If any provision or provisions hereof or the application thereof to any party or to any person or circumstance shall be held to be invalid, void or illegal, the remaining provisions hereof and the application of such provisions other than those as to which it is held to be invalid, void or illegal, shall nevertheless remain in full force and effect and not be affected thereby.

**Governing Law**

13. This Agreement shall be governed by, and construed and enforced in accordance with, the internal substantive laws of the State of California (without reference to choice of law principles).

**Attorneys' Fees**

14. In the event that suit is brought to enforce or interpret any part of this Agreement, the prevailing party shall be entitled to recover its court costs and reasonable attorneys' fees (as set by the court) from the non-prevailing party.

**Miscellaneous**

15. The waiver by Grantor or Grantees or any successor Owner thereof shall not be deemed to be a waiver of any other right granted hereunder, nor shall the same be deemed to be a waiver of a subsequent right obtained by reason of the continuation of any matter previously waived. The Grantor and Grantees any successor Owner thereof shall promptly execute such other documents and perform such other acts as may be reasonably necessary to carry out the purpose and intent of this Agreement. This Agreement may be executed in one or more counterparts, each of which when taken together shall form one and the same document.

**IN WITNESS WHEREOF,** Grantor and Grantees have executed this Agreement to be effective as of the Effective Date.

Executed on January 16, 2015, at Los Angeles, Los Angeles County, California.

GRANTOR

_____, Trustee
Cilgia Halprin Family Trust

GRANTEES

_____, Managing Member
Grandview Lots, LLC

ESCROW NO.: 129593-008

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

## ACKNOWLEDGMENT

State of California

County of Los Angeles

On January 16, 2015 before me, Sheiba Rajadas, a Notary Public personally appeared, Cilgia Halprin, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

SHEIBA RAJADAS
COMM. # 2053892
NOTARY PUBLIC-CALIFORNIA
LOS ANGELES COUNTY
MY COMM. EXP. MAY. 7, 2018

**Recorded at the Request of and Return to:**

ROB ANDERSON
18180 Knoll Hill
Granada Hills, CA
91344

---

## EASEMENT GRANT DEED

No Documentary Transfer Tax due since easements have no apparent value. No other consideration received by any party.

For valuable consideration, receipt of which is hereby acknowledged,

hereby GRANT(S) to

the following described real property in the City of Los Angeles, County of Los Angeles, State of California:

AN EASEMENT for Storm Drainage purposes over, under and upon that parcel of land described as the southeasterly 8.00 feet of Lot 96 for the benefit of Lot 95, in the City of Los Angeles, as shown on Tract Map No 865 as filed in Book 16 at Page 97 of Maps in the office of the County Recorder, County of Los Angeles, State of California as shown on the Sketch attached hereto as Exhibit A for reference only.

Print name / title

Print name / title

The Acknowledgment Form is attached hereto.

Prepared by:
HOVELL & PILARSKI ENGINEERING, Inc.

9.2.15

James T. Pilarski, LS 4755 Date
WO 1860-02.2 CAC - Grandview

LICENSED LAND SURVEYOR
JAMES T. PILARSKI
NO. 4755
STATE OF CALIFORNIA

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF } S

ON _____ BEFORE ME, _____ NOTARY PUBLIC PERSONALLY APPEARED _____ WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL

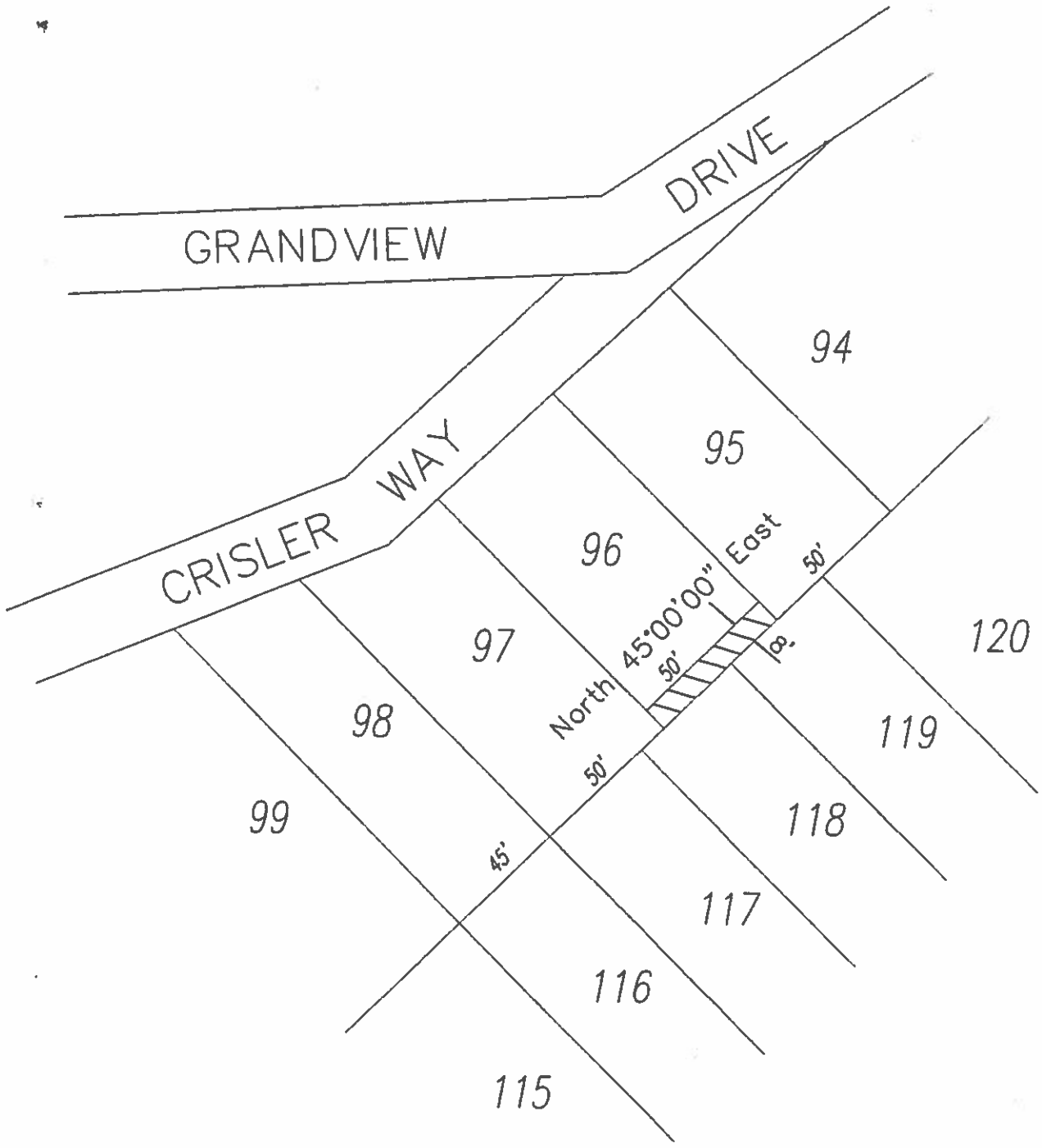
SIGNATURE _____

Not to Scale

# EXHIBIT A

## Tract No 865

MB 16-97



**Recorded at the Request of and Return to:**

ROB ANDERSON
18180 Knoll Hill
Granada Hills, CA
91344

---

## EASEMENT GRANT DEED

No Documentary Transfer Tax due since easements have no apparent value. No other consideration received by any party.

For valuable consideration, receipt of which is hereby acknowledged,

hereby GRANT(S) to

the following described real property in the City of Los Angeles, County of Los Angeles, State of California:

AN EASEMENT for Storm Drainage purposes over, under and upon that parcel of land described as the southeasterly 8.00 feet of Lot 97 for the benefit of Lot 98, in the City of Los Angeles, as shown on Tract Map No 865 as filed in Book 16 at Page 97 of Maps in the office of the County Recorder, County of Los Angeles, State of California as shown on the Sketch attached hereto as Exhibit A for reference only.

Print name / title

Print name / title

The Acknowledgment Form is attached hereto.

Prepared by:
HOVELL & PILARSKI ENGINEERING, Inc.

4.2.15

James T. Pilarski, LS 4755 Date
WO 1860-02.2 CAC - Grandview



A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF } S

ON _____ BEFORE ME, _____ NOTARY PUBLIC PERSONALLY APPEARED _____ WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL

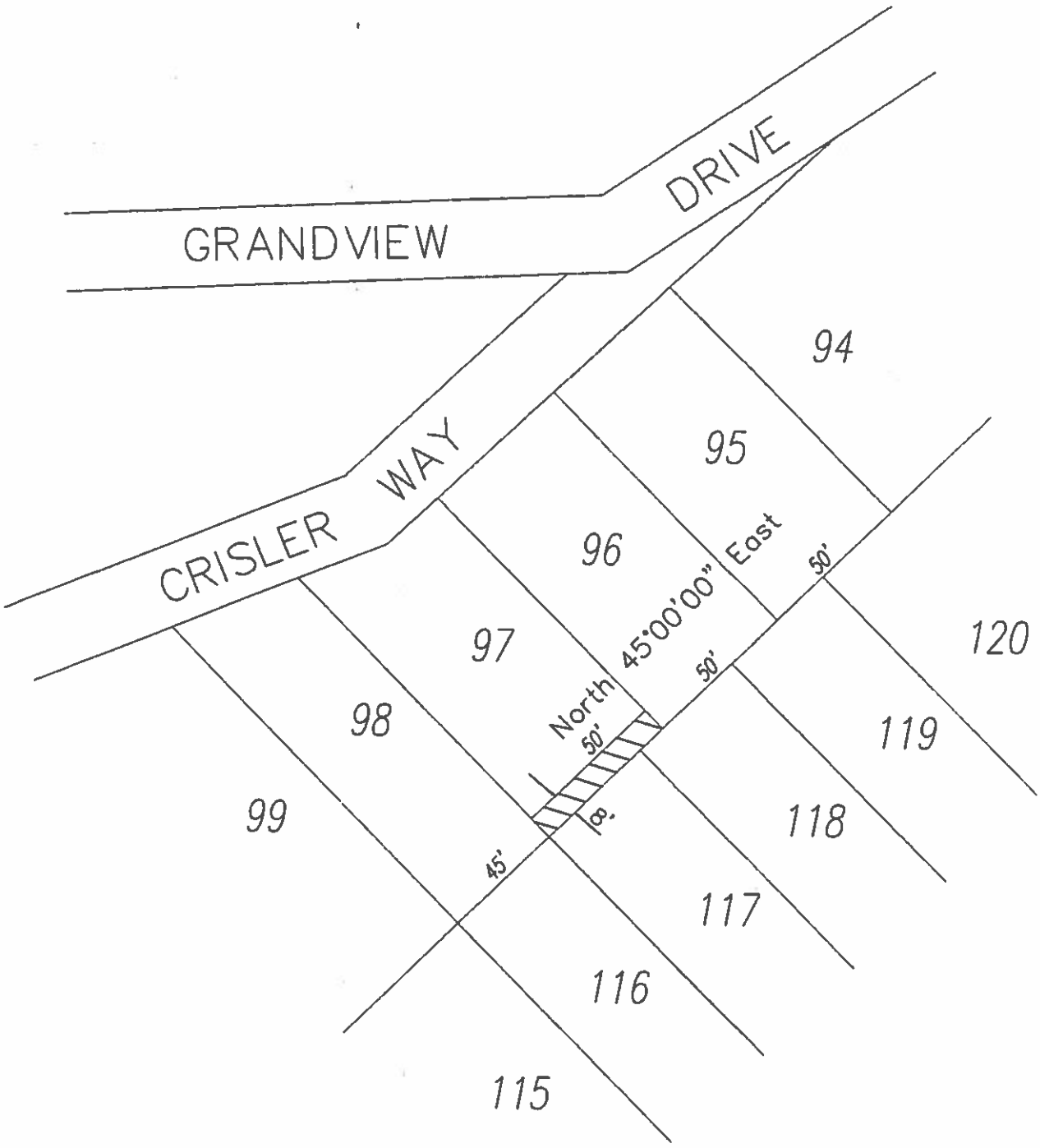
SIGNATURE _____

Not to Scale

# EXHIBIT A

## Tract No 865

MB 16-97



#3

# STEVEN W. MEZEY & associates

## STRUCTURAL ENGINEERING

April 3, 2015

Mr. Robert Anderson
CAC Development
18169 Knoll Hill,
Granada Hills, CA 91344

Re:1800/1806/1812/1818 Crisler Way
Los Angeles, 90069

Dear Mr. Anderson,

In response to items 1 and 3, of the March 23, 2015 City of Los Angeles Geology and Soils Report Correction Letter, the following explanation is provided.

Lateral surcharge from the existing residences located up-slope of the proposed retaining walls abutting the proposed street has been considered in the the design of the retaining walls.

The future residences which are located down-slope of the proposed street shall be constructed after the following sequence of excavation and construction is performed:

1. The permanent soldier pile retaining walls supporting the street shall be constructed.
2. The soil down slope of the soldier piles shall be removed to the depth necessary for the construction of the foundation system of the proposed single family residences.
3. The shotcrete between the soldier piles shall be installed.
4. The adjacent retaining wall for the proposed single family residences shall be constructed 5' to 15' from soldier pile wall per plan.
5. The drainage system and waterproofing for the residence retaining walls shall be installed.
6. The earth between the residence retaining wall and soldier pile retaining wall shall be backfilled and compacted per the approved soil report.

In summary, the permanent street soldier piles perform as a temporary retaining ~~wall system~~ for the construction of the residence retaining walls and foundation.

Please don't hesitate to call if you have any questions.

Sincerely,

Steven W. Mezey
Structural Engineer
SE2665

REGISTERED PROFESSIONAL ENGINEER
STEVEN W. MEZEY
No. 2665
APR 03 2015
Exp 9-30-15
STRUCTURAL
STATE OF CALIFORNIA

15230 BURBANK BLVD., SUITE 105, VAN NUYS, CA 91411 VOICE (818) 908-1554 FAX (818) 908-090

8350 W Grand View Dr → 1818 N. CRISLER WAY D. Chen 12/11/12

#4 #5

Application #: 11010 - 20000 - 00921
Plan Check #: B11VN03971 Printed: 06/15/11 10:19 AM
Event Code:

Bldg-New GREEN - MANDATORY

8352 W Grand View Dr → 1812 N. CRISLER WAY D. Chen 12/11/12

Application #: 11010 - 20000 - 01123
Plan Check #: B11VN03971 Printed: 06/15/11 10:11 AM
Event Code:

Bldg-New GREEN - MANDATORY City of Los Angeles - Department of Building and Safety Last Status: PC in Progress

8354 W Grand View Dr → 1806 N. CRISLER WAY D. Chen 12/11/12

Application #: 11010 - 20000 - 01124
Plan Check #: B11VN03971 Printed: 06/15/11 10:07 AM
Event Code:

Last Status: PC in Progress

8356 W Grand View Dr → 1800 N. CRISLER WAY D. Chen 12/11/12

Application #: 11010 - 20000 - 011
Plan Check #: B11VN03971 Printed: 06/15/11 10:02 A
Event Code:

Bldg-New GREEN - MANDATORY City of Los Angeles - Department of Building and Safety
1 or 2 Family Dwelling
Regular Plan Check
Plan Check

Last Status: PC in Progress
Status Date: 06/08/2011

# APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

| 1. TRACT | BLOCK | LOT(s) | ARB | COUNTY MAP REF # | PARCEL ID # (PIN #) | 2. ASSESSOR PARCEL |
|---|---|---|---|---|---|---|
| TR 865 | | 98 | | M B 16-97 | 148-5A175 78 | 5556 - 022 - 004 |

**3. PARCEL INFORMATION**

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 5
Certified Neighborhood Council - Bel Air - Beverly Cres
Community Plan Area - Hollywood

Census Tract - 1942.00
District Map - 148-5A173
Energy Zone - 9
Fire District - VHFHSZ
Hillside Grading Area - YES

Hillside Ordinance - YES
Earthquake-Induced Landslide Area - Yes
Near Source Zone Distance - 0
Thomas Brothers Map Grid - 593-A4

ZONE(S): R1-1 /

**4. DOCUMENTS**

ZI - ZI-2415 Baseline Hillside -Ord 181
HLSAREA - Yes

**5. CHECKLIST ITEMS**

Special Inspect - Concrete>2.5ksi
Special Inspect - Field Welding
Special Inspect - Grade Beam/Caisson
Special Inspect - Structural Observation
Special Inspect - Structural Wood (periodic)
Fabricator Reqd - Prefabricated Joist
Fabricator Reqd - Shop Welds
Fabricator Reqd - Structural Steel
Std. Work Descr - Excess Flow Shut Off Valve

**6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION**

Owner(s):

Tenant:

Applicant: (Relationship: Architect)
Robert Anderson -

(818) 788-4236

**7. EXISTING USE** | **PROPOSED USE**

**8. DESCRIPTION OF WORK**

26' x 49.5' THREE STORY SFD W/ BASEMENT AND ATTACHED GARAGE. LOT 98

**9. # Bldgs on Site & Use:** 11 OF 13

**10. APPLICATION PROCESSING INFORMATION**

BLDG. PC By:
OK for Cashier:
Signature:
DAS PC By:
Coord. OK:
Date:

For inspection requests, call toll-free (888) LA4BUILD (524-2845). Outside LA County, call (213) 482-0000 or request inspections via www.ladbs.org. To speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

For Cashier's Use Only W/O #:

# C. Y. GEOTECH, INC.
## Engineering Geology and Geotechnical Engineering

9428 Eton Avenue, Unit M, Chatsworth, CA 91311
Tel: (818) 341-1899 Fax: (818) 341-1897 Email: cygeotech@sbcglobal.net

June 8, 2018

P.N. CYG-14-7350

CAC Development
1504 South Flower Street
Los Angeles, CA 90049

Subject: Response to Geology and Soils Questions from Review of MND, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818 Crisler Way, Los Angeles, California

Dear Robert,

As requested, C. Y. Geotech (CYG), Inc. has prepared this addendum report for the subject project to respond the geology and soils questions from review of MND. A copy of the geology and soils questions from review of MND are enclosed in Appendix A.

Question 1:
Inadequate Description of Existing Slope Condition

Response to Question :
A regional topographic map showing the site and site vicinity, including the top to the toe of the southeast-facing slope and Grand View Drive, was enclosed in the referenced GeoSystems reports and the referenced Parmelee/geology reports. A geologic cross section showing the entire southeast-facing slope and subsurface earth materials and geologic structure was enclosed in the referenced GeoSystems reports. For your convenience, the regional topographic map and geologic cross section showing the entire southeast-facing slope are enclosed in Appendix B of this report.

The descriptions of the slope was also presented by GeoSystems and Parmelee/Geology in the referenced GeoSystems and Parmelee/Geology report. For your convenience, the descriptions of the southeast-facing slope by GeoSystems and Parmelee/Geology are presented below:

By GeoSystems :
The property is topographically situated at the top of a south-facing slope that descends from the south side of Grandview Drive. The slope has a height of approximately 240-feet and a gradient ranging from 3/4:1 (H:V) to about 2:1. The average slope angle is about 40 degrees. The property was previously developed with a single-family residence constructed in the 1920's which has since burned down. All that remains of the previous residence is the concrete floor slab, the fireplace, several retaining walls, and landscape rock rubble walls. These items will be removed from the site prior to construction of the new residence. The natural slope below the property is vegetated with natural grasses and brush. Bushes and trees which were planted adjacent to the old residence are present within the property limits. Drainage of the slope is via natural contours down to the canyon bottom.

By Parmelee/Geology :
The subject property consists of four contiguous undeveloped hillside lots on the south flank of the Santa Monica Mountains, Los Angeles, California. Lots 95 and 96 were previously occupied by a single family residence which was destroyed in a fire. The remnants of the concrete floor slabs and walls are still present on the site. Lots 97 and 98 are vacant. The surrounding area consists of a hillside residential community.

Past grading on the subject property has consisted of spilling approximately two feet of uncompacted fill over the upper portion of the site during initial grading for Grand View Drive and construction activities performed during the prior site development on Lots 95 and 96. The surface of the property descends below Grand View Drive approximately 280 feet at gradients ranging from 2:1 to slightly steeper than 1:1. The average slope gradient is about 40 degrees. Vegetation on the site consists of natural grasses and sparse native chaparral.

As shown on the regional topographic map geologic cross section, the southeast-facing slope descends up to approximately 260 feet from the top of the slope (close to Grand View Drive) to the top of the slope. The gradient of the slope varied from approximately 1.5:1 to 1:1(horizontal:vertical). The slope is composed primarily of granitic rock.

A topographic Map showing the site and site vicinity, adopted from the City of Los Angeles Topographic Map, is shown on Figure 1. As shown on Figure 1, the subject site (Lots 95 to 98) is located below the proposed extension of Crisler Way.

The static gross slope stability of the southeast-facing slope was analyzed by GeoSystems in th referenced GeoSystems report dated November 12, 1997. The analyses indicated a factor of safety of 1.83 which is greater than greater than the minimum code requirement of 1.50. For your convenience, the graphic output of the static gross slope stability analysis is presented in Figure 2.

The static and seismic gross slope stability of the southeast-facing slope was analyzed by Parmelee/Geology in the referenced Parmelee/Geology report dated December 9, 2001. The analyses indicated a factor of safety of 1.825 for static slope stability and a factor of safety of 1.419 for seismic slope stability. The factor of safety for static gross slope stability of 1.825 is greater than the minimum code requirement of 1.5 and the factor of safety for seismic gross slope stability of 1.419 is greater than the minimum code requirement of 1.1. For your convenience, the graphic outputs of the static and seismic gross slope stability analyses are presented in Figures 3 and 4.

The static and seismic gross slope stability of the southeast-facing slope were updated by Geomatrix (previously as Parmelee/Geology) in the referenced Geomatrix report dated September 10, 2012 due to the update requirement for the use of seismic coefficient in the seismic slope stability analysis. The analyses indicated a factor of safety of 1.814 for static slope stability and a factor of safety of 1.260 for seismic slope stability. The factor for static slope stability of 1.814 is greater than the minimum code requirement of 1.5 and the factor for static slope stability of 1.260 is greater than the minimum code requirement of 1.0. The update City of Los Angeles requirements for seismic slope stability analyses required the use of a greater value of seismic coefficient in seismic slope stability analyses and a minimum factor of safety of 1.0. For your convenience, the graphic outputs of the slope stability analyses are presented in Figures 5 and 6.

Question 2:
Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslide.

Subject Site

Scale 1"=100'

Figure 1

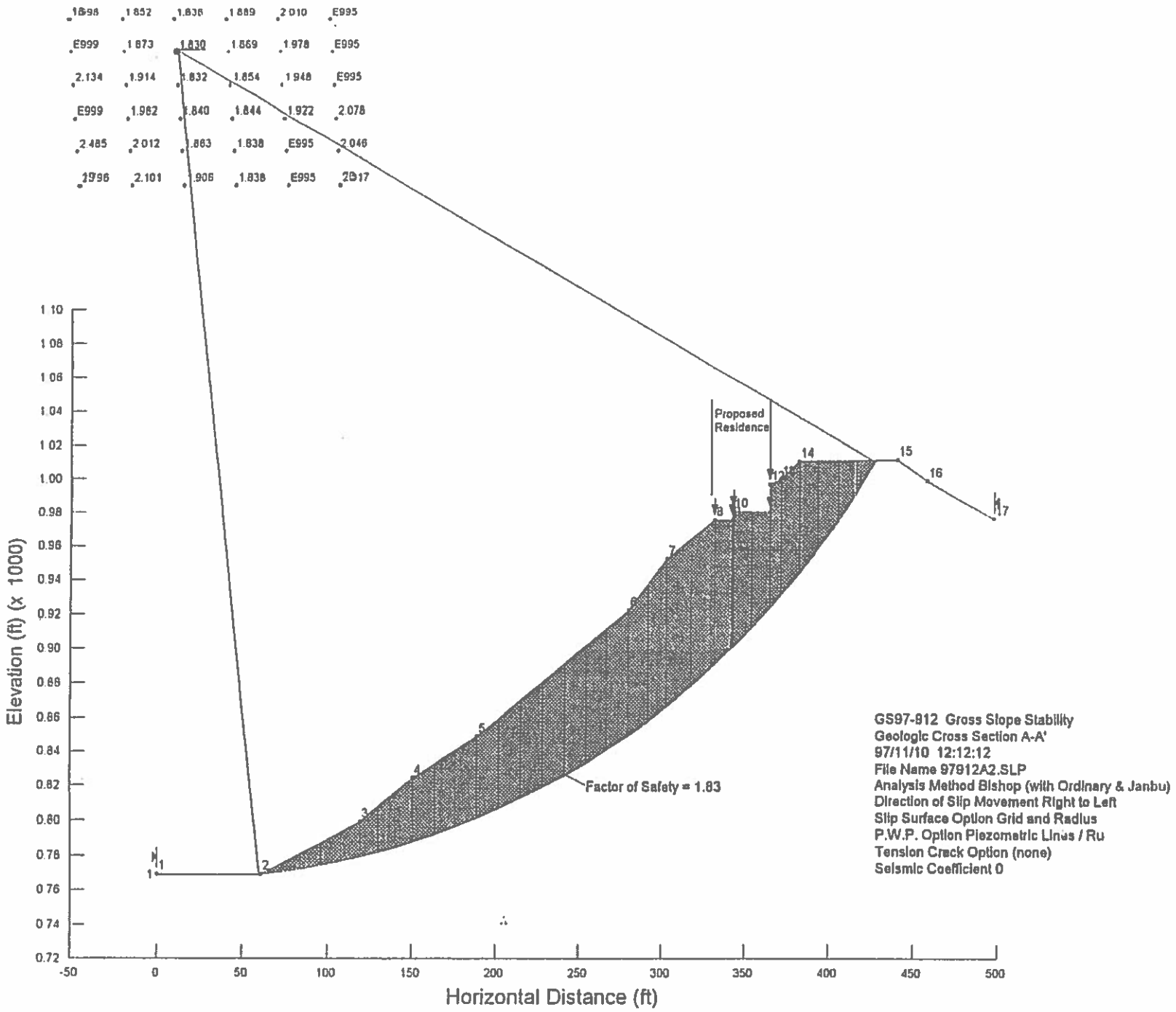



PLATE SA-1 -

Figure 2

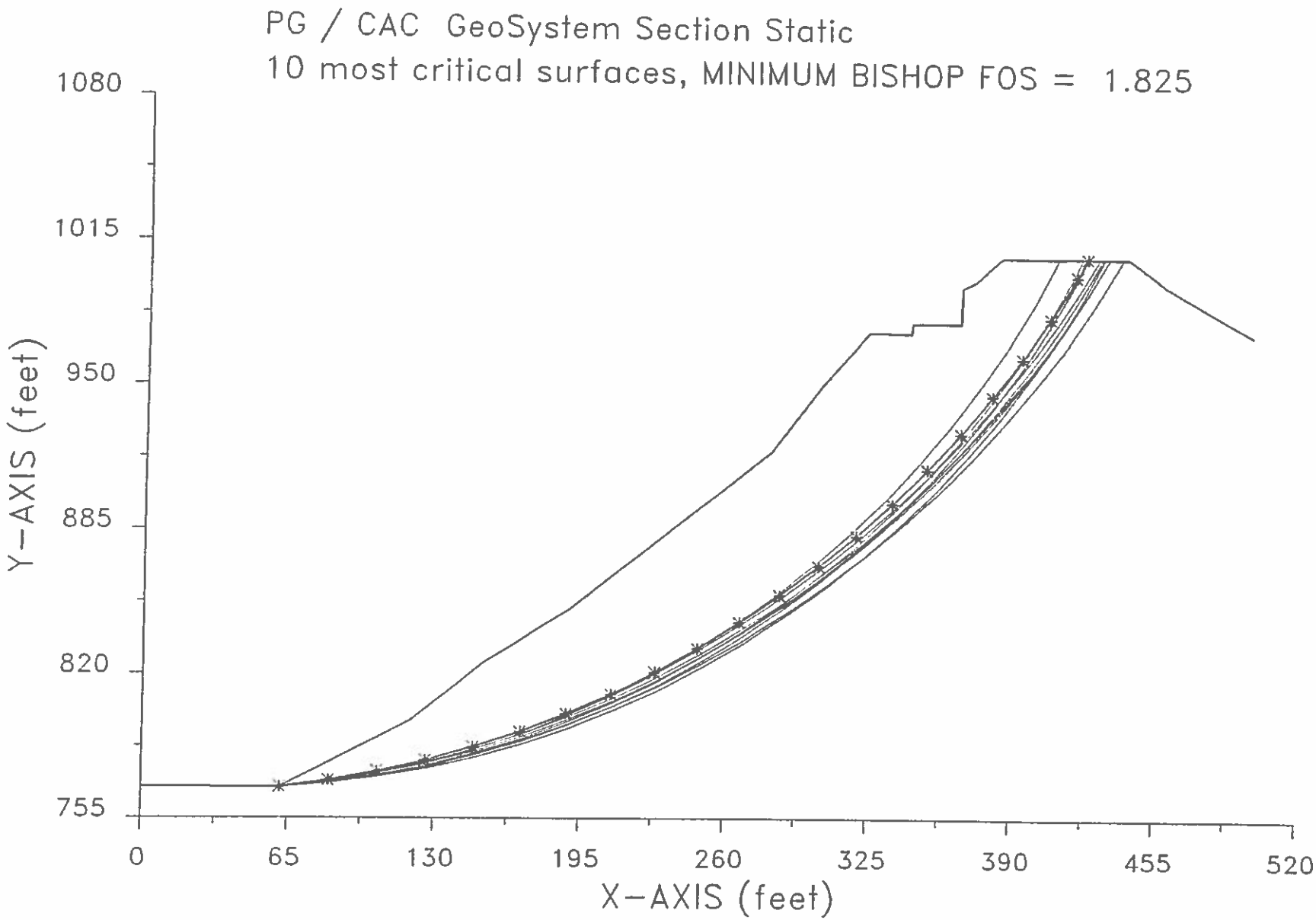

PG / CAC GeoSystem Section Static
10 most critical surfaces, MINIMUM BISHOP FOS = 1.825
1080
1015
950
885
820
755
Y-AXIS (feet)
0
65
130
195
260
325
390
455
520
X-AXIS (feet)

Figure 3

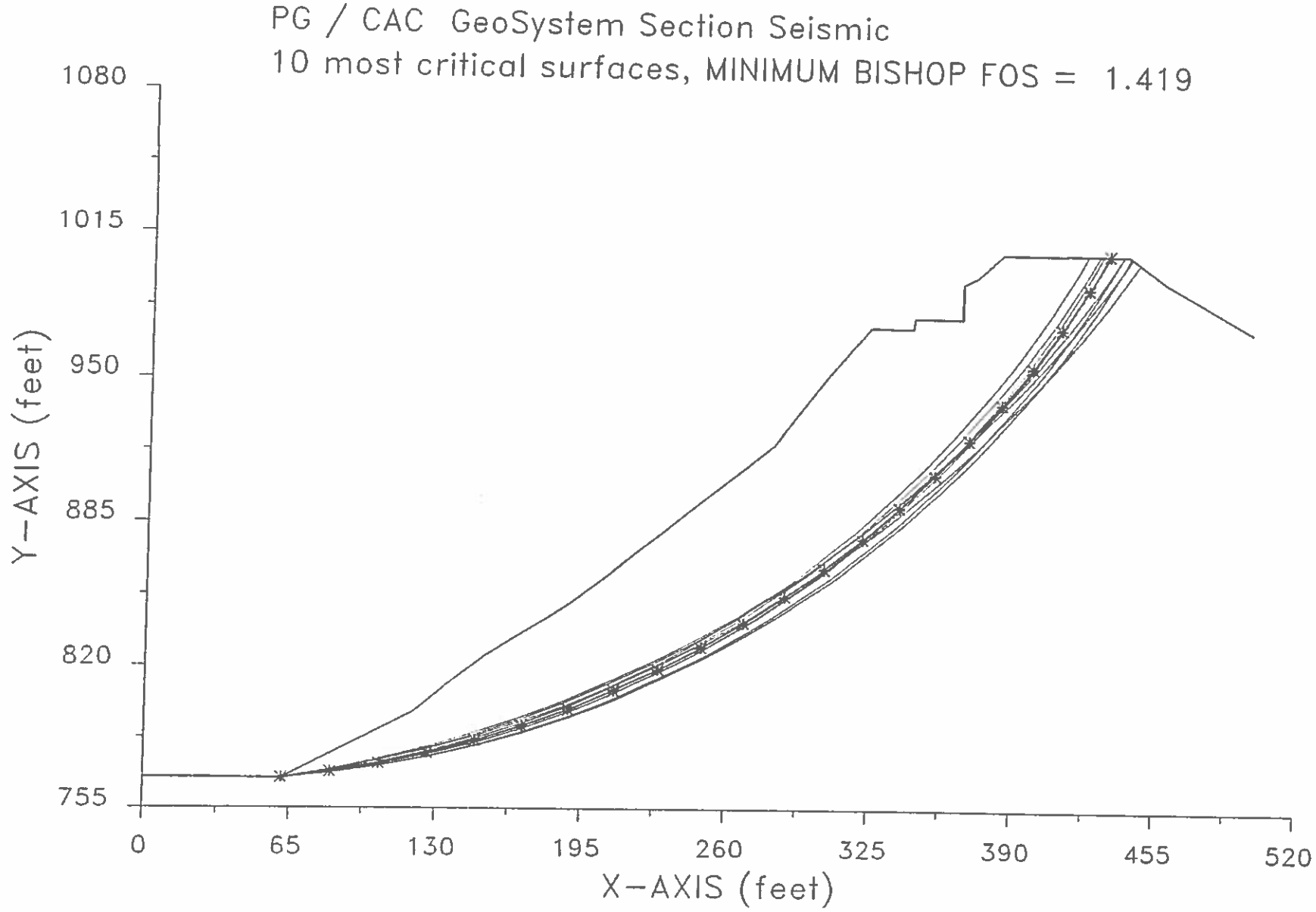

PG / CAC GeoSystem Section Seismic
10 most critical surfaces, MINIMUM BISHOP FOS = 1.419
1080
1015
950
885
820
755
Y-AXIS (feet)
0
65
130
195
260
325
390
455
520
X-AXIS (feet)

Figure 4

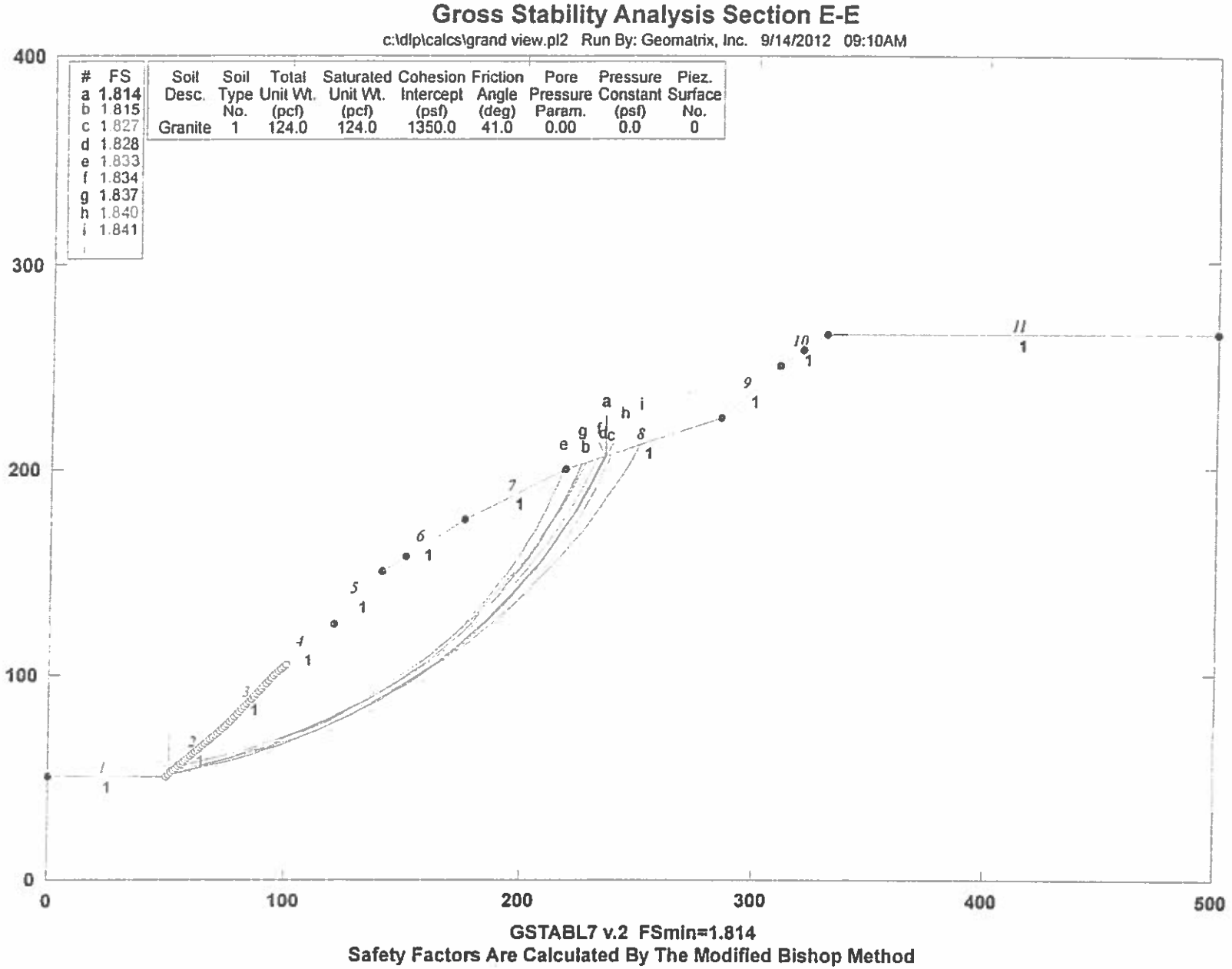

Gross Stability Analysis Section E-E
c:\dlp\calcs\grand view.pl2 Run By: Geomatrix, Inc. 9/14/2012 09:10AM
# FS
a 1.814
b 1.815
c 1.827
d 1.828
e 1.833
f 1.834
g 1.837
h 1.840
i 1.841
Soil Desc. | Soil Type No. | Total Unit Wt. (pcf) | Saturated Unit Wt. (pcf) | Cohesion Intercept (psf) | Friction Angle (deg) | Pore Pressure Param. | Pressure Constant (psf) | Piez. Surface No.
Granite | 1 | 124.0 | 124.0 | 1350.0 | 41.0 | 0.00 | 0.0 | 0
0
100
200
300
400
500
GSTABL7 v.2 FSmin=1.814
Safety Factors Are Calculated By The Modified Bishop Method

Figure 5

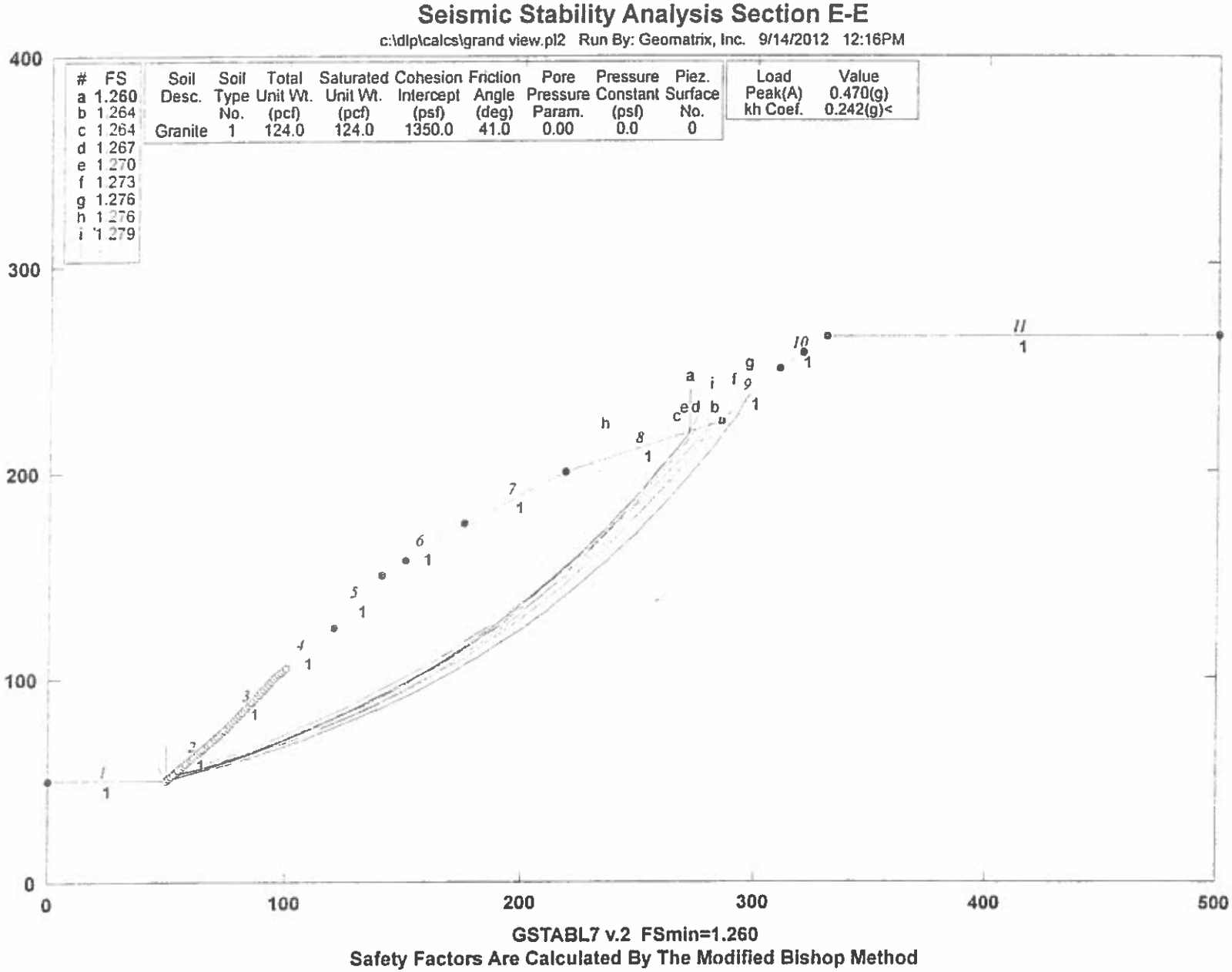

Seismic Stability Analysis Section E-E
c:\dlp\calcs\grand view.pl2 Run By: Geomatrix, Inc. 9/14/2012 12:16PM
# FS
a 1.260
b 1.264
c 1.264
d 1.267
e 1.270
f 1.273
g 1.276
h 1.276
i 1.279
Soil Desc. | Soil Type No. | Total Unit Wt. (pcf) | Saturated Unit Wt. (pcf) | Cohesion Intercept (psf) | Friction Angle (deg) | Pore Pressure Param. | Pressure Constant (psf) | Piez. Surface No.
Granite | 1 | 124.0 | 124.0 | 1350.0 | 41.0 | 0.00 | 0.0 | 0
Load Peak(A) 0.470(g)
Load kh Coef. 0.242(g)<
400
300
200
100
0
0
100
200
300
400
500
GSTABL7 v.2 FSmin=1.260
Safety Factors Are Calculated By The Modified Bishop Method

Figure 6

Response to Question 2:
The "potential" earthquake-induced landslide zones mapped in the CDMG Seismic Hazard Maps is basically based on the steepness of the slope, the potential of seismic activity and the type of earth material and the geologic structure of bedrock. A site located within the zones means that the site has a potential of earthquake-induced landslide and not the site will have earthquake-induced landslide. Therefore, a geologic and soils engineering report is required to address the seismic slope stability analyses for residential development if the site falls into the following conditions:

1. The site is located within the "potential" earthquake-induced landslide zones as mapped in the CDMG Seismic Hazard Maps and the proposed residential development has three floor levels or greater.

2. The site is located within the "potential" earthquake-induced landslide zones as mapped in the CDMG Seismic Hazard Maps and the number of proposed residence is four or greater.

Although portions of the site are located within one of the "potential" earthquake-induced landslide zones as mapped in the California of Mines and Geology (CDMG) Seismic Hazard Maps (see Figure 7), no evidence of deep-seated slope failure was observed within the site and no landslide was mapped within the site or in immediate site vicinity in the published geologic maps.

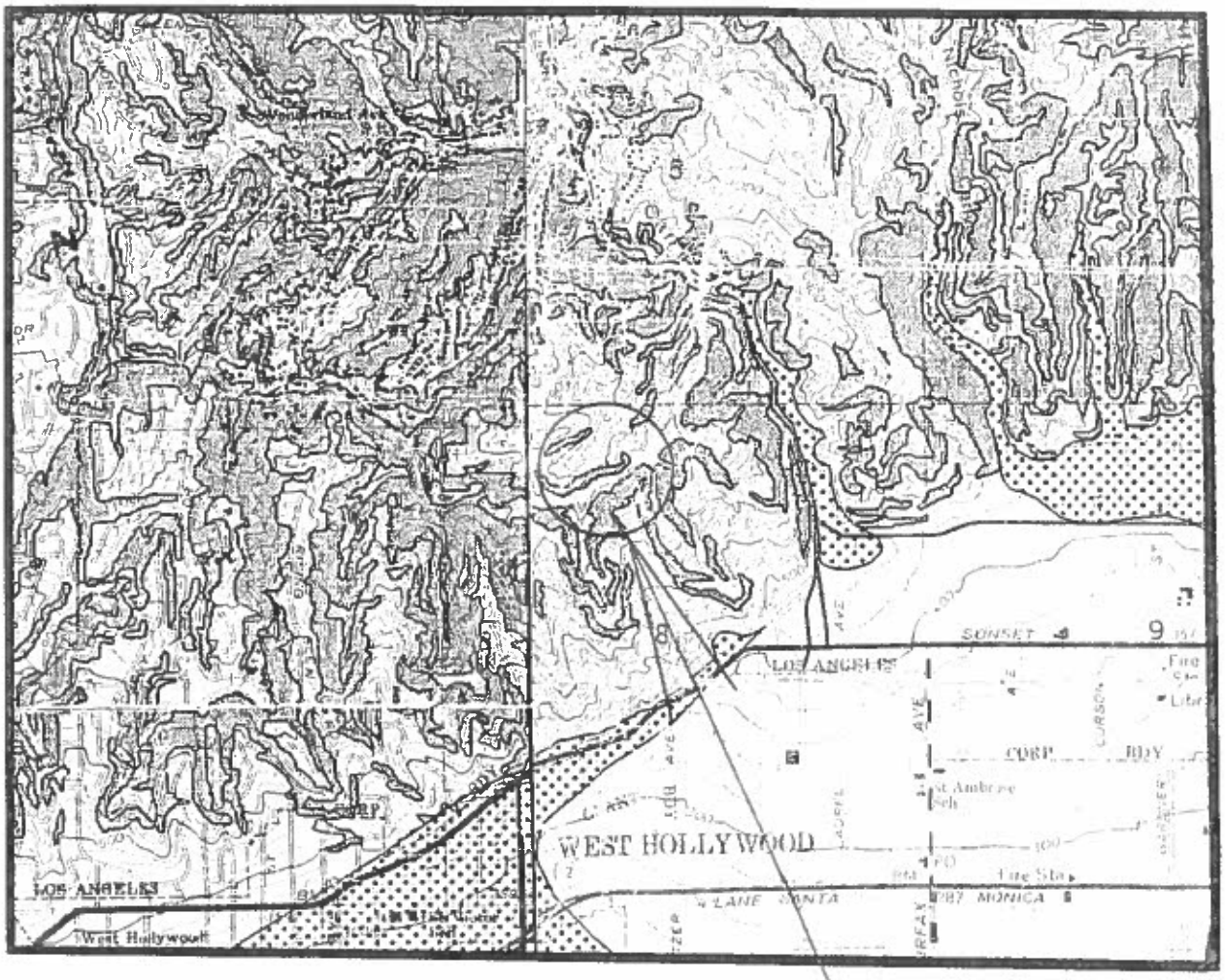
The gross and surficial slope stability of the entire southeast-facing slope descending from Grand View Drive to the toe of the slope were analyzed by GeoSystemes in 1997. The analyses indicated factors of safety greater than the minimum code requirement for static gross slope stability and static surficial slope stability. For your convenience, the graphic output of the static gross slope stability analysis is presented in Figure 2 and the output of the static surficial slope stability analysis is presented in Figure 8.

The static and seismic gross slope stability of the entire southeast-facing slope descending from Grand View Drive to the toe of the slope were analyzed by Parmelee/Geology in 2001. The analyses indicated factors of safety greater than the minimum code requirements for both static and seismic gross slope stability. For your convenience, the graphic output of the static and seismic gross slope stability analyses are presented in Figures 3 and 4.

The static and seismic gross slope stability of the southeast-facing slope were updated by Geomatrix in the referenced Geomatrix report dated September 10, 2012 due to the update requirements for the use of greater seismic coefficient in the seismic slope stability analyses. The update slope stability analyses indicated factors of safety greater than the minimum code requirements for both static and seismic gross slope stability. For your convenience, the graphic output of the update static and seismic gross slope stability analyses are presented in Figures 5 and 6.

The stability of temporary excavation and retaining wall design were analyzed by Parmelee/Geology in 2001 and by Geomatrix (previously as Parmelee/Geology) in 2012. The recommendations for the design of temporary excavations and the recommendations for the design and construction of retaining wall were provided based on the findings of slope stability analyses for temporary excavation and retaining wall design so that the temporary excavation and retaining wall will be stable from engineering viewpoint and building code viewpoint.

The most recent geologic and soils engineering report approved by the City of Los Angeles Grading Division is dated March 31, 2015 and the most recent city of Los Angeles approval letter for geology and soils engineering reports is dated April 10, 2015. Both the most recent geologic and soils engineering report and City of Los Angeles approval letter are not older than four (4) years. Therefore, the findings and conclusions




## Legend

**Liquefaction**

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such as that mitigation as defined in Public Resources Code section 2693 (c) would be required

**Earthquake-Induced Landslide**

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code section 2693 (c) would be required

(Adopted from State of California Seismic Hazard Zones.)

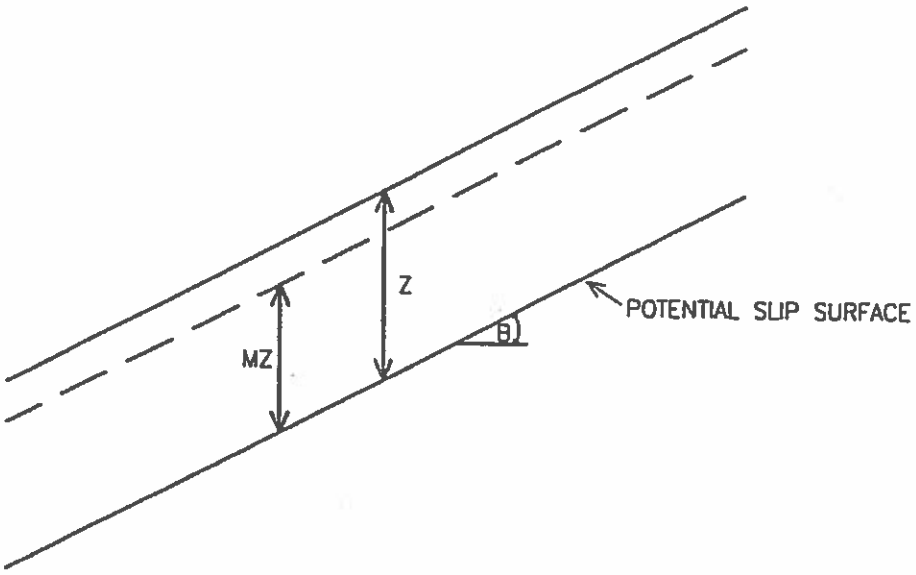
N

Scale 1" = 2000'

| | |
|---|---|
| **C. Y. GEOTECH, INC.**<br>Engineering Geology<br>and Geotechnical Engineering | **Seismic Hazard Map** |
| **CYG-14-7350** | **Figure 7** |

# SURFICIAL SLOPE STABILITY ANALYSIS

Reference: USGS Professional Paper 851, Campbell, 1975




$$F.S. = \frac{C + (\gamma_S - M\gamma_W)\ Z\ \cos^2 B\ \tan \phi}{\gamma_S Z\ \sin B\ \cos B}$$

C = COHESION = 150 PSF

$\phi$ = ANGLE OF SHEARING RESISTANCE = 36 degrees

$\gamma_S$ = UNIT WEIGHT OF THE SOIL = 120 PCF

$\gamma_W$ = UNIT WEIGHT OF WATER = 62.4 PCF

B = SLOPE ANGLE = 40 degrees

Z = VERTICAL DEPTH OF SLIP SURFACE = 2 FEET (3' MAX)

M = FRACTION OF Z SUCH THAT MS IS THE VERTICAL HEIGHT OF THE TEMPORARY WATER SURFACE ABOVE THE SLIP SURFACE = 1

$$F.S. = \frac{150 + (120 - 62.4)\ 2\ \cos^2 40\ \tan 36}{120\ 2\ \sin 40\ \cos 40} = 1.68 > 1.5 = O.K.$$

CALIFORNIA GEOSYSTEMS

*Project:* 8350 Grandview Drive
Los Angeles, California
*Date:* November 1997
*GS #* 97-912

**Figure 8**

of the investigation and the recommendations for the design and construction are still applicable as long as the proposed development remain the same and the permit process is still valid and not expired. Therefore, the bringing the entire project to meet the 2017 building code is not mandatary. For your information, an additional seismic slope stability analysis was performed using a update seismic coefficient (0.299g) in seismic slope stability analyses o meet 2017 regulations. The date of the most recent update City of Los Angeles regulations for the use of seismic coefficient in seismic slope stability analyses is July 16, 2014. The results of the analyses are presented in Appendix C. The analysis indicated a factor of 1.129 which is still greater than safety greater than the minimum code requitement (see Figure 9).

No evidence of deep-seated slope failure was observed within the site. No landslide was mapped within the site or in immediate site vicinity in the published geologic maps. The slope stability analyses performed by GeoSystems, Parmelee/Geology, Geomatrix and CYG indicated factors of safety greater than the minimum code requirement for gross slop stability, surficial slope stability and local slope stability for retaining wall and temporary excavation. Therefore, the potential impacts of landslide for the subject project should be considered in a level considered less than significant.

Question 3:
Would the Project result in substantial soil erosion or the loss of topsoil.

Response to Question 3:
The recommendations for the design and performance of grading, the design and construction of conventional spread footings, skin friction piles and end beating caissons, and the design and construction of retaining wall and temporary excavation were presented in the referenced geologic and soils engineering reports prepared by GeoSystems and Parmelee/Geology.

The addendum geologic and soils engineering reports prepared by C. Y. Geotech, Inc., are for the purposes of the filing of change of Consultant letter and the responses to City of Los Angels review letters dated January 30, 2013 and March 23, 2015. The concept and scope of proposed residential development remain the same. Therefore, the addendum geologic and soils engineering reports prepared by CYG do not include all recommendations for the design and performance of grading, the design and construction of conventional spread footings, skin friction piles and end beating caissons, and the design and construction of retaining walls and temporary excavations. The recommendations for the design and performance of grading, the design and construction of conventional spread footings, skin friction piles and end beating caissons, and the design and construction of retaining walls and temporary excavations in the referenced Geomtrix report dated September 19, 2012 are still applicable to the subject project.

As shown on the geologic maps and geologic cross sections shown on Plate 1, 2 and 3 which were enclosed in the referenced CYG report dated November 26, 2014, the grading of the site mainly include the cutting of onsite portion of the east-facing slope to create subterraneous building floors. The placement of fill soil within the site is limited to retaining wall backfill. Therefore, the evaluation of substantial soil erosion or loss of topsoil is not a concern for the subject project. Therefore, the potential impacts of substantial soil erosion or the loss of topsoil on the subject project should be in a level considered less than significant.

Question 4:
Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite, lateral spreading, subsidence, liquefaction or collapse.

PG1091E 6-08-·· 16:21

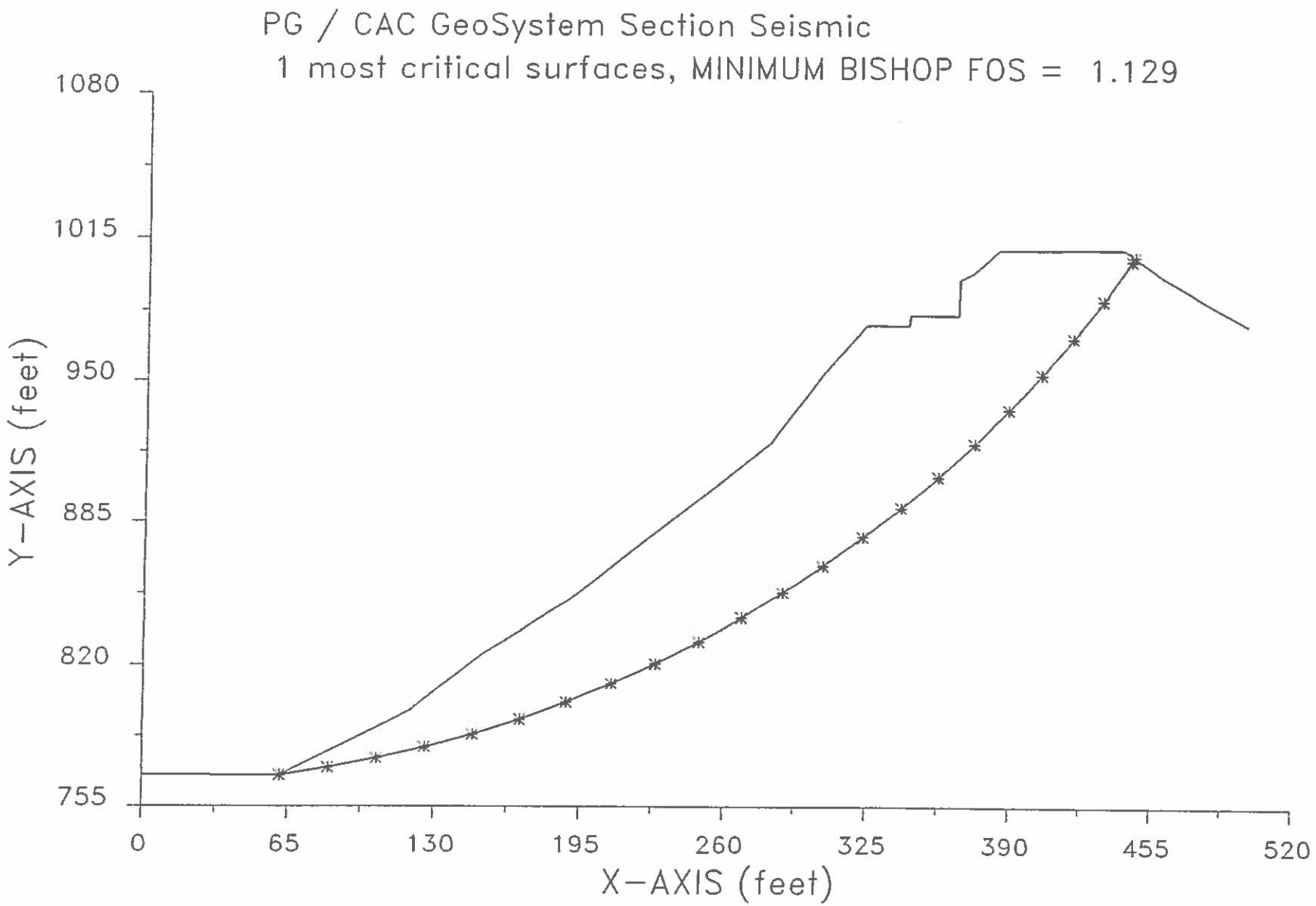



**Figure 9**

Response to Question 4:
The site is a hillside project and mainly composed of granite of igneous rock. The slope stability analyses by GeoSystems, Parmelee/Geology, Gematrix and CYG indicated adequate factors of safety for both static and seismic slope stability of the southeast-facing slope. The proposed single family residences will be supported by conventional spread footings, skin friction piles and/or end bearing caissons founded into granitic rock. Therefore, the site, as well as the recommended building foundations, should be considered stable fro geologic, soils engineer and building code viewpoints.

A rock foundation in a rock site will not subjected to earthquake-induced liquefaction, earthquake-induced lateral spreading, liquefaction-induced lateral spreading, ground subsidence or ground collapse. As shown on Figure 7, the site is not located with any of the potential earthquake-induced liquefaction zones as mapped in the CDMG Seismic Hazards Report. The potential impacts of earthquake-induced liquefaction, earthquake-induced lateral spreading, liquefaction-induced lateral spreading, earthquake-induced ground subsidence, earthquake-induced ground collapse and earthquake-induced foundation settlement to the suject site should be in a level considered less than significant.

## ENDING

We appreciate the opportunity for providing this professional service. If you have any questions regarding this report, please do not hesitate to contact us.

Very truly yours,
C. Y. Geotech, Inc.

Paul Cai
RCE 80352

John T. Tsao
RCE 46886/CEG 1783

Encl: References
Appendix A, Geology and Soils Questions from Review of MND
Appendix B, Topographic Map and Cross Section Showing Southeast-Facing Slope
Appendix C, Additional Slope Stability Analysis by CYG

cc: (5) Addressee

## REFERENCES


1. GeoSystems, November 12, 1997, Soils and Engineering-Geologic Investigation for Proposed Single-Family Residence, Lots 95 & 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

2. City of Los Angeles Geology and Soils Report Correction Letter Dated December 16, 1997 (Log 23068).

3. GeoSystems, January 19, 1998, Response to City of Los Angels department of Building and safety, Grading Division Geotechnical Review Letter for Lots 95 & 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

4. GeoSystems, April 2, 1998, Revised Temporary Stability Calculation, Lots 95 & 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

5. City of Los Angeles Geology and Soils Report Approval Letter Dated April 2,1998 (Log 23791).

6. Parmelee/Geology, December 9, 2001, Geologic and Soils Engineering Update Report, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

7. City of Los Angeles Approval Letter Dated February 20, 2002 (Log# 35753).

8. Parmelee/Geology, May 19, 2002, Geologic and Soils Engineering Report, Proposed Two Residences, Lots 97 and 98, Tract 865, Adjacent to 8350 Grandview Drive, Los Angeles, California.

9. City of Los Angeles Approval Letter Dated June 27, 2002 (Log# 36891).

10. Parmelee/Geology, March 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

11. Parmelee/Geology, April 14, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

12. City of Los Angeles Inter-Department Correspondence, April 25, 2003, 8350 Grandview Drive (BD 401611).

13. Parmelee/Geology, May5, 2003, Response to City Review Letter Dated April 25, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

14. City of Los Angeles Inter-Department Correspondence, May 14, 2003, 8350 Grandview Drive (BD 401611).

15. Parmelee/Geology, May 25, 2003, Response to City Review Letter Dated May 14, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

16. Parmelee/Geology, October 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

17. Parmelee/Geology, November 26, 2003, Additional Information, Proposed Two Residences, Lots 95, 96, 97 and 98, Tract 865, 8350 Grandview Drive, Los Angeles, California.

18. Geomatrix, Inc., September 19, 2012, Geologic and Soils Engineering Update Report, Proposed Four Hillside Residences and Street Improvement, Lot 95, 96, 97 and 98, Tract 865, 8350, 8354, 8358 and 8362 Grand View Court, Los Angeles, California.

19. City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013 (Log# 79258).

20. C. Y. Geotech, Inc., November 10, 2014, Letter of Change of Geologist and Soils Engineer of Record, Proposed

Four Single Family Residences, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California.

21. C. Y. Geotech, Inc., November 26, 2014, Response to City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

22. City of Los Angeles Geology and Soils Report Correction Letter Dated March 23, 2015 (Log# 79258-01).

23. C. Y. Geotech, Inc., March 31, 2015, 2015, Response to City of Los Angeles Geology and Soils Report Correction Letter Dated march 23, 2015, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

24. City of Los Angeles Geology and Soils Report Approval Letter Dated April 10, 2015 (Log# 79258-02).

# APPENDIX A

## GEOLOGY AND SOILS QUESTIONS FROM REVIEW OF MND

document fails to provide sufficient information regarding roadway conditions and access issues, or provide a map showing the recommended routing showing the Crisler Way turn. As a result the analysis of the potential for traffic impacts is underestimated and the potential for impacts remains, as detailed in Section V of this comment letter.

I.g. *Inadequate Description of Existing Slope Conditions*

2-12 CEQA CRISLER SLOPE DESCRIPTION

As shown in **Figures 2 and 3**, the project site is located on a steep slope. The MND does indicate, on page 43, that as: "noted in the LADBS Approval Letter, the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope." This is the only substantive description of existing slope conditions in the area and is very non-specific as to the location of slopes, particularly slopes of 1:1. The environmental document for the project needs to include a copy of the slope analysis. In addition, the quoted language from the MND does not identify slopes along the proposed extension of Crisler Way; the description is only of the area "below the proposed extension of Crisler Way." The MND is deficient in its description of geotechnical conditions for the whole site (Crisler Way extension and single-family lots). This is evidence of the MND's failure to analyze the whole of the action.

I.h. *Inadequate Description of Very High Fire Severity Zone Conditions in Project Area and Fire History*

2-13 CEQA - FIRE HAZARD

The property has been officially mapped in a "Very High Fire Hazard Severity Zone" due to its location in a fire-prone hillside area of the City. It is identified as such in the City's ZIMAS system and on the Parcel Profile Reports for the project site. The City has defined the "Very High Fire Hazard Severity Zone" as follows:

> "Any area within the City of Los Angeles that poses a significant threat of fire from adjoining natural brush hillside areas and which is determined by the following factors: topography, infrastructure, fire protection, population density, types of construction, weather, existing fire codes and ordinances, and fire history." LAMC Section 57.202.

The City's Zone Information and Map Access System ("ZIMAS") describes the Very High Fire Hazard Severity Zone as follows:

> "Lands designated by the City of Los Angeles Fire Department pursuant to Government Code 51178 that were identified and recommended to local agencies by the Director of Forestry and Fire Protection based on criteria that includes fuel loading, slope, fire weather, and other relevant factors. These areas must comply with the Brush Clearance Requirements of the Fire Code. The Very High Fire Hazard Severity Zone (VHFHSZ) was first established in the City of Los Angeles in 1999 and replaced the older 'Mountain Fire District' and 'Buffer Zone.'"

*VI.c. Geology and Soils*

| VI GEOLOGY AND SOILS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| iv) Landslides? | ☒ | ☐ | ☐ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgements:**

According to ZIMAS and page 45 of the MND: "The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides." We have not been able to review the current geotechnical reports for the project as a whole, since the geotechnical reports for the project are not in the project file (see **Appendix E**). We were only able to obtain a copy of the September 19, 2012 Soils and Geology Report (PG1091) and associated Correction Letter. We are therefore unable to verify that impacts would be reduced to a level considered less than significant.

According to page 46 of the MND:

> The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced with the following Regulatory Compliance Measure (RCM) RC-GEO- 3 which, requires the Applicant to submit a Geology and Soils Report to the Department of Building and Safety for review. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development.

The MND is deficient because is fails to provide information on the remedial grading, retaining walls, and conventional and/or drilled-pile foundations required for the project or to identify the required conditions/mitigations specified in the report. In addition, it is unclear whether the 2015 geotechnical report for the project addressed the project as a whole, since it appears that the B-permit for Crisler Way and the permits for the four single-family dwellings, which were issued June 8, 2015, were processed separately. As noted on page i of the MND:

2-42 CEQA - GED PROJECT CHANGES SINCE PERMITS ISSUED

> The proposed residences were previously permitted by the Los Angeles Department of Building and Safety (LADBS); however, subsequent to the issuance of the building permits, LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the building permits because the project site fronts a Substandard Hillside Limited Street that is not fully improved and the Applicant had not obtained the requisite approvals as required by Los Angeles Municipal Code (LAMC) Sections 12.24 X.28(a)(7)(i) and (ii).

The MND fails to indicate whether any changes have been made to the proposed project, from the project that the City mistakenly issued permits for in 2015, and thus it is unclear whether the 2015 geotechnical report and the 2015 Geology and Soils Report Approval Letter address the project as currently proposed. According to page 46 of the MND:

2-43 CEQA GED 2017 BUILDING CODE

> Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the **2014 City of Los Angeles Building Code**. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than significant. (Emphasis added).

Although the project applications for each of the four single-family homes were filed in November of 2015, they were not accepted for review until March of 2017, as shown in **Attachment H**. Projects submitted after January of 2017 are subject to the

2017 Building Code. Since the applications were not accepted for review until March of 2017, the projects should arguably be subject to the 2017 building code and the approval letter may not be accurate. In the absence of a clear and complete project description, public access to the geotechnical, soils and grading reports, and a determination of whether the project is subject to the 2017 building code, the potential for soil stability impacts remains. In addition, as noted in MND Appendix D: "The subject lots are located below the proposed Crisler Way at the top of an approximately 200 foot high average slope gradient of about 40 degrees with localized areas steeper than 1: 1. The earth materials at the subsurface exploration locations consist of up to 2 feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock." Therefore the potential for grading and construction to result in the loss of topsoil also remains potentially significant.

*VI.d. Hazards and Hazardous Materials*

2-44 CEQA

FIRE HAZARD

| VIII HAZARDS AND HAZARDOUSMATERIALS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☒ | ☐ | ☐ | ☐ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As discussed earlier in this comment letter, the proposed project is located in a High Fire Severity area on a site that previously burned in the Kirkwood Bowl Fire (see **Figure 8**) in an area is characterized by very narrow roadways. Maintenance of roadway and emergency access is a very important issue for residents along these narrow streets. Both Yucca Trail and Grand View Drive are substandard streets of limited width. (See MND Appendix F).

As noted in the City of Los Angeles's analysis of the Kirkwood Bowl/Laurel Canyon fire (see **Attachment D**) which destroyed 23 homes, including 14 on Grand View Drive and three on Crisler Way, partially ruined another five structures, and caused an estimated $4 million in damages in 1979:[3]

> The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

[3] City of Los Angeles Department of Fire, Analysis of Greater Alarm Operations, 9-16-79, page 1-2.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-significant Impact | No Impact |
|---|---|---|---|---|
| **VI. GEOLOGY AND SOILS.** Would the project: | | | | |
| a. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii. Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv. Landslides? | ☐ | ☐ | ☒ | ☐ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |

Unless noted otherwise, the following impact analysis is based on the LADBS Geology and Soils Report Approval Letter ("LADBS Approval Letter") dated April 10, 2015, provided in **Appendix D**, and the Geology and Soils Reports referenced therein as listed in **Table 4.6-1, Project Geology and Soils Reports**. As noted in the LADBS Approval Letter, the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope. Earth materials identified at subsurface exploration locations consist of up to two (2) feet of uncertified fill underlain by silty sand, natural residual soils, and granite bedrock.

**Table 4.6-1**
**Project Geology and Soils Reports**

| Geology Report | Report Number | Date of Document | Prepared By |
|---|---|---|---|
| Addendum Report | CYG-14-7350 | 03/31/2015 | C.Y. Geotech, Inc. |
| Department Correction Letter | 79258-01 | 03/23/2015 | LADBS |
| Addendum Report | CYG-14-7350 | 11/26/2014 | C.Y. Geotech, Inc. |
| Responsibility Letter | CYG-14-7350 | 11/10/2014 | C.Y. Geotech, Inc. |
| Department Correction Letter | 79258 | 01/30/2013 | LADBS |
| Geology/Soil Report | PG 1091 | 09/19/2012 | GeoMatrix |
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log #23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | Geosystems |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |

*a.* ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

*i.* ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project site is located within a State-designated Alquist-Priolo Zone or other designated fault zone. Alquist-Priolo Earthquake Fault Zones are regulatory zones that encompass surface traces of active faults that have potential for future surface fault rupture. Fault rupture occurs when movement on a fault breaks through the earth's surface. Faults that show evidence of movement within the past 11,000 years (during the Holocene Epoch) are referred to as active faults. The California Geological Survey establishes regulatory zones around active faults, called Alquist-Priolo Earthquake Fault Zones. These zones extend from 200 to 500 feet on each side of the known fault. The zones identify areas where a potential surface fault rupture could prove hazardous for buildings used for human occupancy. Development located within an Alquist-Priolo Earthquake Fault Zone or other designated fault zone is required to prepare special geotechnical studies to characterize hazards from any potential surface ruptures.

The nearest known fault to the project site is the Hollywood Fault. The Site is not located in the Alquist-Priolo Fault Zone for the Hollywood Fault[17] or a Preliminary Fault Rupture Study Area.[18] Given that the project site is not located within an Alquist-Priolo Fault Zone, the potential risk for surface fault rupture through the site is considered low. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[17] California Geological Survey, Earthquake Zones of Required Investigation Hollywood Quadrangle, Earthquake Fault Zones Official Map, November 6, 2014, http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM.pdf (accessed November 2016).

[18] Los Angeles Dept. of City Planning, ZIMAS, Seismic Hazards, http://zimas.lacity.org (accessed November 2016).

*ii. Strong seismic ground shaking?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project represents an increased risk to public safety or destruction of property by exposing people, property, or infrastructure to seismically induced ground shaking hazards greater than the average risk associated with other locations in Southern California. The project site is located within a seismically active region, as is all of Southern California. The intensity of ground shaking depends primarily on the earthquake's magnitude, distance from the source, and the site response characteristics. Several active and potentially active faults could affect the project site. The potential for ground shaking to result in ground failure impacts are discussed and evaluated below in subsections VI. a.iii. and VI.a.iv.

Although future earthquakes could result in a perceptible degree of seismic ground shaking at the Site, the ground shaking would not be considered strong or of sufficient strength to expose people or structures to potential substantial adverse effects. In addition, current California Building Codes and seismic standards specified in the Los Angeles Building Code as approved by the LADBS require that new buildings be designed to resist ground shaking through the use of shear panels, moment frames, and structural reinforcement. The design and construction of the Project would be required to conform to current Building Codes and the Site-specific geotechnical recommendations of the previously prepared Geology and Soils Reports to minimize potential impacts due to strong seismic ground shaking. Therefore, seismic ground shaking impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

*iii. Seismic-related ground failure, including liquefaction?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project site is located within a liquefaction zone. Liquefaction is the loss of soil strength or stiffness due to buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine- to medium-grained, cohesionless soils. The State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that the project site is not located within an area designed as a liquefaction zone, where historical occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements.[19] Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

*iv. Landslides?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A project-related, significant adverse effect may occur if the Project is located in a hillside area with soil conditions that would suggest a high potential for sliding. The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides.[20]

[19] California Geological Survey, Earthquake Zones of Required Investigation Hollywood Quadrangle, Earthquake Fault Zones Official Map, Seismic Hazard Zones, March 25, 1999, http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM.pdf (accessed November 2016).

[20] Ibid.

The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced with the following Regulatory Compliance Measure (RCM) RC-GEO-3 which, requires the Applicant to submit a Geology and Soils Report to the Department of Building and Safety for review. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project result in substantial soil erosion or the loss of topsoil?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have significant sedimentation or erosion impacts if it would: (1) constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or (2) accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on site.

Although development of the Project has the potential to result in the erosion of soils during site preparation and construction, erosion would be reduced by implementation of stringent erosion controls imposed by the City through standard grading and building permit conditions. During Project operations, soil erosion would be minimized with the installation and maintenance of landscaping and stormwater collection and drainage. Although minor erosion and siltation could occur during grading, all grading activities would require grading permits from the LADBS, which include requirements and standards designed to limit potential impacts to acceptable levels. The Project would also install a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope.[21] In addition, all on-site grading and site preparation would comply with applicable provisions of Chapter IX, Division 70 of the LAMC, which addresses grading, excavations, and fills. Through compliance with regulatory requirements and permit conditions, potential soil erosion impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

[21] CAC Development, Crisler Way, April 12, 2016.

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it could cause or accelerate geologic hazards causing substantial damage to structures or infrastructure, or expose people to substantial risk of injury. For the purpose of this specific issue, a significant impact may occur if the Project is built in an unstable area without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property.

As discussed above, the Site is located within an area subject to potential seismically-induced slope instability likely due to the presence of relatively steep slopes. Soil stabilization measures incorporated into the grading plan would include soil remediation, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to support the proposed structures. The Project would be required to incorporate slope reinforcement measures for compliance with City Code and site-specific recommendations by geology and soils engineers. Compliance with existing regulations and geology and soil engineer recommendations, as required by Regulatory Compliance Measure (RCM) RC-GEO-1, which requires the design and construction of the project to comply with the California Department of Conservation, Division of Mines and Geology (CDMG), which provides guidance for the evaluation and mitigation of earthquake-related hazards, and with the seismic safety requirements in the Uniform Building Code (UBC) and the LAMC. Compliance with such requirements would reduce seismic ground shaking impacts to the maximum extent practicable with current engineering practices; RC-GEO-2, which requires that the grading plan conform with the City's Landform Grading Manual guidelines, subject to approval by the Department of Building and Safety's Grading Division, and appropriate erosion control and drainage devices to the satisfaction of the Building and Safety Department; and RC-GEO-6, which requires that expansive soils areas be assessed in a geotechnical report and compliance with conditions contained in the Department of Building and Safety's Soils Report Approval letter when issued, would reduce landslide impacts to less-than-significant.

Lateral spreading is a term referring to landslides that form on gentle slopes and have a fluid-like flow movement. Potential landslide impacts are addressed above in Subsection VI.a.iv.

Subsidence is a form of ground failure that occurs when subsurface fluids such as groundwater or petroleum are extracted. The Seismic Hazard Zone Report for the Hollywood Quadrangle indicates that the historically-highest groundwater level at the site is greater than 40 feet below ground surface.[22] The project proposes to grade approximately 800 cy of earth material to a depth of approximately 30 feet. Therefore, no groundwater would be expected to be encountered during Project construction, and potential subsidence impacts would be less-than-significant. Subsection VI.a.iii. provides a discussion of liquefaction potential, which would not be present on the site as indicated by the California Geologic Survey Seismic Hazard Zone map. The Project would have no impact regarding liquefaction.

In summary, potential impacts related to soil instability would be less-than-significant because the Project would be required to comply with applicable RCMs, City building codes and implement site-specific recommendations of a soils engineer to address soil stability. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[22] California Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, California, 1998, Plate 1.2, Historically Highest Ground Water Contours and Borehole Log Data Locations, Hollywood Quadrangle. http://gmw.consrv.ca.gov/shmp/download/quad/HOLLYWOOD/reports/holly_eval.pdf (accessed November 2016).

*d.* ***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

**Less-than-significant Impact.** Based the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A significant impact may occur if the project is built on expansive soils without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property. Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation, heaving and cracking of building foundations could result.

The LADBS Approval Letter describes the earth materials of the project site, which include small amounts of up to two feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock. These materials would not be considered expansive, as they would not contain significant amounts of clay particles with potential to swell or shrink. Construction of the Project would be required to comply with the City's applicable building codes, which include building foundation requirements appropriate to site-specific conditions. Therefore, soil expansiveness impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

*e.* ***Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

**No Impact.** A project would cause a significant impact if adequate wastewater disposal is not available. The project site is located in a developed area of the City served by an existing wastewater collection, conveyance, and treatment system operated by LA Sanitation, a part of the City Department of Public Works. No septic tanks or alternative disposal systems are necessary, nor are they proposed. Therefore, no impact regarding septic tanks or alternative wastewater disposal systems would occur.

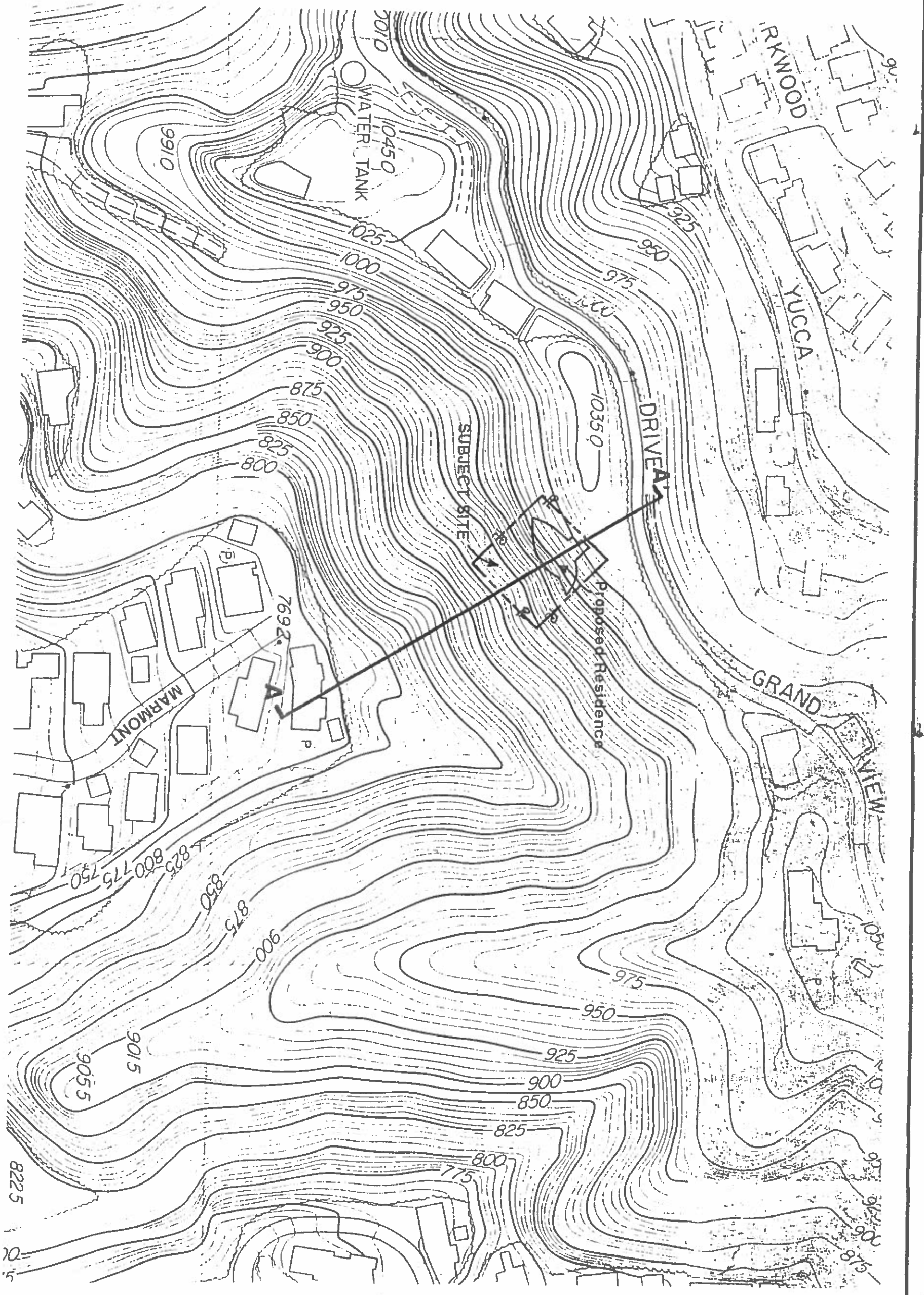
***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight (8) related projects (see Section 3.9, Related Projects) with respect to the topics listed in the previous geology and soils analysis. Geological hazards are site-specific and there is little connection between the hazards posed to the Project and those to related projects. Given that the region is seismically active, it is likely that related projects would be at risk from similar geological hazards as the proposed Project. As with the Project, adherence to applicable regulations, building codes, and comprehensive engineering practices, geologic hazards would be less-than-significant. Therefore, cumulative impacts related to geological hazards would be less-than-significant.

## APPENDIX B

## TOPOGRAPHIC MAP AND CROSS SECTION SHOWING SOUTHEAST-FACING SLOPE




Map Reference: Santa Monica Mountains Topographic Map Sheets No. 178 & 200, published by the City of Los Angeles

GEOSYSTEMS
ENVIRONMENTAL AND GEOTECHNICAL CONSULTANTS
312 WESTERN AVE GLENDALE CA 91201-2836
PHONE 818-500-9533 FAX 818-500-0134

# REGIONAL TOPOGRAPHIC MAP

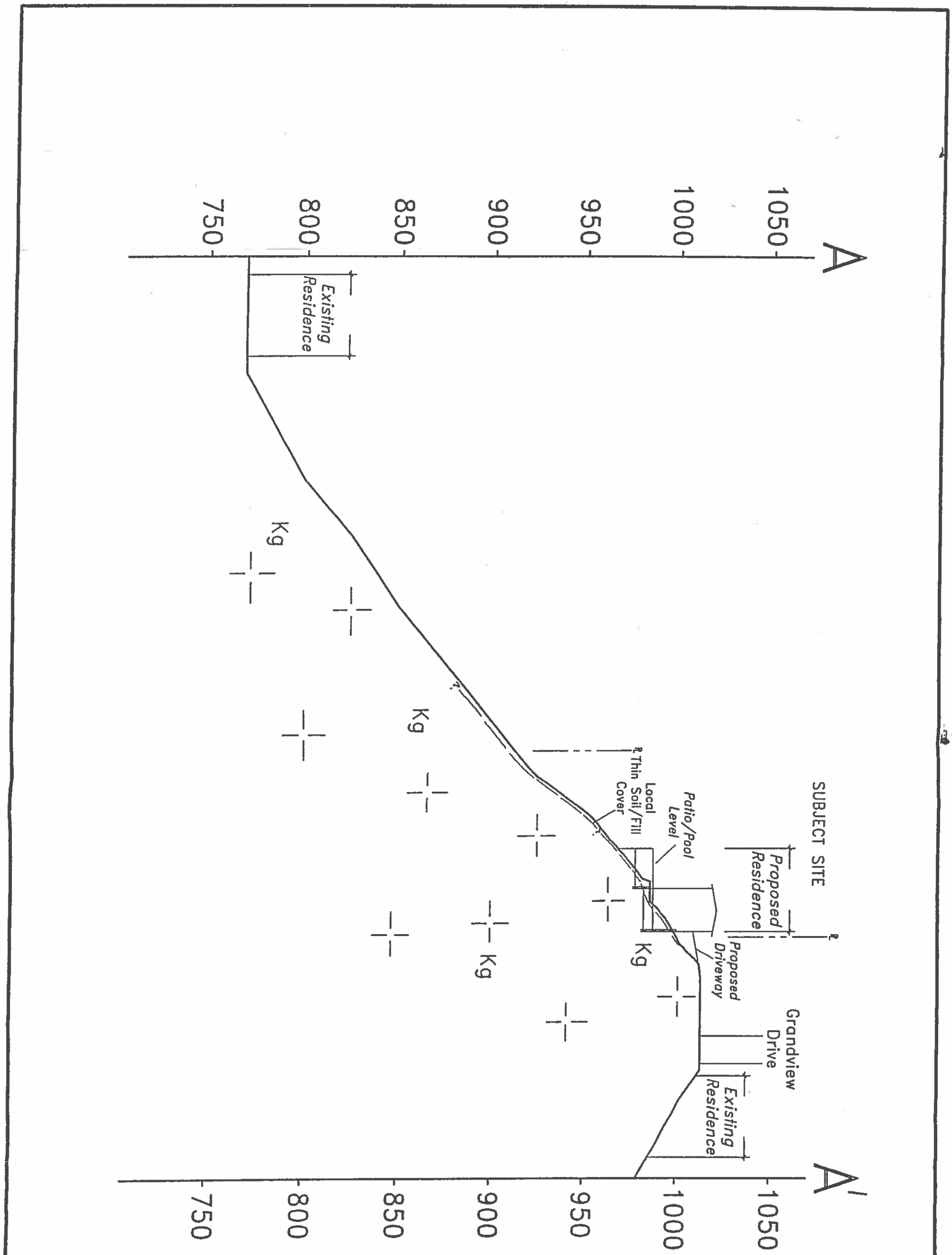
Scale: 1" = 100'

Lots 95 & 96, Tract No. 865
8350 Grandview Drive, Los Angeles, California

GS 97-912

DATE: November 1997

PLATE 1

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312 WESTERN AVE GLENDALE CA 91201-2836
PHONE 818-500-9533 FAX 818-500-0134

# GEOLOGIC CROSS SECTION A-A'

Scale: 1" = 50'

Lots 95 & 96, Tract No. 865
8350 Grandview Drive, Los Angeles, California

GS 97-912

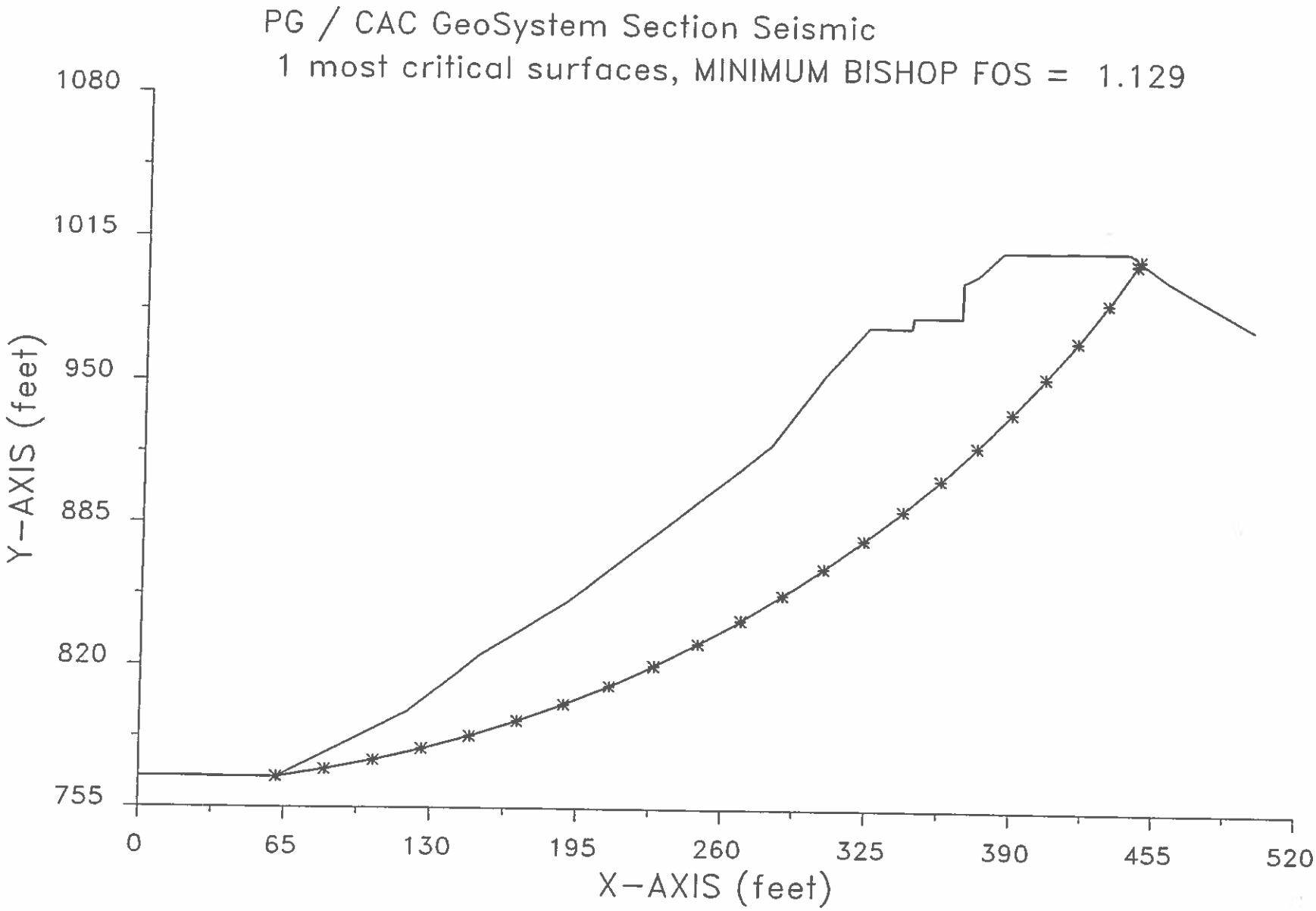
DATE: November 1997

PLATE CS-1

# APPENDIX C

## ADDITIONAL SLOPE STABILITY ANALYSIS BY CYG

PG1091E 6-08-** 16:21



Problem Description : PG / CAC GeoSystem Section Seismic

---
SEGMENT BOUNDARY COORDINATES
---

16 SURFACE boundary segments

| Segment No. | x-left (ft) | y-left (ft) | x-right (ft) | y-right (ft) | Soil Unit Below Segment |
|---|---|---|---|---|---|
| 1 | .4 | 769.2 | 61.5 | 769.0 | 1 |
| 2 | 61.5 | 769.0 | 119.6 | 799.2 | 1 |
| 3 | 119.6 | 799.2 | 151.0 | 824.8 | 1 |
| 4 | 151.0 | 824.8 | 189.4 | 849.2 | 1 |
| 5 | 189.4 | 849.2 | 280.3 | 921.0 | 1 |
| 6 | 280.3 | 921.0 | 303.5 | 952.0 | 1 |
| 7 | 303.5 | 952.0 | 323.3 | 975.0 | 1 |
| 8 | 323.3 | 975.0 | 342.5 | 974.9 | 1 |
| 9 | 342.5 | 974.9 | 343.1 | 979.7 | 1 |
| 10 | 343.1 | 979.7 | 365.0 | 979.6 | 1 |
| 11 | 365.0 | 979.6 | 365.1 | 995.5 | 1 |
| 12 | 365.1 | 995.5 | 371.6 | 998.4 | 1 |
| 13 | 371.6 | 998.4 | 383.3 | 1009.0 | 1 |
| 14 | 383.3 | 1009.0 | 441.0 | 1009.4 | 1 |
| 15 | 441.0 | 1009.4 | 458.5 | 997.0 | 1 |
| 16 | 458.5 | 997.0 | 498.3 | 975.0 | 1 |

---
ISOTROPIC Soil Parameters
---

1 Soil unit(s) specified

| Soil Unit No. | Unit Weight Moist (pcf) | Unit Weight Sat. (pcf) | Cohesion Intercept (psf) | Friction Angle (deg) | Pore Pressure Parameter Ru | Pore Pressure Constant (psf) | Water Surface No. |
|---|---|---|---|---|---|---|---|
| 1 | 130.0 | 133.0 | 1350.0 | 41.00 | .000 | .0 | 0 |

A horizontal earthquake loading coefficient
of .299 has been assigned
A vertical earthquake loading coefficient
of .000 has been assigned

A critical failure surface searching method, using a random
technique for generating CIRCULAR surfaces has been specified.
1000 trial surfaces will be generated and analyzed.
1000 Surfaces initiate from each of 1 points equally spaced
along the ground surface between x = 61.5 ft
and x = 61.5 ft
Each surface terminates between x = 250.0 ft
and x = 480.0 ft
Unless further limitations were imposed, the minimum elevation
at which a surface extends is y = .0 ft

* * * * * DEFAULT SEGMENT LENGTH SELECTED BY XSTABL * * * * *
22.0 ft line segments define each trial failure surface.

ANGULAR RESTRICTIONS :
The first segment of each failure surface will be inclined within the angular range defined by :
Lower angular limit := -45.0 degrees
Upper angular limit := (slope angle - 5.0) degrees

Factors of safety have been calculated by the :

* * * * * SIMPLIFIED BISHOP METHOD * * * * *
The most critical circular failure surface is specified by 23 coordinate points

| Point No. | x-surf (ft) | y-surf (ft) |
|---|---|---|
| 1 | 61.50 | 769.00 |
| 2 | 83.21 | 772.54 |
| 3 | 104.77 | 776.92 |
| 4 | 126.15 | 782.14 |
| 5 | 147.30 | 788.18 |
| 6 | 168.20 | 795.04 |
| 7 | 188.82 | 802.71 |
| 8 | 209.13 | 811.18 |
| 9 | 229.09 | 820.42 |
| 10 | 248.68 | 830.44 |
| 11 | 267.86 | 841.21 |
| 12 | 286.61 | 852.72 |
| 13 | 304.90 | 864.94 |
| 14 | 322.70 | 877.87 |
| 15 | 339.99 | 891.48 |
| 16 | 356.73 | 905.76 |
| 17 | 372.90 | 920.67 |
| 18 | 388.48 | 936.20 |
| 19 | 403.45 | 952.32 |
| 20 | 417.78 | 969.02 |
| 21 | 431.45 | 986.26 |
| 22 | 444.44 | 1004.01 |
| 23 | 445.78 | 1006.01 |

**** Simplified BISHOP FOS = 1.129 ****

The following is a summary of the TEN most critical surfaces

Problem Description : PG / CAC GeoSystem Section Seismic

| | FOS (BISHOP) | Circle Center x-coord (ft) | Circle Center y-coord (ft) | Radius (ft) | Initial x-coord (ft) | Terminal x-coord (ft) | Resisting Moment (ft-lb) |
|---|---|---|---|---|---|---|---|
| 1. | 1.129 | -18.69 | 1329.14 | 565.85 | 61.50 | 445.78 | 1.262E+09 |
| 2. | 1.129 | -20.70 | 1347.95 | 584.76 | 61.50 | 450.92 | 1.364E+09 |
| 3. | 1.130 | -31.56 | 1339.71 | 578.25 | 61.50 | 442.38 | 1.214E+09 |
| 4. | 1.131 | -19.55 | 1312.15 | 549.16 | 61.50 | 438.58 | 1.148E+09 |
| 5. | 1.132 | -58.24 | 1412.53 | 654.57 | 61.50 | 451.53 | 1.436E+09 |
| 6. | 1.132 | 10.46 | 1287.52 | 521.03 | 61.50 | 447.84 | 1.267E+09 |
| 7. | 1.132 | -14.90 | 1350.50 | 586.50 | 61.50 | 454.91 | 1.435E+09 |
| 8. | 1.132 | -42.36 | 1356.08 | 596.19 | 61.50 | 442.10 | 1.222E+09 |
| 9. | 1.133 | -57.95 | 1390.61 | 632.99 | 61.50 | 445.13 | 1.301E+09 |
| 10. | 1.133 | 8.62 | 1256.37 | 490.23 | 61.50 | 431.97 | 1.051E+09 |

# C. Y. GEOTECH, INC.

## Engineering Geology and Geotechnical Engineering

9428 Eton Avenue, Unit M, Chatsworth, CA 91311
Tel: (818) 341-1899 Fax: (818) 341-1897 Email: cygeotech@sbcglobal.net

November 26, 2014 P.N. CYG-14-7350

CAC Development
1504 South Flower Street
Los Angeles, CA 90015

Subject: Response to City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

Dear Robert,

As requested, C. Y. Geotech (CYG), Inc. has prepared this addendum report in response to the City of Los Angeles Geology and Soils Report Correction Letter dated January 30, 2013 (Log# 79258). A copy of the city correction letter is attached at the end of this report. For your convenience, the responses are presented following each review comment.

City Review Comment 1:
Revise all geologic cross-sections so that all construction and grading (including the retaining wall construction on the uphill and downhill sides of the proposed street), are shown relative to the existing private property boundaries and existing structures.

Response to City Review Item 1:
The geologic cross sections A-A' to D-D have been extended to be A-A-A' to D-D-D' to include the portion of street improvement. The site plan shown on Plate 1 was used to extend the geologic cross sections. Based on the information provided, it is our understanding that the proposed street improvement of Crisler Way was already reviewed and approved the City of Los Angeles Department of Public Works. As shown on the revised geologic cross sections (see Plates 2 and 3), retaining walls are to be built along both uphill and downhill sides of Crisler Way. The maximum height of the retaining wall along the uphill side of Crisler Way is about 16.5 feet. The maximum height of the retaining wall along the down side of Crisler Way is about 7 feet.

City Review Comment 2:
Clearly depict all temporary excavations that will remove lateral support from offsite property, and revise recommendations to shore these excavations.

Response to City Review Item 2:
The northwesterly property line of the subject sites is along the downhill side of Crisler Way. Based on the information provided, it is our understanding that the proposed street improvement of Crisler Way was already reviewed and approved by the City of Los Angeles Department of Public Works. Therefore, the design and construction of the retaining wall along the uphill side of Crisler Way are not discussed and presented in this report. The temporary excavations within the site for the subject project which will remove lateral support of offsite properties are listed below:

1. The temporary excavations for the construction of the northwesterly subterraneous building walls of each single family residence.

2. The temporary excavation for the northwest 15 feet of the northeasterly subterraneous building wall of the single family residence at Lot 95.

3. The temporary excavation for the northwest 15 feet of the southwesterly subterraneous building wall of the single family residence at Lot 98.

The maximum height of the temporary excavations is up to about 21 feet. The stability of a 21 feet high temporary excavation was evaluated and the results were presented in the referenced Geomatrix report dated September 19, 2012. Therefore, the recommendations for the design and construction of temporary excavations, including the shoring system, in the referenced Geomatrix report dated September 19, 2012 are still applicable.

City Review Comment 3:
Clarify for the record if the improved portion of Crisler Way will be a private street.

Response to City Review Item 3:
The Crisler Way to be improved as a part of the residential development is a actually recorded public street. Based on the information provided, it is our understanding that the proposed street improvement of Crisler Way was already reviewed and approved by the City of Los Angeles Department of Public Works.

City Review Comment 4:
Consult and verify that retaining walls attached from building and their height will comply with the requirements of the zoning code and city ordinance 176,445, or obtain a variance. Note: Be advised that verification of compliance is a part of the structural plan-check and permitting process.

Response to City Review Item 4:
Acknowledged. Based on the amendment of the City of Los Angeles Ordinance No. 176445 (effective 09/26/05), a maximum of one free standing vertical or approximately vertical retaining wall may be built on any lot with a maximum height of 12 feet as measured from the top of wall to the lower side of the adjacent ground elevation. Alternatively, a maximum of two 10-foot high vertical or approximately vertical walls or portions of a wall can be built if the minimum horizontal distance between the two walls is 3 feet (see Figure 1). Based on the revised site plan, the number and height of the proposed retaining walls will comply with the City of Los Angeles Ordinance No. 176445. The number of exterior retaining walls will not be greater than 2 and the height of the exterior retaining walls will not be greater than 10 feet.

City Review Comment 5:
Clarify and show how all street drainage will be conducted to an improved street. The proposed elevations shown will result in a southwest flow direction to the Lot 98 area, and the rip rap pads shown currently, are not acceptable.

Response to City Review Item 5:
Based on the information provided, it is our understanding that the proposed street improvement of the Crisler Way was already reviewed and approved the City of Los Angeles Department of Public Works. CYG was informed that the water to be collected in Lot 98 will be drained through a solid pipe to the southeast side of the lot and then to the street. The details of the drainage system are to be included in the drainage plan is to be prepared by the Project Civil Engineer.

INFORMATION BULLETIN / PUBLIC - GENERAL INFORMATION
REFERENCE NO.: Ord.176,445 (Sec. 12.21C8) Effective: 9-26-05
DOCUMENT NO. P/ZC 2002-016 Revised:
Previously Issued As: None

# RETAINING WALLS IN A OR R ZONES LOCATED IN HILLSIDE AREAS

To control the proliferation of massive retaining walls on residential lots within the Hillside Area delineated on the Bureau of Engineering Basic Grid Map No. A-13372, the City Council passed Ordinance No. 176,445, which places limitations on the height and the number of retaining walls on a lot, and requires landscaping or screening in front of these walls.

The Ordinance defines retaining walls as *"a freestanding continuous structure, as viewed from the top, intended to support earth, which is not attached to a building."* According to the City Attorney's Office, the phrase "not attached to a building" is intended to exempt retaining walls that are structurally integrated as part of the building foundation, such as a basement wall. However, the portion of the retaining wall which is attached to the building but extend beyond the footprint of the building is subject to the regulation of this ordinance.

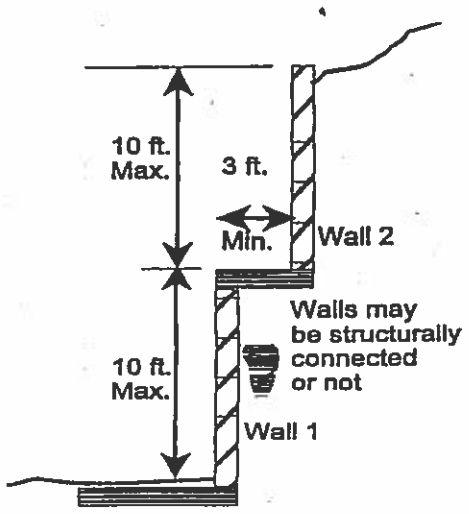
The height of each retaining wall is measured from the top of the wall to the lower side of the adjacent ground elevation.

For permit applications submitted on or after March 9, 2005, the design of retaining walls in A or R zones (including the RA Zone) located in Hillside Area shall comply with the following:

**I. Number and Height of Retaining Walls:**

A) A total of **one** freestanding retaining wall with a height of not to exceed 12 feet may be built on any lot.

B) In lieu of one 12 foot high retaining wall as allowed in A) above, a total of **two** retaining walls with a maximum height of 10 feet each (which may be stacked for a maximum of 20 feet in vertical height) may be built on any lot, provided that they are separated/offset horizontally by a minimum of 3 feet, as shown in the diagram to the right.




Note: 1) Retaining walls which can be built without building and grading permits are exempt from this ordinance and thus may be constructed in addition to the retaining wall permitted in IA) or IB) above.

2) Guard rails required by Los Angeles Municipal Code (LAMC) Section 91.509.1 may be placed on top of the retaining wall and are exempt from the height limitation specified herein. However, these guard rails shall be designed as open guard rails as specified in LAMC Section 91.509.3.

**II. All Other Walls**

In accordance with LAMC Section 12.21C8(c), walls exceeding the number or height limitations stated in IA) or IB) above require an approval from the Zoning Administrator ("ZA").
The number and height limitations specified under Section I above do not apply to retaining walls built to comply with an order issued by the Department of Building and Safety to repair an unsafe or substandard conditions.

**III. Walls in Required Yards**

Height of walls located in required yards shall comply with LAMC Section 12.22C20(f).

**IV. Landscaping**

Retaining walls 8 feet or higher shall be covered with landscaping material. The landscaping plan for such retaining walls shall be approved by the Department of City Planning in accordance with LAMC Sections 12.40 through 12.43.

**City of Los Angeles Ordinance 176445**
**Illustration of Double-Layered Retaining Wall**

**CYG-14-7350** | **Figure 1**

**C. Y. GEOTECH, INC**
ENGINEERING GEOLOGY &
GEOTECHNICAL ENGINEERING

City Review Comment 6:
Shoring is discussed and recommended (see Pgs. 27-29). Shown by labeling on the plan and on the revised geologic cross-sections requested in this letter, all areas where shoring will be employed during construction,

Response to City Review Item 6:
The soldier piles for the shoring of temporary excavations are labeled on the site plan (see Plate 1) and geologic cross sections (see Plates 2 and 3).

**ENDING**

We appreciate the opportunity for providing the professional service. If you have any questions regarding this report, please do not hesitate to contact us.

Very truly yours,
C. Y. Geotech, Inc.

REGISTERED PROFESSIONAL ENGINEER
TZE-TZONG TSAO
No. C 046886
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

REGISTERED GEOLOGIST
TZE-TZONG, TSAO
No. 1783
CERTIFIED ENGINEERING GEOLOGIST
EXP. 11-30-15
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LUO B. CAI
C 80352
EXP. 12-31-14
CIVIL
STATE OF CALIFORNIA

John T. Tsao
RCE 46886/CEG 1783

Paul Cai
RCE 80352

Encl: References
City of Los Angeles Correction Letter Dated January 30, 2013

cc: (5) Addressee

## REFERENCES


1. Parmelee/Geology, December 9, 2001, Geologic and Soils Engineering Update Report, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

2. City of Los Angeles Approval Letter Dated February 20, 2002 (Log# 35753).

3. Parmelee/Geology, May 19, 2002, Geologic and Soils Engineering Report, Proposed Two Residences, Lots 97 and 98, Tract 865, Adjacent to 8350 Grandview Drive, Los Angeles, California.

4. City of Los Angeles Approval Letter Dated June 27, 2002 (Log# 36891).

5. Parmelee/Geology, March 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

6. Parmelee/Geology, April 14, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

7. City of Los Angeles Inter-Department Correspondence, April 25, 2003, 8350 Grandview Drive (BD 401611).

8. Parmelee/Geology, May5, 2003, Response to City Review Letter Dated April 25, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

9. City of Los Angeles Inter-Department Correspondence, May 14, 2003, 8350 Grandview Drive (BD 401611).

10. Parmelee/Geology, May25, 2003, Response to City Review Letter Dated May 14, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

11. Parmelee/Geology, October 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

12. Parmelee/Geology, November 26, 2003, Additional Information, Proposed Two Residences, Lots 95, 96, 97 and 98, Tract 865, 8350 Grandview Drive, Los Angeles, California.

13. Geomatrix, Inc., September 19, 2012, Geologic and Soils Engineering Update Report, Proposed Four Hillside Residences and Street Improvement, Lot 95, 96, 97 and 98, Tract 865, 8350, 8354, 8358 and 8362 Grand View Court, Los Angeles, California.

14. City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013 (Log# 79258).

15. C. Y. Geotech, Inc., November 10, 2014, Letter of Change of Geologist and Soils Engineer of Record, Proposed Four Single Family Residences, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California.

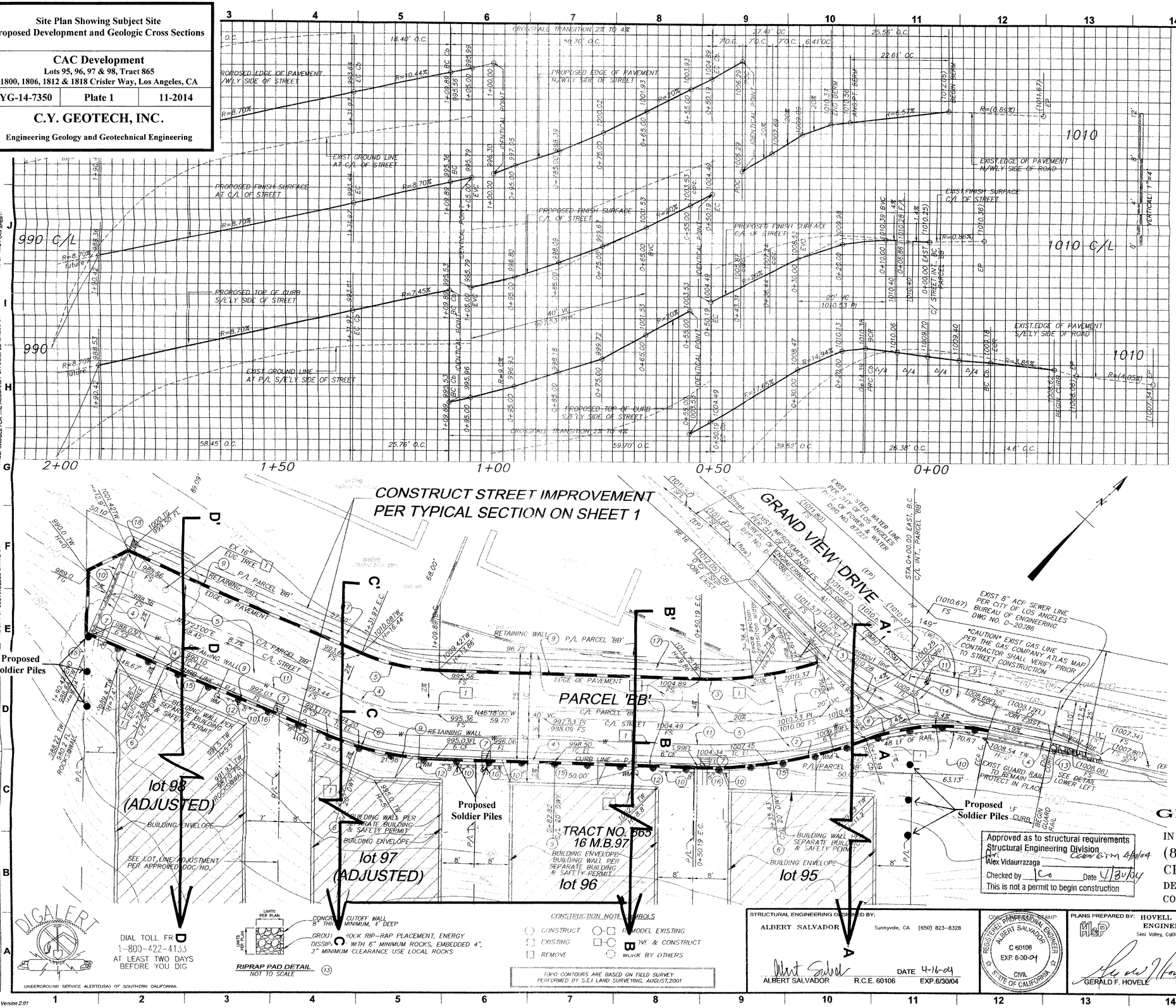
**Site Plan Showing Subject Site**
**Proposed Development and Geologic Cross Sections**

**CAC Development**
Lots 95, 96, 97 & 98, Tract 865
1800, 1806, 1812 & 1818 Crisler Way, Los Angeles, CA

| CYG-14-7350 | Plate 1 | 11-2014 |
|---|---|---|

**C.Y. GEOTECH, INC.**

Engineering Geology and Geotechnical Engineering




## CONSTRUCTION NOTES:

1. EXIST. WALLS, TREES, FENCES, AND GROUND COVER WITHIN LIMITS OF CONSTRUCTION ARE TO BE REMOVED
2. ADJUST EXIST.WATER METER TO FINISH SURFACE PER DWP STANDARD PLATE NO.18, AS NEEDED
3. EXIST STREET LIGHT AND OVERHEAD WIRING TO BE RELOCATED PER CITY OF LOS ANGELES BUREAU OF STREET LIGHTING STANDARDS.
4. CONSTRUCT 6" CONC CURB WITH 24" GUTTER PER CITY OF LOS ANGELES STD. PLAN S-410-2, TYPE 'C' INTEGRAL CURB AND GUTTER
5. CONSTRUCT 4" A.C. PAVEMENT ON 6" CRUSHED MISC. BASE COMPACTED TO A MIN.OF 90% MAX.DRY DENSITY, SUBGRADE TO BE COMPACTED TO A MINIMUM OF 95% MAX. DRY DENSITY, 24" MIN. WEED KILL AT BASE, FINAL STRUCTURAL SECTION TO BE DETERMINED BY SOILS ENGINEERS RECOMMENDATION
6. CONSTRUCT RESIDENTIAL DRIVEWAY PER CITY OF LOS ANGELES STD. PLAN S-440-3, CASE II, X=3', Y=4'
7. CONSTRUCT 3.5' WIDE CURBSIDE GRATING CATCH BASIN PER CITY OF LOS ANGELES, BUREAU OF ENGINEERING STANDARD S-354-0, SINGLE GRATE, W=4', T=6"
8. CONSTRUCT 6" AC BERM PER CITY OF LOS ANGELES STANDARD PLAN S-412-0
9. CONSTRUCT RETAINING WALL BY SEPARATE PERMIT TOP OF WALL ELEVATIONS PER PLAN, SHEET 5
10. CONSTRUCT METAL BEAM GUARD RAILING 2' FROM EDGE OF PAVEMENT PER BUREAU OF ENGINEERING STANDARD PLAN S-462-2, WITH REFLECTIVE MARKERS PER BUREAU OF ENGINEERING STD PLAN S-450.0
11. INSTALL 8" (SDR-35) CL.150, PVC WATER LINE 5' E/O CENTERLINE PER CITY OF LOS ANGELES-DWP STD. SPECS. LATEST EDITION, JOIN EXIST WATER LINE IN GRANDVIEW DR. CONTRACTOR TO VERIFY HORIZONTAL & VERTICAL LOCATION PRIOR TO INSTALLATION OF NEW WATER LINE, BY SEPARATE PERMIT
12. INSTALL 2" WATER SERVICE LINE WITH 1&1/2" METER PER CITY OF LOS ANGELES-DWP STND. SPECS., BY SEPARATE PERMIT
13. INSTALL GROUTED ROCK RIP-RAP PLACEMENT, ENERGY DISSIPATOR WITH 6" MINIMUM ROCKS, EMBEDDED 4", 2" MAXIMUM CLEARANCE USE LOCAL ROCKS, SEE DETAIL HEREON & SHEET 1
14. CONSTRUCT TYPICAL INTERSECTION GUTTER PER BUREAU OF ENGINEERING STD PLAN S-410-2
15. CONSTRUCT CONCRETE CAISSONS PER STRUCTURAL ENGINEERS SPECIFICATIONS SEE DETAILS ON SHEET 4
16. INSTALL 8" PVC (SDR35) DRAINAGE PIPE, LENGTH=5' REMOVE BLOCK AT BASE OF WALL AS NEEDED FOR PIPE
17. CONSTRUCT 3' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 5
18. INSTALL DRAIN INLET & PIPE PER DETAIL A, SHEET 1

### CURVE DATA

| | D | R | L | T |
|---|---|---|---|---|
| 1 | 31°57'12" | 90' | 50.19' | 25.76' |
| 2 | 22°38'44" | 100' | 39.52' | 20.02' |
| 3 | 19°38'00" | 80' | 27.41' | 13.84' |
| 4 | 21°05'00" | 60' | 22.08' | 11.07' |
| 5 | 21°05'00" | 50' | 18.39' | 9.36' |
| 6 | 21°05'00" | 70' | 25.76' | 13.03' |
| 7 | 129°57'40" | 10' | 22.68' | 21.43' |
| 8 | 32°50'13" | 50' | 28.66' | 14.73' |
| 9 | 26°47'46" | 150' | 70.35' | 35.83' |

REGISTERED PROFESSIONAL ENGINEER — No. C046896 Exp. 6-30-06 — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. 33118 Exp. 6-30-2006 — STATE OF CALIFORNIA

**GEOMATRIX, INC.**

IN CONNECTION WITH BUILDING PERMIT
(8350) GRAND VIEW DRIVE &,
CRISLER WAY S/W CORNER
DESIGN PERMIT BD-401611
CONSTRUCTION PERMIT BC

Approved as to structural requirements
Structural Engineering Division
By: Alex Vidaurrazaga
Checked by _____ Date 4/30/04
This is not a permit to begin construction

DIGALERT — DIAL TOLL FR 1-800-422-4133 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT(USA) OF SOUTHERN CALIFORNIA

RIPRAP PAD DETAIL — NOT TO SCALE
CONCRETE CUTOFF WALL 8" THICK MINIMUM, 4' DEEP
GROUTED ROCK RIP-RAP PLACEMENT, ENERGY DISSIPATOR WITH 6" MINIMUM ROCKS, EMBEDDED 4", 2" MINIMUM CLEARANCE USE LOCAL ROCKS

CONSTRUCTION NOTE SYMBOLS
CONSTRUCT / REMODEL EXISTING / REMOVE / REMOVE & CONSTRUCT / WORK BY OTHERS

TOPO CONTOURS ARE BASED ON FIELD SURVEY PERFORMED BY S.E.I. LAND SURVEYING, AUGUST,2001

STRUCTURAL ENGINEERING DESIGNED BY:
ALBERT SALVADOR — Sunnyvale, CA (650) 823-8328
ALBERT SALVADOR — DATE 4-16-04 — R.C.E. 60106 — EXP.6/30/04

CIVIL ENGINEER STAMP — REGISTERED PROFESSIONAL ENGINEER — ALBERT SALVADOR — C 60106 — EXP. 6-30-04 — CIVIL — STATE OF CALIFORNIA

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900
GERALD F. HOVELL — DATE 4/7/04 — R.C.E. 33118 — EXP.6/30/06

CIVIL ENGINEER STAMP — REGISTERED PROFESSIONAL ENGINEER — No. 33118 Exp. 6-30-2006 — CIVIL — STATE OF CALIFORNIA

THE CITY OF LOS ANGELES OR ITS OFFICERS OR ITS AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISION DATES (DESIGN STAGE ONLY)

Sheet Version 2.01

CITY OF LOS ANGELES — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

LA DPW — ENGINEERING — Symbol of Pride, Dedication, Professionalism & Future

GARY LEE MOORE, P.E. — CITY ENGINEER
ACCEPTED BY :
DATE
PLAN CHECKER

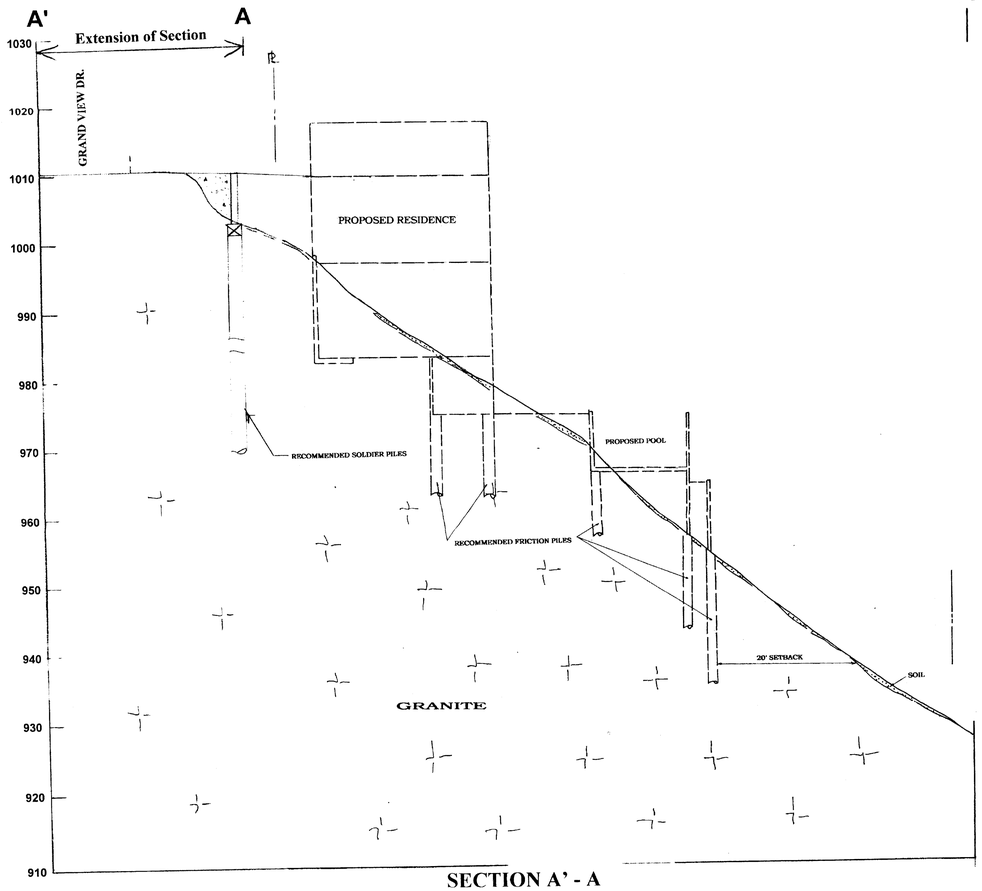
B - PERMITS BD-401611
INDEX NO. D-#
SERIAL NO.
DATE: BY:
NO. REVISIONS:
WORK ACCEPTED

VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS

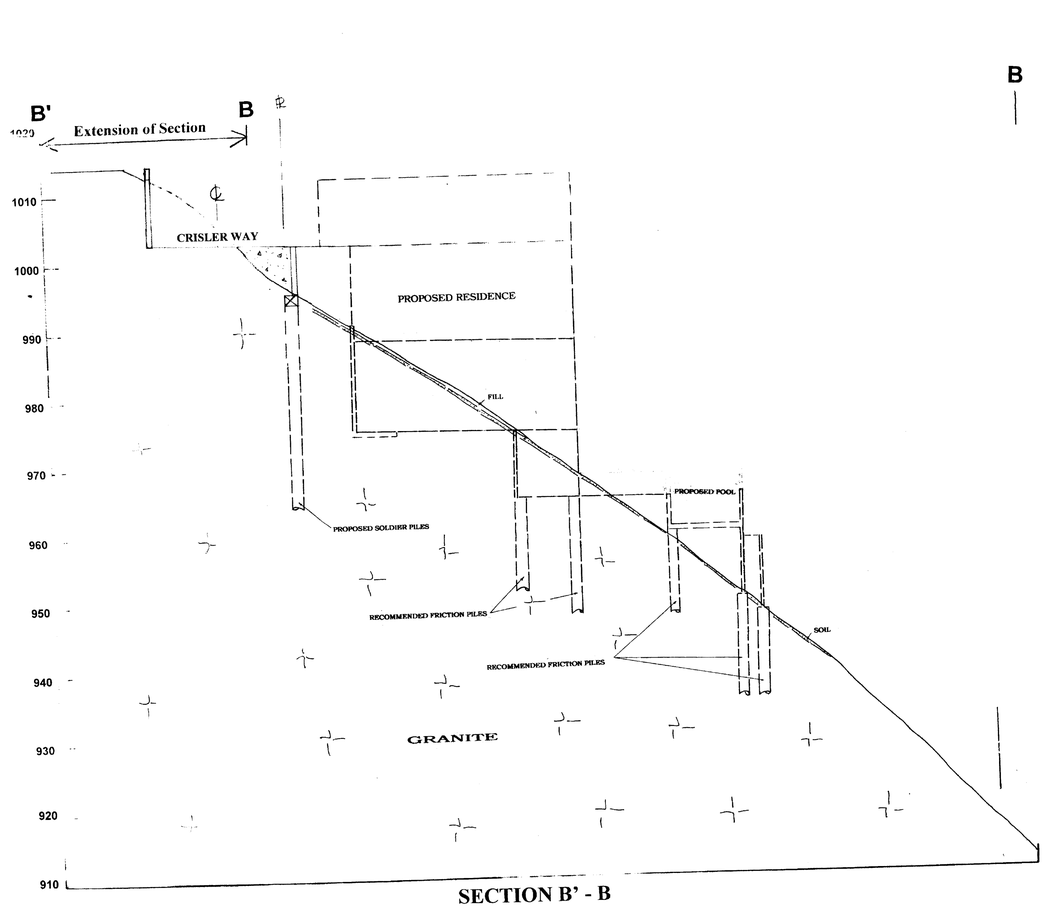
SHEET TITLE: STREET PLAN & PROFILE
PROJECT: 8350 GRNADVIEW DR. & CRISLER WAY S/W CORNER
ADDRESS:

PROJECT NO. CXXXXX
DRAWING NO. 2
SHEET 2 OF 6 SHEETS

| Geologic Cross Sections A'-A & B'-B | | |
|---|---|---|
| **CAC Development**<br>Lots 95, 96, 97 & 98, Tract 865<br>1800, 1806, 1812 & 1818 Crisler Way, Los Angeles, CA | | |
| CYG-14-7350 | Plate 2 | 11-2014 |
| **C.Y. GEOTECH, INC.**<br>Engineering Geology and Geotechnical Engineering | | |

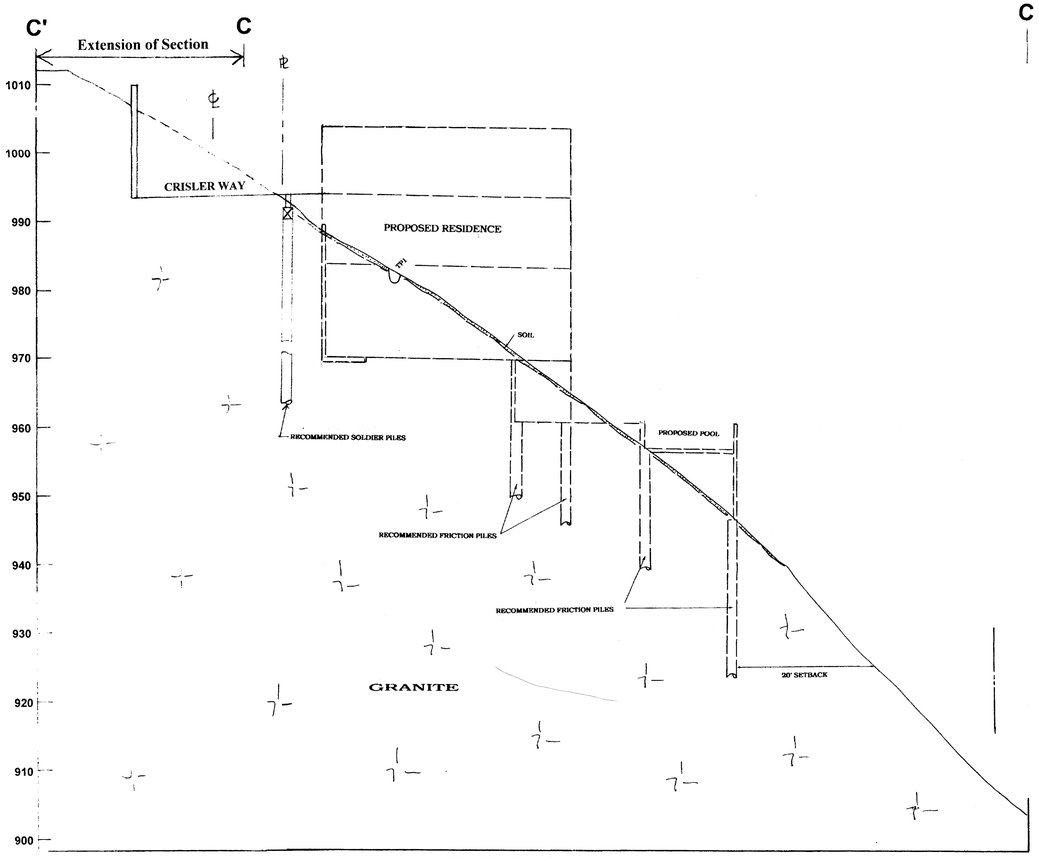



SECTION A' - A

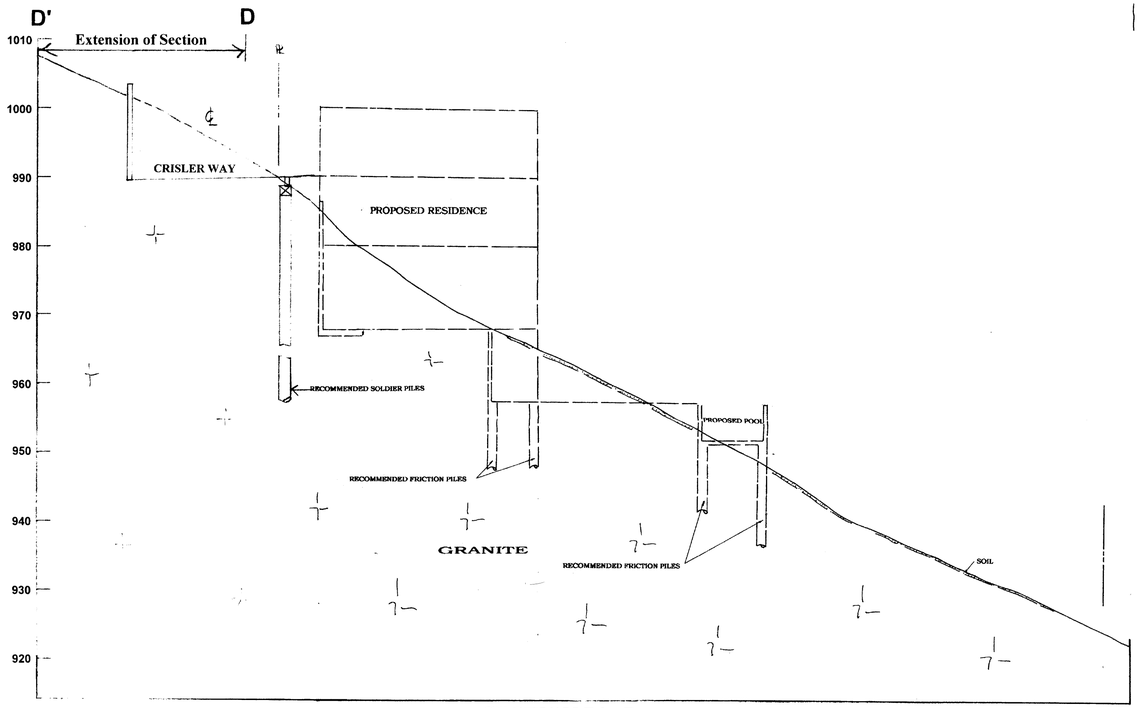



SECTION B' - B

| Geologic Cross Sections C'-C & D'-D | | |
|---|---|---|
| **CAC Development**<br>Lots 95, 96, 97 & 98, Tract 865<br>1800, 1806, 1812 & 1818 Crisler Way, Los Angeles, CA | | |
| CYG-14-7350 | Plate 3 | 11-2014 |
| **C.Y. GEOTECH, INC.**<br>Engineering Geology and Geotechnical Engineering | | |




SECTION C' - C




SECTION D' - D

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

HELENA JUBANY
PRESIDENT

VAN AMBATIELOS
VICE-PRESIDENT

E. FELICIA BRANNON
VICTOR H. CUEVAS
SEPAND SAMZADEH

# CITY OF LOS ANGELES
CALIFORNIA

ANTONIO R. VILLARAIGOSA
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

ROBERT R. "BUD" OVROM
GENERAL MANAGER

RAYMOND S. CHAN, C.E., S.E.
EXECUTIVE OFFICER

## GEOLOGY AND SOILS REPORT CORRECTION LETTER

January 30, 2013

Log # 79258
SOILS/GEOLOGY FILE - 2

C A C Development
1504 South Flower Street
Los Angeles, CA 90015

TRACT: 865
LOTS: 98 / 97 / 96 / 95
LOCATION: 1800 / 1806 / 1812 / 1818 Crisler Way

| CURRENT REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Geology/Soil Report | PG 1091 | 09/19/2012 | GeoMatrix |
| Oversized Documents | " | " | " |

| PREVIOUS REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | " |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |

The referenced current report concerning the proposed construction of a new, multi-level dwelling with pool on each of the subject lots, has been reviewed by the Grading Division of the Department of Building and Safety. Crisler Way (currently unimproved) adjacent to the subject lots will be improved, as part of the proposed development. Retaining walls are proposed as part of the building construction and for the street improvement. The drainage improvements proposed currently are not acceptable. The review of the subject current report cannot be completed at this time and will be continued upon submittal of an addendum to the report which shall include, but need not be limited to, the following:



AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

1. Revise all geologic cross-sections so that all construction and grading (including the retaining wall construction on the uphill and downhill sides of the proposed street), are shown relative to the existing private property boundaries and existing structures.

2. Clearly depict all temporary excavations that will remove lateral support from offsite property, and revise recommendations to shore these excavations.

3. Clarify for the record if the improved portion of Crisler Way will be a private street.

4. Consult and verify that retaining walls detached from buildings and their heights will comply with the requirements of the zoning code and city ordinance 176, 445, or obtain a variance. Note: Be advised that verification of compliance is a part of the structural plan-check and permitting process.

5. Clarify and show how all street drainage will be conducted to an improved street. The proposed elevations shown will result in a southwest flow direction to the Lot 98 area, and the rip-rap pads shown currently, are not acceptable.

6. Shoring is discussed and recommended (see pgs. 27 - 29). Show by labeling on the plan and on the revised geologic cross-sections requested in this letter, all areas where shoring will be employed during construction.

The licensed geologist and soil engineer shall prepare an addendum response report containing the corrections indicated in this letter. The report shall be in the form of an itemized response. It is recommended that the undersigned reviewers be contacted at the phone number listed below, to schedule an appointment to verify that the report contains the required information. Please do not schedule an appointment until all correction items have been addressed. Bring three copies of the addendum response report, including one unbound wet-signed original for microfilming, in the event that the report is found to be acceptable.

STEPHEN DAWSON
Engineering Geologist II

PASCAL CHALLITA
Geotechnical Engineer II

Log # 79258
(213) 482-0480

cc: Robert Anderson (Applicant)
GeoMatrix
LA District Office

C.Y. Geotech Report Copy

**GEOMATRIX, INC.**
5737 Kanan Road, #103
Agoura Hills, California 91301
(818) 889-0762 (818) 889-0766 fax

CYG # 2541

September 19 , 2012
PG 1091

CAC Development

**Subject**

Geologic and Soils Engineering Update Report
Proposed Four Hillside Residences
and Street Improvement
Lots 95, 96 97 and 98, Tract 865
8350, 8354, 8358 and 8362 Grand View Court
Los Angeles, California

The following report has been prepared in accordance with our signed agreement and summarizes the findings of our geologic and soils engineering exploration performed on the site. The purpose of this report is to evaluate the nature, distribution, engineering properties, relative stability, and geologic structure of the earth materials underlying the site with respect to future construction of four hillside residences and street improvement.

**Intent**

It is the intent of this report to aid in the design and completion of the proposed project. Implementation of the "Conclusions and Recommendations" section of this report is intended to reduce certain risks associated with construction projects. The professional opinions and geotechnical advice contained in this report are subject to the general conditions described in the "Notice" section of this report.

## SITE EXPLORATION

The scope of our employment is based upon the Preliminary Plans prepared by the architect, Rob Anderson. It is limited to the areas of the proposed project as shown on the enclosed Geologic Map and Cross Sections.

Field exploration was initially conducted on Lots 95 and 96 by Geosystems in 1997 with the aid of hand labor and field geologic mapping. It included excavating two test pits, mapping outcrops adjacent to and within the property and obtaining samples of the earth materials. Field exploration of Lots 97 and 98 was conducted by Parmelee Geology on April 30, 2002 with the aid of hand labor and field geologic mapping. It included excavating 3 test pits to depths of 1 to 3 feet, mapping outcrops adjacent to and within the property and obtaining samples of the earth materials. The samples were returned to the laboratory for testing and analysis. Downhole observation of the earth materials was performed by the project geologist.

Office tasks included review of prior laboratory testing, engineering analysis, review of the Department of Building and Safety grading records, and the preparation of this report. Procedures and results of the laboratory testing are presented in Appendix I, which contains a discussion of the testing procedures and results. Test pit logs are provided in Table I.

Surface geologic conditions and the location of the test pits are shown on the enclosed Geologic Map. Subsurface distribution of the earth materials, projected geologic structure, and the proposed project are shown on Sections A through D.

## RESEARCH OF PUBLIC DOCUMENTS

Research of available geotechnical records at the Department of Building and Safety was performed in preparation of this report. The list of documents presented in this report may not represent all

available records on the site due in part to inconsistencies in the City document filing procedures.

A portion of the subject property (Lots 95 and 96) was initially investigated by GeoSystems for the proposed construction of a residence and swimming pool. A geologic and soils engineering report was prepared on November 12, 1997. Field exploration at the site consisted of excavating two test pits to a depth of 4 feet. Samples of the earth materials were collected and returned to the laboratory for testing and analysis. Recommendations were provided to support the proposed structures on friction piles which derive support from the granite bedrock. The report was denied by the Department of Building and Safety in a letter dated December 16, 1997 due to lack of information concerning the laboratory testing performed and the slope stability analysis. An addendum report was prepared on January 19, 1998 which provided the requested information. On April 2, 1998 a second addendum report was prepared to provide revised temporary stability calculations. The reports were approved in a city letter dated April 2, 1998.

A geologic and soils engineering update report for residential development of Lots 95 and 96 was prepared by Parmelee Geology on December 9, 2001. The report was approved by Building and Safety in a letter dated February 20, 2002.

A geologic and soils engineering report was prepared by Parmelee Geology on May 19, 2002 to provide recommendations for construction of two hillside residences on Lots 97 and 98. Three test pits were excavated at the site and samples of the earth materials collected for laboratory testing. Recommendations were provided for construction of residence and retaining walls utilizing deepened foundations consisting of friction piles and grade beams. A reduction in foundation setback was recommended to 20 feet to the soil/bedrock contact. The report was approved by Building and Safety in a letter dated June 27, 2002.

An additional information letter was issued by Parmelee Geology on March 13, 2003 to provide information for the Department of Public Works concerning the proposed access driveway retaining wall design.

A letter providing additional information was prepared by Parmelee Geology on April 14, 2003.

A response to a City Review Letter was prepared by Parmelee Geology on May 5, 2003.

A second response letter was issued on May 25, 2003.

Additional information was provided in a letter dated October 3, 2003 which provided information concerning increases in passive earth pressure as a function of pile spacing. The letter also provide design information concerning surcharge loading from the downhill street foundations onto residence retaining walls.

An additional information letter was prepared by Parmelee Geology on November 26, 2003 commenting on potential joint plane surcharge conditions of retaining walls and recommending that the field geologist map every five feet of vertical retaining wall cut

**Acceptance of Responsibility**

It is the intention of this office to utilize information contained within above mentioned documents in the formation of professional opinions regarding this site. Our office concurs with and accepts the designs, calculations and recommendations contained therein as instruments of professional practice to form the basis for the continued implementation of those designs, and as a basis for proposed new designs. All work supervised by this office will comply with general standards of professional practice, and with the specific "conditions of approval for issuance of grading permits", as defined in correspondence by the Los Angeles Department of Building and Safety.

## PROPOSED PROJECT

Information concerning the proposed project was provided by the architect. The Preliminary Plan prepared by Rob Anderson was used as a guide for the preparation of this update report. The

proposed grading for the street improvement from Grand View Drive remains the same as evaluated within the previously prepared reports which were approved by Building and Safety. Retaining walls to 6 to 21 feet high are proposed along the uphill side of the proposed private street. Pile-supported retaining walls from 5 to 7-½ feet high are proposed along the downslope side of the proposed street. The new proposed construction plans provide specific information concerning the construction of four hillside residences and swimming pools on the subject property. Retaining walls associated with the construction of the individual residences are proposed up to 22 feet high. Retaining walls used to create the level rear yard areas are proposed up to 12 feet high. Grading will consist of excavation into the hillside for construction of the street improvement, street retaining walls, residence retaining walls, and placement of compacted fill. Preparation of the final construction plans for the proposed project await the conclusions and recommendations of this exploration.

## SITE DESCRIPTION

The subject property consists of four contiguous undeveloped hillside lots on the south flank of the Santa Monica Mountains, Los Angeles, California. Lots 95 and 96 were previously occupied by a single family residence which was destroyed in a fire. The remnants of the concrete floor slabs and walls are still present on the site. Lots 97 and 98 are vacant. The surrounding area consists of a hillside residential community.

Past grading on the subject property has consisted of spilling approximately two feet of uncompacted fill over the upper portion of the site during initial grading for Grand View Drive and construction activities performed during the prior site development on Lots 95 and 96. The surface of the property descends below Grand View Drive approximately 280 feet at gradients ranging from 2:1 to slightly steeper than 1:1. The average slope gradient is about 40 degrees. Vegetation on the site consists of natural grasses and sparse native chaparral.



Figure 1. Vicinity Map. Navigatela. Aerial Orthophoto. 147b173.

**Surface Drainage**

Slope drainage is by sheetflow runoff down the contours to the southeast.

**Groundwater**

Evidence of seeps, springs and shallow groundwater were not observed on the site on the day of our site visit. Seeps, springs, and groundwater were not encountered on the subject property during the exploration to a depth of 4 feet below the present ground surface.

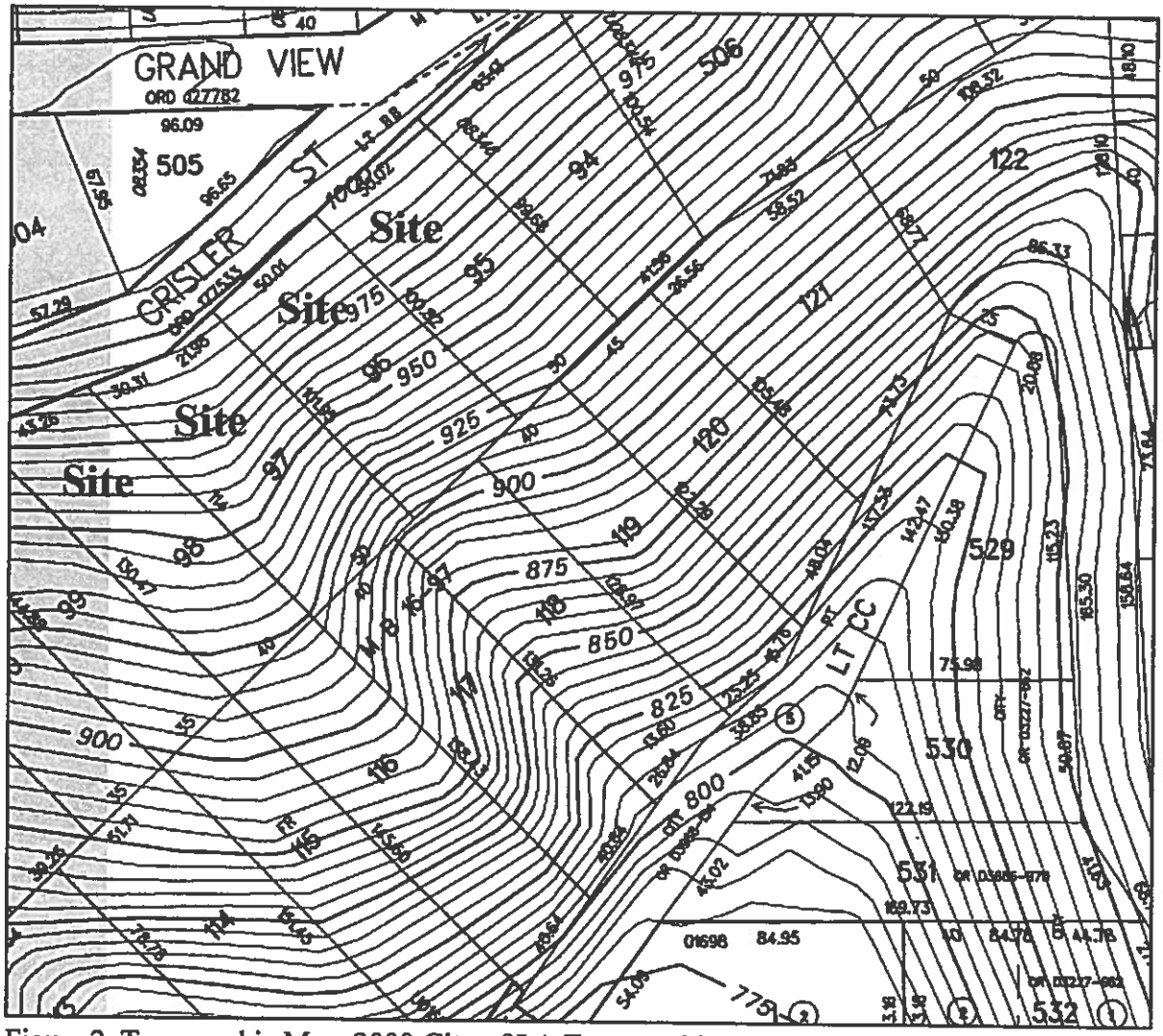



Figure 2. Topographic Map. 2000 City of LA Topographic Maps. 148-5a175.

## EARTH MATERIALS

### Fill

Fill, associated with previous site and street grading, overlies portions of the subject property to a

maximum observed depth of 2 feet. The fill consists of a medium to yellow brown silty sand which is present on the slope below the location of the previous residence. Some assorted construction debris was also encountered within the fill.

**Soil**

Natural residual soil overlies bedrock on the subject property. The soil consists of gray brown silty sand which is coarse-grained, moderately loose and dry. The soil was observed by the previous consultants to be about 12 inches thick.

**Bedrock**

Granite bedrock underlies the subject property and is exposed in isolated outcrops on the descending slope. The granite bedrock is yellow gray, massive, coarse-grained and hard.

## GEOLOGIC STRUCTURE

The bedrock described is common to this area of the Santa Monica Mountains. The enclosed Regional Geologic Map shown in Figure 3 illustrates the distribution of earth materials in the vicinity of the subject property. The granite bedrock is generally massive and lacks significant planes of structural weakness. The massive nature of the granite bedrock is considered favorable with respect to site and slope stability. No evidence of landsliding or mudflows was observed on the subject property.

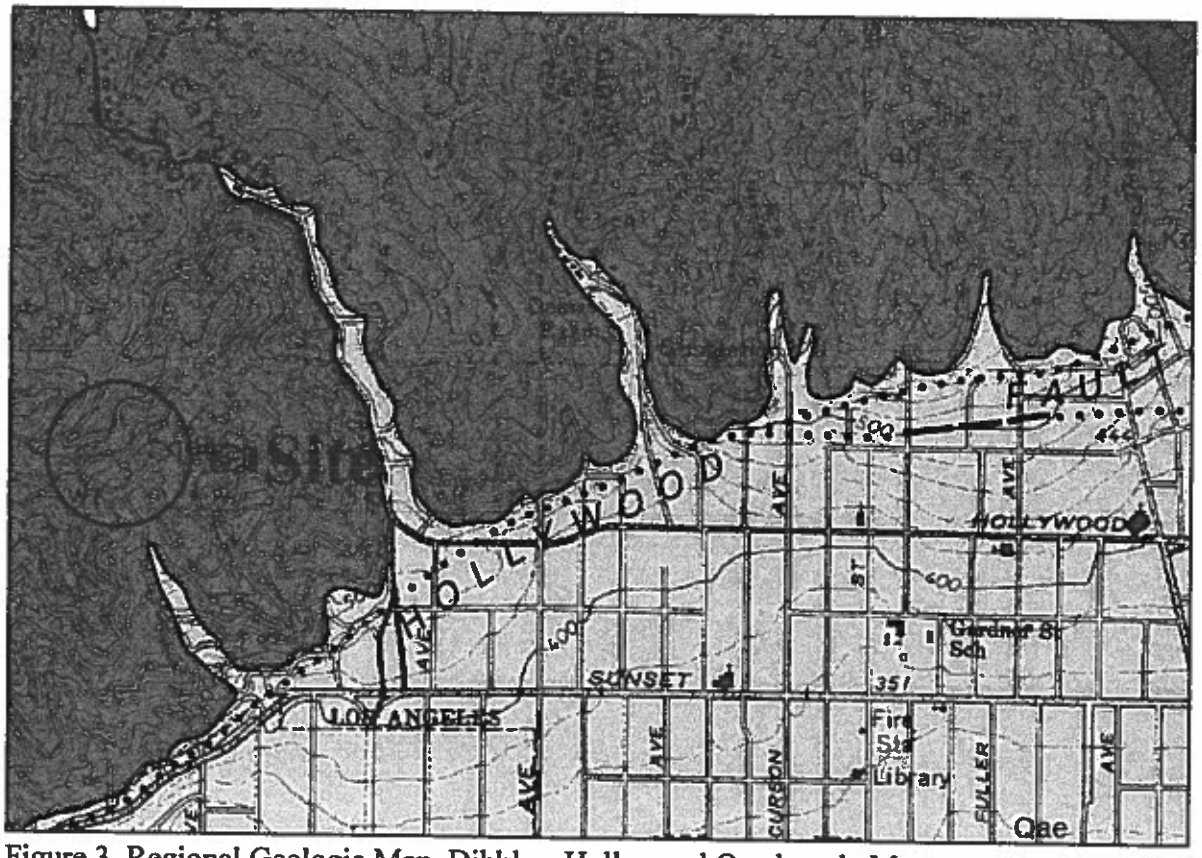


Figure 3. Regional Geologic Map. Dibblee, Hollywood Quadrangle Map.

## SEISMIC CONDITIONS

### General

The Southern California region is located within a tectonically active portion of the earth's crust which has produced both small and sizeable earthquakes throughout recorded history and before. As the earth's crust continuously adjusts itself, stresses and strains are built up along discontinuities, referred to as faults. Faults can be generally classified as active, potentially active, or inactive. Faults are considered active if they have produced seismic activity within the past 11,000 years. Faults are considered potentially active if there has been seismic activity along the fault between 11,000 and 1,000,000 years. Inactive faults have not produced any seismic activity within the past 1,000,000

years.

*Alquist-Priolo Special Studies Zones* - In an effort to better inform the public regarding seismic risk of ground rupture, the State of California passed the Alquist-Priolo Special Studies Act in 1972 following the 1971 Sylmar Earthquake. Active faults within the state were identified and zones were established limiting construction within the zones.

*State of California Seismic Hazard Zones* - Following the damaging 1989 Loma Prieta Earthquake, the state enacted the Seismic Hazard Mapping Act (SHMA) in 1990. The Department of Conservation was empowered to prepare a set of maps designating areas throughout the state which are susceptible to seismic slope instability and liquefaction. These seismic safety zones are published as a series of maps, initially released in 1996.

Liquefaction Hazard - Liquefaction is a process where loose granular sediment that is saturated with water can behave like a liquid. In order for liquefaction to occur, three components are necessary: loose granular sediments, groundwater levels within 50 feet of the ground surface, and strong seismic ground shaking. During liquefaction, seismic waves cause water pressures to increase in the sediment and the sand grains to lose contact with each other, leading the sediment to lose strength and behave like a liquid. The soil can loose its ability to support structures, flow down gentle slopes, and erupt to the ground surface to form sand boils. Many of these phenomena are accompanied by settlement of the ground surface, typically with uneven patterns, that damage buildings, roads and pipelines. This process is considered hazardous to structures since liquefaction can result in significant structural failure.

Landslide Hazard - Strong ground motion associated with large earthquakes can also cause natural and manufactured slopes to become unstable and experience slumping, landsliding or block failure. Susceptibility to seismically-induced slope movement is a function of the strength of the earth materials comprising the slope, geologic structure, and topographic conditions.

**Site Specifics**

The subject property is not located within any special studies zone (Alquist-Priolo Act, 1972) and no known active fault crosses the site. Active faults in the vicinity of the subject property are listed in the following Table I. Potentially active faults are also present within the area.

The State of California Seismic Hazards Maps were reviewed in preparation of this report. The enclosed portion of the Hollywood Quadrangle map sheet indicates that the subject property is located within a zone which is considered susceptible to seismically-induced slope failure. The subject property is not located within a zone of potential liquefaction.

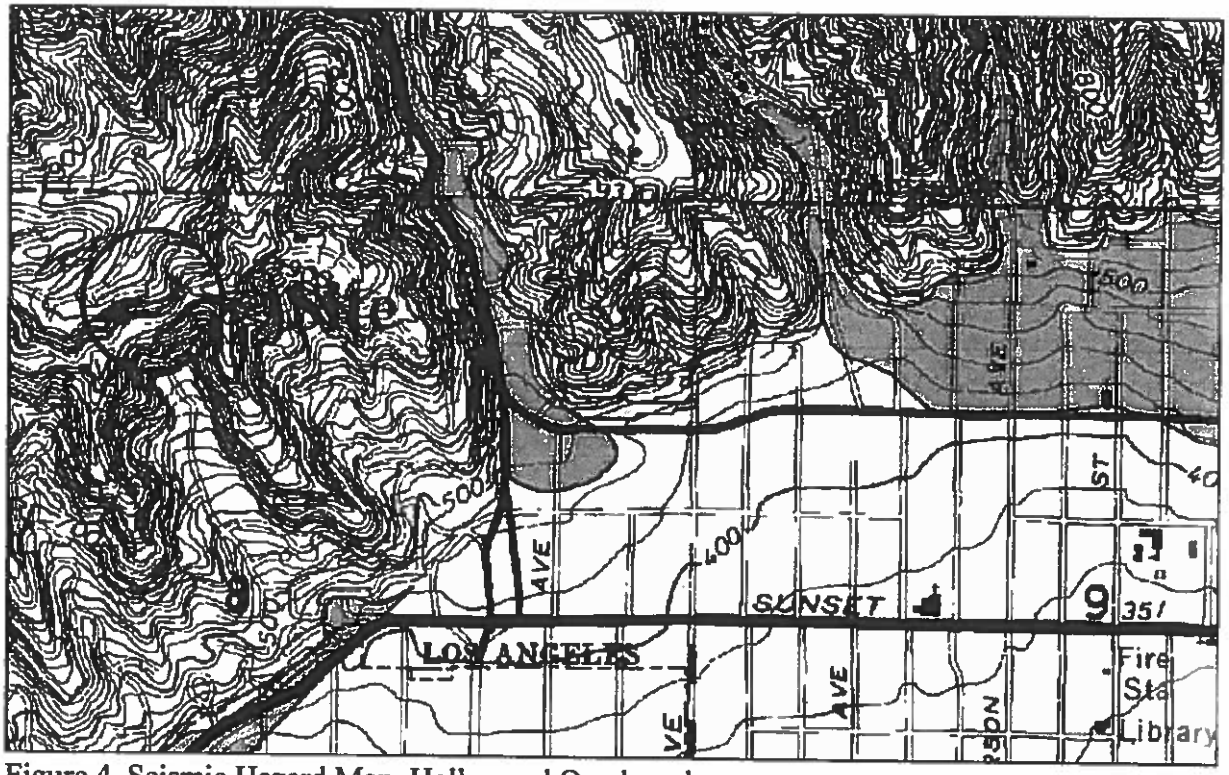



Figure 4. Seismic Hazard Map. Hollywood Quadrangle.

**ZONES OF REQUIRED INVESTIGATION**

**Liquefaction**
Areas where historic occurrences of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693© would be required.

**Earthquake-Induced Landslides**
Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693© would be required.

The following table lists known active faults within the southern California area which could theoretically produce a sizable earthquake during the expected occupancy period of the property. UBC categories have been established for active faults in accordance with Table 16-U in the 1997 UBC. Faults within category A exhibit magnitudes greater than or equal to 7.0 and slip rates greater than or equal to 5mm/year. Category B faults exhibit magnitudes up to magnitude 7.0, but with slip rates less than 5mm/year. Category C faults exhibit magnitudes less than 6.5 and slip rates less than

2mm/year.

| Fault | UBC Category | Distance from Site (miles) | Maximum Credible Earthquake (Richter Magnitude)* | Risk of Earthquake during Occupancy |
|---|---|---|---|---|
| *San Andreas* | A | 34 NE | 8.0 | moderate |
| *Newport-Inglewood* | B | 3½ SW | 6.9 | low to moderate |
| *Malibu* | B | 10 SW | 6.7 | low |
| *Santa Monica* | B | 3½ SW | 6.6 | low |
| *Hollywood* | B | ½ S | 6.7 | low |
| *Raymond* | B | 10 E | 6.5 | low to moderate |
| *San Fernando Fault Zone* | B | 12 NE | 6.7 | moderate |
| *Santa Susana* | B | 16 NW | 6.6 | low to moderate |
| *Mission Hills* | B | 14 NW | 6.3 | low to moderate |
| *Simi-Santa Rosa* | B | 18 NW | 6.7 | low |
| *Verdugo* | B | 7½ NE | 6.7 | low |
| *Elysian Park Thrust* | B | 5 SE | 6.7 | moderate |
| *Palos Verdes* | B | 16 SW | 7.1 | low |
| *Oak Ridge* | B | 31 NW | 6.9 | low |
| *San Cayetano* | B | 32 NW | 6.8 | low |
| *Unknown fault* | | ? | ? | moderate |

**Table I** - Active Faults within the Los Angeles - Ventura County areas

* Data obtained from Los Angeles County Seismic Safety Element, 1990; Annual Technical Report, July, 1994, Southern California Earthquake Center; Seismic Hazards Study of Ventura County, 1975; and ICBO publication, Maps of Known Active Fault Near-Source Zones, California Division of Mines and Geology, 1998.

## FUTURE SEISMICITY

The potential seismic events postulated to most likely affect the site within the next 50 to 100 years are a magnitude 6 to 7.0 earthquake on the Newport-Inglewood Fault located approximately 8 miles southeast of the site; and a magnitude 8 or greater earthquake on the San Andreas Fault zone located approximately 36 miles northeast of the site. Strong ground shaking can be anticipated should the Newport-Inglewood or San Andreas faults produce an earthquake.

The Southern California region is subject to periodic strong seismic ground shaking. Building and seismic code regulations are intended to reduce the risk of collapse of habitable structures during seismic ground shaking to protect life safety, but are not intended to prevent seismic damages. Conformance to the minimum earthquake design procedures given in Section 16 of the City of Los Angeles building codes may therefore not provide an acceptable level of protection against structure damage. Sites and structures can experience significant damage during strong seismic shaking. Foundation conditions and the seismic/structural/architectural design of the building can greatly affect how structures will perform during earthquake loading. Strong ground shaking can also cause movement of the earth materials on the site which may not be predictable. It is therefore the responsibility of the structural engineer and property owner to decide what level of damage risk is acceptable due to seismic activity and incorporate appropriate design values into the proposed construction.

### Seismic Design - California Building Code

The seismic design of the proposed structures may be determined from the values provided in the following chart, which is based upon the 2009 International Building Code. The following seismic design information is assigned based upon site conditions as determined by field geologic mapping and laboratory testing of the onsite earth materials:

| Seismic Factors for IBC System | Value | Reference |
|---|---|---|
| Site Class | C | Table 1613.5.2, IBC |
| Mapped Spectral Response Acceleration at 0.2 sec Period (Ss) | 1.810g | Figure 1613.5(3), IBC |
| Mapped Spectral Response Acceleration at 1.0 sec Period ($S_1$) | 0.600g | Figure 1613.5(4), IBC |
| Site Coefficient (Fa) | 1.0 | Table 1613.5.3(1) IBC |
| Site Coefficient (Fv) | 1.3 | Table 1613.5.3(2) IBC |
| Maximum Considered Earthquake Spectral Response Acceleration of 0.2 second Period (Sms) | 1.810g | Equation 16-36, IBC |
| Maximum Considered Earthquake Spectral Response Acceleration of 1.0 second Period ($S_{M1}$) | 0.780g | Equation 16-37, IBC |
| Design Spectral Response Acceleration at 0.2 sec Period ($S_{DS}$) | 1.207g | Equation 16-38, IBC |
| Design Spectral Response Acceleration at 1.0 sec Period ($S_{D1}$) | 0.520g | Equation 16-39, IBC |
| Seismic Design Category | D | Tables 1613.5.6(1) & 1613.5.6(2), IBC |

Due to the nature and density of the earth materials underlying the subject property and the depth to groundwater, earthquake induced liquefaction, consolidation and differential settlement are not likely to occur on the site. The geologic structure of the bedrock is favorable. Therefore, earthquake induced landslides are not likely to occur on the site.

## SLOPE STABILITY

### Gross Stability

Existing slopes affecting the subject property consist of a 280 foot high natural slope with gradients which vary from about 2:1 to slightly steeper than 1:1. The gross stability of the slope was analyzed using the computer software program Gstabl7. The analysis shows that the subject property is grossly stable with a factor of safety in excess of 1.5. Pseudostatic slope stability calculations were also performed. In Accordance with California Geological Survey Special Publication 117, the design earthquake magnitude was based upon PSH Deaggregation calculated by the USGS website application. The design earthquake magnitude with a 2% exceedance in 50 years is calculated to be

6.69. The seismic coefficient, Keq, is determined as follows:

MHA (maximum horizontal acceleration) = Sds/2.5 = 0.483

Feq = 0.50 (as determined from the 5cm threshold curve for a 6.69 earthquake event)

Keq = feq x MHA = 0.50 x 0.483 = 0.242

The enclosed calculations indicate that the existing slopes have a factor of safety greater than the code minimum value of 1.0. The calculations are based upon shear tests of samples believed to represent the weakest bedrock encountered during exploration.

**Surficial Stability**

Based upon the enclosed calculations performed by Geosystems, it is reasonable to assume that the natural residual soil is surficially stable. The method of analysis used is the "parallel seepage model" recommended by the ASCE and the Building and Safety Advisory Committee (8/16/78). The assumptions of this method are: a uniform planar slope; uniform soil density and shear strength; and uniform seepage parallel to the slope. The validity of the analysis depends, in part, by how closely the assumptions model the field conditions.

For surficial deposits overlying natural slopes, it is the opinion of Geomatrix that the assumptions of the "parallel seepage model" are not completely satisfied. Thus, though the calculation shows that the surficial materials on the site are stable with a factor of safety in excess of 1.5, the mitigating measures recommended in the "Conclusions and Recommendations" section of this report are recommended be implemented during development of the site.

Surficial slope stability is influenced by proper control of surface drainage, irrigation, slope planting and the presence of burrowing rodents. These factors are not considered in the surficial stability analysis and when not properly managed, can have a detrimental impact on surficial slope stability. These factors are the responsibility of the homeowner and must be properly managed by the

homeowner as part of a general hillside property management program.

## CONCLUSIONS AND RECOMMENDATIONS

Based upon the exploration, research, consultation and review of the prepared development plans, it is our finding that construction of the proposed project is feasible from a geologic and soils engineering standpoint provided the advice and recommendations contained in this report are included in the plans and are properly implemented during construction. The recommended bearing material is the granite bedrock which can be reached with a combination of conventional and deepened foundations.

### Street Improvement

It is proposed to improve the proposed street along the front of the subject property by constructing retaining walls to establish a 25 foot wide roadway, 20 feet of which will be paved. The uphill street retaining wall may utilize a conventional foundation system which is supported within the underlying granite bedrock. The downhill side retaining wall will require the use of a friction pile and grade beam foundation in order to derive support from the granite bedrock and to satisfy slope setback requirements. Downslope street piles will also act as temporary shoring to residence retaining wall excavations below street grade. Existing fill and soil within the street improvement area must be removed and properly recompacted. It is recommended that a minimum of 24 inches of compacted fill underlie the street improvement area to provide a uniform base for support of the pavement.

### Residences

The proposed residences may be supported on a deepened foundation system consisting of friction piles and grade beams which derive support from the underlying granite bedrock. Conventional foundations may be used to support portions of the residence retaining walls provided slope setback requirements are satisfied.

**Swimming Pools and Spas**

The proposed swimming pools and spas are recommended to be constructed using a free-standing design. The pools and spas are recommended to derive support entirely from bedrock which will require the use of a deepened foundation system consisting of friction piles and grade beams.

## FOUNDATION DESIGN

**Spread Footings**

Continuous and/or pad footings may be used to support the uphill side of the street improvement retaining walls and portions of proposed residence retaining walls provided they are founded in granite bedrock and satisfy slope setback requirements. Continuous footings should be a minimum of 12 inches in width. Pad footings should be a minimum of 24 inches square. The following chart contains the recommended design parameters.

| Bearing Material | Minimum Embedment Depth of Footing (Inches) | Vertical Bearing (psf) | Coefficient of Friction | Passive Earth Pressure (pcf) | Maximum Passive Earth Pressure (psf) |
|---|---|---|---|---|---|
| *Bedrock* | 12 | 4,000 | 0.6 | 600 | 4,000 |

For bearing calculations, the weight of the concrete in the footing may be neglected. The bearing value shown above is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. When combining passive and friction for lateral resistance, the passive component should be reduced by one third.

All continuous footings must be reinforced with four #4 steel bars; two placed near the top and two near the bottom of the footings. Footings should be cleaned of all loose soil, moistened, free of shrinkage cracks and approved by the geologist prior to placing forms, steel or concrete.

**Deepened Foundations**

Cast-in-place friction piles are recommended to support the proposed residences, retaining walls and swimming pools. Piles should be a minimum of 24 inches in diameter and a minimum of 10 feet into bedrock. Piles may be assumed fixed at 3 feet into bedrock. The piles may be designed for a skin friction of 750 pounds per square foot for that portion of pile in contact with the bedrock, below the point of fixity. All piles supporting the proposed residences and swimming pools are required to be tied in two horizontal directions with grade beams. Friction piles supporting exterior retaining walls are not required to have two-direction grade beam ties.

**Lateral Design**

The existing fill and soil on the site are subject to downhill creep. Pile shafts are subject to lateral loads due to the creep forces. Pile shafts should be designed for a lateral load of 1,000 pounds per linear foot for each foot of shaft exposed to the existing fill and soil.

The friction value is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. Resistance to lateral loading may be provided by passive earth pressure within the bedrock. Frictional resistance and bearing resistance shall not be assumed to act simultaneously.

Passive earth pressure may be computed as an equivalent fluid having a density of 400 pounds per cubic foot. The maximum allowable earth pressure is 6,000 pounds per square foot. For design of isolated piles, the allowable passive earth pressure may be increased by 100 percent. Piles spaced 3 pile diameters or greater on center may be considered isolated.

In is our understanding that thirty five 36-inch diameter piles are to be installed for support of the lower street retaining wall and to act as temporary shoring for the upper residence retaining walls. Lower street piles are to be provided with a 7-½ foot pile spacing. When the pile group is considered as a single block for the project, the maximum increase percentage of lateral load capacity is determined as follows :

n = number of piles
s = pile spacing
d = pile diameter

$[(n-1) \times S + d]/nd$

For 36-inch diameter piles and a 7-½ foot on-center pile spacing, the allowable passive earth pressure may be increased by a factor of 1.75. No increase in passive earth pressure is allowable for pile spacings less than 2 pile diameters. The maximum allowable increase in passive earth pressure is 100%.

## FLOOR SLABS, DECKING AND PAVING

Decking, slabs and walkways are likely to experience cracking as the result of the curing process of the concrete. Shrinkage cracks are very difficult to prevent from occurring. Expansion joints are commonly installed within exterior decks, walkways, patios and driveways in an effort to control the location of the inevitable cracks. Interior slabs however are typically not provided with expansion joints, making cracking more random. The recommended steel reinforcement is intended to reduce the severity of cracking and must be properly installed to provide satisfactory performance. Rigid or brittle floor coverings, such as tile or marble may also experience cracking during the curing process of the concrete slab underneath and/or minor settlement. Providing a slip sheet between the slab and floor covering will help to reduce cracking of the floor covering. Garage floor slabs are recommended to be quartered with expansive joints.

**Floor Slabs**

Conventional on-grade floor slabs are recommended to be cast entirely over bedrock or approved compacted fill. Floor slabs are recommended to be a minimum of 4 inches thick and reinforced with a minimum of #4 bars on 16 inch centers, each way. Slab reinforcement is recommended to be placed at mid-depth of the slab. Interior floor slabs are recommended to be protected by a 10-mil polyethylene plastic vapor retarder placed below the slab. The retarder is recommended to be sandwiched between two one-inch layers of sand to reduce the risk of punctures and aid in the concrete cure. Plastic vapor retarders are intended to reduce vapor transmissions through the floor slab, but may not be 100% effective. The effectiveness of the vapor retarder is a function of the quality and care of installation which is the responsibility of the contractor. Care must be taken to prevent punctures within the retarder during installation. Utilities which penetrate the vapor retarder are recommended to be tightly sealed. Overlaps of the plastic sheeting must be properly sealed. Since vapor retarders are not always 100% effective, a waterproofing membrane is recommended to be installed over the surface of interior slabs prior to installation of moisture-sensitive interior flooring. The waterproofing membrane must be selected and installed in strict conformance with the flooring manufacturer's recommendations. Shrinkage cracks in the concrete slab are recommended to be sealed prior to placement of flooring or surface waterproofing applications.

**Exterior Decking, Walkways and Patios**

Exterior on-grade decking, walkways and patios are recommended to be cast over approved compacted fill or bedrock and reinforced with a minimum of #4 bars placed 16 inches on center, each way, with reinforcement placed mid-height. Decking which caps a retaining wall should be provided with a flexible joint to allow for the normal one to two percent deflection of the retaining wall. Decking which does not cap a retaining wall should not be tied to the wall. The space between the wall and the deck will require periodic caulking to prevent moisture intrusion into the retaining wall backfill.

**Driveway Pavement**

Driveway pavement is recommended to be cast over future approved compacted fill or bedrock. Irrigation water must be prevented from migrating under paving. Concrete driveway pavement is recommended to be a minimum of 5 inches thick and provided with a minimum of #3 bars placed 16 inches on center, each way. Pavement reinforcement is to be placed at mid-height. Driveway pavement is recommended to be cast over 2 inches of clean sand base.

The following table shows the recommended pavement sections:

| Service | Asphalt Pavement Thickness | Concrete Pavement Thickness | Base Course |
|---|---|---|---|
| Light Passenger Cars | 3" | 4" | 4" |
| Moderate Trucks | 5" | 5" | 4" |

## RETAINING WALLS

**General Design**

Non-restrained cantilever retaining walls may be designed per the following table :

| Retaining Wall Location | Maximum Wall Height (Feet) | Supported Material | Backslope Angle (degrees) | Recommended EFP (pcf) | Foundation Design |
|---|---|---|---|---|---|
| Uphill side of street retaining walls | 21 | Bedrock | | 43* | Conventional |
| Downhill side of street retaining walls | 7-½ | Compacted fill over bedrock | 0 | 43* | Friction Piles |
| Downhill side of street soldier piles | 22 | Bedrock | 0 | 43* | Soldier Piles |
| Residence retaining walls | 22 | Bedrock | 0 | 43 | Friction Piles |
| Rear yard retaining walls | 12 | Compacted fill | 0 | 43 | Friction Piles |

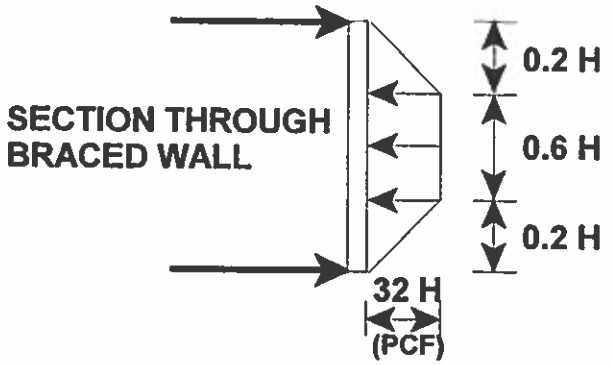
* Portions of the uphill street retaining wall system will be surcharged by foundations from adjoining offsite residences (Figure 2). The soldier piles along the downslope edge of the street will also be surcharged by the upper street wall foundation (Figure 1). The structural engineer is recommended to apply the appropriate induced lateral pressure provided in Figures 4 and 5 into the recommended design retaining wall and soldier pile values given in the table above.

Rear yard retaining walls which will support future approved non-expansive compacted fill derived locally with a level backslope may be designed for an equivalent fluid pressure of 43 pounds per cubic foot.

Non-restrained retaining walls should be anticipated to deflect up to 1% their total height upon loading. The deflection can affect nearby hard scape located within a 1:1 influence zone projected from the base of the wall. The structural engineer is recommended to take this into consideration in design of maximum allowable lateral deflection for the upper street retaining wall which would effect offsite property and structures above the wall.

Subterranean (basement) level residence retaining walls up to 22 feet high are required to be designed for an at-rest earth pressure. The recommended at-rest design earth pressure for subterranean level residence retaining walls is 50 pounds per cubic foot per the enclosed calculations. Restrained

retaining walls may be designed for a trapezoidal pressure distribution, as illustrated in the following diagram:




The recommended basement wall lateral earth pressure is 32H, where "H" is the design wall height.

**Wall Foundation Design**

Retaining wall footings may be sized per the "Deepened Foundations" and "Conventional Foundations" sections of this report.

**Freeboard**

Retaining walls surcharged by a sloping condition are recommended to be provided with a minimum of 12 inches of freeboard for slough protection. An open concrete "V" drain must be placed behind the wall so that all upslope flows are directed to the street.

**Subsurface Drainage Control**

Retaining walls are recommended to be provided with a subdrain or weepholes for control of subsurface drainage behind the wall which are designed in accordance with the specifications provided within this section of the report.

Weepholes - Weepholes are recommended to be a minimum of 2-inches in diameter and provided at a maximum spacing of 15 feet on center along the entire length of wall. Open vertical header joints within concrete block construction may not be substituted for weepholes. A minimum of one cubic foot of gravel is recommended behind the wall weepholes. The gravel pocket is recommended to be wrapped in filter fabric to be designed by the Project Civil Engineer. A gravel pocket consisting of 3/4 inch gravel is recommended to be installed at the base of the retaining wall, extending a minimum of 6 inches above the top of the weepholes. The gravel pocket is recommended to be wrapped in non-woven geotextile filter fabric, such as Mirafi 140N or Phillips Supac 4NP.

Exterior Wall Subdrains - Retaining wall subdrains are recommended to consist of 4-inch diameter schedule 40 PVC perforated subdrain pipe conforming to ASTM D 1785 or equivalent. Subdrains are recommended to be covered with a minimum of 12 inches of 3/4 inch crushed gravel. Subdrains should rest on a bed of gravel about 3 inches thick with pipe perforations down. The subdrain pipe is recommended to be placed to achieve a minimum flow gradient of 1% along the back of the wall to the approved discharge location. The subdrain pipe and gravel are recommended to be wrapped in non-woven geotextile filter fabric, such as Mirafi 140N or Phillips Supac 4NP.

Basement Subdrains - Basement retaining walls are recommended to be provided with a 4-inch diameter schedule 40 PVC perforated subdrain pipe conforming to ASTM D 1785 or equivalent. Subdrains are recommended to be covered with a minimum of 12 inches of 3/4 inch crushed gravel. Subdrains should rest on a bed of gravel about 6 inches thick with pipe perforations down. The subdrain pipe is recommended to be placed to achieve a minimum flow gradient of 1% along the back of the wall to the approved discharge location. The subdrain pipe and gravel are recommended to be wrapped in non-woven geotextile filter fabric, such as Mirafi 140N or Phillips Supac 4NP. The use of a sump pump will be necessary to conduct drainage within the basement subdrain system to the street.

**Retaining Wall Backfill**

Basement retaining walls are recommended to be backfilled with 3/4 inch crushed gravel to within two feet of the ground surface. The upper two feet of wall backfill is recommended to consist of

compacted fill. Retaining wall backfill is recommended to be compacted to a minimum of 90 percent of the maximum density as determined by ASTM D 1557-09 or equivalent. All gravel backfill is required to be compacted by vibratory means. If the wall backfill contains less than 15% clay, 95% compaction is required. The recommended gravel gallery may be replaced by compacted fill over the subdrain or weephole gravel provided a drainage composite application, such as Mirafi G100W or equivalent, is installed along the back of the retaining wall.

Where access between the retaining wall and the temporary excavation prevents the use of compaction equipment, retaining walls should be backfilled with 3/4 inch crushed gravel to within 2 feet of the ground surface. The upper 2 feet of backfill above the gravel is required to consist of a compacted fill blanket to the surface.

**Waterproofing**

Walls located below grade are susceptible to moisture penetration and no waterproofing system can guarantee 100% protection. The most effective means of providing protection against moisture penetration is application of a waterproofing system on the backside of the retaining wall, prior to backfilling. Conventional waterproofing materials, such as asphaltic emulsions, have often proved ineffective due to cracking and deterioration over time. Elastomeric polyurethane waterproofing applications are now currently employed which if properly installed can be more effective than the asphalt emulsion products. Composite asphaltic-urethane membranes, such as Grace Bituthene, have also proven to be effective waterproofing systems. Geomatrix, Inc. is not responsible for selection, design or installation inspection of the waterproofing system. It is recommended that the contractor or waterproofing consultant provide recommendations for proven waterproofing systems to be utilized.

In addition to waterproofing, other precautions can be taken to reduce the possibility of future seepage problems. Implementing and maintaining proper surface drainage control on the site and around the retaining walls is very important. Surface water ponding must be completely eliminated on the site

and behind retaining walls through the proper use of area drains, roof gutters and downspouts and surface drains which conduct drainage to an approved location. Providing a minimum 5% slope of the ground surface above the retaining wall to direct surface flow away from the wall towards surface drainage control devices is recommended.

**Temporary Retaining Wall Excavations**

Temporary excavations will be required to construct the proposed retaining walls. The excavations will be up to 21 feet in height and will expose granite bedrock. Based upon the approved calculations prepared by GeoSystems, temporary vertical excavations within the granite bedrock may be made to 15 feet. Should excavations exceed 15 feet in vertical height, the use of temporary shoring will be required. Vertical excavations removing lateral support from any adjacent site or structure will also require the use of temporary shoring. Temporary shoring is recommended to be designed for an equivalent fluid pressure of 30 pounds per cubic foot per the enclosed calculations. Temporary shoring which is surcharged by offsite foundations is recommended to be designed for the recommended 30 pound per cubic foot earth material load and also the foundation surcharge load, as described in Figures 1 through 5.

The following design values are provided for acceptable shoring design alternatives :

**Shoring "H" Beams**

A system of steel "H" beams and wood lagging may be utilized to support temporary retaining wall excavations. Steel "H" beams are recommended to be spaced 8 feet on-center and founded a minimum of 8 feet below excavation grade. "H" beams may be assumed fixed at 3 feet into granite bedrock below the excavation grade. "H" beam shoring is recommended to be providing with continuous wood lagging. It is recommended that wood lagging be continuously installed as the excavation is lowered. The void space behind the wood lagging is recommended to be filled with grout. A representative of this office is recommended to perform continuous inspection of the shoring

pile and lagging system.

**Shoring Piles**

Shoring piles may be utilized to support temporary wall excavations. Shoring piles should be a minimum of 24 inches in diameter and a minimum of 10 feet into granite bedrock below the excavation grade. Piles may be assumed fixed at 3 feet into granite bedrock below the excavation grade. The piles may be designed for a skin friction of 750 pounds per square foot for that portion of pile in contact with the bedrock below the excavation grade. Shoring piles are recommended to be spaced a maximum of 8 feet on center.

**Shoring Pile Lateral Design**

The friction value is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. Resistance to lateral loading may be provided by passive earth pressure within the bedrock. Passive earth pressure may be computed as an equivalent fluid having a density of 500 pounds per cubic foot. The maximum allowable earth pressure is 5,000 pounds per square foot. For design of isolated piles, the allowable passive earth pressure may be increased by 100 percent. Piles spaced more than 3 pile diameters on center may be considered isolated. For 36-inch diameter street piles with a 7-½ foot on-center pile spacing, the allowable passive earth pressure may be increased by a factor of 1.75.

Temporary shoring piles may be incorporated into the design and construction of the permanent exterior retaining walls.

In order to achieve acceptable waterproofing application performance, temporary retaining wall shoring is not recommended to be incorporated into the final construction of residence retaining walls. It is recommended that the shoring system and permanent wall construction be independently constructed, to allow conventional waterproofing applications to be utilized for the retaining walls

to be supporting lower level interior residence spaces.

It is proposed to utilize the downhill street retaining wall piles to act as temporary shoring for the residence lower level retaining walls for a portion of Lot 95 and Lots 96, 97 and 98. Excavation is to take place along the edge of the shoring pipes, without leaving a wedge of bedrock in the temporary wall excavation. The wall backfill area is to be on the order of 7 feet wide and is recommended to be backfilled with compacted fill. The downhill street piles above the eastern portion of Lot 95 are too remote to the residence retaining wall excavation. Temporary wall excavations will require additional shoring piles and/or trimming of maximum height excavations (15 feet).

**Shoring Pile Deflection** - Temporary shoring piles are anticipated to deflect laterally 1% to 2% of the shoring height. The structural engineer is recommended to verify that shoring design conforms with this assumption. Lateral deflection of the shoring pile system may cause some localized settlement to occur above the shoring system. Remedial grading work may be necessary should lateral deflection of the shoring system occur prior to completion of the permanent retaining wall system. A representative of this office is recommended to perform continuous inspection of the shoring pile and lagging system and monitor deflection-related settlement above the shoring.

The geologist is recommended to be present during grading to see temporary slopes. All excavations are recommended to be stabilized within 30 days of initial excavation. Water must not be allowed to pond on top of the excavations nor to flow toward it. No vehicular surcharge is allowed within three feet of the top of any temporary cut. Excavated materials must not be stockpiled within a 1:1 setback plane projected from the base of the temporary excavation or temporary shoring.

**Foundation Settlement**

Settlement of the foundation system is expected to occur on initial application of loading. A settlement of ¼ to ½ inch may be anticipated. Differential settlement should not exceed ½ inch over a span of 30 feet.

## SLOPE SETBACKS

### Foundation Setback

The Building Code requires that foundations be a sufficient depth to provide horizontal setback from a descending slope. The required setback is 1/3 the height of the slope with a minimum of five feet and a maximum of 40 feet measured horizontally from the base of the foundation to the slope face. In the area of proposed construction, the slope descends 280 feet at a 2:1 to 1:1 gradient. The code required setback for the proposed residences and retaining walls is 40 feet. The code required setback for the proposed swimming pools is 20 feet.

Geologic conditions on the site are favorable for stability. As approved by the Department of Building and Safety in their February 20, 2002 approval letter, it is the opinion of Geomatrix that the required setback for proposed residences and retaining walls can be reduced to 20 feet from the soil/bedrock contact. The recommended setback is less than that required by the building code but may be considered as an "alternative setback" per the 2008 City of Los Angeles Building Code, Section 1805.3.5. The required setback for the proposed swimming pools is recommended to be 20 feet from the soil/bedrock contact.

## GRADING

The following guidelines may be used in preparation of the grading plan and job specifications. Our office must review the plans to insure that these recommendations are included and available.

A. The areas to receive compacted fill shall be stripped of all vegetation, debris, existing fill, soil, soft or disturbed earth materials, and shall be observed by the soils engineer and/or geologist prior to placing compacted fill.

B. Fill, consisting of soil approved by the soils engineer, shall be placed horizontally in compacted layers with suitable compaction equipment. The excavated onsite materials are considered satisfactory for reuse in the controlled fills. Any imported fill shall be observed by the soils engineer prior to use in fill areas. Rocks larger than six inches in diameter shall

not be used in the fill.

C. The fill shall be compacted to at least 90 or 95 percent of the maximum laboratory density for the material used. The maximum density shall be determined by ASTM D 1557-09 or equivalent. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, the fill shall be compacted to 95 percent relative compaction.

D. Field observation and testing shall be performed by the soils engineer during grading to assist the contractor in obtaining the required degree of compaction and the proper moisture content. Where compaction is less than required, additional compactive effort shall be made with adjustment of the moisture content, as necessary, until the required minimum dry density is obtained. One compaction test is required for each 500 cubic yards or two vertical feet of fill placed.

E. Utility trenches are recommended to be properly backfilled and compacted. Clean sand is recommended to be hydro-jetted around utility pipes and conduit to fill void spaces and to avoid damage to the pipes during the compaction process. Sand may be placed to a maximum thickness of 6 inches above the utility pipes and conduit. The remaining portion of the utility trench is recommended to backfilled with fill which is compacted in accordance with the requirements set forth within this section of the report. Since sand beds can act as subsurface drainage flow paths, it is recommended that utility trenches be provided with a drainage barrier where entering the property. The drainage barrier may consist of a 2-sack slurry placement around the utility lines at the entrance location. All utility trench backfill is recommended to be tested for proper compaction by the soils engineer. Utility trenches running parallel to foundations must be placed no closer than a 1:1 plane extending down from the bottom edge of the footing. Utility trenches are also recommended no closer than 5 feet from any portion of the foundation system without specific recommendations from the soils engineer which may include deepening of the effected portions of the foundation system.

**Excavation Characteristics**

Standard excavation equipment can be employed for the proposed site construction and grading. The test pits did not encounter hard, cemented bedrock. Excavation difficulty is a function of degree of weathering and amount of fracturing within the bedrock. Hard cemented layers occur at random locations and depths and likely to be encountered during foundation excavation. Should a hard cemented layer or dense bedrock be encountered, coring or the use of jackhammers will likely be necessary. Groundwater and natural seepage were not encountered within the test pits excavated on the site to a depth of 4 feet and should not be encountered within the anticipated foundation

excavations.

The granite bedrock present at the subject property contains joint and fracture planes. Although no adversely oriented joint and fracture planes were encountered during site exploration, adversely-oriented planes may be exposed within retaining wall excavations. Every five feet of vertical retaining wall cut is recommended to be mapped by the field geologist. If adversely-oriented joint or fracture planes are found to result in a surcharge condition, appropriate recommendations will be provided to either eliminate the surcharge wedge through corrective grading or modify the design of the retaining wall to account for the surcharge condition.

## DRAINAGE

Roof gutters are recommended for the proposed structures. Surface drains are recommended to be installed throughout the site to eliminate surface drainage ponding within landscaped and paved areas. Pad and roof drainage must be collected and transferred to a city-approved location in non-erosive drainage devices. Drainage must not be allowed to pond on the pad or against any foundation or retaining wall. Rigid decking is recommended to be constructed to sheetflow surface drainage to drainage control devices within the decking and to slope at a minimum of 2% gradient away from the perimeter of the residence, where decking adjoins the structure. Deck drains shall be of sufficient number and size to prevent ponding during severe weather. Landscape planters located within retaining wall backfill are recommended to be sealed to prevent moisture intrusion into the backfill. Landscape areas adjacent to foundations are recommended to slope a minimum of 5% away from the structure for a distance of 10 feet, directing surface drainage to approved drainage control devices.

Raised Floor Construction - Moisture problems often occur within construction of raised floor buildings where the grade under the floor has been lowered for joist clearance. Chronic excess moisture within the subfloor area can adversely effect subfloor wood framing and interior wood flooring and framing. The risk of development of excess moisture within the underfloor area increases with increasing clay and silt content in the onsite earth materials which tends to trap and hold excess moisture. Precautions can be taken during construction which can reduce the risk of long

term moisture-related damages.

Utility Foundation Penetrations - Surface moisture can seep through exterior foundations, utility access holes in foundations, and access openings resulting in standing water or excess soil moisture in the underfloor area. All utility access penetrations through perimeter foundations are recommended to be properly sealed.

Exterior Grades and Drainage - A minimum slope of exterior grades of 5% away from the residence footings is recommended. Waterproofing the footings, compaction of trench backfill and subdrains is also recommended to help to reduce moisture intrusion. Landscape planters located next to raised floor type construction are recommended be sealed to the depth of the footings. Area drains are recommended in planters next to the foundation system to eliminate surface ponding.

Foundation Drain - A foundation drain is recommended around the perimeter of the residence for raised floor construction. The foundation drain is recommended to consist of a 4-inch diameter schedule 40 perforated PVC drain pipe conforming to ASTM D 1785 or equivalent. The foundation drains is to be installed with perforations down within a 2 foot deep trench, located two feet from the perimeter residence foundation system. One cubic foot of 3/4 inch gravel is recommended to surround the drain pipe. The pipe and gravel are recommended to be wrapped in non-woven geotextile filter fabric, such as Mirafi 140N or Phillips Supac 4NP. The foundation drain trench is recommended to be capped with 12 inches of compacted fill. The foundation drain is recommended to discharge by gravity flow to the street.

Concrete Moisture Barrier - Consideration should also be given to providing a concrete moisture barrier over the underfloor ground surface within the subfloor area of the residence. Concrete moisture barriers have proven to be an effective means of reducing moisture levels in the subfloor area. Concrete moisture barriers are typically 3 inches thick and reinforced with wire mesh. Should a concrete moisture barrier be utilized, it is recommended that a surface drain system be provided which discharges to the street. The surface of the concrete moisture barrier should slope gently towards the surface drains.

Ventilation - Proper ventilation within the residence underfloor area is also recommended to be provided to reduce the risk of moisture-related damages which can occur with raised floor construction. It has been our experience that current building code regulations for minimum passive ventilation often provides to be inadequate due to the presence of interior foundations which restrict

or block airflow. Passive air vents are recommended to be constructed with conventional wire mesh. Louvered vent covers are recommended to be avoided due to the restricted nature of airflow through the louvered vents. Due to the relatively high clay content of the onsite earth materials, a mechanical ventilation system is recommended to be employed within the underfloor area to augment passive air flow. Mechanical ventilation must be designed to pull fresh air from the passive air vents to create effective airflow throughout the underfloor area. Care must be taken in design of the mechanical airflow system to prevent a pressure imbalance between the interior of the residence and the underfloor which can draw air from the underfloor area into the residence.

## LANDSCAPING

Care is recommended to be taken during landscaping of the site to avoid creation of adverse drainage conditions. Landscaping must be conducted to preserve proper surface drainage control on the site and to prevent the creation of areas of surface drainage ponding. Landscaping must be conducted to preserve the recommended 5% grade slope away from residence foundations and to preserve the required elevation grades around the residence. Selection of vegetation is also important to prevent potential damages to site structures caused by tree root growth. Large trees are recommended to be planted a sufficient distance from foundations and exterior paving. In general, trees should be located a lateral distance away from foundations equal to the mature canopy diameter. Consultation with a landscape specialist is recommended when considering the type and placement of site vegetation.

Landscape watering is recommended to be regulated to maintain appropriate soil moisture levels and reduce the risk of development of a perched groundwater condition on the site. Excessive landscape watering is recommended to be avoided.

## PLAN REVIEW

Formal plans ready for submittal to the Building Department must be reviewed by Geomatrix, Inc. Any change in scope of the project may require additional work. Engineering for the proposed project should not be started until approval of the geology and soils report is obtained from the Department

of Building and Safety as significant changes in the design and recommendations may result from the city review process.

## SITE OBSERVATION

The Department of Building and Safety requires that site inspections be performed by this office during construction to ensure that the recommendations contained in this report and the approved plans are properly implemented. The following inspections are anticipated for the proposed construction :

1. Grading bottom excavations
2. Compaction testing during fill placement
3. Residence foundations
4. Street retaining wall excavations
5. Residence retaining wall excavations
   (Field mapping every 5 feet of vertical cut)
6. Retaining wall footing excavations
7. Retaining wall subdrain installations
8. Retaining wall backfill testing
9. Pool shell excavations
10. Pool foundation excavations

A site meeting prior to the commencement of grading is recommended to coordinate the grading activities and required inspections. Should the observations reveal any unforeseen hazard, the geologist will provide additional recommendations. All fill that is placed on the site must be approved, tested, and verified if used for engineered purposes. The City of Los Angeles requires that the entire length of subdrain behind retaining walls is observed by a representative of this office. All gravel backfill above the subdrain must be observed by a representative of Geomatrix Inc. prior to placing a minimum of two feet of controlled fill as a cap. Please advise our office at least 24 hours prior to any required site visit. All approved plans and permits must be at the jobsite and available.

## CONSTRUCTION SITE MAINTENANCE

It is the responsibility of the contractor to maintain a safe construction site per OSHA requirements. When excavations exist on a site, the area must be fenced and warning signs posted. Establishment of line and grade on the proposed project shall be the responsibility of the contractor. GI is not responsible for verification or determination of line and grade. All pile excavations must be properly covered and secured. Soil generated by foundation and subgrade excavations must be either removed from the site or properly placed as a certified compacted fill. Soil must not be spilled over any descending slope. Workers must not be allowed to enter any unshored trench excavations over five feet deep.

Please call this office with any questions. This report and the exploration are subject to the following NOTICE. Please read the Notice carefully, as it limits our liability.

## NOTICE

### General Conditions

In the event of any changes in the design or location of any structure, as outlined in this report, the conclusions and recommendations contained herein may not be considered valid unless the changes are reviewed by us and the conclusions and recommendations are modified or reaffirmed after such review.

The subsurface conditions, excavation characteristics, and geologic structure described herein and shown on the enclosed cross sections have been projected from excavations on the site as indicated and should in no way be construed to reflect any variations that may occur between these excavations or that may result from changes in subsurface conditions.

Fluctuations in the level of groundwater may occur due to variations in rainfall, temperature, irrigation, and other factors not evident at the time of the measurements reported herein. Fluctuations also may occur across the site. High groundwater levels can be extremely hazardous. Saturation of earth materials can cause subsidence or slippage of the site.

If conditions encountered during construction appear to differ from those disclosed herein, notify us immediately so we may consider the need for modifications. Compliance with the design concepts, specifications or recommendations during construction requires the review of the engineering geologist and geotechnical engineer during the course of construction.

HE EXPLORATION WAS PERFORMED ONLY ON A PORTION OF THE SITE, AND CANNOT BE CONSIDERED AS INDICATIVE OF THE PORTIONS OF THE SITE NOT EXPLORED.

This report is issued and made for the sole use and benefit of the client, is not transferable and is as of the exploration date. Any liability in connection herewith shall not exceed the amount set forth within the signed Agreement. No warranty, expressed or implied, is made or intended in connection with the above exploration or by the furnishing of this report or by any other oral or written statement.

THIS REPORT WAS PREPARED ON THE BASIS OF THE PRELIMINARY DEVELOPMENT PLAN FURNISHED. FINAL PLANS SHOULD BE REVIEWED BY THIS OFFICE AS ADDITIONAL GEOTECHNICAL WORK MAY BE REQUIRED.

It should be noted that a geologic and soils engineering exploration performed without the benefit of a topographic survey is based upon a field sketch which is subject to inaccuracies in elevation, dimensions, and property line locations. The architectural design work should be based upon a survey.

Geomatrix Inc. is not responsible for locating seepage pits, basements, wells or other subsurface structures or utilities. Such structures may have been improperly abandoned in the past and not shown on the topographic survey. Buried structures and utilities may be encountered during grading and construction which may require remedial grading, proper abandonment procedures or revised foundation recommendations.

Geomatrix Inc. has reviewed and concurs with the laboratory testing performed by C.Y. Geotech, Inc. and Geosystems, Inc. Geomatrix Inc. accepts the responsibility for the laboratory testing which was used in preparation of this report and is presented in Appendix I.

Respectfully submitted,

LARRY PARMELEE
Certified Engineering Geologist
C.E.G. 1425

JOHN TSAO
Registered Civil Engineer
R.C.E. 46886

LP:JT

Enc: Appendix I - Laboratory Testing (C.Y. Geotech)
Table I - Log of Test Pits (Parmelee Geology)
Table II - Lot of Test pits (Geosystems)
Calculation Sheets
Department of Building and Safety Approval Letters, 4/2/98, 2/20/02, 6/27/02

Pocket : Geologic Maps
Sections A through D

xc: (6) Addressee

## TABLE I

## LOG OF TEST PITS - Parmelee Geology

| Test Pit Number | Depth (Feet) | Sample Location | Description |
|---|---|---|---|
| 1 | 0 - ½ | | **Soil** : Silty to Gravelly Sand; medium brown, dry, medium dense |
| | ½ - 1 | | **Bedrock** : Granite; brown and white, massive, hard, fractured. Slightly to moderately weathered |
| | | | End at 1 foot. No Water; No Caving; No Fill |
| 2 | 0 - 3 | | **Bedrock** : Granite; brown and white, massive, hard, fractured. Slightly to moderately weathered |
| | | | End at 3 feet. No Water; No Caving; No Fill |
| 3 | 0 - ½ | | **Soil** : Silty to Gravelly Sand; medium brown, dry, medium dense |
| | ½ - 3 | | **Bedrock** : Granite; brown and white, massive, hard, fractured. Slightly to moderately weathered |
| | | | End at 3 feet. No Water; No Caving; No Fill |

HS - hand sampler B - bulk sample

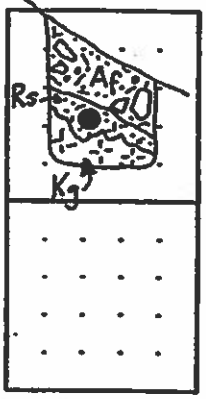
## TABLE I

## LOG OF TEST PITS - Geosystems

# TEST PIT LOG NO. TP–1 & TP–2

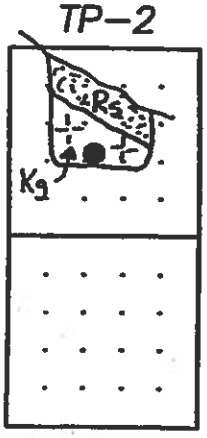
## Graphic Log

TP–1




Total Depth: 4 ft.

TP–2




Total Depth: 3 ft.

Scale: 1 inch = 5 feet

## Lithologic Description

**Af** Artificial Fill (spill fill): Silty Sand, medium brown to yellow brown, loose, dry, coarse grained, construction debris and blocks of concrete up to 12 inches in diameter common, few roots

**Rs** Residual Soil: Silty Sand, gray brown, moderately loose, dry, coarse grained, irregular lower contact

**Kg** Bedrock: Granite, yellow gray where weathered, white with black biotite specks where fresh, hard, friable where weathered, few random fractures (closed, tight), coarse grained

● = Sample Location

*This log of subsurface conditions applies only at the specific location and the date indicated. Subsurface conditions may differ at other locations and times.*

CALIFORNIA GEOSYSTEMS

Project: 8350 Grandview Drive
Los Angeles, California
Date Excavated: 9/24/97
Excavation Method: Hand Labor
Logged By: SDF
GS # 97–912

PLATE TP–1

## REFERENCES

The following is a list of references which was reviewed and utilized in preparation of this report.

**AEG Field Trip Guidebook**, Fault Rupture During the 1994 Northridge Earthquake, November 11, 1995.

**Bureau of Engineering, Department of Public Works, City of Los Angeles**, 1982, Preliminary Geologic Maps of the Santa Monica Mountains, Bureau of Engineering, Department of Public Works, City of Los Angeles, 1982, sheet #219.

**California Division of Mines and Geology**, 1995, Special Publication 116, The Northridge Earthquake of 17 January 1994.

**Hill, et al.**, 1979, Earthquake Hazards Associated with Faults in the Greater Los Angeles Metropolitan Area, CDMG Open File Report 79-16.

**Hoots, H.W.**, 1930, Geology of the Eastern Part of the Santa Monica Mountains, Los Angeles County, California, USGS Professional Paper 165-C, 1930.

**Los Angeles County Seismic Safety Element**, Department of Regional Planning, 1990.

**Moran, D. E., Slosson, J. E., Stone, R. O., and Yelverton, C. A.**, editors, 1974, Geology, Seismicity and Environmental Impact, Special Publication, AEG.

**Ziony, J. I.**, 1985, Evaluating Earthquake Hazards in the Los Angeles Region - An Earth-Science Perspective, USGS Professional Paper 1360, 1985.

**Ziony, J. I. and Jones, L. M.**, 1987, Map Showing Late Quaternary Faults and 1978-84 Seismicity of the Los Angeles Region, California, USGS Miscellaneous Map MF-1964.

# ACTIVE AND POTENTIALLY ACTIVE FAULTS WITHIN THE SOUTHERN CALIFORNIA AREA

## San Andreas Fault

The San Andreas Fault forms a major tectonic boundary between the Pacific Plate and the North American Plate and has been the source for many large, devastating earthquakes. Due to the length of the fault surface, the San Andreas Fault is capable of producing a magnitude 8.0 or larger earthquake. The San Andreas Fault displays strike-slip movement with an average slip rate of about 5mm per year. The San Andreas Fault is zoned active based upon the Alquist-Priolo Special Studies Act with a moderately high risk of producing the next large scale earthquake to effect the Southern California area.

## San Fernando Fault Zone

The San Fernando Fault Zone consists of five major, en echelon segments, all displaying reverse-left-oblique movement. The five segments consist of the Reservoir Segment, the Mission Wells Segment, the Sylmar Segment, the Tujunga Segment and the Lake View Segment. The fault system is approximately 17 km in length and 5 km in width (Ziony and Yerkes, 1985). The San Fernando Fault Zone forms the frontal system of the San Gabriel Mountains. This fault system was most recently active during the 1971 San Fernando Earthquake which produced a Richter magnitude 6.4 earthquake. Surface breaks were mapped along fault system during the 1971 earthquake which demonstrated left lateral and normal components of fault movement. The fault system is zoned active by the Alquist-Priolo Special Studies Act and capable of producing a magnitude 6.5 earthquake.

## Mission Hills Fault

The Mission Hills "Fault" actually consists of three individual fault traces exposed between Sepulveda Pass and the Van Norman Reservoir. It has been postulated that the faults comprise a Mission Hills thrust which dips 40 to 50 degrees to the north and forms the southwestern extension of the San Fernando fault. The fault is not zoned active by the State of California, however recent studies suggest Holocene movement.

## Santa Susana Fault Zone

The Santa Susana Fault Zone consists of several individual fault segments which extend from the Santa Susana Mountains across the San Fernando Pass and into the San Gabriel Mountains for a distance of 28 to 38 kilometers. The majority of the fault system has most likely been inactive since the middle Pleistocene, however there is still some debate as to whether or not any movement occurred along the fault system during the 1971 San Fernando Earthquake. Sympathetic movement of the western portion of the fault system is postulated to have occurred during the 1971 Earthquake. The western portion of the fault has been designated an Alquist-Priolo Special Studies zone fault and is zoned active. The fault has been assigned a slip rate of 3 to 4.5 mm/year.

**Newport-Inglewood Fault Zone**

The Newport-Inglewood Fault can be structurally divided into two distinct mechanical segments, based upon work performed by James F. Dolan and Kerry Sieh with the Caltech Seismological Laboratory. The southern segment of the fault extends from the northern end of the 1993 Long Beach earthquake rupture at Signal Hill, southward parallel to the coast to near San Diego, where it comes onshore as the Rose Canyon fault. This portion of the fault is a continues right-lateral strike-slip fault. The northern segment of the Newport-Inglewood Fault Zone is separated from the southern section by Signal Hill, trends through the Los Angeles Basin, and consists of a discontinuous, en echelon series of several fault traces. The northern segment of the fault is considered to have lower seismic activity than the southern segment.

**Malibu Coast Fault**

The Malibu Coast Fault consists of several onshore and offshore en-echelon fault segments trending east-west along the southern margin of the western Santa Monica Mountains. Where the fault is encountered onshore, reverse motion can be observed with dip angles ranging from 45 to 80 degrees to the north. A slip rate of 0.04 to 0.09 mm/year has been assigned to the fault. The Malibu Coast Fault is known to offset Pleistocene deposits of 11,000 to 2 million years in age. The fault is considered to be "potentially active" as defined in the Alquist-Priolo Special Studies Zones Act of 1972. Recent evidence by private consultants indicates that sections of the fault may in fact be active. Excavations about a mile west of the Malibu pier have encountered offset sediments thought to date from 4,000 to 6,000 years old.

**Santa Monica Fault**

The onshore extension of the Malibu Coast Fault has been designated as the Santa Monica Fault. The fault is buried under unconsolidated alluvial sediments and is not exposed anywhere at the ground surface. For this reason, the precise location of the fault is not known. The Santa Monica Fault is an oblique/left-lateral fault which exhibits pronounced near-surface strain which has caused development of a series of near-vertical, left-lateral strike slip faults and a near-surface blind thrust. Work performed in 1992 and 1993 by James F. Dolan and Kerry Sieh for the Caltech Seismological Laboratory consisted of fault trenching, geomorphic mapping and paleoseismologic analysis. The results of their studies indicate that at least three surface-rupturing earthquakes have occurred on one of the fault strands during the past 12,000 to 15,000 years. The predicted recurrence interval is approximately 4,000 to 5,000 years. While the researchers consider the Santa Monica Fault to be active, the fault has not yet been zoned active by the State of California.

Where the Santa Monica Fault joins with the Malibu Fault, this zone has been referred to as the Potrero Canyon Fault. Where exposed, the Potrero Canyon Fault is a north-dipping reverse fault which is part of the frontal fault system of the Transverse Ranges. The fault has been studied extensively by John T. McGill and described in the publication, "Geologic Maps of the Pacific Palisades Area, Los Angeles, California, 1989". The fault is exposed in the mouth of Potrero Canyon, extending onshore with a trend of about N75E. The fault can be observed to displace upper Pleistocene marine and nonmarine alluvial terrace deposits. Movement along the fault has contributed to the uplift of the overlying alluvial terrace deposits. The rate

of uplift has been estimated at 1.2 feet per 1,000 years. The Potrero Canyon Fault is considered to be potentially active because of the geologically recent (late Pleistocene) displacement on the fault and the historic seismic activity along the southern frontal fault system which included the Point Mugu earthquake (M 6.0) of February 21, 1973. East of the Pacific Palisades area, McGill has reported topographic features which suggests deformation since formation of the late Pleistocene alluvial plane. Topographic and geomorphic features suggest that the fault extends to within about a mile of Beverly Hills. The Potrero Canyon Fault has not been zoned active by the State of California.

**Raymond Fault Zone**

The Raymond Fault Zone is a northeast trending reverse-left-oblique slip fault located north of downtown Los Angeles. The fault has a surface expression of about 22 km and a width of 0.4 km. The slip rate of the fault has been determined to be 0.22 mm/year (Ziony and Yerkes, 1985). The zone comprises one to eight strands which diverge from the Sierra Madre Fault Zone in the area of Monrovia, and trends to South Pasadena. The fault lies entirely within the greater Los Angeles area, where it forms the geologic boundary between the Raymond Basin and the San Gabriel Valley. It trends generally east-west through an urbanized area. Geomorphic features indicate vertical and probable left-lateral movement during the Holocene. Trench studies and radiometric dating of exposed sediments indicate five major seismic events in the last 36,000 to 155,000 years, and an additional three events which cannot be dated precisely in the last 29,000 years (Crook, et al, 1987). The fault features a nearly continuous fault scarp between Monrovia Canyon and Arroyo Secco, as well as a scarp feature in alluvium on the south side of the fault in the South Pasadena area.

**Verdugo Fault**

The Verdugo Fault forms a prominent break at the base of the Verdugo Mountains and youthful geomorphic conditions suggest recent seismic activity. Surface breaks in alluviated slopes suggest that the fault zone is approximately one kilometer wide. The fault is not zoned active by the State of California. However, recent investigations suggest that seismic activity on the fault is possible. During the 1971 Sylmar Earthquake, surface ruptures occurred subparallel to and outbound of the main fault trace.

**Simi-Santa Rosa Fault**

The Simi-Santa Rosa Fault System consists of parallel and subparallel segments which form a frontal fault zone along the Simi Hills within the cities of Camarillo, Moorpark, Simi Valley and portions of Ventura County. The fault system can be separated into several major segments consisting of the Springville Fault Zone, the Camarillo Fault Zone, the Santa Rosa Fault Zone and the Simi Fault Zone. The system of faults extends approximately 30 miles and displays north-dipping reverse movement. Recent studies suggest a slip rate of 0.8 to 2.0 mm/year. Numerous private investigations have been recently performed along the fault system as a condition for residential and commercial construction. The recent investigations have revealed that segments of the fault zone display late Quaternary movement. Geomorphic evidence also suggests late Quaternary movement along the fault. Carbon dating has been performed along segments of the fault which indicate movement at least as recent as 26,000 years ago. The State of California however found insufficient evidence for Holocene movement to zone the fault system active, as required by the Alquist-Priolo Act. The City of Camarillo in 1986 however was compelled to classify the fault as active within the city limits and

established a special studies zone of 400 feet around known traces of the fault system. The maximum possible earthquake along the fault system has been estimated between Richter Magnitude 6.5 and 7.5

**Palos Verdes Fault Zone**

The Palos Verdes Fault Zone consists of three segments, all displaying reverse right oblique or reverse movement. Insufficient evidence currently exists to zone the fault system active. The Palos Verdes Fault Zone is considered active however based upon recent studies. The fault system has a cumulative length of about 77 kilometers and an assumed slip rate of 0.02 to 0.7 mm/year.

**San Cayetano Fault**

The San Cayetano Fault forms a portion of the southern boundary of the Ventura Basin from north of Ventura to Piru Creek. The fault displays gentle to moderate dips to the north with a thrust sense of movement. The eastern portion of the fault exhibits one of the highest slip rates in the region (>7.5mm/yr; Rockwell, 1988). The fault is considered active with a maximum probable earthquake of 7.3.

**Elysian Park Thrust**

The Elysian Park Thrust consists of a series of shallowly north and northeast-dipping blind thrusts that extend from Orange County through downtown Los Angeles and westward beneath the Santa Monica Mountains. The thrust system is not exposed at the surface but is buried under the unconsolidated alluvial sediments of the Los Angeles basin. Recent studies suggest that the fault experiences an average slip rate of 1.5mm/year and is capable fo producing a Magnitude 6.7 earthquake.

**Oak Ridge Fault**

The Oak Ridge Fault is a major south-dipping reverse fault which extends from the eastern portion of Ventura County into the Santa Clarita Valley and forms a portion of the southern boundary of the Ventura Basin. The fault is postulated to join the Santa Susana Fault to the east. Large Quaternary displacements are indicated in the area of Fillmore-Piru. Near Saticoy faulting in quaternary sediments has produced a groundwater barrier. The eastern portion of the fault is considered active, displaying Holocene movement. The fault is considered capable of producing a magnitude 7.0 to 7.5 earthquake.

**Hollywood Fault**

The Hollywood Fault is a very steep (65 to 90 degree) north-dipping left-lateral strike slip fault located along the southern foothill region of the Santa Monica Mountains and forms the landward extension of the Malibu Coast/Santa Monica Faults. Work performed by James F. Dolan and Kerry Sieh with the Caltech Seismological Laboratory in 1992 just west of downtown Hollywood consisted of analyzing continuously cored borings from the MetroRail Red Line as well as observation of storm drain trenches on Fuller and Vista Avenues. Based upon the observation of offset paleosoils younger than 17,000 years, it was concluded that the Hollywood Fault is active and that at least one surface-rupturing earthquake has occurred in the last

12,000 to 15,000 years. The work also indicated that it has been at least 2,000 to 4,000 years since the last seismic event, suggesting a 4,000 to 8,000 year recurrence interval. To date however the Hollywood Fault has not been zoned active by the State of California.

**Northridge Hills Fault**

The Northridge Hills Fault transects the northern San Fernando Valley from west-northwest of Chatsworth, in the vicinity of the Santa Susanna Pass, to the east central valley where it is concealed beneath thick alluvial sediments. In the northwest section of the valley, discontinuous, aligned topographic expression defines the fault (Wentworth and Yerkes, 1971). The Northridge Hills Fault may very well be associated with or part of the fault system related to the uplift of the Santa Susanna Mountains (Barnhart and Slosson, 1973). The western portion of the fault dips northward at approximately 80 degrees, with the north side up relative to the south side. Farther east, evidence suggests the fault is nearly vertical, and possibly southward-dipping.

Subsurface data from nearby petroleum exploration indicate that Miocene strata has been vertically displaced between 500 and 1000 feet, with a corresponding variance in thickness of the alluvium overlying the Miocene rock units (Barnhart and Slosson, 1973). This shows that the fault experienced post-Miocene slippage and seismic events with activity continuing during the Pleistocene, and possibly extending into the Holocene. This fault is believed to be capable of producing another 1971 San Fernando earthquake-type event (Barnhart and Slosson, 1973).

# APPENDIX I

**Laboratory Test Results**
**by**
**C.Y. Geotech, Inc.**

# C. Y. GEOTECH, INC.

## Engineering Geology and Geotechnical Engineering

21430 Strathern Street, Unit O, Canoga Park, CA 91304
Tel: (818) 888-1499 Fax: (818) 888-1498

April 14, 2003

P. N. CYG-02-2747

**LABORATORY TESTING SERVICES**

As requested by Mr. Larry Parmelee of Parmelee Geology (PG), C. Y. Geotech (CYG) , Inc. has performed the laboratory tests as listed in Table 1 for PG project PG1224, at 8350 Grandview Drive, Los Angeles, California. The testing procedures of ASTM (American Society for Testing and Materials) Standards were followed in laboratory tests. The CYG laboratory is certified by the City of Los Angeles Department of Building and Safety.

Client Name: Parmelee Geology

Project Name: PG/CAC

PG Project No: PG 1224

Project Address: 8350 Grandview Drive, Los Angeles, California

The type and quantity of laboratory tests are listed in Table 1. The results of laboratory tests are summarized in Table 2, Table-3, Plate DS-1 and Plate CM-1. If you have any questions regarding the laboratory testing, please do not hesitate to call us.

Very truly yours,
C. Y. Geotech, Inc.

REGISTERED PROFESSIONAL ENGINEER
TZE-TZONG TSAO
No. C 046886
Exp. 06-30-03
CIVIL
STATE OF CALIFORNIA

John T. Tsao
RCE 46886

## TEST PROCEDURES

**Direct Shear Test**

One shear test was performed in accordance with ASTM Standard D-3080. The direct shear tests were performed using a strain control type direct shear machine. These samples were sheared under varying confining loads in order to determine the Coulomb shear strength parameters: cohesion and friction angle. These samples were tested in an artificially saturated condition. The results are plotted and a linear approximations of the failure envelope is shown on Plate DS-1.

**Compaction Test**

One compaction test was performed in accordance with ASTM Standard D-1557. The results of the tests are presented in terms of moisture content verses dry density to generate a compaction curve. The maximum dry density and optimum moisture content can be determined from the compaction curve. The results of the compaction test are presented on Plate CM-1.

**Expansion Index**

One expansion index test was performed in accordance with ASTM Standard D-4829. The result of expansion index test is shown on Table-3. A soil with an expansion index of zero (0) is considers as non-expansive soil.

Table 1. Type and Quantity of Laboratory Test

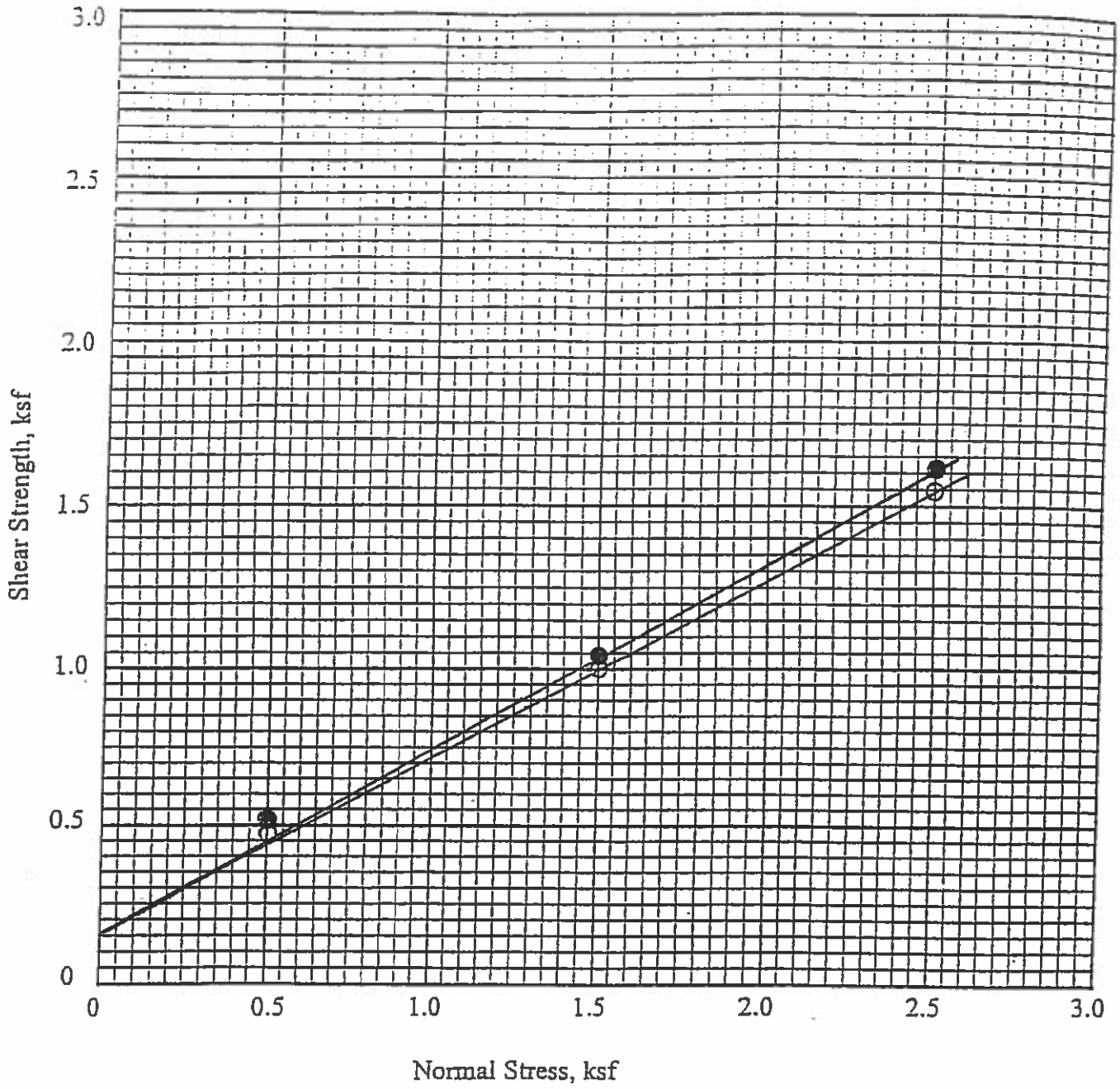
| Laboratory Test | Quantity | ASTM Standard |
|---|---|---|
| Density and Moisture Content | 1 | D-2216 |
| Direct Shear Test | 1 | D-3080 |
| Compaction Test | 1 | D-1557 |
| Expansion Index Test | 1 | D-4829 |

Table 2. Results of the Dry Density-Moisture Content Test

| Location | Depth ft | Soils Description | Dry Density, pcf | Moisture Content, % |
|---|---|---|---|---|
| Onsite | --- | Brown silty sand | 120 | 7 |

Table 3. Result of the Compaction Test and Expansion Index Test

| Location | Depth ft | Soil Description | Maximum Dry Density, pcf | Optimum Moisture Content, % | Expansion Index |
|---|---|---|---|---|---|
| Onsite | --- | Brown silty sand | 133.5 | 8 | 0 |




● Peak - At Saturation Moisture Content  C = 150 psf  $\phi$ = 29.5°

○ Ultimate - At Saturation Moisture Content  C = 150 psf  $\phi$ = 28.5°

Field Dry Density = 120 pcf
Field Moisture Content = 7 %
Saturation Moisture Content = 15 %

Boring / Test Pit : Onsite
Depth : ---
Description : Brown silty sand (Af) (Remolded fill)

# C. Y. Geotech, Inc.

Geotechnical Engineering and Engineering Geology

PG/CAC/PG 1224

8350 Grandview Drive, Los Angeles

Date 04/2003  P.N. No. CYG-02-2747

## Shear Diagram

Plate DS- 1

C. Y. GEOTECH, INC.

## COMPACTION CURVE

Project Number CYG-02-2747
Boring/Test Pit Onsite
Soil Description Brown silty sand

Client PG/CAC/PG 1224
Depth ---

Maximum Dry Density = 133.5 Optimum Moisture Content = 8

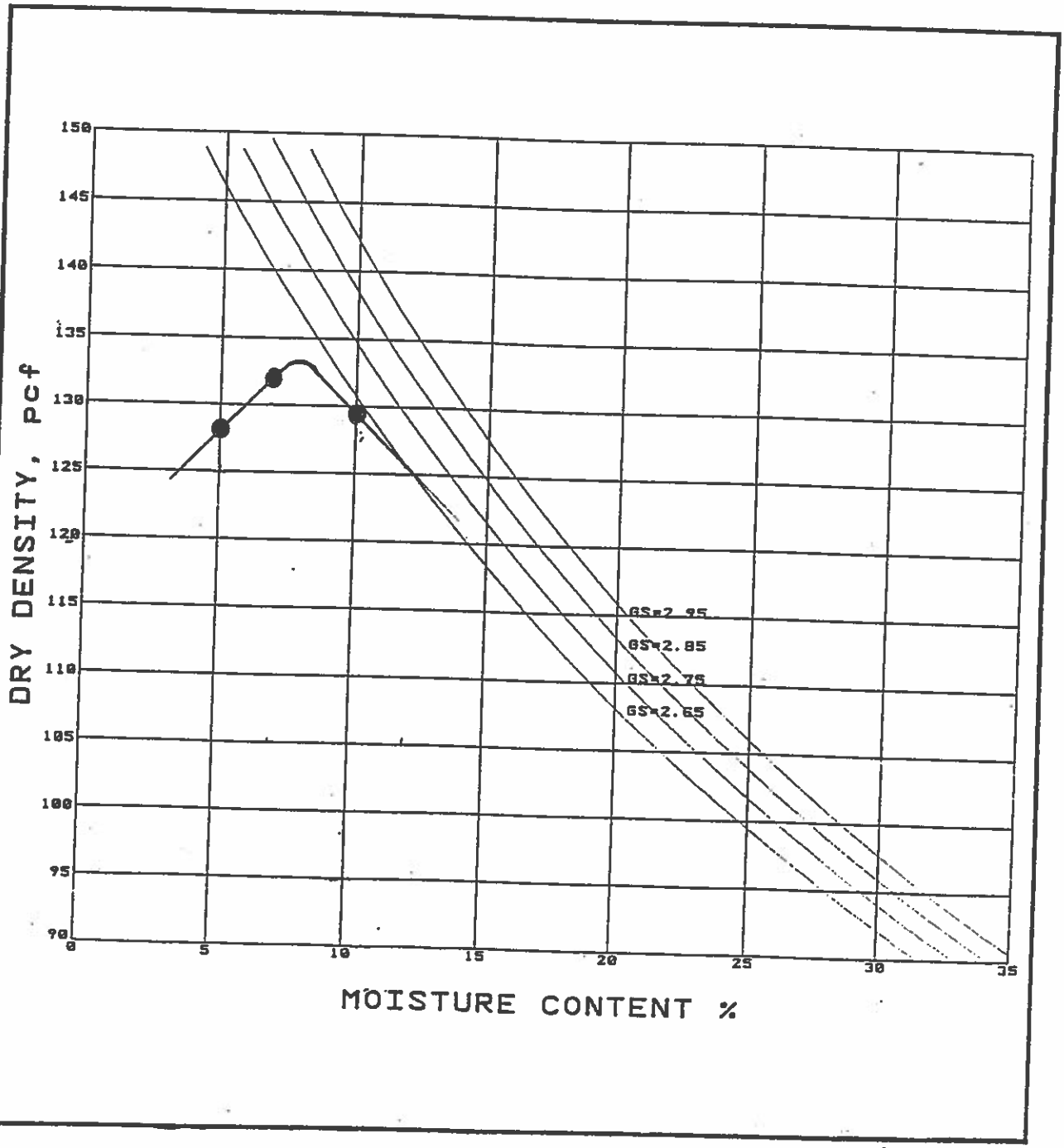
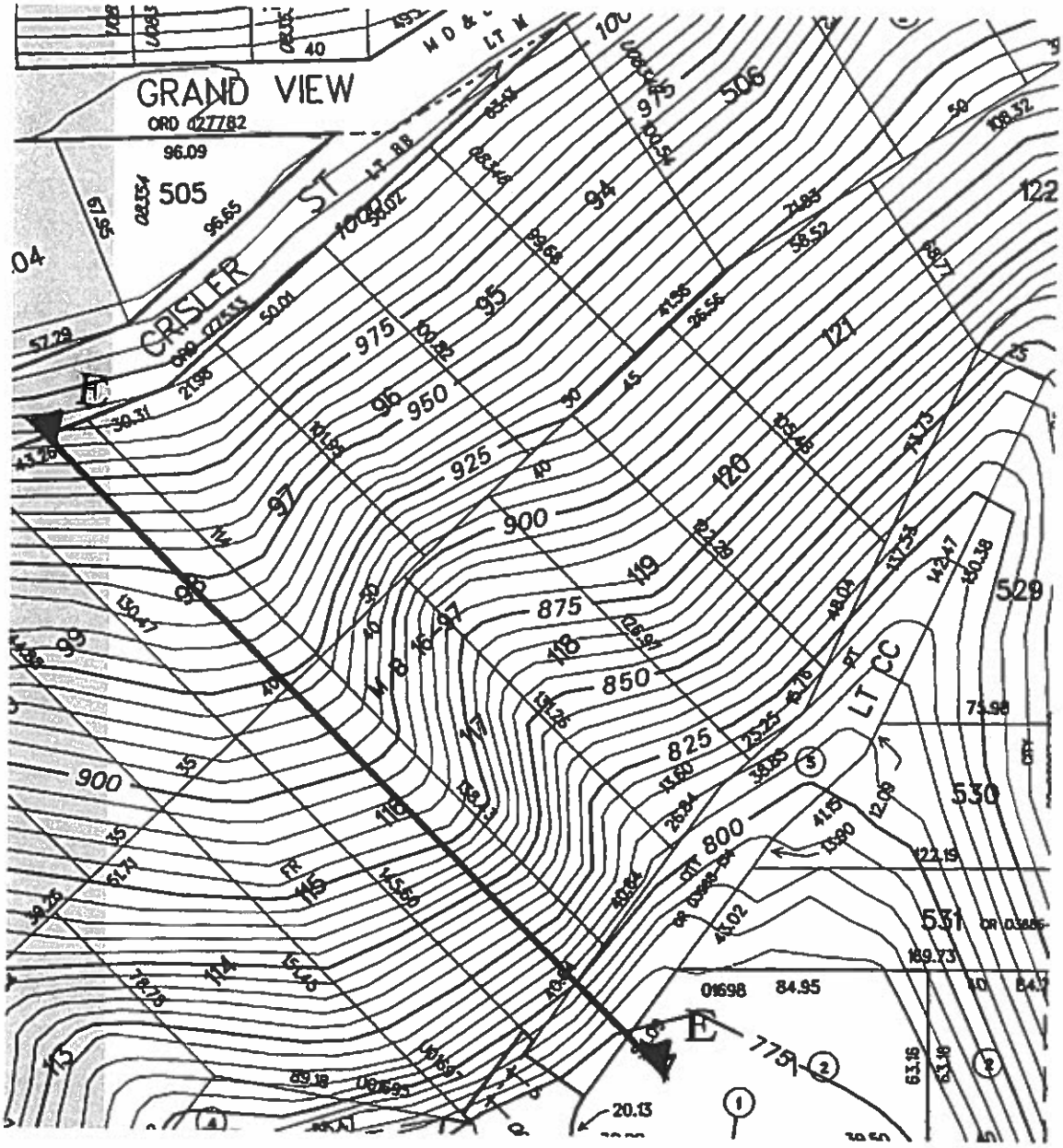



Plate CM-1




# STABILITY SECTION

## 1IN:60FT

# Gross Stability Analysis Section E-E

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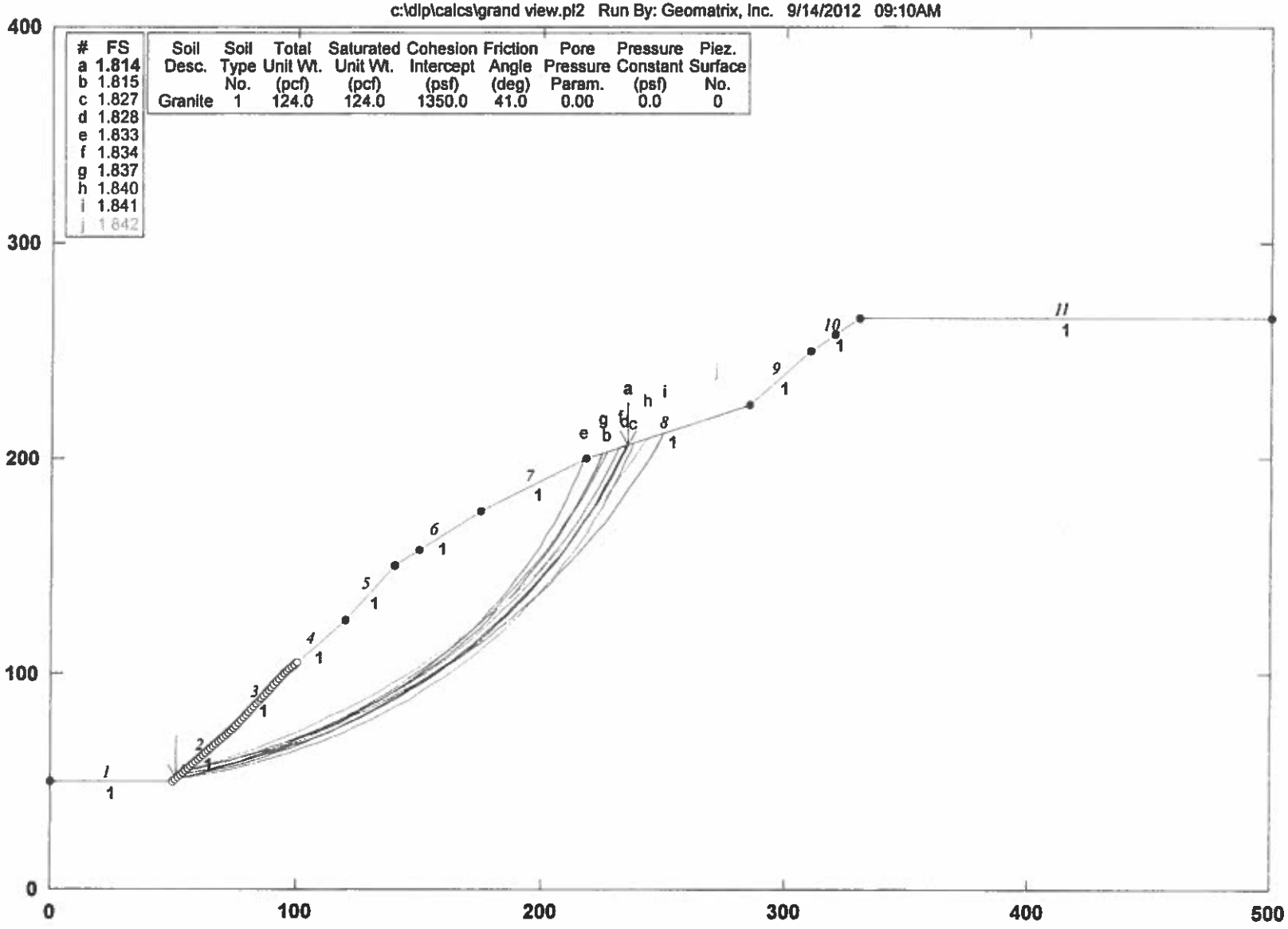



GSTABL7 v.2 FSmin=1.814

Safety Factors Are Calculated By The Modified Bishop Method

```
                                *** GSTABL7 ***
                        ** GSTABL7 by Garry H. Gregory, P.E. **
    ** Original Version 1.0, January 1996; Current Version 2.005, Sept. 2006 **
                   (All Rights Reserved-Unauthorized Use Prohibited)
*******************************************************************************
                      SLOPE STABILITY ANALYSIS SYSTEM
         Modified Bishop, Simplified Janbu, or GLE Method of Slices.
         (Includes Spencer & Morgenstern-Price Type Analysis)
         Including Pier/Pile, Reinforcement, Soil Nail, Tieback,
         Nonlinear Undrained Shear Strength, Curved Phi Envelope,
         Anisotropic Soil, Fiber-Reinforced Soil, Boundary Loads, Water
         Surfaces, Pseudo-Static & Newmark Earthquake, and Applied Forces.
*******************************************************************************
Analysis Run Date:        9/14/2012
Time of Run:              09:10AM
Run By:                   Geomatrix, Inc.
Input Data Filename:      C:\DLP\CALCS\Grand view.in
Output Filename:          C:\DLP\CALCS\Grand view.OUT
Unit System:              English
Plotted Output Filename:  C:\DLP\CALCS\Grand view.PLT
PROBLEM DESCRIPTION:  Gross Stability Analysis
                      Section E-E
BOUNDARY COORDINATES
   11 Top   Boundaries
   11 Total Boundaries
Boundary     X-Left     Y-Left     X-Right    Y-Right    Soil Type
   No.        (ft)       (ft)       (ft)       (ft)     Below Bnd
    1          0.00      50.00      50.00      50.00        1
    2         50.00      50.00      75.00      75.00        1
    3         75.00      75.00      95.00     100.00        1
    4         95.00     100.00     120.00     125.00        1
    5        120.00     125.00     140.00     150.00        1
    6        140.00     150.00     175.00     175.00        1
    7        175.00     175.00     218.00     200.00        1
    8        218.00     200.00     285.00     225.00        1
    9        285.00     225.00     310.00     250.00        1
   10        310.00     250.00     330.00     265.00        1
   11        330.00     265.00     500.00     265.00        1
Default Y-Origin = 0.00(ft)
Default X-Plus Value = 0.00(ft)
Default Y-Plus Value = 0.00(ft)
ISOTROPIC SOIL PARAMETERS
 1 Type(s) of Soil
Soil  Total  Saturated  Cohesion Friction   Pore   Pressure   Piez.
Type Unit Wt. Unit Wt. Intercept   Angle  Pressure Constant Surface
 No.  (pcf)    (pcf)     (psf)     (deg)    Param.   (psf)     No.
  1   124.0    124.0    1350.0     41.0    0.00       0.0      0
A Critical Failure Surface Searching Method, Using A Random
Technique For Generating Circular Surfaces, Has Been Specified.
2500 Trial Surfaces Have Been Generated.
  50 Surface(s) Initiate(s) From Each Of    50 Points Equally Spaced
Along The Ground Surface Between  X =  50.00(ft)
                             and  X = 100.00(ft)
Each Surface Terminates Between   X = 150.00(ft)
                             and  X = 320.00(ft)
Unless Further Limitations Were Imposed, The Minimum Elevation
At Which A Surface Extends Is  Y =      0.00(ft)
 6.00(ft) Line Segments Define Each Trial Failure Surface.
Following Are Displayed The Ten Most Critical Of The Trial
      Failure Surfaces Evaluated. They Are
      Ordered - Most Critical First.
      * * Safety Factors Are Calculated By The Modified Bishop Method * *
      Total Number of Trial Surfaces Attempted =  2500
      Number of Trial Surfaces With Valid FS = 2500
      Statistical Data On All Valid FS Values:
         FS Max =  17.249   FS Min =   1.814   FS Ave =   2.447
         Standard Deviation =    0.889   Coefficient of Variation =   36.33 %
```

Failure Surface Specified By 43 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 51.020 | 51.020 |
| 2 | 56.878 | 52.322 |
| 3 | 62.702 | 53.761 |
| 4 | 68.491 | 55.338 |
| 5 | 74.242 | 57.052 |
| 6 | 79.949 | 58.901 |
| 7 | 85.612 | 60.884 |
| 8 | 91.226 | 63.002 |
| 9 | 96.789 | 65.251 |
| 10 | 102.296 | 67.631 |
| 11 | 107.746 | 70.141 |
| 12 | 113.135 | 72.779 |
| 13 | 118.460 | 75.544 |
| 14 | 123.718 | 78.435 |
| 15 | 128.906 | 81.448 |
| 16 | 134.021 | 84.584 |
| 17 | 139.061 | 87.840 |
| 18 | 144.022 | 91.214 |
| 19 | 148.902 | 94.705 |
| 20 | 153.698 | 98.310 |
| 21 | 158.408 | 102.028 |
| 22 | 163.028 | 105.856 |
| 23 | 167.556 | 109.792 |
| 24 | 171.990 | 113.835 |
| 25 | 176.327 | 117.981 |
| 26 | 180.565 | 122.229 |
| 27 | 184.701 | 126.575 |
| 28 | 188.733 | 131.019 |
| 29 | 192.658 | 135.556 |
| 30 | 196.476 | 140.185 |
| 31 | 200.182 | 144.904 |
| 32 | 203.776 | 149.708 |
| 33 | 207.255 | 154.596 |
| 34 | 210.618 | 159.566 |
| 35 | 213.862 | 164.613 |
| 36 | 216.986 | 169.736 |
| 37 | 219.987 | 174.931 |
| 38 | 222.865 | 180.196 |
| 39 | 225.618 | 185.527 |
| 40 | 228.243 | 190.922 |
| 41 | 230.740 | 196.378 |
| 42 | 233.108 | 201.891 |
| 43 | 234.877 | 206.298 |

Circle Center At X = -1.038 ; Y = 299.167 ; and Radius = 253.549

Factor of Safety
*** 1.814 ***

Individual data on the 48 slices

| Slice No. | Width (ft) | Weight (lbs) | Water Force Top (lbs) | Water Force Bot (lbs) | Tie Force Norm (lbs) | Tie Force Tan (lbs) | Earthquake Force Hor (lbs) | Earthquake Force Ver (lbs) | Surcharge Load (lbs) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.9 | 1654.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 2 | 5.8 | 4874.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 3 | 5.8 | 7930.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 4 | 5.8 | 10817.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 5 | 0.8 | 1640.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 6 | 4.9 | 12271.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 7 | 5.7 | 17437.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 8 | 5.6 | 20766.7 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 9 | 3.8 | 15852.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 10 | 1.8 | 7985.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 11 | 5.5 | 26021.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 12 | 5.4 | 27797.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 13 | 5.4 | 29388.3 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 14 | 5.3 | 30792.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 15 | 1.5 | 9217.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 16 | 3.7 | 23009.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 17 | 5.2 | 34063.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 18 | 5.1 | 35719.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 19 | 5.0 | 37160.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 20 | 0.9 | 7131.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 21 | 4.0 | 30719.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 22 | 4.9 | 37309.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 23 | 4.8 | 36613.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 24 | 4.7 | 35795.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 25 | 4.6 | 34864.6 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 26 | 4.5 | 33826.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 27 | 4.4 | 32687.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 28 | 3.0 | 21889.7 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 29 | 1.3 | 9551.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 30 | 4.2 | 29898.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 31 | 4.1 | 28225.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 32 | 4.0 | 26505.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 33 | 3.9 | 24747.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 34 | 3.8 | 22959.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 35 | 3.7 | 21151.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 36 | 3.6 | 19332.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 37 | 3.5 | 17511.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 38 | 3.4 | 15698.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 39 | 3.2 | 13902.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 40 | 3.1 | 12134.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 41 | 1.0 | 3659.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 42 | 2.0 | 6692.6 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 43 | 2.9 | 8462.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 44 | 2.8 | 6644.3 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 45 | 2.6 | 4918.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 46 | 2.5 | 3294.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 47 | 2.4 | 1779.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 48 | 1.8 | 411.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |

Failure Surface Specified By 42 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 51.020 | 51.020 |
| 2 | 56.814 | 52.580 |
| 3 | 62.570 | 54.273 |
| 4 | 68.286 | 56.098 |
| 5 | 73.958 | 58.055 |
| 6 | 79.583 | 60.142 |
| 7 | 85.159 | 62.358 |
| 8 | 90.682 | 64.702 |
| 9 | 96.150 | 67.173 |
| 10 | 101.559 | 69.769 |
| 11 | 106.907 | 72.490 |
| 12 | 112.190 | 75.333 |
| 13 | 117.407 | 78.297 |
| 14 | 122.554 | 81.381 |
| 15 | 127.628 | 84.582 |
| 16 | 132.628 | 87.900 |
| 17 | 137.549 | 91.332 |
| 18 | 142.390 | 94.877 |
| 19 | 147.148 | 98.533 |
| 20 | 151.820 | 102.297 |
| 21 | 156.404 | 106.168 |
| 22 | 160.898 | 110.144 |
| 23 | 165.299 | 114.222 |
| 24 | 169.604 | 118.401 |
| 25 | 173.812 | 122.678 |
| 26 | 177.920 | 127.051 |
| 27 | 181.926 | 131.518 |
| 28 | 185.829 | 136.076 |
| 29 | 189.625 | 140.722 |

| | | |
|---|---|---|
| 30 | 193.312 | 145.455 |
| 31 | 196.890 | 150.272 |
| 32 | 200.356 | 155.170 |
| 33 | 203.707 | 160.146 |
| 34 | 206.943 | 165.199 |
| 35 | 210.062 | 170.325 |
| 36 | 213.061 | 175.521 |
| 37 | 215.940 | 180.785 |
| 38 | 218.697 | 186.114 |
| 39 | 221.330 | 191.506 |
| 40 | 223.838 | 196.957 |
| 41 | 226.220 | 202.464 |
| 42 | 226.508 | 203.175 |

Circle Center At X = -13.675 ; Y = 302.914 ; and Radius = 260.069

Factor of Safety

*** 1.815 ***

Failure Surface Specified By 44 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 51.020 | 51.020 |
| 2 | 56.936 | 52.021 |
| 3 | 62.825 | 53.172 |
| 4 | 68.682 | 54.473 |
| 5 | 74.504 | 55.923 |
| 6 | 80.288 | 57.521 |
| 7 | 86.028 | 59.267 |
| 8 | 91.722 | 61.158 |
| 9 | 97.366 | 63.194 |
| 10 | 102.957 | 65.373 |
| 11 | 108.489 | 67.694 |
| 12 | 113.961 | 70.155 |
| 13 | 119.368 | 72.756 |
| 14 | 124.708 | 75.493 |
| 15 | 129.975 | 78.366 |
| 16 | 135.168 | 81.373 |
| 17 | 140.282 | 84.511 |
| 18 | 145.314 | 87.778 |
| 19 | 150.261 | 91.173 |
| 20 | 155.120 | 94.693 |
| 21 | 159.888 | 98.335 |
| 22 | 164.561 | 102.099 |
| 23 | 169.137 | 105.980 |
| 24 | 173.612 | 109.977 |
| 25 | 177.983 | 114.086 |
| 26 | 182.249 | 118.306 |
| 27 | 186.405 | 122.633 |
| 28 | 190.449 | 127.065 |
| 29 | 194.379 | 131.599 |
| 30 | 198.192 | 136.232 |
| 31 | 201.886 | 140.960 |
| 32 | 205.458 | 145.781 |
| 33 | 208.905 | 150.692 |
| 34 | 212.227 | 155.689 |
| 35 | 215.419 | 160.769 |
| 36 | 218.481 | 165.929 |
| 37 | 221.410 | 171.165 |
| 38 | 224.205 | 176.474 |
| 39 | 226.863 | 181.854 |
| 40 | 229.383 | 187.299 |
| 41 | 231.763 | 192.806 |
| 42 | 234.002 | 198.373 |
| 43 | 236.099 | 203.995 |
| 44 | 237.187 | 207.159 |

Circle Center At X = 14.806 ; Y = 283.254 ; and Radius = 235.041

Factor of Safety

*** 1.827 ***

Failure Surface Specified By 43 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 53.061 | 53.061 |
| 2 | 58.941 | 54.255 |
| 3 | 64.790 | 55.594 |
| 4 | 70.603 | 57.079 |
| 5 | 76.378 | 58.707 |
| 6 | 82.110 | 60.479 |
| 7 | 87.797 | 62.393 |
| 8 | 93.434 | 64.448 |
| 9 | 99.018 | 66.643 |
| 10 | 104.546 | 68.976 |
| 11 | 110.014 | 71.445 |
| 12 | 115.419 | 74.050 |
| 13 | 120.758 | 76.789 |
| 14 | 126.027 | 79.660 |
| 15 | 131.222 | 82.661 |
| 16 | 136.342 | 85.790 |
| 17 | 141.381 | 89.046 |
| 18 | 146.339 | 92.426 |
| 19 | 151.210 | 95.928 |
| 20 | 155.993 | 99.551 |
| 21 | 160.685 | 103.291 |
| 22 | 165.282 | 107.147 |
| 23 | 169.781 | 111.116 |
| 24 | 174.180 | 115.196 |
| 25 | 178.477 | 119.385 |
| 26 | 182.668 | 123.678 |
| 27 | 186.750 | 128.075 |
| 28 | 190.723 | 132.572 |
| 29 | 194.581 | 137.167 |
| 30 | 198.325 | 141.856 |
| 31 | 201.950 | 146.636 |
| 32 | 205.456 | 151.506 |
| 33 | 208.839 | 156.461 |
| 34 | 212.098 | 161.499 |
| 35 | 215.230 | 166.616 |
| 36 | 218.235 | 171.810 |
| 37 | 221.109 | 177.077 |
| 38 | 223.851 | 182.414 |
| 39 | 226.459 | 187.817 |
| 40 | 228.932 | 193.283 |
| 41 | 231.269 | 198.810 |
| 42 | 233.467 | 204.393 |
| 43 | 234.050 | 205.989 |

Circle Center At X = 8.048 ; Y = 289.921 ; and Radius = 241.099

Factor of Safety

*** 1.828 ***

Failure Surface Specified By 40 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 53.061 | 53.061 |
| 2 | 58.925 | 54.333 |
| 3 | 64.751 | 55.766 |
| 4 | 70.536 | 57.359 |
| 5 | 76.274 | 59.111 |
| 6 | 81.962 | 61.021 |
| 7 | 87.595 | 63.087 |
| 8 | 93.169 | 65.308 |
| 9 | 98.680 | 67.681 |
| 10 | 104.123 | 70.206 |
| 11 | 109.494 | 72.881 |
| 12 | 114.789 | 75.702 |
| 13 | 120.004 | 78.669 |
| 14 | 125.136 | 81.778 |
| 15 | 130.179 | 85.028 |
| 16 | 135.132 | 88.415 |

| | | |
|---|---|---|
| 17 | 139.988 | 91.938 |
| 18 | 144.746 | 95.594 |
| 19 | 149.401 | 99.380 |
| 20 | 153.950 | 103.293 |
| 21 | 158.388 | 107.329 |
| 22 | 162.714 | 111.487 |
| 23 | 166.924 | 115.763 |
| 24 | 171.014 | 120.153 |
| 25 | 174.981 | 124.654 |
| 26 | 178.822 | 129.263 |
| 27 | 182.535 | 133.977 |
| 28 | 186.116 | 138.791 |
| 29 | 189.563 | 143.702 |
| 30 | 192.873 | 148.706 |
| 31 | 196.044 | 153.800 |
| 32 | 199.073 | 158.979 |
| 33 | 201.958 | 164.240 |
| 34 | 204.696 | 169.579 |
| 35 | 207.286 | 174.991 |
| 36 | 209.726 | 180.472 |
| 37 | 212.014 | 186.019 |
| 38 | 214.147 | 191.627 |
| 39 | 216.126 | 197.292 |
| 40 | 216.758 | 199.278 |

Circle Center At X = 9.963 ; Y = 266.054 ; and Radius = 217.309

Factor of Safety

*** 1.833 ***

Failure Surface Specified By 42 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 55.102 | 55.102 |
| 2 | 60.946 | 56.461 |
| 3 | 66.756 | 57.961 |
| 4 | 72.527 | 59.601 |
| 5 | 78.257 | 61.382 |
| 6 | 83.942 | 63.301 |
| 7 | 89.578 | 65.358 |
| 8 | 95.163 | 67.551 |
| 9 | 100.693 | 69.879 |
| 10 | 106.165 | 72.341 |
| 11 | 111.575 | 74.934 |
| 12 | 116.921 | 77.659 |
| 13 | 122.198 | 80.513 |
| 14 | 127.406 | 83.494 |
| 15 | 132.539 | 86.600 |
| 16 | 137.595 | 89.831 |
| 17 | 142.571 | 93.183 |
| 18 | 147.464 | 96.656 |
| 19 | 152.271 | 100.246 |
| 20 | 156.990 | 103.951 |
| 21 | 161.618 | 107.771 |
| 22 | 166.151 | 111.701 |
| 23 | 170.587 | 115.741 |
| 24 | 174.924 | 119.887 |
| 25 | 179.159 | 124.138 |
| 26 | 183.289 | 128.490 |
| 27 | 187.313 | 132.941 |
| 28 | 191.227 | 137.488 |
| 29 | 195.030 | 142.129 |
| 30 | 198.718 | 146.862 |
| 31 | 202.291 | 151.682 |
| 32 | 205.745 | 156.588 |
| 33 | 209.079 | 161.576 |
| 34 | 212.291 | 166.644 |
| 35 | 215.379 | 171.788 |
| 36 | 218.342 | 177.006 |
| 37 | 221.176 | 182.294 |

| | | |
|---|---|---|
| 38 | 223.881 | 187.650 |
| 39 | 226.455 | 193.070 |
| 40 | 228.897 | 198.550 |
| 41 | 231.205 | 204.089 |
| 42 | 231.586 | 205.069 |

Circle Center At X = 2.134 ; Y = 296.264 ; and Radius = 246.910

Factor of Safety

*** 1.834 ***

Failure Surface Specified By 41 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 55.102 | 55.102 |
| 2 | 60.959 | 56.406 |
| 3 | 66.779 | 57.861 |
| 4 | 72.560 | 59.468 |
| 5 | 78.298 | 61.224 |
| 6 | 83.987 | 63.129 |
| 7 | 89.625 | 65.181 |
| 8 | 95.208 | 67.379 |
| 9 | 100.732 | 69.721 |
| 10 | 106.193 | 72.206 |
| 11 | 111.588 | 74.833 |
| 12 | 116.912 | 77.599 |
| 13 | 122.163 | 80.502 |
| 14 | 127.337 | 83.541 |
| 15 | 132.430 | 86.713 |
| 16 | 137.438 | 90.017 |
| 17 | 142.359 | 93.450 |
| 18 | 147.189 | 97.009 |
| 19 | 151.925 | 100.693 |
| 20 | 156.564 | 104.499 |
| 21 | 161.101 | 108.424 |
| 22 | 165.536 | 112.466 |
| 23 | 169.864 | 116.622 |
| 24 | 174.082 | 120.889 |
| 25 | 178.188 | 125.264 |
| 26 | 182.178 | 129.744 |
| 27 | 186.051 | 134.327 |
| 28 | 189.804 | 139.009 |
| 29 | 193.433 | 143.786 |
| 30 | 196.937 | 148.657 |
| 31 | 200.313 | 153.617 |
| 32 | 203.559 | 158.663 |
| 33 | 206.673 | 163.792 |
| 34 | 209.652 | 169.000 |
| 35 | 212.495 | 174.284 |
| 36 | 215.200 | 179.640 |
| 37 | 217.764 | 185.064 |
| 38 | 220.186 | 190.553 |
| 39 | 222.465 | 196.104 |
| 40 | 224.599 | 201.711 |
| 41 | 224.903 | 202.576 |

Circle Center At X = 7.898 ; Y = 280.959 ; and Radius = 230.737

Factor of Safety

*** 1.837 ***

Failure Surface Specified By 43 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 54.082 | 54.082 |
| 2 | 59.779 | 55.963 |
| 3 | 65.441 | 57.948 |
| 4 | 71.067 | 60.035 |
| 5 | 76.653 | 62.223 |
| 6 | 82.200 | 64.512 |
| 7 | 87.703 | 66.901 |
| 8 | 93.163 | 69.390 |
| 9 | 98.576 | 71.977 |

| | | |
|---|---|---|
| 10 | 103.942 | 74.662 |
| 11 | 109.258 | 77.444 |
| 12 | 114.523 | 80.321 |
| 13 | 119.735 | 83.294 |
| 14 | 124.893 | 86.360 |
| 15 | 129.993 | 89.519 |
| 16 | 135.036 | 92.771 |
| 17 | 140.019 | 96.113 |
| 18 | 144.941 | 99.545 |
| 19 | 149.800 | 103.065 |
| 20 | 154.594 | 106.673 |
| 21 | 159.322 | 110.367 |
| 22 | 163.982 | 114.146 |
| 23 | 168.573 | 118.009 |
| 24 | 173.093 | 121.955 |
| 25 | 177.541 | 125.981 |
| 26 | 181.915 | 130.088 |
| 27 | 186.215 | 134.274 |
| 28 | 190.437 | 138.536 |
| 29 | 194.582 | 142.874 |
| 30 | 198.647 | 147.287 |
| 31 | 202.632 | 151.773 |
| 32 | 206.535 | 156.330 |
| 33 | 210.355 | 160.957 |
| 34 | 214.090 | 165.653 |
| 35 | 217.739 | 170.415 |
| 36 | 221.302 | 175.243 |
| 37 | 224.777 | 180.135 |
| 38 | 228.162 | 185.088 |
| 39 | 231.457 | 190.102 |
| 40 | 234.661 | 195.176 |
| 41 | 237.772 | 200.306 |
| 42 | 240.790 | 205.492 |
| 43 | 242.912 | 209.295 |

Circle Center At X = -46.908 ; Y = 369.436 ; and Radius = 331.131

Factor of Safety

*** 1.840 ***

Failure Surface Specified By 45 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 55.102 | 55.102 |
| 2 | 60.938 | 56.496 |
| 3 | 66.743 | 58.012 |
| 4 | 72.515 | 59.651 |
| 5 | 78.251 | 61.410 |
| 6 | 83.949 | 63.289 |
| 7 | 89.607 | 65.288 |
| 8 | 95.221 | 67.406 |
| 9 | 100.789 | 69.641 |
| 10 | 106.309 | 71.993 |
| 11 | 111.778 | 74.460 |
| 12 | 117.194 | 77.042 |
| 13 | 122.555 | 79.737 |
| 14 | 127.857 | 82.544 |
| 15 | 133.100 | 85.462 |
| 16 | 138.280 | 88.490 |
| 17 | 143.395 | 91.626 |
| 18 | 148.443 | 94.869 |
| 19 | 153.422 | 98.218 |
| 20 | 158.329 | 101.671 |
| 21 | 163.162 | 105.225 |
| 22 | 167.920 | 108.881 |
| 23 | 172.600 | 112.636 |
| 24 | 177.199 | 116.489 |
| 25 | 181.717 | 120.438 |
| 26 | 186.150 | 124.481 |
| 27 | 190.498 | 128.616 |

| | | |
|---|---|---|
| 28 | 194.757 | 132.841 |
| 29 | 198.927 | 137.156 |
| 30 | 203.005 | 141.557 |
| 31 | 206.990 | 146.043 |
| 32 | 210.879 | 150.611 |
| 33 | 214.671 | 155.261 |
| 34 | 218.365 | 159.989 |
| 35 | 221.959 | 164.794 |
| 36 | 225.450 | 169.673 |
| 37 | 228.838 | 174.625 |
| 38 | 232.122 | 179.647 |
| 39 | 235.299 | 184.737 |
| 40 | 238.368 | 189.893 |
| 41 | 241.328 | 195.112 |
| 42 | 244.177 | 200.392 |
| 43 | 246.915 | 205.731 |
| 44 | 249.540 | 211.126 |
| 45 | 249.898 | 211.902 |

Circle Center At X = -8.242 ; Y = 333.209 ; and Radius = 285.230

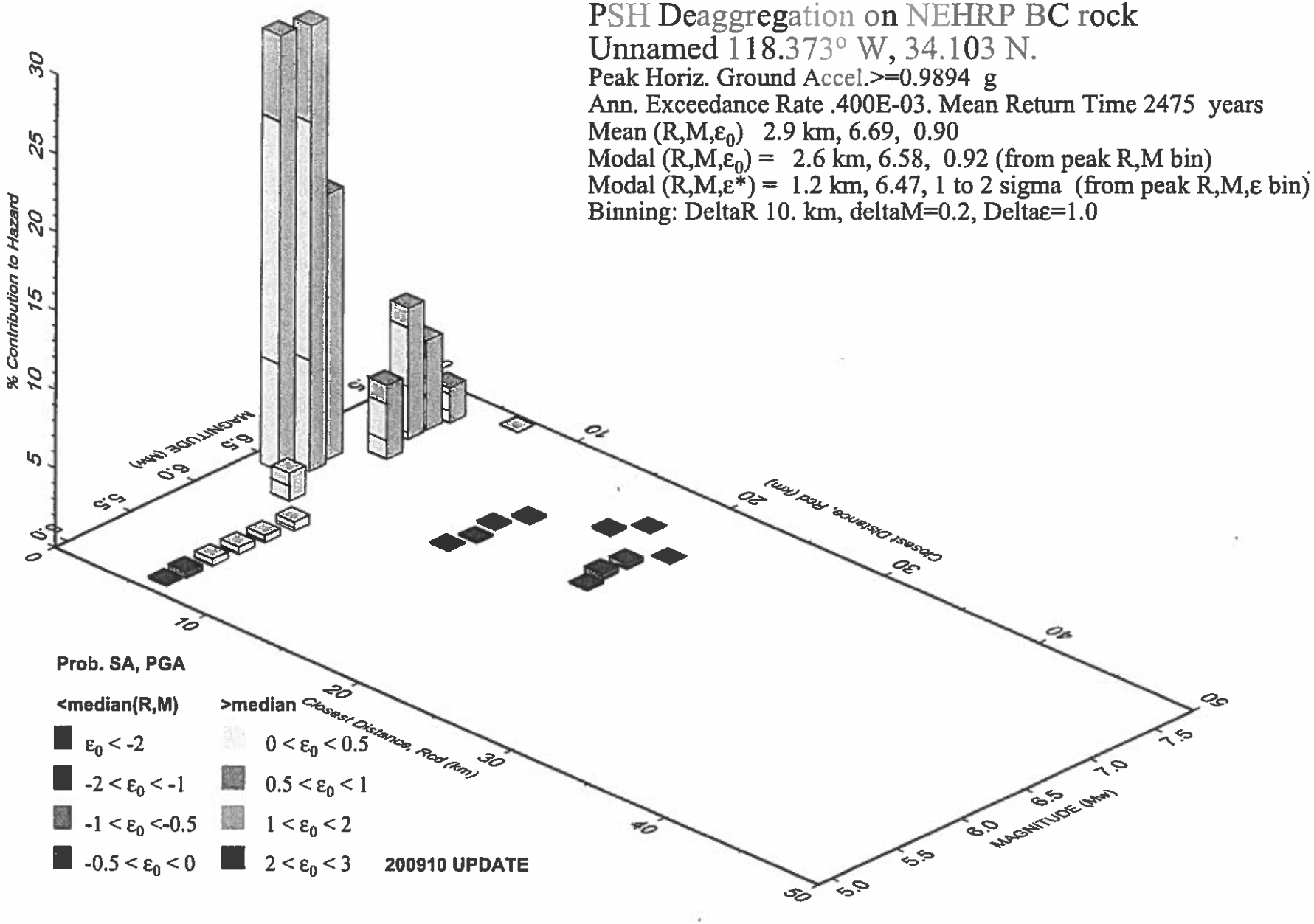
Factor of Safety

*** 1.841 ***

Failure Surface Specified By 49 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 50.000 | 50.000 |
| 2 | 55.696 | 51.885 |
| 3 | 61.364 | 53.853 |
| 4 | 67.004 | 55.902 |
| 5 | 72.613 | 58.032 |
| 6 | 78.191 | 60.243 |
| 7 | 83.736 | 62.534 |
| 8 | 89.248 | 64.905 |
| 9 | 94.725 | 67.355 |
| 10 | 100.166 | 69.884 |
| 11 | 105.570 | 72.491 |
| 12 | 110.935 | 75.176 |
| 13 | 116.262 | 77.938 |
| 14 | 121.548 | 80.776 |
| 15 | 126.792 | 83.691 |
| 16 | 131.994 | 86.681 |
| 17 | 137.153 | 89.746 |
| 18 | 142.266 | 92.885 |
| 19 | 147.334 | 96.097 |
| 20 | 152.354 | 99.382 |
| 21 | 157.327 | 102.739 |
| 22 | 162.251 | 106.168 |
| 23 | 167.125 | 109.667 |
| 24 | 171.948 | 113.236 |
| 25 | 176.719 | 116.875 |
| 26 | 181.437 | 120.582 |
| 27 | 186.101 | 124.357 |
| 28 | 190.709 | 128.198 |
| 29 | 195.262 | 132.106 |
| 30 | 199.759 | 136.079 |
| 31 | 204.197 | 140.116 |
| 32 | 208.577 | 144.218 |
| 33 | 212.897 | 148.381 |
| 34 | 217.156 | 152.607 |
| 35 | 221.354 | 156.894 |
| 36 | 225.490 | 161.241 |
| 37 | 229.562 | 165.647 |
| 38 | 233.571 | 170.111 |
| 39 | 237.515 | 174.633 |
| 40 | 241.393 | 179.212 |
| 41 | 245.204 | 183.845 |
| 42 | 248.949 | 188.534 |
| 43 | 252.625 | 193.275 |

```
   44        256.232      198.070
   45        259.770      202.916
   46        263.238      207.812
   47        266.635      212.758
   48        269.960      217.753
   49        271.349      219.906
Circle Center At X =   -77.797 ; Y =   445.653 ; and Radius =   415.780
      Factor of Safety
     ***    1.842   ***
         **** END OF GSTABL7 OUTPUT ****
```




GMT 2012 Sep 14 19:51:13 Distance (R), magnitude (M), epsilon (E0,E) deaggregation for a site on rock with average vs= 760. m/s top 30 m. USGS CGHT PSHA2008 UPDATE Bins with lt 0.05% contrib. omitted

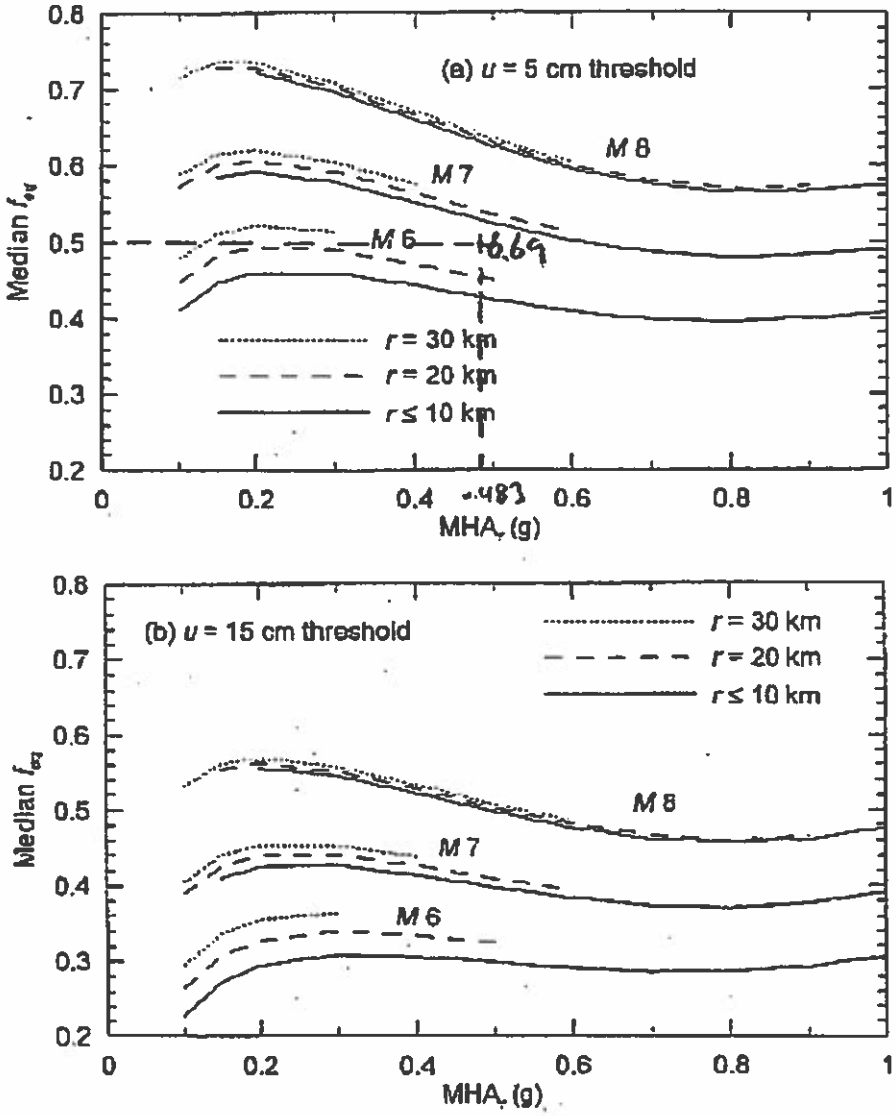
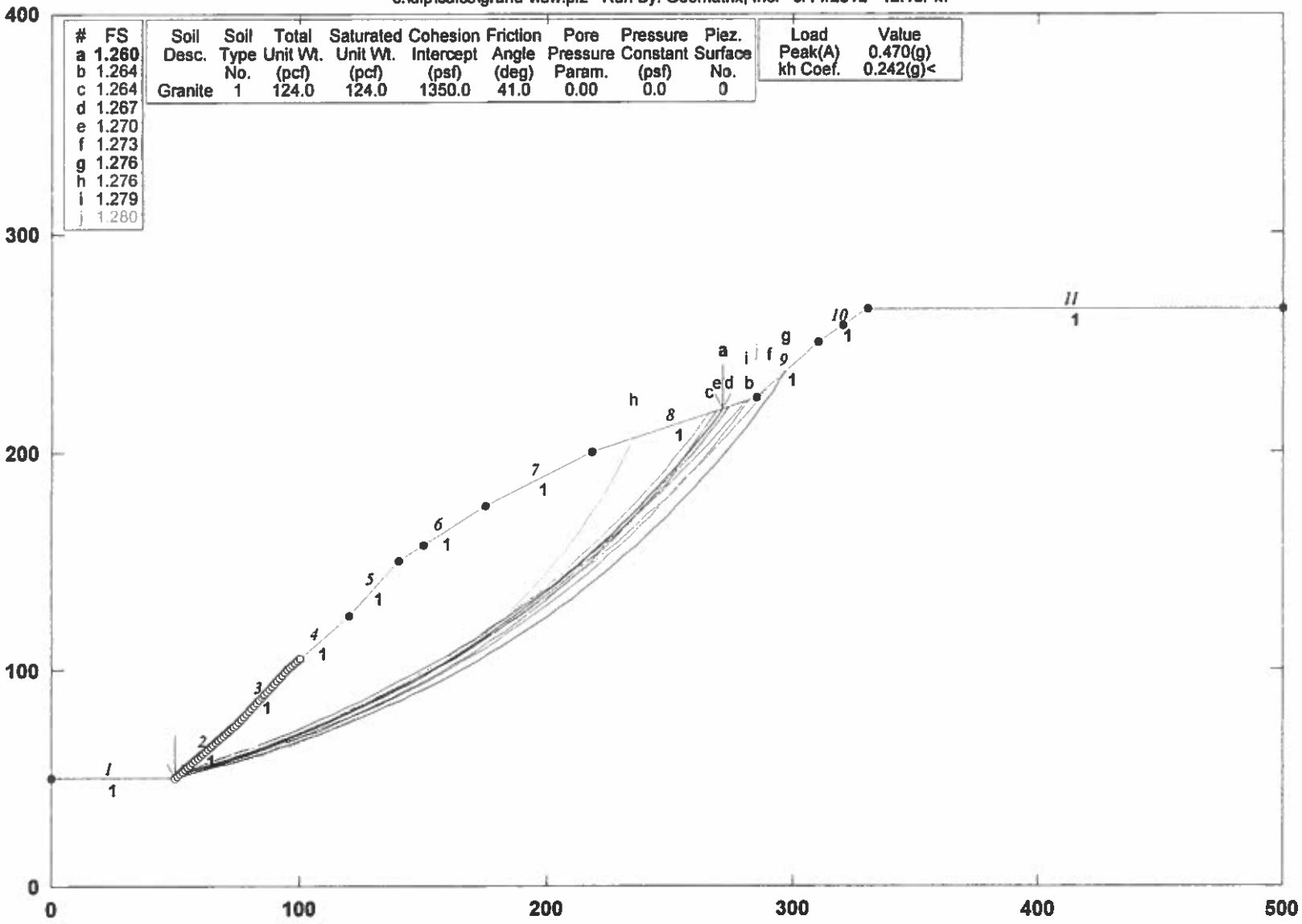



**Figure 11.1. Required Values of $f_{eq}$ as Function of MHA, and Seismological Condition for Threshold Displacements of (a) 5 cm and (b) 15 cm**

# Seismic Stability Analysis Section E-E

c:\dlp\calcs\grand view.pl2 Run By: Geomatrix, Inc. 9/14/2012 12:16PM




GSTABL7 v.2 FSmin=1.260

Safety Factors Are Calculated By The Modified Bishop Method

```
                                *** GSTABL7 ***
                        ** GSTABL7 by Garry H. Gregory, P.E. **
    ** Original Version 1.0, January 1996; Current Version 2.005, Sept. 2006 **
                  (All Rights Reserved-Unauthorized Use Prohibited)
*******************************************************************************
                        SLOPE STABILITY ANALYSIS SYSTEM
          Modified Bishop, Simplified Janbu, or GLE Method of Slices.
          (Includes Spencer & Morgenstern-Price Type Analysis)
          Including Pier/Pile, Reinforcement, Soil Nail, Tieback,
          Nonlinear Undrained Shear Strength, Curved Phi Envelope,
          Anisotropic Soil, Fiber-Reinforced Soil, Boundary Loads, Water
          Surfaces, Pseudo-Static & Newmark Earthquake, and Applied Forces.
*******************************************************************************
Analysis Run Date:        9/14/2012
Time of Run:              09:10AM
Run By:                   Geomatrix, Inc.
Input Data Filename:      C:\DLP\CALCS\Grand view.in
Output Filename:          C:\DLP\CALCS\Grand view.OUT
Unit System:              English
Plotted Output Filename:  C:\DLP\CALCS\Grand view.PLT
PROBLEM DESCRIPTION:  Gross Stability Analysis
                      Section E-E
BOUNDARY COORDINATES
   11 Top   Boundaries
   11 Total Boundaries
Boundary     X-Left     Y-Left    X-Right    Y-Right    Soil Type
   No.        (ft)       (ft)       (ft)       (ft)    Below Bnd
    1          0.00      50.00      50.00      50.00        1
    2         50.00      50.00      75.00      75.00        1
    3         75.00      75.00      95.00     100.00        1
    4         95.00     100.00     120.00     125.00        1
    5        120.00     125.00     140.00     150.00        1
    6        140.00     150.00     175.00     175.00        1
    7        175.00     175.00     218.00     200.00        1
    8        218.00     200.00     285.00     225.00        1
    9        285.00     225.00     310.00     250.00        1
   10        310.00     250.00     330.00     265.00        1
   11        330.00     265.00     500.00     265.00        1
Default Y-Origin = 0.00(ft)
Default X-Plus Value = 0.00(ft)
Default Y-Plus Value = 0.00(ft)
ISOTROPIC SOIL PARAMETERS
 1 Type(s) of Soil
Soil  Total  Saturated  Cohesion Friction   Pore   Pressure   Piez.
Type Unit Wt. Unit Wt. Intercept   Angle  Pressure Constant Surface
 No.  (pcf)    (pcf)     (psf)     (deg)    Param.   (psf)     No.
  1   124.0    124.0    1350.0     41.0    0.00      0.0      0
A Critical Failure Surface Searching Method, Using A Random
Technique For Generating Circular Surfaces, Has Been Specified.
2500 Trial Surfaces Have Been Generated.
  50 Surface(s) Initiate(s) From Each Of    50 Points Equally Spaced
Along The Ground Surface Between  X =  50.00(ft)
                                  and  X = 100.00(ft)
Each Surface Terminates Between   X = 150.00(ft)
                                  and  X = 320.00(ft)
Unless Further Limitations Were Imposed, The Minimum Elevation
At Which A Surface Extends Is  Y =      0.00(ft)
 6.00(ft) Line Segments Define Each Trial Failure Surface.
Following Are Displayed The Ten Most Critical Of The Trial
      Failure Surfaces Evaluated. They Are
      Ordered - Most Critical First.
      * * Safety Factors Are Calculated By The Modified Bishop Method * *
      Total Number of Trial Surfaces Attempted =  2500
      Number of Trial Surfaces With Valid FS = 2500
      Statistical Data On All Valid FS Values:
         FS Max =  17.249   FS Min =   1.814   FS Ave =   2.447
         Standard Deviation =    0.889   Coefficient of Variation =   36.33 %
```

Failure Surface Specified By 43 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 51.020 | 51.020 |
| 2 | 56.878 | 52.322 |
| 3 | 62.702 | 53.761 |
| 4 | 68.491 | 55.338 |
| 5 | 74.242 | 57.052 |
| 6 | 79.949 | 58.901 |
| 7 | 85.612 | 60.884 |
| 8 | 91.226 | 63.002 |
| 9 | 96.789 | 65.251 |
| 10 | 102.296 | 67.631 |
| 11 | 107.746 | 70.141 |
| 12 | 113.135 | 72.779 |
| 13 | 118.460 | 75.544 |
| 14 | 123.718 | 78.435 |
| 15 | 128.906 | 81.448 |
| 16 | 134.021 | 84.584 |
| 17 | 139.061 | 87.840 |
| 18 | 144.022 | 91.214 |
| 19 | 148.902 | 94.705 |
| 20 | 153.698 | 98.310 |
| 21 | 158.408 | 102.028 |
| 22 | 163.028 | 105.856 |
| 23 | 167.556 | 109.792 |
| 24 | 171.990 | 113.835 |
| 25 | 176.327 | 117.981 |
| 26 | 180.565 | 122.229 |
| 27 | 184.701 | 126.575 |
| 28 | 188.733 | 131.019 |
| 29 | 192.658 | 135.556 |
| 30 | 196.476 | 140.185 |
| 31 | 200.182 | 144.904 |
| 32 | 203.776 | 149.708 |
| 33 | 207.255 | 154.596 |
| 34 | 210.618 | 159.566 |
| 35 | 213.862 | 164.613 |
| 36 | 216.986 | 169.736 |
| 37 | 219.987 | 174.931 |
| 38 | 222.865 | 180.196 |
| 39 | 225.618 | 185.527 |
| 40 | 228.243 | 190.922 |
| 41 | 230.740 | 196.378 |
| 42 | 233.108 | 201.891 |
| 43 | 234.877 | 206.298 |

Circle Center At X = -1.038 ; Y = 299.167 ; and Radius = 253.549

Factor of Safety
*** 1.814 ***

Individual data on the 48 slices

| Slice No. | Width (ft) | Weight (lbs) | Water Force Top (lbs) | Water Force Bot (lbs) | Tie Force Norm (lbs) | Tie Force Tan (lbs) | Earthquake Force Hor (lbs) | Earthquake Force Ver (lbs) | Surcharge Load (lbs) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.9 | 1654.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 2 | 5.8 | 4874.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 3 | 5.8 | 7930.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 4 | 5.8 | 10817.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 5 | 0.8 | 1640.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 6 | 4.9 | 12271.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 7 | 5.7 | 17437.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 8 | 5.6 | 20766.7 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 9 | 3.8 | 15852.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 10 | 1.8 | 7985.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 11 | 5.5 | 26021.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 12 | 5.4 | 27797.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 13 | 5.4 | 29388.3 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 14 | 5.3 | 30792.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 15 | 1.5 | 9217.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 16 | 3.7 | 23009.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 17 | 5.2 | 34063.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 18 | 5.1 | 35719.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 19 | 5.0 | 37160.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 20 | 0.9 | 7131.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 21 | 4.0 | 30719.1 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 22 | 4.9 | 37309.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 23 | 4.8 | 36613.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 24 | 4.7 | 35795.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 25 | 4.6 | 34864.6 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 26 | 4.5 | 33826.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 27 | 4.4 | 32687.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 28 | 3.0 | 21889.7 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 29 | 1.3 | 9551.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 30 | 4.2 | 29898.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 31 | 4.1 | 28225.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 32 | 4.0 | 26505.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 33 | 3.9 | 24747.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 34 | 3.8 | 22959.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 35 | 3.7 | 21151.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 36 | 3.6 | 19332.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 37 | 3.5 | 17511.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 38 | 3.4 | 15698.4 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 39 | 3.2 | 13902.9 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 40 | 3.1 | 12134.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 41 | 1.0 | 3659.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 42 | 2.0 | 6692.6 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 43 | 2.9 | 8462.8 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 44 | 2.8 | 6644.3 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 45 | 2.6 | 4918.5 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 46 | 2.5 | 3294.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 47 | 2.4 | 1779.2 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |
| 48 | 1.8 | 411.0 | 0.0 | 0.0 | 0. | 0. | 0.0 | 0.0 | 0.0 |

Failure Surface Specified By 42 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 51.020 | 51.020 |
| 2 | 56.814 | 52.580 |
| 3 | 62.570 | 54.273 |
| 4 | 68.286 | 56.098 |
| 5 | 73.958 | 58.055 |
| 6 | 79.583 | 60.142 |
| 7 | 85.159 | 62.358 |
| 8 | 90.682 | 64.702 |
| 9 | 96.150 | 67.173 |
| 10 | 101.559 | 69.769 |
| 11 | 106.907 | 72.490 |
| 12 | 112.190 | 75.333 |
| 13 | 117.407 | 78.297 |
| 14 | 122.554 | 81.381 |
| 15 | 127.628 | 84.582 |
| 16 | 132.628 | 87.900 |
| 17 | 137.549 | 91.332 |
| 18 | 142.390 | 94.877 |
| 19 | 147.148 | 98.533 |
| 20 | 151.820 | 102.297 |
| 21 | 156.404 | 106.168 |
| 22 | 160.898 | 110.144 |
| 23 | 165.299 | 114.222 |
| 24 | 169.604 | 118.401 |
| 25 | 173.812 | 122.678 |
| 26 | 177.920 | 127.051 |
| 27 | 181.926 | 131.518 |
| 28 | 185.829 | 136.076 |
| 29 | 189.625 | 140.722 |

| | | |
|---|---|---|
| 30 | 193.312 | 145.455 |
| 31 | 196.890 | 150.272 |
| 32 | 200.356 | 155.170 |
| 33 | 203.707 | 160.146 |
| 34 | 206.943 | 165.199 |
| 35 | 210.062 | 170.325 |
| 36 | 213.061 | 175.521 |
| 37 | 215.940 | 180.785 |
| 38 | 218.697 | 186.114 |
| 39 | 221.330 | 191.506 |
| 40 | 223.838 | 196.957 |
| 41 | 226.220 | 202.464 |
| 42 | 226.508 | 203.175 |

Circle Center At X = -13.675 ; Y = 302.914 ; and Radius = 260.069

Factor of Safety

*** 1.815 ***

Failure Surface Specified By 44 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 51.020 | 51.020 |
| 2 | 56.936 | 52.021 |
| 3 | 62.825 | 53.172 |
| 4 | 68.682 | 54.473 |
| 5 | 74.504 | 55.923 |
| 6 | 80.288 | 57.521 |
| 7 | 86.028 | 59.267 |
| 8 | 91.722 | 61.158 |
| 9 | 97.366 | 63.194 |
| 10 | 102.957 | 65.373 |
| 11 | 108.489 | 67.694 |
| 12 | 113.961 | 70.155 |
| 13 | 119.368 | 72.756 |
| 14 | 124.708 | 75.493 |
| 15 | 129.975 | 78.366 |
| 16 | 135.168 | 81.373 |
| 17 | 140.282 | 84.511 |
| 18 | 145.314 | 87.778 |
| 19 | 150.261 | 91.173 |
| 20 | 155.120 | 94.693 |
| 21 | 159.888 | 98.335 |
| 22 | 164.561 | 102.099 |
| 23 | 169.137 | 105.980 |
| 24 | 173.612 | 109.977 |
| 25 | 177.983 | 114.086 |
| 26 | 182.249 | 118.306 |
| 27 | 186.405 | 122.633 |
| 28 | 190.449 | 127.065 |
| 29 | 194.379 | 131.599 |
| 30 | 198.192 | 136.232 |
| 31 | 201.886 | 140.960 |
| 32 | 205.458 | 145.781 |
| 33 | 208.905 | 150.692 |
| 34 | 212.227 | 155.689 |
| 35 | 215.419 | 160.769 |
| 36 | 218.481 | 165.929 |
| 37 | 221.410 | 171.165 |
| 38 | 224.205 | 176.474 |
| 39 | 226.863 | 181.854 |
| 40 | 229.383 | 187.299 |
| 41 | 231.763 | 192.806 |
| 42 | 234.002 | 198.373 |
| 43 | 236.099 | 203.995 |
| 44 | 237.187 | 207.159 |

Circle Center At X = 14.806 ; Y = 283.254 ; and Radius = 235.041

Factor of Safety

*** 1.827 ***

Failure Surface Specified By 43 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 53.061 | 53.061 |
| 2 | 58.941 | 54.255 |
| 3 | 64.790 | 55.594 |
| 4 | 70.603 | 57.079 |
| 5 | 76.378 | 58.707 |
| 6 | 82.110 | 60.479 |
| 7 | 87.797 | 62.393 |
| 8 | 93.434 | 64.448 |
| 9 | 99.018 | 66.643 |
| 10 | 104.546 | 68.976 |
| 11 | 110.014 | 71.445 |
| 12 | 115.419 | 74.050 |
| 13 | 120.758 | 76.789 |
| 14 | 126.027 | 79.660 |
| 15 | 131.222 | 82.661 |
| 16 | 136.342 | 85.790 |
| 17 | 141.381 | 89.046 |
| 18 | 146.339 | 92.426 |
| 19 | 151.210 | 95.928 |
| 20 | 155.993 | 99.551 |
| 21 | 160.685 | 103.291 |
| 22 | 165.282 | 107.147 |
| 23 | 169.781 | 111.116 |
| 24 | 174.180 | 115.196 |
| 25 | 178.477 | 119.385 |
| 26 | 182.668 | 123.678 |
| 27 | 186.750 | 128.075 |
| 28 | 190.723 | 132.572 |
| 29 | 194.581 | 137.167 |
| 30 | 198.325 | 141.856 |
| 31 | 201.950 | 146.636 |
| 32 | 205.456 | 151.506 |
| 33 | 208.839 | 156.461 |
| 34 | 212.098 | 161.499 |
| 35 | 215.230 | 166.616 |
| 36 | 218.235 | 171.810 |
| 37 | 221.109 | 177.077 |
| 38 | 223.851 | 182.414 |
| 39 | 226.459 | 187.817 |
| 40 | 228.932 | 193.283 |
| 41 | 231.269 | 198.810 |
| 42 | 233.467 | 204.393 |
| 43 | 234.050 | 205.989 |

Circle Center At X = 8.048 ; Y = 289.921 ; and Radius = 241.099

Factor of Safety

*** 1.828 ***

Failure Surface Specified By 40 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 53.061 | 53.061 |
| 2 | 58.925 | 54.333 |
| 3 | 64.751 | 55.766 |
| 4 | 70.536 | 57.359 |
| 5 | 76.274 | 59.111 |
| 6 | 81.962 | 61.021 |
| 7 | 87.595 | 63.087 |
| 8 | 93.169 | 65.308 |
| 9 | 98.680 | 67.681 |
| 10 | 104.123 | 70.206 |
| 11 | 109.494 | 72.881 |
| 12 | 114.789 | 75.702 |
| 13 | 120.004 | 78.669 |
| 14 | 125.136 | 81.778 |
| 15 | 130.179 | 85.028 |
| 16 | 135.132 | 88.415 |

| | | |
|---|---|---|
| 17 | 139.988 | 91.938 |
| 18 | 144.746 | 95.594 |
| 19 | 149.401 | 99.380 |
| 20 | 153.950 | 103.293 |
| 21 | 158.388 | 107.329 |
| 22 | 162.714 | 111.487 |
| 23 | 166.924 | 115.763 |
| 24 | 171.014 | 120.153 |
| 25 | 174.981 | 124.654 |
| 26 | 178.822 | 129.263 |
| 27 | 182.535 | 133.977 |
| 28 | 186.116 | 138.791 |
| 29 | 189.563 | 143.702 |
| 30 | 192.873 | 148.706 |
| 31 | 196.044 | 153.800 |
| 32 | 199.073 | 158.979 |
| 33 | 201.958 | 164.240 |
| 34 | 204.696 | 169.579 |
| 35 | 207.286 | 174.991 |
| 36 | 209.726 | 180.472 |
| 37 | 212.014 | 186.019 |
| 38 | 214.147 | 191.627 |
| 39 | 216.126 | 197.292 |
| 40 | 216.758 | 199.278 |

Circle Center At X = 9.963 ; Y = 266.054 ; and Radius = 217.309

Factor of Safety

*** 1.833 ***

Failure Surface Specified By 42 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 55.102 | 55.102 |
| 2 | 60.946 | 56.461 |
| 3 | 66.756 | 57.961 |
| 4 | 72.527 | 59.601 |
| 5 | 78.257 | 61.382 |
| 6 | 83.942 | 63.301 |
| 7 | 89.578 | 65.358 |
| 8 | 95.163 | 67.551 |
| 9 | 100.693 | 69.879 |
| 10 | 106.165 | 72.341 |
| 11 | 111.575 | 74.934 |
| 12 | 116.921 | 77.659 |
| 13 | 122.198 | 80.513 |
| 14 | 127.406 | 83.494 |
| 15 | 132.539 | 86.600 |
| 16 | 137.595 | 89.831 |
| 17 | 142.571 | 93.183 |
| 18 | 147.464 | 96.656 |
| 19 | 152.271 | 100.246 |
| 20 | 156.990 | 103.951 |
| 21 | 161.618 | 107.771 |
| 22 | 166.151 | 111.701 |
| 23 | 170.587 | 115.741 |
| 24 | 174.924 | 119.887 |
| 25 | 179.159 | 124.138 |
| 26 | 183.289 | 128.490 |
| 27 | 187.313 | 132.941 |
| 28 | 191.227 | 137.488 |
| 29 | 195.030 | 142.129 |
| 30 | 198.718 | 146.862 |
| 31 | 202.291 | 151.682 |
| 32 | 205.745 | 156.588 |
| 33 | 209.079 | 161.576 |
| 34 | 212.291 | 166.644 |
| 35 | 215.379 | 171.788 |
| 36 | 218.342 | 177.006 |
| 37 | 221.176 | 182.294 |

| | | |
|---|---|---|
| 38 | 223.881 | 187.650 |
| 39 | 226.455 | 193.070 |
| 40 | 228.897 | 198.550 |
| 41 | 231.205 | 204.089 |
| 42 | 231.586 | 205.069 |

Circle Center At X = 2.134 ; Y = 296.264 ; and Radius = 246.910

Factor of Safety

*** 1.834 ***

Failure Surface Specified By 41 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 55.102 | 55.102 |
| 2 | 60.959 | 56.406 |
| 3 | 66.779 | 57.861 |
| 4 | 72.560 | 59.468 |
| 5 | 78.298 | 61.224 |
| 6 | 83.987 | 63.129 |
| 7 | 89.625 | 65.181 |
| 8 | 95.208 | 67.379 |
| 9 | 100.732 | 69.721 |
| 10 | 106.193 | 72.206 |
| 11 | 111.588 | 74.833 |
| 12 | 116.912 | 77.599 |
| 13 | 122.163 | 80.502 |
| 14 | 127.337 | 83.541 |
| 15 | 132.430 | 86.713 |
| 16 | 137.438 | 90.017 |
| 17 | 142.359 | 93.450 |
| 18 | 147.189 | 97.009 |
| 19 | 151.925 | 100.693 |
| 20 | 156.564 | 104.499 |
| 21 | 161.101 | 108.424 |
| 22 | 165.536 | 112.466 |
| 23 | 169.864 | 116.622 |
| 24 | 174.082 | 120.889 |
| 25 | 178.188 | 125.264 |
| 26 | 182.178 | 129.744 |
| 27 | 186.051 | 134.327 |
| 28 | 189.804 | 139.009 |
| 29 | 193.433 | 143.786 |
| 30 | 196.937 | 148.657 |
| 31 | 200.313 | 153.617 |
| 32 | 203.559 | 158.663 |
| 33 | 206.673 | 163.792 |
| 34 | 209.652 | 169.000 |
| 35 | 212.495 | 174.284 |
| 36 | 215.200 | 179.640 |
| 37 | 217.764 | 185.064 |
| 38 | 220.186 | 190.553 |
| 39 | 222.465 | 196.104 |
| 40 | 224.599 | 201.711 |
| 41 | 224.903 | 202.576 |

Circle Center At X = 7.898 ; Y = 280.959 ; and Radius = 230.737

Factor of Safety

*** 1.837 ***

Failure Surface Specified By 43 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 54.082 | 54.082 |
| 2 | 59.779 | 55.963 |
| 3 | 65.441 | 57.948 |
| 4 | 71.067 | 60.035 |
| 5 | 76.653 | 62.223 |
| 6 | 82.200 | 64.512 |
| 7 | 87.703 | 66.901 |
| 8 | 93.163 | 69.390 |
| 9 | 98.576 | 71.977 |

| | | |
|---|---|---|
| 10 | 103.942 | 74.662 |
| 11 | 109.258 | 77.444 |
| 12 | 114.523 | 80.321 |
| 13 | 119.735 | 83.294 |
| 14 | 124.893 | 86.360 |
| 15 | 129.993 | 89.519 |
| 16 | 135.036 | 92.771 |
| 17 | 140.019 | 96.113 |
| 18 | 144.941 | 99.545 |
| 19 | 149.800 | 103.065 |
| 20 | 154.594 | 106.673 |
| 21 | 159.322 | 110.367 |
| 22 | 163.982 | 114.146 |
| 23 | 168.573 | 118.009 |
| 24 | 173.093 | 121.955 |
| 25 | 177.541 | 125.981 |
| 26 | 181.915 | 130.088 |
| 27 | 186.215 | 134.274 |
| 28 | 190.437 | 138.536 |
| 29 | 194.582 | 142.874 |
| 30 | 198.647 | 147.287 |
| 31 | 202.632 | 151.773 |
| 32 | 206.535 | 156.330 |
| 33 | 210.355 | 160.957 |
| 34 | 214.090 | 165.653 |
| 35 | 217.739 | 170.415 |
| 36 | 221.302 | 175.243 |
| 37 | 224.777 | 180.135 |
| 38 | 228.162 | 185.088 |
| 39 | 231.457 | 190.102 |
| 40 | 234.661 | 195.176 |
| 41 | 237.772 | 200.306 |
| 42 | 240.790 | 205.492 |
| 43 | 242.912 | 209.295 |

Circle Center At X = -46.908 ; Y = 369.436 ; and Radius = 331.131

Factor of Safety

*** 1.840 ***

Failure Surface Specified By 45 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 55.102 | 55.102 |
| 2 | 60.938 | 56.496 |
| 3 | 66.743 | 58.012 |
| 4 | 72.515 | 59.651 |
| 5 | 78.251 | 61.410 |
| 6 | 83.949 | 63.289 |
| 7 | 89.607 | 65.288 |
| 8 | 95.221 | 67.406 |
| 9 | 100.789 | 69.641 |
| 10 | 106.309 | 71.993 |
| 11 | 111.778 | 74.460 |
| 12 | 117.194 | 77.042 |
| 13 | 122.555 | 79.737 |
| 14 | 127.857 | 82.544 |
| 15 | 133.100 | 85.462 |
| 16 | 138.280 | 88.490 |
| 17 | 143.395 | 91.626 |
| 18 | 148.443 | 94.869 |
| 19 | 153.422 | 98.218 |
| 20 | 158.329 | 101.671 |
| 21 | 163.162 | 105.225 |
| 22 | 167.920 | 108.881 |
| 23 | 172.600 | 112.636 |
| 24 | 177.199 | 116.489 |
| 25 | 181.717 | 120.438 |
| 26 | 186.150 | 124.481 |
| 27 | 190.498 | 128.616 |

| | | |
|---|---|---|
| 28 | 194.757 | 132.841 |
| 29 | 198.927 | 137.156 |
| 30 | 203.005 | 141.557 |
| 31 | 206.990 | 146.043 |
| 32 | 210.879 | 150.611 |
| 33 | 214.671 | 155.261 |
| 34 | 218.365 | 159.989 |
| 35 | 221.959 | 164.794 |
| 36 | 225.450 | 169.673 |
| 37 | 228.838 | 174.625 |
| 38 | 232.122 | 179.647 |
| 39 | 235.299 | 184.737 |
| 40 | 238.368 | 189.893 |
| 41 | 241.328 | 195.112 |
| 42 | 244.177 | 200.392 |
| 43 | 246.915 | 205.731 |
| 44 | 249.540 | 211.126 |
| 45 | 249.898 | 211.902 |

Circle Center At X = -8.242 ; Y = 333.209 ; and Radius = 285.230

Factor of Safety

*** 1.841 ***

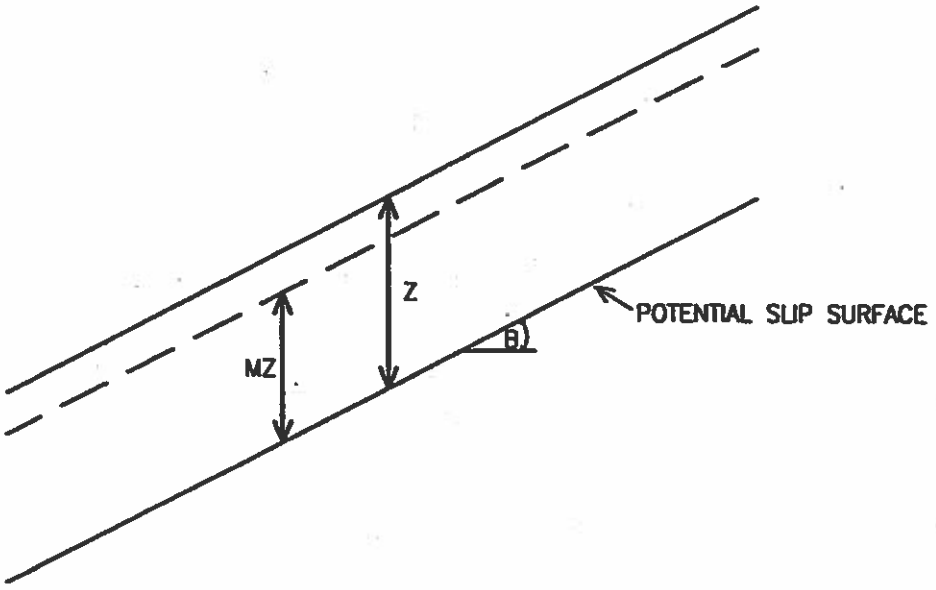
Failure Surface Specified By 49 Coordinate Points

| Point No. | X-Surf (ft) | Y-Surf (ft) |
|---|---|---|
| 1 | 50.000 | 50.000 |
| 2 | 55.696 | 51.885 |
| 3 | 61.364 | 53.853 |
| 4 | 67.004 | 55.902 |
| 5 | 72.613 | 58.032 |
| 6 | 78.191 | 60.243 |
| 7 | 83.736 | 62.534 |
| 8 | 89.248 | 64.905 |
| 9 | 94.725 | 67.355 |
| 10 | 100.166 | 69.884 |
| 11 | 105.570 | 72.491 |
| 12 | 110.935 | 75.176 |
| 13 | 116.262 | 77.938 |
| 14 | 121.548 | 80.776 |
| 15 | 126.792 | 83.691 |
| 16 | 131.994 | 86.681 |
| 17 | 137.153 | 89.746 |
| 18 | 142.266 | 92.885 |
| 19 | 147.334 | 96.097 |
| 20 | 152.354 | 99.382 |
| 21 | 157.327 | 102.739 |
| 22 | 162.251 | 106.168 |
| 23 | 167.125 | 109.667 |
| 24 | 171.948 | 113.236 |
| 25 | 176.719 | 116.875 |
| 26 | 181.437 | 120.582 |
| 27 | 186.101 | 124.357 |
| 28 | 190.709 | 128.198 |
| 29 | 195.262 | 132.106 |
| 30 | 199.759 | 136.079 |
| 31 | 204.197 | 140.116 |
| 32 | 208.577 | 144.218 |
| 33 | 212.897 | 148.381 |
| 34 | 217.156 | 152.607 |
| 35 | 221.354 | 156.894 |
| 36 | 225.490 | 161.241 |
| 37 | 229.562 | 165.647 |
| 38 | 233.571 | 170.111 |
| 39 | 237.515 | 174.633 |
| 40 | 241.393 | 179.212 |
| 41 | 245.204 | 183.845 |
| 42 | 248.949 | 188.534 |
| 43 | 252.625 | 193.275 |

```
   44        256.232      198.070
   45        259.770      202.916
   46        263.238      207.812
   47        266.635      212.758
   48        269.960      217.753
   49        271.349      219.906
Circle Center At X =   -77.797 ; Y =   445.653 ; and Radius =   415.780
      Factor of Safety
     ***    1.842   ***
         **** END OF GSTABL7 OUTPUT ****
```

# SURFICIAL SLOPE STABILITY ANALYSIS

Reference: USGS Professional Paper 851, Campbell, 1975




$$F.S. = \frac{C + (\gamma_S - M\gamma_W)\ Z\ \cos^2 B\ \tan \phi}{\gamma_S Z\ \sin B\ \cos B}$$

C = COHESION = 150 PSF

$\phi$ = ANGLE OF SHEARING RESISTANCE = 36 degrees

$\gamma_S$ = UNIT WEIGHT OF THE SOIL = 120 PCF

$\gamma_W$ = UNIT WEIGHT OF WATER = 62.4 PCF

B = SLOPE ANGLE = 40 degrees.

Z = VERTICAL DEPTH OF SLIP SURFACE = 2 FEET (3' MAX)

M = FRACTION OF Z SUCH THAT MS IS THE VERTICAL HEIGHT OF THE TEMPORARY WATER SURFACE ABOVE THE SLIP SURFACE = 1

$$F.S. = \frac{150 + (120 - 62.4)\ 2\ \cos^2 40\ \tan 36}{120\ 2\ \sin 40\ \cos 40} = 1.68 > 1.5 = O.K.$$

CALIFORNIA GEOSYSTEMS

*Project:* 8350 Grandview Drive
Los Angeles, California
*Date:* November 1997
*GS #* 97-912

PLATE SA-2

# PARMELEE/GEOLOGY

**Earth Science Consulting Services**

## Retaining Wall Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Retaining Wall supporting Granite up to 21 feet high, with a 13 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction (ϕ) |
| 1350 psf | 124 pcf | 41 ° |

| Retaining Wall Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 13° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.5

$Cd = C / Fs = 900$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 30.09°$

35 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 46 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE RETAINING WALL AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 62 degrees | 134 sq. ft. | N/A | -14552 lbs | -66 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED RETAINING WALL UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 43 PCF.

# PARMELEE/GEOLOGY

**Earth Science Consulting Services**

## Retaining Wall Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Retaining Wall supporting Granite up to 21 feet high, with a 18 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction (ϕ) |
| 1350 psf | 124 pcf | 41 ° |

| Retaining Wall Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 18° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.5

$Cd = C / Fs = 900$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 30.09°$

51 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 30 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE RETAINING WALL AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 63 degrees | 135 sq. ft. | N/A | -15394 lbs | -69.9 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED RETAINING WALL UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 43 PCF.

# PARMELEE/GEOLOGY

**Earth Science Consulting Services**

## Retaining Wall Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Retaining Wall supporting Granite up to 21 feet high, with a 26 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction (ϕ) |
| 1350 psf | 124 pcf | 41 ° |

| Retaining Wall Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 26° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.5

$Cd = C / Fs = 900$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 30.09°$

51 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 30 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE RETAINING WALL AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 65 degrees | 134 sq. ft. | N/A | -16963 lbs | -77 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED RETAINING WALL UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 43 PCF.

# PARMELEE/GEOLOGY

**Earth Science Consulting Services**

## Retaining Wall Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Retaining Wall supporting Granite up to 21 feet high, with a 34 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction (ϕ) |
| 1350 psf | 124 pcf | 41 ° |

| Retaining Wall Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 34° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.5

$Cd = C / Fs = 900$ psf

$$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 30.09\ °$$

46 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 35 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE RETAINING WALL AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 68 degrees | 123 sq. ft. | N/A | -18903 lbs | -85.8 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED RETAINING WALL UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 43 PCF.

# PARMELEE/GEOLOGY

**Earth Science Consulting Services**

## Retaining Wall Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Retaining Wall supporting Granite up to 21 feet high, with a 45 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Retaining Wall Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 45° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.5

$Cd = C / Fs = 900$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 30.09$ °

35 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 46 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE RETAINING WALL AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 72 degrees | 107 sq. ft. | N/A | -22413 lbs | -101.7 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED RETAINING WALL UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 43 PCF.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Shoring Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Temporary Shoring supporting Granite up to 21 feet high, with a 0 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Temporary Shoring Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 0° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82$ °

46 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 35 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE TEMPORARY SHORING AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 62 degrees | 118 sq. ft. | N/A | -16241 lbs | -73.7 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED TEMPORARY SHORING UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 30 PCF.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Shoring Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Temporary Shoring supporting Granite up to 21 feet high, with a 13 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Temporary Shoring Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 13° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82°$

46 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 35 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE TEMPORARY SHORING AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 65 degrees | 116 sq. ft. | N/A | -18325 lbs | -83.2 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED TEMPORARY SHORING UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 30 PCF.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Shoring Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Temporary Shoring supporting Granite up to 21 feet high, with a 18 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Temporary Shoring Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 18° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf $\qquad \phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82°$

46 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 35 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE TEMPORARY SHORING AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 66 degrees | 115 sq. ft. | N/A | -19241 lbs | -87.3 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED TEMPORARY SHORING UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 30 PCF.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Shoring Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Temporary Shoring supporting Granite up to 21 feet high, with a 26 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Temporary Shoring Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 26° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82$ °

46 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 35 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE TEMPORARY SHORING AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 68 degrees | 111 sq. ft. | N/A | -20888 lbs | -94.8 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED TEMPORARY SHORING UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 30 PCF.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Shoring Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Temporary Shoring supporting Granite up to 21 feet high, with a 34 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Temporary Shoring Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 34° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82°$

46 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 35 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE TEMPORARY SHORING AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 71 degrees | 99 sq. ft. | N/A | -22811 lbs | -103.5 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED TEMPORARY SHORING UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 30 PCF.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Shoring Analysis

**PG1091 CAC**

Calculate the design minimum Equivalent Fluid Pressure (EFP) for proposed Temporary Shoring supporting Granite up to 21 feet high, with a 45 degree backslope. Assume the backfill is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Temporary Shoring Properties | | |
|---|---|---|
| Retained Height | Backslope Angle | Surcharge |
| 21 feet | 45° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82°$

35 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 46 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

## DESIGN THE TEMPORARY SHORING AS FOLLOWS:

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 75 degrees | 81 sq. ft. | N/A | -26016 lbs | -118 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT THE PROPOSED TEMPORARY SHORING UP TO 21 FEET HIGH SUPPORTING GRANITE MAY BE DESIGNED FOR A MINIMUM EFP OF 30 PCF.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Stability Analysis

**PG1091 CAC**

Calculate the maximum allowable height of Temporary Vertical Excavations in Granite with a 0 degree backslope. Assume the Granite is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Proposed Cut | | |
|---|---|---|
| Height | Backslope Angle | Surcharge |
| 15 feet | 0° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82$ °

35 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 46 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

**The maximum height of vertical excavations is 15 feet, per the following:**

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 62 degrees | 60 sq. ft. | N/A | -13125 lbs | -116.7 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT TEMPORARY VERTICAL EXCAVATIONS UP TO 15 FEET HIGH EXPOSING GRANITE WILL HAVE A NEGATIVE THRUST AND ARE THEREFORE TEMPORARILY STABLE.

# GEOMATRIX, INC.

**Geotechnical Services**

## Temporary Stability Analysis

**PG1091 CAC**

Calculate the maximum allowable height of Temporary Vertical Excavations in Granite with a 45 degree backslope. Assume the Granite is saturated with no excess hydrostatic pressure.

| Granite Properties (Saturated) | | |
|---|---|---|
| Cohesion (C) | Saturated Density (Ws) | Angle of Internal Friction ($\phi$) |
| 1350 psf | 124 pcf | 41 ° |

| Proposed Cut | | |
|---|---|---|
| Height | Backslope Angle | Surcharge |
| 15 feet | 45° | pounds |

FOR FACTOR OF SAFETY (Fs) = 1.25

$Cd = C / Fs = 1080$ psf

$\phi d = \text{ARCTAN}\frac{\text{TAN}(\phi)}{Fs} = 34.82°$

35 TRIALS WERE ANALYZED USING ASSUMED FAILURE ANGLES VARYING FROM 46 TO 80 DEGREES AT 1 DEGREE INTERVALS, AND NO TENSION CRACK.

**The maximum height of vertical excavations is 15 feet, per the following:**

| Critical Failure Angle: | Area of Failure Wedge: | Tension Crack Depth: | Maximum Horizontal Thrust: | Equivalent Fluid Pressure: |
|---|---|---|---|---|
| 78 degrees | 31 sq. ft. | N/A | -20148 lbs | -179.1 pcf |

## CONCLUSIONS:

THE CALCULATION INDICATES THAT TEMPORARY VERTICAL EXCAVATIONS UP TO 15 FEET HIGH EXPOSING GRANITE WILL HAVE A NEGATIVE THRUST AND ARE THEREFORE TEMPORARILY STABLE.

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************************************************************
*  EQUIVALENT FLUID PRESSURE (FREE BODY DIAGRAM METHOD)   *
*     PROGRAM MADE BY C. Y. GEOTECH, INC.  (JUNE 1997)    *
************************************************************

PROJECT NAME : RH=10' w/ Level Ground

GEOMETRY OF CRITICAL ACTIVE WEDGE :
      HEIGHT OF RETAINING WALL          = 10 FEET
      SLOPE ANGLE OF RETAINED SLOPE     = 0 DEG
      DIP ANGLE OF CRITICAL WEDGE       = 55 DEG

SHEAR STRENGTH PARAMETERS :
      UNIT WEIGHT                       = 138 PCF
      COHESION                          = 150 PSF
      FRICTION ANGLE                    = 29.5 DEG
      MOBILIZED COHESION                = 100 PSF
      MOBILIZED FRICTION ANGLE          = 20.7 DEG

REQUIRED FACTOR OF SAFETY               = 1.5


*************
*  RESULTS  *
*************

DIP ANGLE OF CRITICAL SLIP SURFACE  = 55 DEG

TOTAL WEIGHT OF ACTIVE WEDGE        = 4831 LBS

FRICTIONAL RESISTANCE (Cm * L)      = 1220 LBS

REQUIRED EXTERNAL FORCE FOR WALL    = 1916 LBS

REQUIRED EQUIVALENT FLUID PRESSURE  = 38.3 PSF/FT

**  RANKINE WEDGE IS NOT THE MOST CRITICAL WEDGE  **
```

**Figure 1**

# CALCULATION OF ACTIVE LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / level ground / static

**Geometry of Critical Active Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 0 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical Active Wedge | = 60 degree |
| Length of Slip Surface | = 19.63 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 900 psf |
| Mobilized Friction Angle ($\phi$m) | = 30.1 degree |
| **Required Factor of Safety** | = 1.50 |
| **Seismic Coefficient** | = 0 |

**Calculations:**

Dip Angle of Critical Active Wedge = 60 degree

Total Weight of Critical Active Wedge = 17325 - 895 = 16430 lbs

Frictional Resistance (Cm x L) = 900 x 19.63 = 17667 lbs

Unbalanced Lateral Force =

= [16430 - 17667 x Sin(60)] x Tan(60 - 30.1) - 17667 x Cos(60) = - 8184 lbs/ft

EFP for Static Stability Condition = 2 x (- 8184) / $22^2$ = - 33.8 psf/ft

Recommended Active EFP = 30 psf/ft (Triangular-distributed)

Recommended At-Rest EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 1**

# CALCULATION OF ACTIVE LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / level ground / seismic

**Geometry of Critical Active Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 0 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical Active Wedge | = 60 degree |
| Length of Slip Surface | = 19.63 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 1227 psf |
| Mobilized Friction Angle ($\phi$m) | = 38.4 degree |

**Required Factor of Safety** = 1.10

**Seismic Coefficient** = 0.241g

**Calculations:**

Dip Angle of Critical Active Wedge = 60 degree

Total Weight of Critical Active Wedge = 17325 - 895 = 16430 lbs

Frictional Resistance (Cm x L) = 1227 x 19.63 = 24086 lbs

Unbalanced Lateral Force =

= [16430 - 24086 x Sin(60)] x Tan(60 - 38.4) - 24086 x Cos(60) + 16430 x 0.241 x 1.1

= - 9441 lbs/ft

EFP for Seismic Condition = 2 x (- 9441) / $22^2$ = - 39.0 psf/ft

Static Stability Condition is Critical than Seismic Stability Condition

Recommended Active EFP = 30 psf/ft (Triangular-distributed)

Recommended At-Rest EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 2**

# CALCULATION OF ACTIVE LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 2:1 slope / static

**Geometry of Critical Active Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 26.6 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical Active Wedge | = 65 degree |
| Length of Slip Surface | = 24.46 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 900 psf |
| Mobilized Friction Angle ($\phi$m) | = 30.1 degree |

**Required Factor of Safety** = 1.50

**Seismic Coefficient** = 0

**Calculations:**

Dip Angle of Critical Active Wedge = 65 degree

Total Weight of Critical Active Wedge = 18246 - 942 = 17304 lbs

Frictional Resistance (Cm x L) = 900 x 24.46 = 22014 lbs

Unbalanced Lateral Force =

= [17304 - 22014 x Sin(65)] x Tan(65-30.1) - 22014 x Cos(65) = - 11150 lbs/ft

EFP for Static Stability Condition = 2 x (- 11150) / $22^2$ = - 46.1 psf/ft

Recommended Active EFP = 30 psf/ft (Triangular-distributed)

Recommended At-Rest EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 3**

# CALCULATION OF ACTIVE LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 2:1 slope / seismic

**Geometry of Critical Active Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 26.6 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical Active Wedge | = 65 degree |
| Length of Slip Surface | = 24.46 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 1227 psf |
| Mobilized Friction Angle ($\phi$m) | = 38.4 degree |
| **Required Factor of Safety** | = 1.10 |
| **Seismic Coefficient** | = 0.241g |

**Calculations:**

Dip Angle of Critical Active Wedge = 65 degree

Total Weight of Critical Active Wedge = 18246 - 942 = 17304 lbs lbs

Frictional Resistance (Cm x L) = 1227 x 24.46 = 30012 lbs

Unbalanced Lateral Force =

= [17304 - 30012 x Sin(65)] x Tan(65-38.4) - 30012 x Cos(65) + 17304 x 0.241 x 1.1

= - 13051 lbs/ft

EFP for Seismic Stability Condition = 2 x (- 13051) / $22^2$ = - 53.9 psf/ft

Static Stability Condition is Critical than Seismic Stability Condition

Recommended Active EFP = 30 psf/ft (Triangular-distributed)

Recommended At-Rest EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 4**

# CALCULATION OF ACTIVE LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 1:1 Slope / static

**Geometry of Critical Active Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 45 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical Active Wedge | = 66 degree |
| Length of Slip Surface | = 33.54 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 900 psf |
| Mobilized Friction Angle ($\phi$m) | = 30.1 degree |
| **Required Factor of Safety** | = 1.50 |
| **Seismic Coefficient** | = 0 |

**Calculations:**

Dip Angle of Critical Active Wedge = 66 degree

Total Weight of Critical Active Wedge = 24083 - 1244 = 22839 lbs

Frictional Resistance (Cm x L) = 900 x 33.54 = 30186 lbs

Unbalanced Lateral Force =

= [22839 - 30186 x Sin(66)] x Tan(66 - 30.1) - 30186 x Cos(66) = - 15706 lbs/ft

EFP for Static Stability Condition = 2 x (- 15706) / $22^2$ = - 64.9 psf/ft

Recommended Active EFP = 30 psf/ft (Triangular-distributed)

Recommended At-Rest EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 5**

# CALCULATION OF ACTIVE LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 1:1 Slope / seismic

**Geometry of Critical Active Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 45 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical Active Wedge | = 66 degree |
| Length of Slip Surface | = 33.54 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 1227 psf |
| Mobilized Friction Angle ($\phi$m) | = 38.4 degree |
| **Required Factor of Safety** | = 1.10 |
| **Seismic Coefficient** | = 0.241g |

**Calculations:**

Dip Angle of Critical Active Wedge = 66 degree

Total Weight of Critical Active Wedge = 24083 - 1244 = 22839 lbs

Frictional Resistance (Cm x L) = 1227 x 33.54 = 41153 lbs

Unbalanced Lateral Force =

= [22839 - 41153 x Sin(66)] x Tan(66 - 38.4) - 41153 x Cos(66) + 22839 x 0.241 x 1.1

= - 18398 lbs/ft

EFP for Seismic Condition = 2 x (- 18398) / $22^2$ = - 76.0 psf/ft

Static Stability Condition is Critical than Seismic Stability Condition

Recommended Active EFP = 30 psf/ft (Triangular-distributed)

Recommended At-Rest EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 6**

# CALCULATION OF AT-REST LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / level ground / static

**Geometry of Critical At-Rest Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 0 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical At-Rest Wedge | = 60 degree |
| Length of Slip Surface | = 19.63 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 900 psf |
| Mobilized Friction Angle ($\phi$m) | = 30.1 degree |
| **Required Factor of Safety** | = 1.50 |
| **Seismic Coefficient** | = 0 |

**Calculations:**

Dip Angle of Critical At-Rest Wedge = 60 degree

Total Weight of Critical At-Rest Wedge = 17325 - 895 = 16430 lbs

Frictional Resistance (Cm x L) = 900 x 19.63 = 17667 lbs

Unbalanced Lateral Force =

= [16430 - 17667 x Sin(60)] x Tan(60) - 17667 x Cos(60) = - 6876 lbs

EFP for Static Stability Condition = 2 x (- 6876) / $22^2$ = - 28.4 psf/ft

Recommended EFP = 30 x (1 + Sin(41) ) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 1**

# CALCULATION OF AT-REST LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / level ground / seismic

**Geometry of Critical At-Rest Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 0 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical At-Rest Wedge | = 60 degree |
| Length of Slip Surface | = 19.63 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 1227 psf |
| Mobilized Friction Angle ($\phi$m) | = 38.4 degree |
| **Required Factor of Safety** | = 1.10 |
| **Seismic Coefficient** | = 0.241g |

**Calculations:**

Dip Angle of Critical At-Rest Wedge = 60 degree

Total Weight of Critical At-Rest Wedge = 17325 - 895 = 16430 lbs

Frictional Resistance (Cm x L) = 1227 x 19.63 = 24086 lbs

Unbalanced Lateral Force =

= [16430 - 24086 x Sin(60)] x Tan(60) - 24086 x Cos(60) + 16430 x 0.241 x 1.1

= - 15359 lbs

EFP for Seismic Stability Condition = 2 x (- 15359) / $22^2$ = - 63.5 psf/ft

Static Stability Condition is Critical Than Seismic Stability Condition

Recommended EFP = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 2**

# CALCULATION OF AT-REST LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 2:1 slope / static

**Geometry of Critical At-Rest Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 26.56 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical At-Rest Wedge | = 65 degree |
| Length of Slip Surface | = 24.46 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 900 psf |
| Mobilized Friction Angle ($\phi$m) | = 30.1 degree |
| **Required Factor of Safety** | = 1.50 |
| **Seismic Coefficient** | = 0 |

**Calculations:**

Dip Angle of Critical At-Rest Wedge = 65 degree

Total Weight of Critical At-Rest Wedge = 18246 - 942 = 17304 lbs

Frictional Resistance (Cm x L) = 900 x 24.46 = 22014 lbs

Unbalanced Lateral Force =

= [17304 - 22014 x Sin(65)] x Tan(65) - 22014 x Cos(65) = - 14981 lbs

EFP for Static Stability Condition = 2 x (- 14981) / $22^2$ = - 61.9 psf/ft

Recommended EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 3**

# CALCULATION OF AT-REST LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 2:1 slope / seismic

**Geometry of Critical At-Rest Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 26.56 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical At-Rest Wedge | = 65 degree |
| Length of Slip Surface | = 24.46 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 1227 psf |
| Mobilized Friction Angle ($\phi$m) | = 38.4 degree |
| **Required Factor of Safety** | = 1.10 |
| **Seismic Coefficient** | = 0.241g |

**Calculations:**

Dip Angle of Critical At-Rest Wedge = 65 degree

Total Weight of Critical At-Rest Wedge = 18246 - 942 = 17304 lbs

Frictional Resistance (Cm x L) = 1227 x 24.46 = 30012 lbs

Unbalanced Lateral Force =

= [17304 - 30012 x Sin(65)] x Tan(65) - 30012 x Cos(65) + 17304 x 0.241 x 1.1

= - 29318 lbs

EFP for Seismic Stability Condition = 2 x (- 29318) / $22^2$ = - 121.2 psf/ft

Static Stability Condition is Critical than Seismic Stability Condition

Recommended EFP = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 4**

# CALCULATION OF AT-REST LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 1:1 slope / static

**Geometry of Critical At-Rest Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 45 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical At-Rest Wedge | = 66 degree |
| Length of Slip Surface | = 33.54 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 900 psf |
| Mobilized Friction Angle ($\phi$m) | = 30.1 degree |
| **Required Factor of Safety** | = 1.50 |
| **Seismic Coefficient** | = 0 |

**Calculations:**

Dip Angle of Critical At-Rest Wedge = 66 degree

Total Weight of Critical At-Rest Wedge = 24083 - 1244 = 22839 lbs

Frictional Resistance (Cm x L) = 900 x 33.54 = 30186 lbs

Unbalanced Lateral Force =

= [22839 - 30186 x Sin(66)] x Tan(66) - 30186 x Cos(66) = - 22917 lbs

EFP for Static stability Condition = 2 x (- 22917) / $22^2$ = - 94.7 psf/ft

Recommended EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 5**

# CALCULATION OF AT-REST LATERAL FORCE FOR RETAINING WALL DESIGN

**Project Name** : CYG-02-2541 / 22 feet high subterraneous wall / 1:1 slope / seismic

**Geometry of Critical Active Wedge:**

| | |
|---|---|
| Height of Retaining Wall | = 22 ft |
| Angle of Slope above Temporary Excavation | = 45 degree |
| Depth of Tension Crack | = 5 ft |
| Dip Angle of Critical Wedge | = 66 degree |
| Length of Slip Surface | = 33.54 ft |

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |
| Mobilized Cohesion (Cm) | = 1227 psf |
| Mobilized Friction Angle ($\phi$m) | = 38.4 degree |
| **Required Factor of Safety** | = 1.10 |
| **Seismic Coefficient** | = 0.241g |

**Calculations:**

Dip Angle of Critical Active = 66 degree

Total Weight of Critical Wedge = 24083 - 1244 = 22839 lbs

Frictional Resistance (Cm x L) = 1227 x 33.54 = 41154 lbs

Unbalanced Lateral Force =

= [22839 - 41154 x Sin(66)] x Tan(66) - 41154 x Cos(66) + 22839 x 0.241 x 1.1

= - 43829 lbs

EFP for Seismic Stability Condition = 2 x (- 43829) / $22^2$ = - 181.1 psf/ft

Static Stability Condition is Critical than Seismic Stability Condition

Recommended EFP = 30 x (1 + Sin(41)) = 50 psf/ft (Triangular-distributed)

Recommended Lateral Force = 32H psf per linear foot of width
Trapezoidal-distributed (0.2H - 0.8H - 0.2H)
H is retaining height

**Figure 6**

# PASSIVE EARTH PRESSURE CALCULATION

**Project Name** : PG / CAC / PG-1091 / Case 1 / Slope Angle = 35°

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |

Surrounding Ground : 35° descending slope
Depth of Overlying Soil = 2 ft
Depth of Fixity Point = 5 ft

Kp = 1.128 $KP^{1/2}$ = 1.062

Recommended Passive Earth Pressure = 500 psf/ft to a maximum of 5000 psf

Total Pile Depth to Reach a Footing Setback of 20 ft = 14 ft
Pile Embedment Depth to Reach a Footing Setback of 20 ft = 9 ft

Embedment Depth = 9 ft Passive Earth Pressure = 4500 psf
Overburden = 9 + 5 = 14 ft
Pp = 0.5 x 124 x 14 x 14 x 1.128 + 2 x 1350 x 14 x 1.062 = 53851 lbs/ft
Recommended Passive Earth Pressure = 0.5 x 500 x $9^2$ = 20250 lbs/ft
FS for Allowable Passive Earth Resistance = 53851 / 20250 = 2.66 O.K.

Embedment Depth = 10 ft Passive Earth Pressure = 5000 psf
Overburden = 10 + 5 = 15 ft
Pp = 0.5 x 124 x 15 x 15 x 1.128 + 2 x 1350 x 15 x 1.062 = 58746 lbs/ft
Recommended Passive Earth Pressure = 0.5 x 500 x $10^2$ = 25000 lbs/ft
FS for Allowable Passive Earth Resistance = 58746 / 25000 = 2.35 O.K.

# PASSIVE EARTH PRESSURE CALCULATION

**Project Name** : PG / CAC / PG-1091 / Case 2 / Slope Angle = 40°

**Shear Strength Parameters of Earth Material:**

| | |
|---|---|
| Unit Weight | = 124 pcf |
| Cohesion (C) | = 1350 psf |
| Friction Angle ($\phi$) | = 41 degree |

Surrounding Ground : 40° descending slope
Depth of Overlying Soil = 2 ft
Depth of Fixity Point = 5 ft

Kp = 0.739 $KP^{1/2} = 0.860$

Recommended Passive Earth Pressure = 500 psf/ft to a maximum of 5000 psf

Total Pile Depth to Reach a Footing Setback of 20 ft = 17 ft
Pile Embedment Depth to Reach a Footing Setback of 20 ft = 12 ft

Embedment Depth = 10 ft Passive Earth Pressure = 5000 psf
Overburden = 10 + 5 = 15 ft
Pp = 0.5 x 124 x 15 x 15 x 0.739 + 2 x 1350 x 15 x 0.860 = 45139 lbs/ft
Recommended Passive Earth Pressure = 0.5 x 500 x $10^2$ = 25000 lbs/ft
FS for Allowable Passive Earth Resistance = 45139 / 25000 = 1.81 O.K.

Embedment Depth = 12 ft Passive Earth Pressure = 5000 psf
Overburden = 12 + 5 = 17 ft
Pp = 0.5 x 124 x 17 x 17 x 0.739 + 2 x 1350 x 17 x 0.860 = 52715 lbs/ft
Recommended Passive Earth Pressure = 0.5 x 500 x $10^2$ + 5000 x 2 = 35000 lbs/ft
FS for Allowable Passive Earth Resistance = 52715 / 35000 = 1.51 O.K.

# PASSIVE EARTH PRESSURE CALCULATION

**Project Name** : PG / CAC / PG-1091 / Case 3 / Level Ground

**Shear Strength Parameters of Earth Material:**

Unit Weight = 124 pcf
Cohesion (C) = 1350 psf
Friction Angle ($\phi$) = 41 degree

Surrounding Ground : 0° descending slope
Depth of Overlying Soil = 2 ft
Depth of Fixity Point = 3 ft

Kp = 4.81 $KP^{1/2} = 2.19$

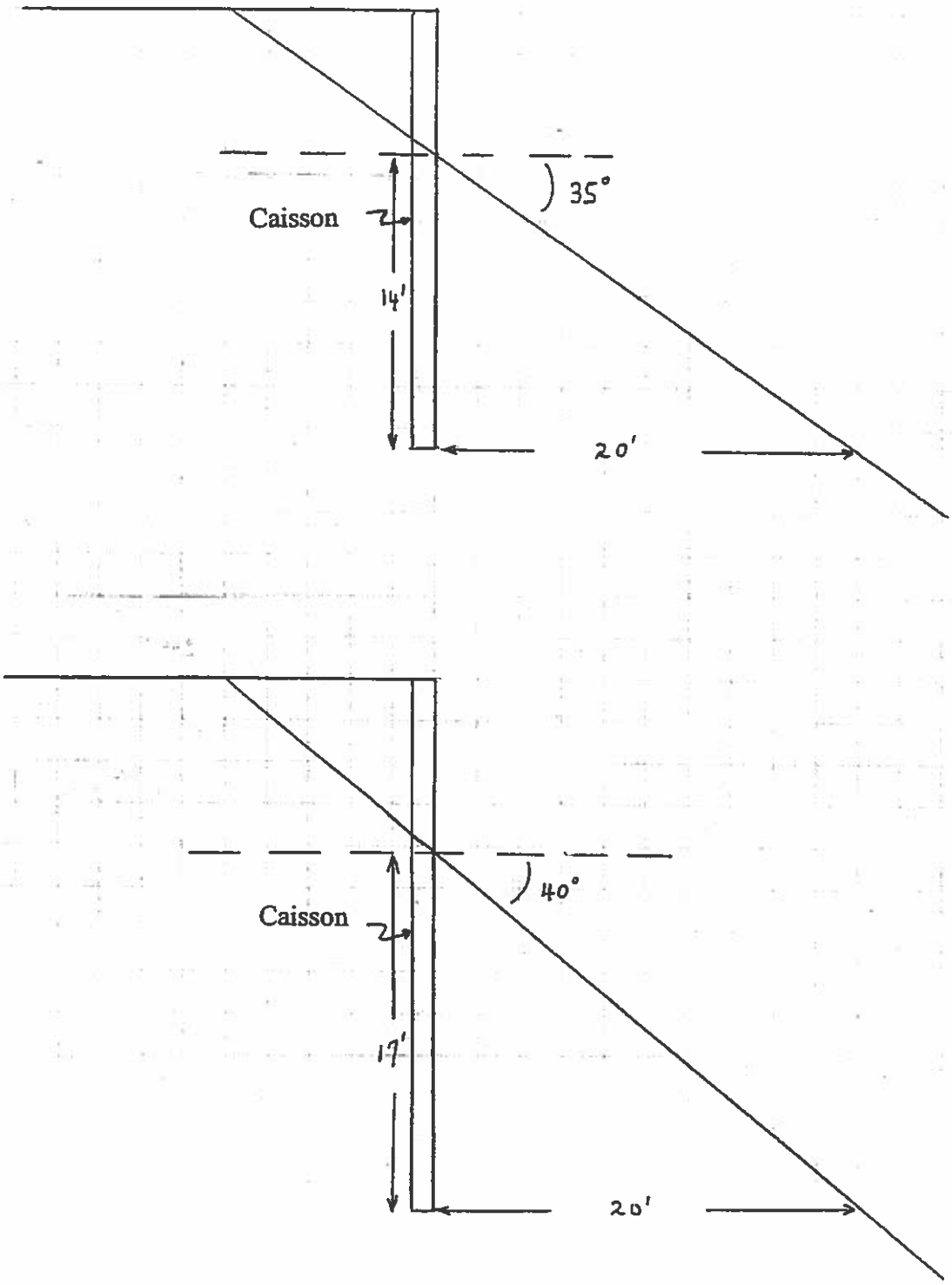
Recommended Passive Earth Pressure = 500 psf/ft to a maximum of 5000 psf

Lateral Force provided by the upper 5 feet (to be neglected) =
0.5 x 124 x 5 x 5 x 4.81 + 2 x 1350 x 5 x 2.19 = 37020 lbs/ft

Embedment Depth = 5 ft Passive Earth Pressure = 2500 psf
Overburden = 5 + 5 = 10 ft
Pp = 0.5 x 124 x 10 x 10 x 4.81 + 2 x 1350 x 10 x 2.19 - 37020 = 51932 lbs/ft
Recommended Passive Earth Pressure = 0.5 x 500 x $5^2$ = 6250 lbs/ft
FS for Allowable Passive Earth Resistance = 51932 / 6250 = 8.31 O.K.

Embedment Depth = 10 ft Passive Earth Pressure = 5000 psf
Overburden = 10 + 5 = 15 ft
Pp = 0.5 x 124 x 15 x 15 x 4.81 + 2 x 1350 x 15 x 2.19 - 37020 = 118774 lbs/ft
Recommended Passive Earth Pressure = 0.5 x 500 x $10^2$ = 25000 lbs/ft
FS for Allowable Passive Earth Resistance = 118774 / 25000 = 4.75 O.K.

Embedment Depth = 15 ft Passive Earth Pressure = 5000 psf
Overburden = 15 + 5 = 20 ft
Pp = 0.5 x 124 x 20 x 20 x 4.81 + 2 x 1350 x 20 x 2.19 - 37020 = 200528 lbs/ft
Recommended Passive Earth Pressure = 0.5 x 500 x $10^2$ + 5000 x 5 = 50000 lbs/ft
FS for Allowable Passive Earth Resistance = 200528 / 50000 = 4.01 O.K.




Scale 1" = 8'

**Figure 3**

**DETERMINATION OF DEPTH TO FIXITY POINT**
**Pile Supported by Level Ground (Actual Condition)**

Pile Spacing (S) = 12 ft
Pile Diameter (D) = 2 ft

Retaining Height (H) = 21 ft
Unit Weight of Granite ($\gamma$) = 130 pcf
Friction Angle of granite ($\phi$) = 41deg
Cohesion (c) = 1350 psf
Equivalent Fluid Pressure (EFP) = 43 psf/ft

Passive Earth Pressure Coefficient (Kp) = $\text{Tan}^2(45+41/2) = 4.82$

$\text{Tan}(45+41/2) = 2.19$

Passive Earth Pressure ($\sigma p$) = $\gamma$ Z $\text{Tan}^2(45+\phi/2)$ + 2C $\text{Tan}(45+\phi/2)$

100% Increase of Passive Earth Pressure when Pile Spacing (S) > 3 x Pile Diameter (D)

Fixity Point (Z) = 3 ft below the lowest adjacent grade

Active Earth Pressure at Fixity Point = 43 x (21 + 3) = 1032 psf

Passive Earth Pressure at Fixity Point = 130 x 3 x 4.82 + 2 x 1350 x 2.19 = 7793 psf

Passive Earth Pressure @ Fixity Point > Active Earth Pressure @ Fixity Point O.K.

**Figure 1**

**DETERMINATION OF DEPTH TO FIXITY POINT**
**Pile Supported by Sloping Ground (Assumed Condition)**

Pile Spacing (S) = 12 ft
Pile Diameter (D) = 2 ft

Retaining Height (H) = 21 ft
Unit Weight of Granite ($\gamma$) = 130 pcf
Friction Angle of granite ($\phi$) = 41deg
Cohesion (c) = 1350 psf
Equivalent Fluid Pressure (EFP) = 43 psf/ft

Slope Angle = 41 degrees

Passive Earth Pressure Coefficient (Kp) = 0.57

Passive Earth Pressure ($\sigma p$) = $\gamma$ Z $\text{Tan}^2(45+\phi/2)$ + 2C $\text{Tan}(45+\phi/2)$

100% Increase of Passive Earth Pressure when Pile Spacing (S) > 3 x Pile Diameter (D)

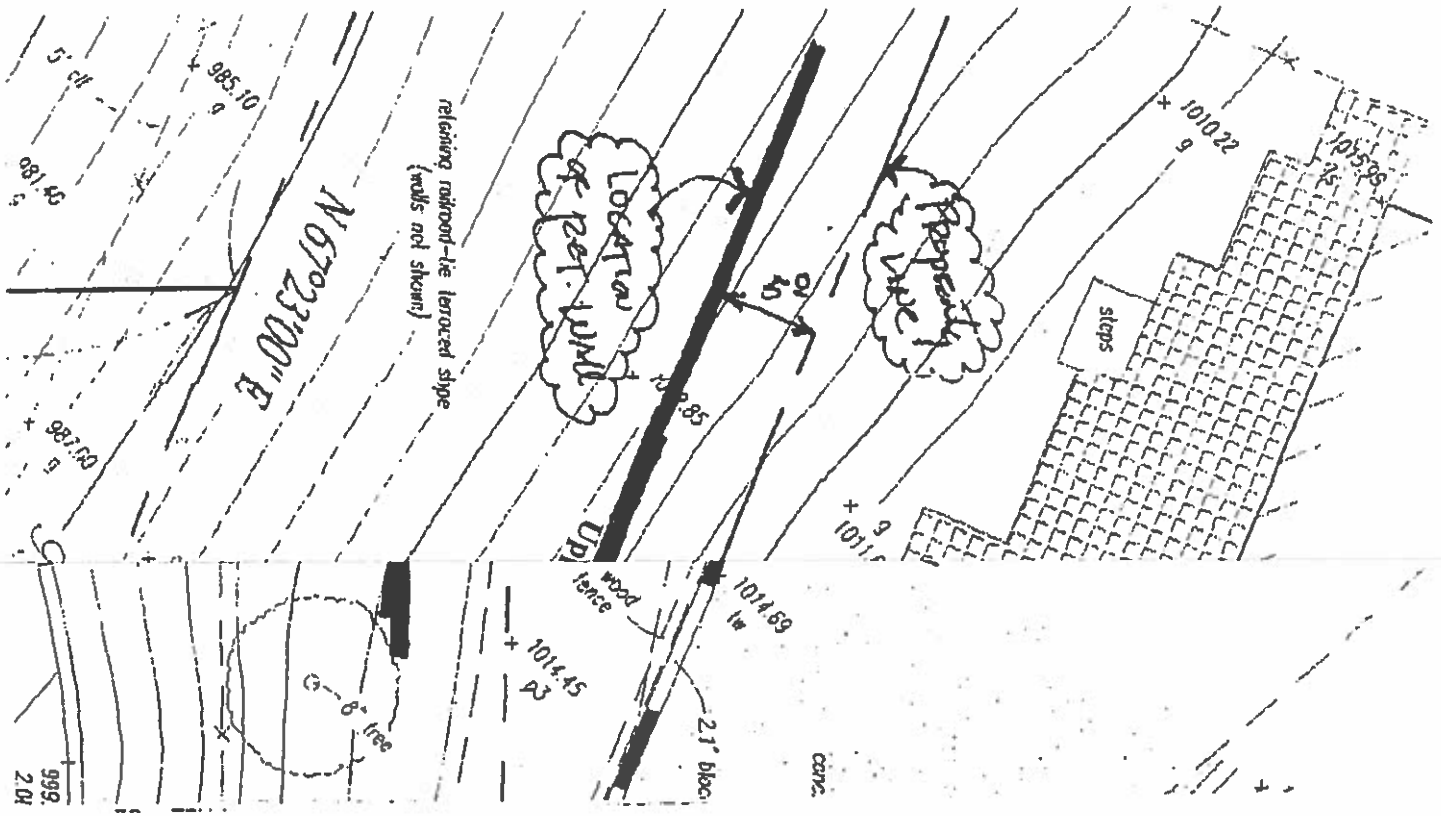
Fixity Point (Z) = 3 ft below the lowest adjacent grade

Active Earth Pressure at Fixity Point = 43 x (21 + 3) = 1032 psf

Passive Earth Pressure at Fixity Point = 130 x 3 x 0.57 + 2 x 1350 x 0.75 = 2247 psf

Passive Earth Pressure @ Fixity Point > Active Earth Pressure @ Fixity Point O.K.

**Figure 2**

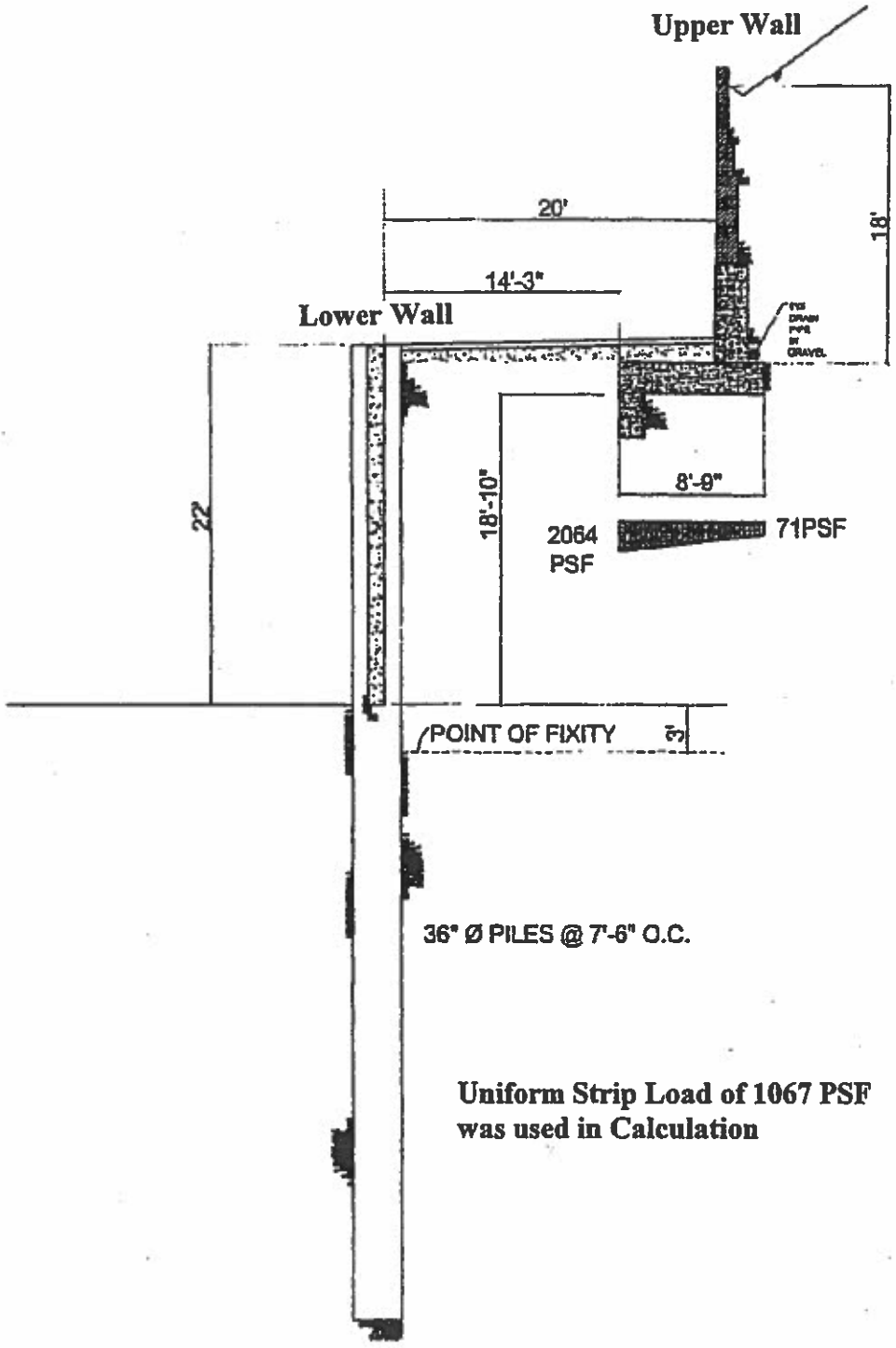



# Site Plan Showing Surcharge From Building to Upper Wall

| PG 1091 | Figure 2 |
|---|---|

**PARMELEE/GEOLOGY**

Earth Science Consulting Services




| | |
|---|---|
| **PARMELEE/GEOLOGY**<br>Earth Science Consulting Services | **Section Showing Surcharge Condition From Upper Wall to Lower Wall** |
| **PG 1091** | **Figure 1** |

```
**********************************
*  LATERAL PRESSURES BY THEORY   *
*  OF ELASTICITY FOR SURCHARGE   *
**********************************

PROJECT NAME : PG / CAC / Grandview  Case 1

LATERAL PRESSURE DUE TO STRIP LOAD

HORIZONTAL DISTANCE BETWEEN STRIP
LOAD AND ANALYZED PLANE = 14.25 TO 23 FT

SURCHARGE OF STRIP LOAD = 1067 PSF

FACTOR OF SAFETY = 1



*****************
*    RESULTS    *
*****************
```

| DEPTH (FT.) | INDUCED LATERAL PRESSURE (PSF) |
|---|---|
| 1 | 13.8 |
| 2 | 27.17 |
| 3 | 39.71 |
| 4 | 51.09 |
| 5 | 61.05 |
| 6 | 69.43 |
| 7 | 76.17 |
| 8 | 81.28 |
| 9 | 84.83 |
| 10 | 86.97 |
| 11 | 87.86 |
| 12 | 87.66001 |
| 13 | 86.57 |
| 14 | 84.76 |
| 15 | 82.39 |
| 16 | 79.6 |
| 17 | 76.51 |
| 18 | 73.24 |
| 19 | 69.85 |
| 20 | 66.43 |
| 21 | 63.04 |
| 22 | 59.7 |

**Figure 3**

```
**********************************
*  LATERAL PRESSURES BY THEORY   *
*  OF ELASTICITY FOR SURCHARGE   *
**********************************

PROJECT NAME : PG / CAC / Grandview  Case 2-2

LATERAL PRESSURE DUE TO LINE LOAD

HORIZONTAL DISTANCE BETWEEN
LINE LOAD AND ANALYZED PLANE = 26 FT

SURCHARGE OF LINE LOAD = 2000 PSF

FACTOR OF SAFETY = 1


*****************
*    RESULTS    *
*****************

 DEPTH     INDUCED LATERAL
 (FT.)     PRESSURE  (PSF)
---------------------------
   1            1.87
   2            3.72
   3            5.5
   4            7.18
   5            8.75
```

**Figure 4**

```
**********************************
*  LATERAL PRESSURES BY THEORY   *
*  OF ELASTICITY FOR SURCHARGE   *
**********************************

PROJECT NAME : PG / CAC / Grandview  Case 2-1

LATERAL PRESSURE DUE TO LINE LOAD

HORIZONTAL DISTANCE BETWEEN
LINE LOAD AND ANALYZED PLANE = 12 FT

SURCHARGE OF LINE LOAD = 2000 PSF

FACTOR OF SAFETY = 1


******************
*    RESULTS     *
******************

 DEPTH     INDUCED LATERAL
 (FT.)     PRESSURE  (PSF)
---------------------------
  1            8.72
  2           16.74
  3           23.49
  4           28.64
  5           32.09
```

**Figure 5**

April 2, 1998

Log # 23791
C.D. –

SOILS/GEOLOGY FILE - 2

Eric Rosdahl
8350 Grandview
Los Angeles, CA 90046

TRACT: 865
LOT: 95&96
LOCATION: 8350 Grandview Dr

| CURRENT REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Addendum Report | 97-912 | 04/02/98 | Geosystems |
| Addendum Report | 97-912 | 01/19/98 | Geosystems |

| PREVIOUS REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Geology/Soil Report | 97-912 | 11/12/97 | Geosystems |
| Ovrszd Doc | 97-912 | 11/12/97 | Geosystems |
| Department Letter | 23068 | 12/16/97 | Building & Safety |

The referenced reports concerning a proposed single-family residence have been reviewed by the Grading Section of the Department of Building and Safety. According to the 11/12/97 report, the site is located at the top of a slope which is over 200 feet in height. It appears that an access easement may be necessary. Retaining walls up to 15 feet high are proposed. The reports are acceptable, provided the following conditions are complied with during site development:

1. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans which clearly indicates that the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports.

2. All new graded slopes and existing cut and fill slopes shall be graded to no steeper than 2:1.

3. All recommendations of the report which are in addition to or more restrictive than the conditions contained herein shall also be incorporated into the plans for the project.

4. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety.

5. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department plan checker prior to issuance of the permit.

6. A grading permit shall be obtained.

7. The geologist and soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading.

8. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557.

9. All roof and pad drainage shall be conducted to the street in an acceptable manner.

10. The proposed swimming pool shall be designed for a freestanding condition.

11. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device.

12. Prior to issuance of the building permit, the design of the subdrainage system required to prevent possible hydrostatic pressure behind retaining walls shall be approved by the soils engineer and accepted by the Department. Installation of the subdrainage system shall be inspected and approved by the soils engineer and by the City grading inspector.

13. Footings adjacent to a descending slope steeper than 3:1 in gradient shall be located a distance of one-third the vertical height of the slope but need not exceed 40 feet measured horizontally from the face of the slope.

14. Pile caisson and/or isolated foundation ties are required by Code Section 91.1807.2. Exceptions and modification to this requirement are provided in Rule of General Application 662.

15. Pile and/or caisson shafts shall be designed for a lateral load of 1000 pounds per linear foot of shaft exposed to fill, soil and weathered bedrock.

16. Prior to the placing of compacted fill, a representative of the consulting soils engineer shall inspect and approve the bottom excavations. He shall post a notice on the job site for the City Grading inspector and the contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the City grading inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be filed with the Department upon completion of the work. The fill shall be placed under the inspection and approval of the soils engineer. A compaction report shall be submitted to the Department upon

completion of the compaction.

17. Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. He shall post a notice on the job site for the City Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspection has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Department upon completion of the work.

18. The dwelling shall be connected to the public sewer system.

19. Existing walls and slabs shall be replaced with designed structures with proper drainage control.

20. All friction pile or caisson drilling and installation shall be performed under the continuous inspection and approval of the soils engineer.

21. The designed passive pressure shall be neglected for a portion of the pile with a set back distance (horizontal set back) less than five feet from the bedrock/soil or fill contact plane.

22. Pool deck drainage shall be collected and conducted to an approved location via a non-erosive device.

23. Grading shall be scheduled for completion prior to the start of the rainy season, or detailed temporary erosion control plans shall be filed in a manner satisfactory to the Department and the Department of Public Works, for any grading work in excess of 200 cu yd.

24. Prior to excavation, an initial inspection shall be called at which time sequence of shoring (if required), protection fences and dust and traffic control will be scheduled.

Dana Prevost

DANA PREVOST
Engineering Geologist I

ANDRZEJ T. SZPIKOWSKI
Geotechnical Engineer I

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PG 1091

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ANDREW A. ADELMAN
GENERAL MANAGER
TOM WHELAN
EXECUTIVE OFFICER

February 20, 2002

Log # 35753
SOILS/GEOLOGY FILE - 2
LAN

Aaron and Isaac Cohen
1504 S Flower St.
Los Angeles, CA 90015

TRACT: 865
LOT: 95 & 96
LOCATION: 8350 Grand View Dr

| CURRENT REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Geology/Soils Report | PG1091 | 12/09/01 | Parmelee/Geology |

| PREVIOUS REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Department Letter | 23791 | 04/02/98 | LADBS |

The referenced reports concerning the proposed single-family residences on two contiguous lots have been reviewed by the Grading Section of the Department of Building and Safety. The site is located at the top of a slope which is over 240 feet in height. Retaining walls up to 21 feet high are proposed. The reports are acceptable, provided the following conditions are complied with during site development:

1. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans which clearly indicates that the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports.

2. All new graded slopes and existing cut and fill slopes shall be graded to no steeper than 2:1.

3. All footings shall be founded in competent bedrock, as recommended.

4. Retaining walls up to 21 feet in height, supporting compacted fill or granitic bedrock, with a backslope no steeper than 2:1, shall be designed for a minimum EFP of 43 pcf, as recommended.

5. Unsurcharged temporary excavations in granitic bedrock greater than 15 feet in height

shall be shored or trimmed back to a gradient no steeper than 1:1.

6. Suitable arrangements shall be made with the Department of Public Works for the proposed removal of support and/or retaining of slopes adjoining the public way.

7. Secure the written consent from all owners upon whose property the proposed grading is to extend.

8. All recommendations of the report which are in addition to or more restrictive than the conditions contained herein shall also be incorporated into the plans for the project.

9. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety.

10. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department plan checker prior to issuance of the permit.

11. A grading permit shall be obtained.

12. The geologist and soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading.

13. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557.

14. All roof and pad drainage shall be conducted to the street in an acceptable manner.

15. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device.

16. Prior to issuance of the building permit, the design of the subdrainage system required to prevent possible hydrostatic pressure behind retaining walls shall be approved by the soils engineer and accepted by the Department. Installation of the subdrainage system shall be inspected and approved by the soils engineer and by the City grading inspector.

17. Footings adjacent to a descending slope steeper than 3:1 in gradient shall be located a distance of one-third the vertical height of the slope but need not exceed 20 feet measured horizontally from the soil/bedrock contact, as recommended. This is considered an alternate setback per code section 91.1806.5.6.

18. Pile caisson and/or isolated foundation ties are required by Code Section 91.1807.2. Exceptions and modification to this requirement are provided in Rule of General Application 662.

19. Pile and/or caisson shafts shall be designed for a lateral load of 1000 pounds per linear

foot of shaft exposed to fill, soil and weathered bedrock, as recommended.

20. Prior to the placing of compacted fill, a representative of the consulting soils engineer shall inspect and approve the bottom excavations. He shall post a notice on the job site for the City Grading inspector and the contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the City grading inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be filed with the Department upon completion of the work. The fill shall be placed under the inspection and approval of the soils engineer. A compaction report shall be submitted to the Department upon completion of the compaction.

21. Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. He shall post a notice on the job site for the City Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Department upon completion of the work.

22. The dwellings shall be connected to the public sewer system.

23. Existing walls and slabs shall be replaced with designed structures with proper drainage control.

24. All friction pile or caisson drilling and installation shall be performed under the continuous inspection and approval of the soils engineer.

25. Grading shall be scheduled for completion prior to the start of the rainy season, or detailed temporary erosion control plans shall be filed in a manner satisfactory to the Department and the Department of Public Works, for any grading work in excess of 200 cu yd.

26. Prior to excavation, an initial inspection shall be called at which time sequence of shoring (if required), protection fences and dust and traffic control will be scheduled.

DAVID HSU
Chief of Grading Section

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ANDREW A. ADELMAN
GENERAL MANAGER
TOM WHELAN
EXECUTIVE OFFICER

June 27, 2002

**APPROVAL LETTER**
Log # 36891
SOILS/GEOLOGY FILE - 2

CAC Development
1504 S. Flower Street
Los Angeles, CA 90015

TRACT: 865
LOTS: 97 & 98
LOCATION: 8350 Grandview Drive

| CURRENT REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee Geology |
| Oversized Documents | " | " | " |

The referenced report concerning the proposed construction of single-family residences on each of the subject lots has been reviewed by the Grading Section of the Department of Building and Safety. According to the 05/19/2002 report, it is planned to provide access to the single-family residences planned on the subject lots by constructing a 20-foot-wide street with retaining walls on the north and south sides. The height of the retaining walls proposed varies from about 5 feet to a maximum height of about 21 feet. It appears that the proposed street will be within the off-site property referred to as Lot BB. Furthermore, it is not clear if the proposed street is a private street or a public street.

The report also indicates that the lots are part of the existing slope that descends to the south about 240 feet exhibiting gradients that are as steep as 53 degrees (0.75H:1V) and with an average gradient of about 40 degrees (1.2:1). Exploration performed indicates that the site is underlain by granitic bedrock with a thin, naturally-occurring soil cover. The consultant has recommended that the proposed residences and retaining walls be supported by the underlying granitic bedrock.

The report is acceptable, provided the following conditions are complied with during site development:

1. Prior to the issuance of any permit, it shall be determined if the proposed street will be private or public and the required procedures be implemented and the necessary written permission be procured with either the Department of Public Works (public street) or the Department of City Planning (private street).


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2. Suitable arrangements shall be made with the Department of Public Works for the proposed removal of support and/or retaining of slopes adjoining the public way.

3. Secure the written consent from all owners upon whose property the proposed grading is to extend. (Code Section 91.7006.6)

4. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans which clearly indicates that the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports.

5. All footings shall be founded in competent bedrock, as recommended.

6. Existing uncertified fill or soil shall not be used for support of footings, concrete slabs or new fill.

7. A grading permit shall be obtained.

8. All existing earth materials in the area of the proposed street shall be removed down to competent bedrock and replaced with certified compacted fill such that the proposed paved street surface is underlain by a uniform certified fill blanket with a minimum thickness of 24inches, as recommended.

9. Footings may be designed with a minimum horizontal setback of 20 feet from the soil/bedrock contact on the descending slope, as recommended, in lieu of the standard setback prescribed by the Building Code.

10. Buildings adjacent to ascending slopes shall be set back from the toe of the slope a level distance equal to one half the vertical height of the slope, but need not exceed 15 feet in accordance with Code Section 91.1806.5.2.

11. All loose foundation excavation material shall be removed prior to commencement of framing. Slopes disturbed by construction activities shall be restored.

12. The portion of all un-surcharged temporary vertical excavations greater than 15 feet shall either be shored or slot-cut using the segmented A-B-C-A-B-C..slot-cut sequence utilizing a maximum individual slot-cut width of 8 feet, as recommended.

13. Excavations that will remove lateral support to either the public way or adjacent structures shall be slot-cut using the segmented A-B-C-A-B-C..slot-cut sequence, as recommended.

14. Temporary shoring shall be designed for a minimum equivalent fluid pressure of 30 pcf, as recommended.

15. Installation of shoring and/or slot cutting excavations shall be performed under the inspection and approval of the soils engineer and deputy grading inspector.

16. Prior to the issuance of any permit which authorizes an excavation where the excavation

is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the subject site shall provide the Department with evidence that the adjacent property owner has been given a 30-day written notice of such intent to make an excavation.

17. The geologist and soil engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading.

18. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety.

19. Retaining walls up to a maximum height of 21 feet and with a backslope no steeper than 2:1 shall be designed for a minimum equivalent fluid pressure of 43 pcf, as recommended.

20. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device.

21. Retaining walls with sloping back-slopes shall be provided with a minimum freeboard of 12 inches.

22. The recommended equivalent fluid pressure (EFP) for the proposed retaining wall shall apply from the top of the freeboard to the bottom of the wall footing.

23. Prior to issuance of the building permit, the design of the subdrainage system required to prevent possible hydrostatic pressure behind retaining walls shall be approved by the soils engineer and accepted by the Department. Installation of the subdrainage system shall be inspected and approved by the soils engineer and by the City grading inspector.

24. All new graded slopes shall be no steeper than 2:1.

25. Grading shall be scheduled for completion prior to the start of the rainy season, or detailed temporary erosion control plans shall be filed in a manner satisfactory to the Department and the Department of Public Works, for any grading work in excess of 200 cu yd.

26. All roof and pad drainage shall be conducted to the street in non-erosive devices and in a manner that is acceptable to the Department; water shall not be dispersed on to descending slopes without specific approval from the Grading Section and the consulting geologist and soil engineer.

27. All recommendations of the reports which are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.

28. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit.

LH CITY BLDG & SFTY FAX:2139778984 Jun 27 2002 15:32 P.03

29. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557; or 95 percent where less than 15 percent fines passes 0.005mm.

30. Prior to the placing of compacted fill, a representative of the consulting Soils Engineer shall inspect and approve the bottom excavations. He shall post a notice on the job site for the City Grading Inspector and the Contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the City Grading Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be filed with the Department upon completion of the work. The fill shall be placed under the inspection and approval of the Foundation Engineer. A compaction report shall be submitted to the Department upon completion of the compaction.

31. Prior to the pouring of concrete, a representative of the consulting Soil Engineer shall inspect and approve the footing excavations. He shall post a notice on the job site for the City Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Department upon completion of the work.

32. The LABC Soil Type underlying the site is $S_B$.

DAVID HSU
Chief of Grading Section

STEPHEN DAWSON
Engineering Geologist I

PASCAL CHALLITA
Geotechnical Engineer I

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Jun 27 2002 15:32 P.04
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RAYMOND S. CHAN, C.E., S.E.
GENERAL MANAGER

FRANK BUSH
EXECUTIVE OFFICER

## GEOLOGY AND SOILS REPORT APPROVAL LETTER

April 10, 2015

LOG # 79258-02
SOILS/GEOLOGY FILE - 2
LAN

Aaron Cohen
1504 S. Flower Street
Los Angeles, CA 90015

TRACT: 865
LOTS: 98 / 97 / 96 / 95
LOCATION: 1800 / 1806 / 1812 / 1818 Crisler Way

| CURRENT REFERENCE REPORT/LETTER | REPORT No. | DATE OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Addendum Report | CYG-14-7350 | 03/31/2015 | C.Y. Geotech, Inc. |

| PREVIOUS REFERENCE REPORT/LETTER(S) | REPORT No. | DATE OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Dept. Correction Letter | 79258-01 | 03/23/2015 | LADBS |
| Addendum Report | CYG-14-7350 | 11/26/2014 | C.Y. Geotech, Inc. |
| Responsibility Letter | " | 11/10/2014 | " |
| Dept. Correction Letter | 79258 | 01/30/2013 | LADBS |
| Geology/Soil Report | PG 1091 | 09/19/2012 | GeoMatrix |
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | " |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |

The referenced reports concerning the proposed construction of multi-level single family residences with pool on each of the subject lots, has been reviewed by the Grading Division of the Department of Building and Safety. Crisler Way (currently unimproved) adjacent to the subject lots will be improved, as part of the proposed development. Retaining walls are proposed as part of the building construction and for the street improvement. It is our understanding that drainage easements from/to lots 98/97, 95/96 and 95, 96, 97, 98 / 118 have been obtained for storm and sanitary sewer pipelines.


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The subject lots are located below the proposed Crisler Way at the top of an approximately 200 foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1. The earth materials at the subsurface exploration locations consist of up to 2 feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock.

The site is located in a designated seismically induced landslide hazard zone as shown on the "Seismic Hazard Zones" map issued by the State of California. The above reports include an acceptable seismic slope stability analysis and the requirements of the 2014 City of Los Angeles Building Code, have been satisfied.

The consultants recommend to support the proposed structures on conventional and/or drilled-pile foundations bearing on competent bedrock.

The referenced reports are acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2014 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. All recommendations of the referenced reports that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.

2. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans which clearly indicates that the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports. (7006.1)

3. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit. (7006.1)

4. Foundations adjacent to a descending slope steeper than 3:1 (H:V) in gradient shall be a minimum distance of one-third the vertical height of the slope but need not exceed 40 feet measured horizontally from the footing bottom to the face of the slope (1808.7.2); for pools the foundation setback shall be one-sixth the slope height to a maximum of 20 feet. (1808.7.3) Where the slope is steeper than 1:1, the required setback shall be measured from an imaginary plane 45 degrees to the horizontal, projected upward from the toe of the slope.

5. Buildings adjacent to ascending slopes steeper than 3:1 (H:V) in gradient shall be set back from the toe of the slope a level distance equal to one-half the vertical height of the slope, but need not exceed 15 feet (1808.7.1); for pools the set back shall be one-fourth the vertical height of the slope, but need not exceed 7.5 feet. (1808.7.3) Where the slope is steeper than 1:1, the toe of the slope shall be assumed to be at the intersection of a horizontal plane drawn from the top of the foundation and a plane drawn tangent to the slope at an angle of 45 degrees to the horizontal.

6. The seismic design shall be based on a Site Class C, as recommended. All other seismic

design parameters shall be reviewed by LADBS building plan check.

7. All foundations shall derive entire support from competent bedrock, as recommended and approved by the geologist and soils engineer by inspection.

8. Pile caisson and/or isolated foundation ties are required by Code Sections 1809.13 and/or 1810.3.13. Exceptions and modification to this requirement are provided in Information Bulletin P/BC 2014-030.

9. Pile and/or caisson shafts shall be designed for a lateral load of 1000 pounds per linear foot of shaft exposed to fill, soil and weathered bedrock. (P/BC 2014-050)

10. The design passive pressure shall be neglected for a portion of the pile with a set back distance (horizontal set back) less than five feet from fill, soil or weathered bedrock.

11. Slabs on uncertified fill shall be designed as a structural slab. (7011.3)

12. All roof and pad drainage shall be conducted to the street in an acceptable manner. Water shall not be dispersed on to descending slopes without specific approval from the Grading Division and the consulting geologist and soils engineer. (7013.10)

13. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS. (7013.10)

14. Sprinkler plans for irrigation shall be submitted and approved by the Mechanical Plan Check Section. (7012.3.1)

15. A grading permit shall be obtained for all structural fill and retaining wall backfill. (106.1.2)

16. Prior to excavation, an initial inspection shall be called with LADBS Inspector at which time sequence of construction, shoring, pile installation, protection fences and dust and traffic control will be scheduled. (108.9.1)

17. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction. (7013.12)

18. The soils engineer shall review and approve the shoring plans prior to issuance of the permit. (3307.3.2)

19. Prior to the issuance of the permits, the soils engineer and/or the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring.

20. Shoring shall be designed for the lateral earth pressures specified in the section titled "Temporary Retaining Wall Excavations" starting on page 27 of the 09/19/2012 report; all surcharge loads shall be included into the design. Total lateral load on shoring piles shall de determined by multiplying the recommended EFP by the pile spacing.

21. Shoring shall be designed for a maximum lateral deflection of ½ inch where a structure is

within a 1:1 plane projected up from the base of the excavation, and for a maximum lateral deflection of 1 inch provided there are no structures within a 1:1 plane projected up from the base of the excavation, as recommended.

22. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer.

23. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety. (3301.1)

24. The geologist and soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading. (7008 & 1705.6)

25. Any recommendations prepared by the geologist and/or the soils engineer for correction of geological hazards found during grading shall be submitted to the Grading Division of the Department for approval prior to utilization in the field. (7008.3)

26. Unsurcharged temporary excavations over 15 feet exposing bedrock shall be shored, as recommended.

27. Excavations shall not remove lateral support from a public way, adjacent property or an existing structure. Note: Lateral support shall be considered to be removed when the excavation extends below a plane projected downward at an angle of 45 degrees from the bottom of a footing of an existing structure, from the edge of the public way or an adjacent property. (3307.3.1)

28. Retaining walls shall be designed for the minimum EFP as specified in section "Retaining Walls" starting on page 22 of the 09/19/2012 report. All surcharge loads shall be included in the design. Note: If stacked retaining walls are planned, piles for the upper wall shall derive passive resistance below a 1:1 plane projected upwards from the base of the lower wall, as an alternative a supplemental report shall be submitted to the Grading Division containing recommendations for design earth pressures due to surcharge from the upper wall. All surcharge loads shall be included into the design.

29. Retaining walls at the base of ascending slopes shall be provided with a minimum freeboard of 12 inches, as recommended.

30. The recommended equivalent fluid pressure (EFP) for the proposed retaining wall shall apply from the top of the freeboard to the bottom of the wall footing.

31. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device. (7013.11)

32. With the exception of retaining walls designed for hydrostatic pressure, all retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soil report shall be incorporated into the foundation plan which shall be reviewed and

approved by the soils engineer of record. (1805.4)

33. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector. (108.9)

34. Basement walls and floors shall be waterproofed/damp-proofed with an L.A. City approved "Below-grade" waterproofing/damp-proofing material with a research report number. (104.2.6)

35. Prefabricated drainage composites (Miradrain/Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.

36. Where the ground water table is lowered and maintained at an elevation not less than 6 inches below the bottom of the lowest floor, or where hydrostatic pressures will not occur, the floor and basement walls shall be damp-proofed. Where a hydrostatic pressure condition exists, and the design does not include a ground-water control system, basement walls and floors shall be waterproofed. (1803.5.4, 1805.1.3, 1805.2, 1805.3)

37. The proposed swimming pool shall be designed for a freestanding condition. (1808.7.3)

38. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill. (1809.2)

39. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density (D1556). Placement of gravel in lieu of compacted fill is allowed only if complying with Section 91.7011.3 of the Code. (7011.3)

40. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. The representative shall post a notice on the job site for the City Grading Inspector and the Contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the LADBS Grading Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Division of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal description as indicated in the grading permit and the permit number shall be included. (7011.3)

41. Existing uncertified fill shall not be used for lateral support of deep foundation. (1810.2.1)

42. Installation of shoring and/or pile installation shall be performed under the inspection and approval of the soils engineer and deputy grading inspector. (1705.6)

43. All friction pile or caisson drilling and installation shall be performed under the inspection and approval of the geologist and soils engineer. The geologist shall indicate the distance

that friction piles or caissons penetrate into competent bedrock in a written field memorandum. (1803.5.5, 1704.9)

44. When water over 3 inches in depth is present in drilled pile holes, a concrete mix with a strength of 1000 p.s.i. over the design p.s.i. shall be tremied from the bottom up; an admixture that reduces the problem of segregation of paste/aggregates and dilution of paste shall be included. (1808.8.3)

45. Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. The representative shall post a notice on the job site for the LADBS Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)

CASEY LEE JENSEN
Engineering Geologist Associate II

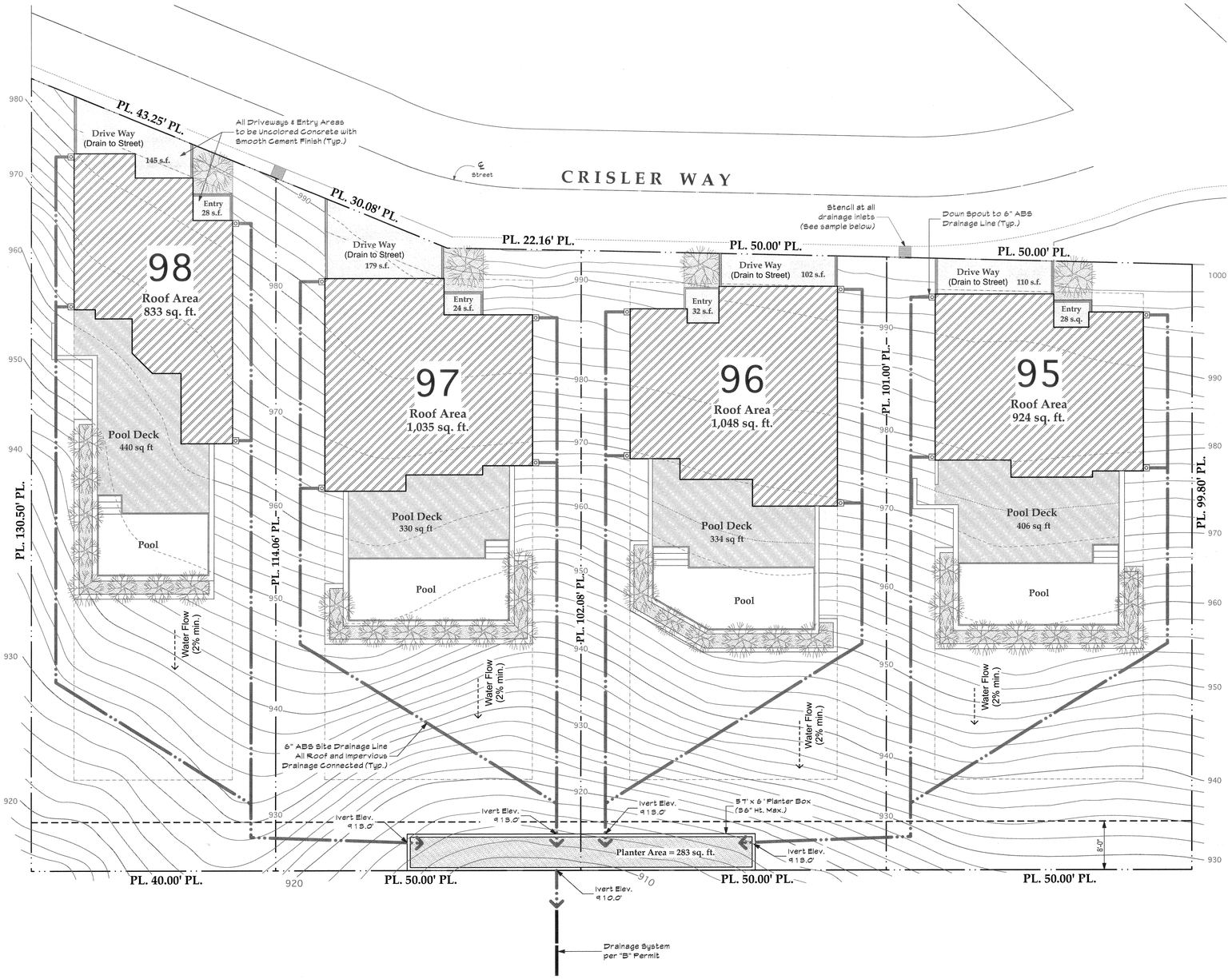
YING LIU
Structural Engineering Associate II

CLJ/YL:clj/yl
Log No. 79258-02
213-482-0480

cc: Robert Anderson, Applicant
C.Y. Geotech, Inc., Project Consultant
LA District Office

# Site Drainage Plan

APPENDIX H




## Site Drainage Plan

### Site Paving Calculation

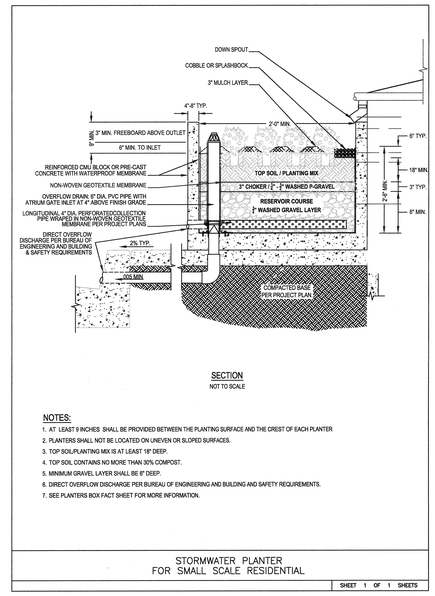
* All Driveways & Entry Areas to be Uncolored Concrete with Smooth Cement Finish (Solar Reflectance ≥ 0.30)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HOUSE 95 : | Pool Deck (406 sq. ft.) | + | Driveway (110 sq. ft.) | + | Entry (28 sq. ft.) | = | 544 sq. ft. | (25% = 136 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 110 | + | 28 | = | 138 sq. ft. | > | 136 sq. ft. | |
| HOUSE 96 : | Pool Deck (334 sq. ft.) | + | Driveway (102 sq. ft.) | + | Entry (32 sq. ft.) | = | 468 sq. ft. | (25% = 117 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 102 | + | 32 | = | 134 sq. ft. | > | 117 sq. ft. | |
| HOUSE 97 : | Pool Deck (330 sq. ft.) | + | Driveway (179 sq. ft.) | + | Entry (24 sq. ft.) | = | 533 sq. ft. | (25% = 133 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 179 | + | 24 | = | 203 sq. ft. | > | 133 sq. ft. | |
| HOUSE 98 : | Pool Deck (440 sq. ft.) | + | Driveway (145 sq. ft.) | + | Entry (28 sq. ft.) | = | 613 sq. ft. | (25% = 153 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 145 | + | 28 | = | 173 sq. ft. | > | 136 sq. ft. | |

### StormWater Planter Calculation

Total : 5,376 sq. ft. ( All Roofs : 3,840 s.f. + All Impervious Area: 1,536 s.f. )

Per Chart : 168 sq. ft. ( for the first 2,500 sq. ft. ) + 20 s.f. per every additional 500 sq. ft.
168 sq. ft. + ( 5,376 - 2,500 = 2,876 ÷ 500 ≈ 5.75 x 20 = 115 sq. ft. Additional ) = **283 sq. ft. Total needed**

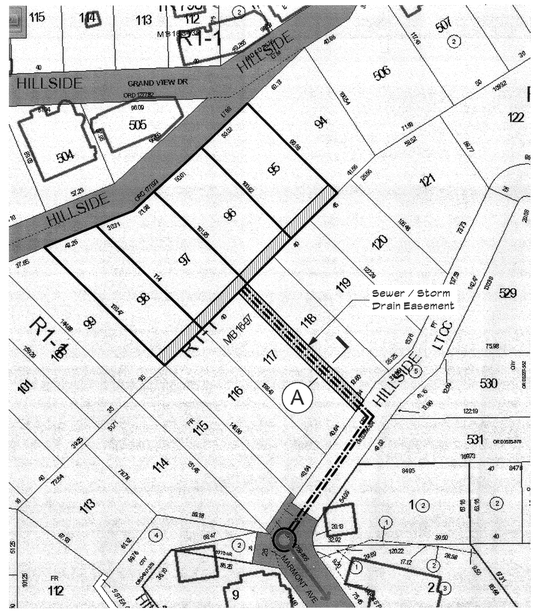



SECTION
NOT TO SCALE

NOTES:
1. AT LEAST 9 INCHES SHALL BE PROVIDED BETWEEN THE PLANTING SURFACE AND THE CREST OF EACH PLANTER
2. PLANTERS SHALL NOT BE LOCATED ON UNEVEN OR SLOPED SURFACES.
3. TOP SOIL/PLANTING MIX IS AT LEAST 18" DEEP.
4. TOP SOIL CONTAINS NO MORE THAN 30% COMPOST.
5. MINIMUM GRAVEL LAYER SHALL BE 8" DEEP.
6. DIRECT OVERFLOW DISCHARGE PER BUREAU OF ENGINEERING AND BUILDING AND SAFETY REQUIREMENTS.
7. SEE PLANTERS BOX FACT SHEET FOR MORE INFORMATION.

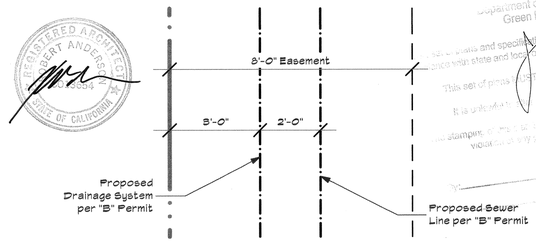
STORMWATER PLANTER
FOR SMALL SCALE RESIDENTIAL

SHEET 1 OF 1 SHEETS




## Vicinity Map

NOTE: Sewer / Storm Drain Easement on Lot 118 recorded on 2/11/15 # 20150151825




## (A) Enlarged Plan

Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

# StormWater Drainage Plan

Four HOUSES for:
CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 3-12-15 | DC |

DATE ISSUED 3-9-15

DATE PRINTED 3-12-15

PROJECT REF. NUMBER

**A-1.1**

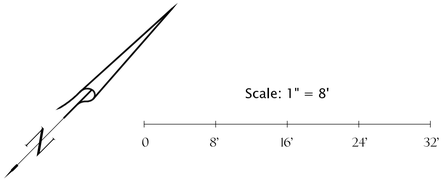
SHEET NUMBER

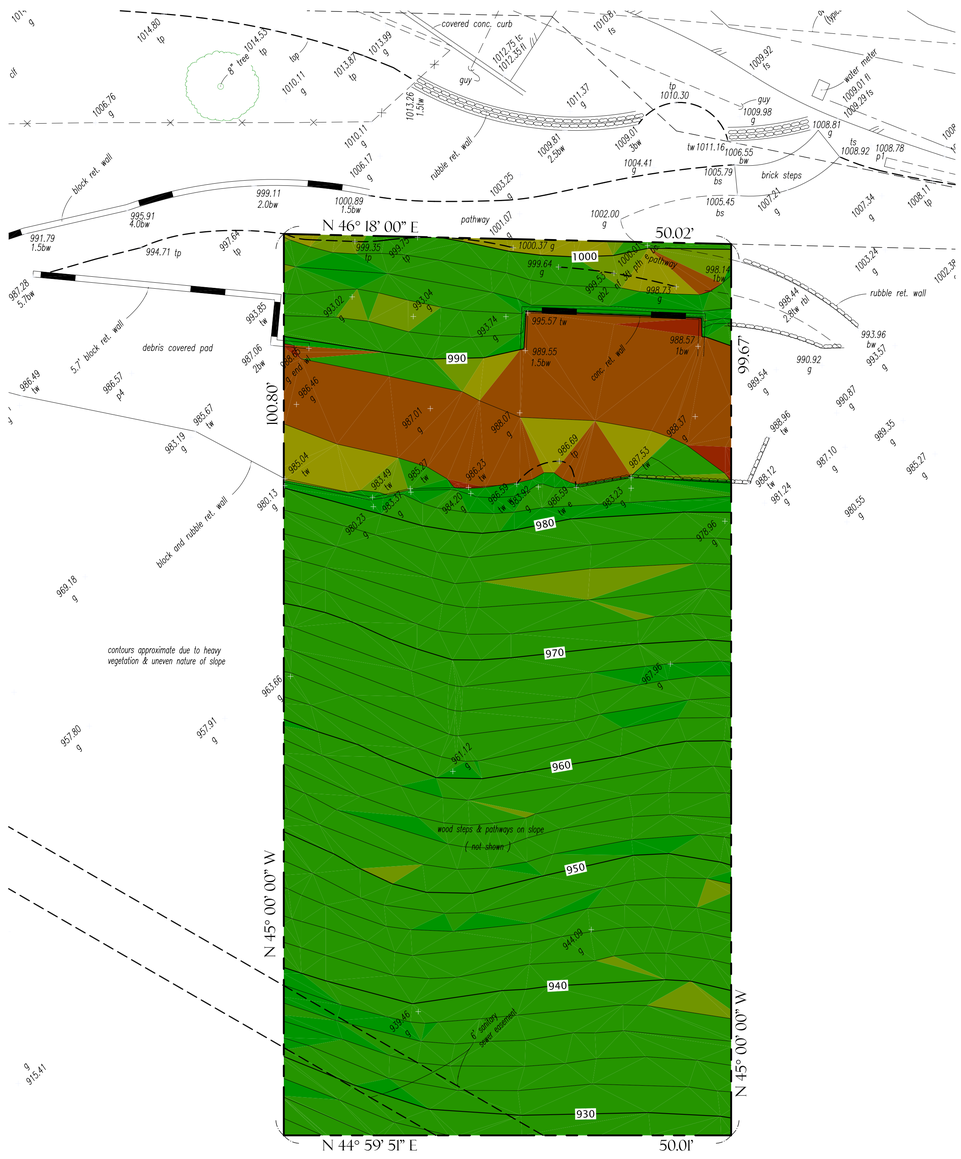
RECEIVED JUN 05 2015

APPENDIX I

# Slope Band Analysis

# SLOPE ANALYSIS MAP




Municipal code, chapter 1 (planning and zoning code)
Chapter 1 General Provisions and Zoning
Article 2 specific planning – zoning
Sec 12.21 general provisions

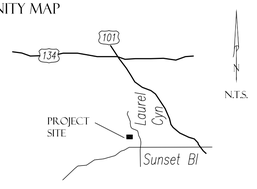
(2) **Guaranteed Minimum Residential Floor Area.** Notwithstanding the above, the maximum Residential Floor Area for all Buildings and Accessory Buildings on any Lot may be least the percentage of the Lot size as outlined in Table 12.21 C.10-3 below or 1,000 square feet, whichever is greater.

**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**
**ZonePercentage of Lot Size**
R1 25%

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,253 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 22.36 | 0.50 | 0.45 | 11.18 |
| 2 | 15.00% | 29.99% | | 592.40 | 0.45 | 11.82 | 266.58 |
| 3 | 30.00% | 44.99% | | 171.81 | 0.40 | 3.43 | 68.72 |
| 4 | 45.00% | 59.99% | | 182.67 | 0.35 | 3.64 | 63.93 |
| 5 | 60.00% | 99.99% | | 3683.05 | 0.30 | 73.48 | 1104.92 |
| 6 | 100.00% | 4000.00% | | 359.71 | 0.00 | 7.18 | 0 |
| | | Totals: | | 5,012 | | 100% | 1,515.33 |

VICINITY MAP




## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 95
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-002

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 95: 5,012 square feet; 0.12 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
Shown in F.B. 40412 pg. 257 dated 12/20/95
Description: Spike in PP #828393H (n. side 1' up) s/s Grand View Dr. E/O Hse # 8354 & opp. Hse # 8353.

## Date of Survey:

Topography: 27 August 2001
Slope Analysis: 19 May 2016

## Note:

This slope analysis has been accurately calculated.

PREPARED FOR:

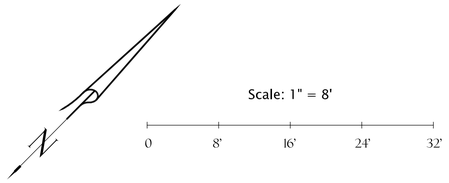
ROBERT ANDERSON, ARCHITECT

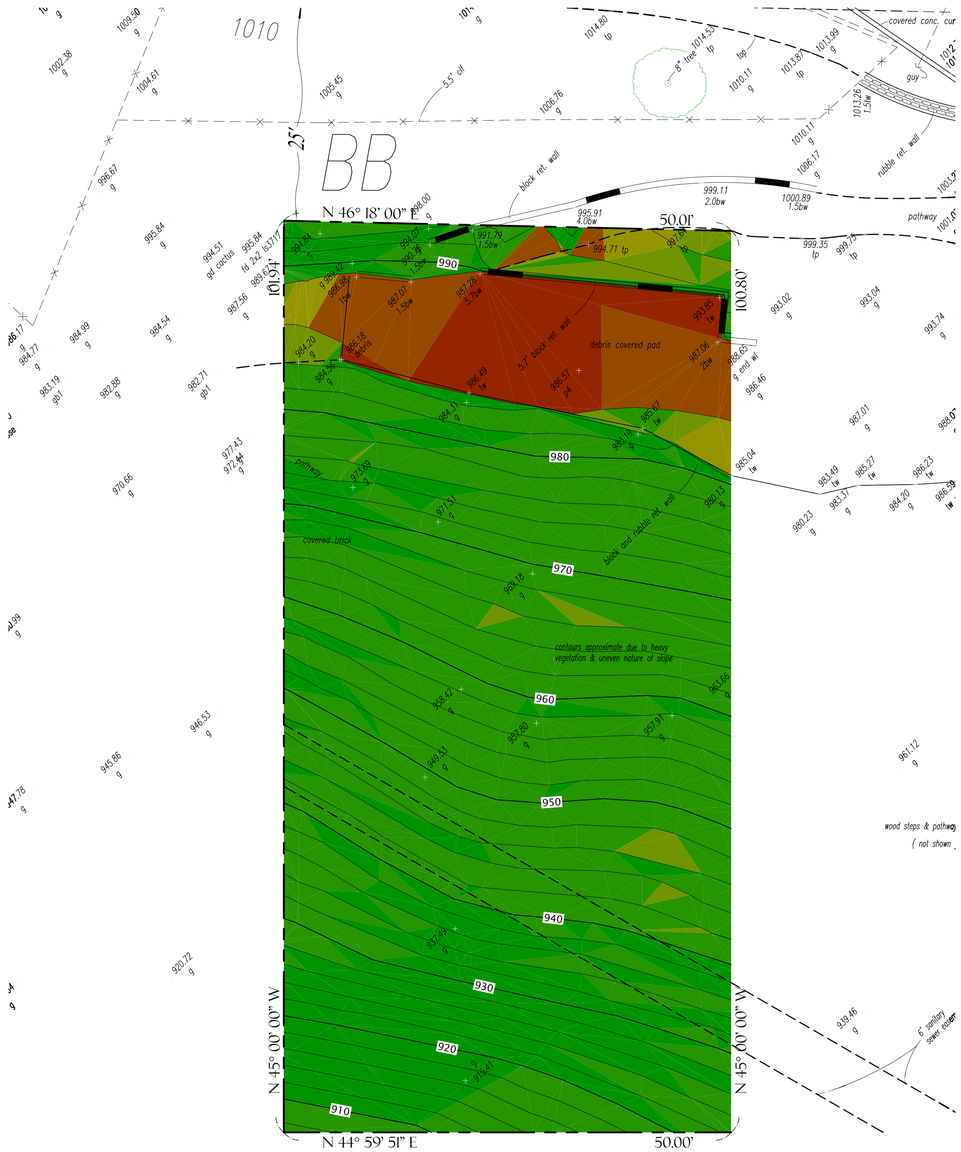
PREPARED BY:

J.O. NELSON
CONSULTING LAND SURVEYORS, INC.
A PROFESSIONAL LAND SURVEYING CORPORATION
501 SOUTH REINO RD., #105
NEWBURY PARK, CA 91320
(310) 337-1778
WWW.JONELSONCLS.COM

LICENSED LAND SURVEYOR
JAMES O. NELSON
No. 6831
EXP. 09-30-16
STATE OF CALIFORNIA

# SLOPE ANALYSIS MAP




Municipal code, chapter 1 (planning and zoning code)
Chapter 1 General Provisions and Zoning
Article 2 specific planning – zoning
Sec 12.21 general provisions

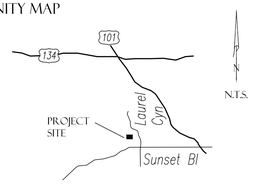
(2) **Guaranteed Minimum Residential Floor Area.** Notwithstanding the above, the maximum Residential Floor Area for all Buildings and Accessory Buildings on any Lot may be least the percentage of the Lot size as outlined in Table 12.21 C.10-3 below or 1,000 square feet, whichever is greater.

**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**
**ZonePercentage of Lot Size**
R1 25%

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,267 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 310.44 | 0.50 | 6.13 | 155.22 |
| 2 | 15.00% | 29.99% | | 298.57 | 0.45 | 5.89 | 134.36 |
| 3 | 30.00% | 44.99% | | 69.02 | 0.40 | 1.36 | 27.61 |
| 4 | 45.00% | 59.99% | | 154.56 | 0.35 | 3.05 | 54.10 |
| 5 | 60.00% | 99.99% | | 2959.05 | 0.30 | 58.39 | 887.71 |
| 6 | 100.00% | 4000.00% | | 1276.36 | 0.00 | 25.18 | 0 |
| | | Totals: | | 5,068 | | 100% | 1,259 |

VICINITY MAP




## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 96
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-002

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 96: 5,068 square feet; 0.12 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
Shown in F.B. 40412 pg. 257 dated 12/20/95
Description: Spike in PP #828393H (n. side 1' up) s/s Grand View Dr. E/O Hse # 8354 & opp. Hse # 8353.

## Date of Survey:

Topography: 27 August 2001
Slope Analysis: 19 May 2016

## Note:

This slope analysis has been accurately calculated.

PREPARED FOR:

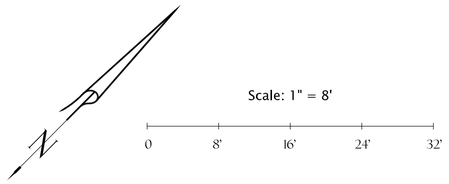
ROBERT ANDERSON, ARCHITECT

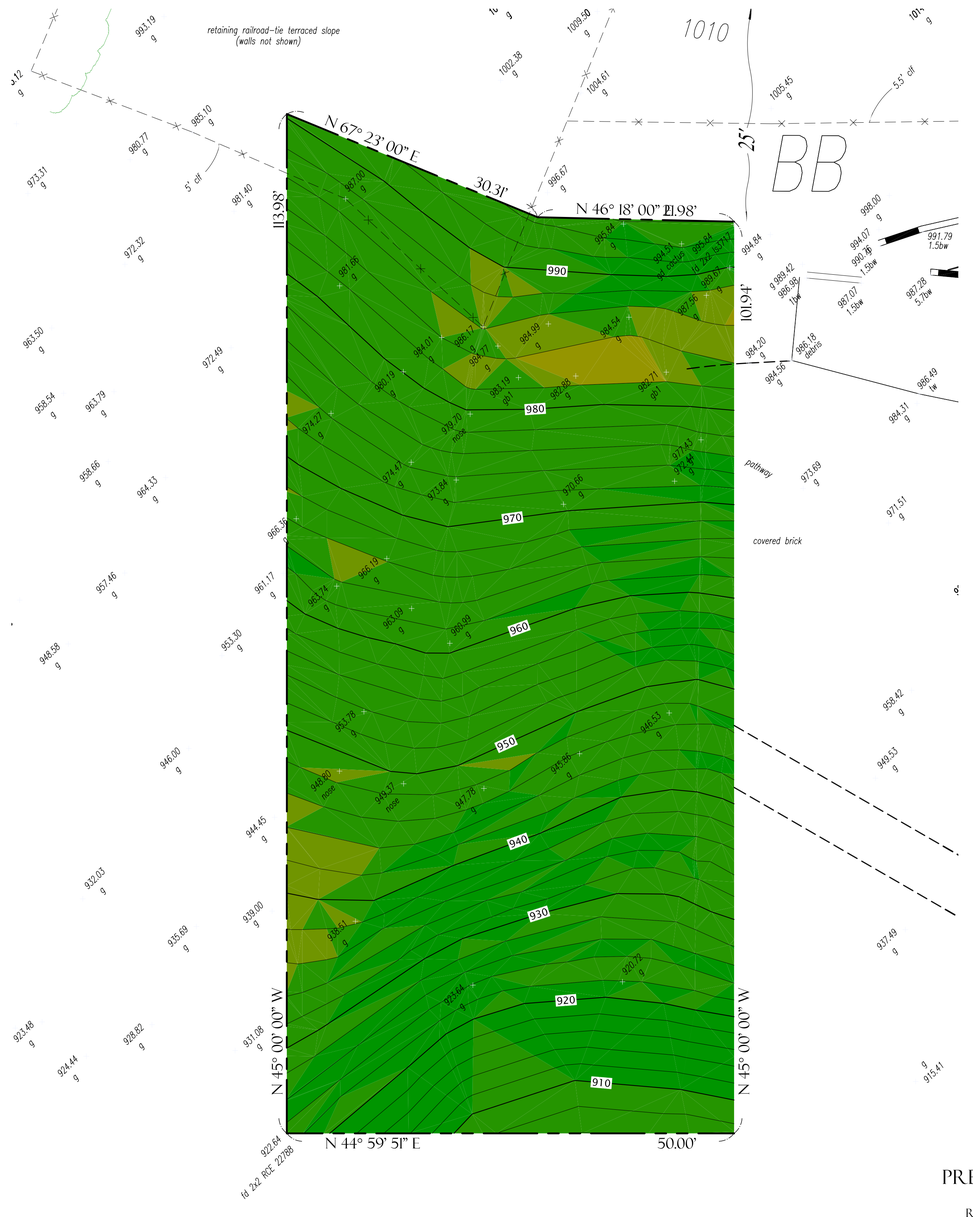
PREPARED BY:

J.O. NELSON
CONSULTING LAND SURVEYORS, INC.
A PROFESSIONAL LAND SURVEYING CORPORATION
501 SOUTH REINO RD., #105
NEWBURY PARK, CA 91320
(310) 337-1778
WWW.JONELSONCLS.COM

LICENSED LAND SURVEYOR
JAMES O. NELSON
No. 6831
EXP. 09-30-16
STATE OF CALIFORNIA

# SLOPE ANALYSIS MAP




Municipal code, chapter 1 (planning and zoning code)
Chapter 1 General Provisions and Zoning
Article 2 specific planning – zoning
Sec 12.21 general provisions

(2) **Guaranteed Minimum Residential Floor Area.** Notwithstanding the above, the maximum Residential Floor Area for all Buildings and Accessory Buildings on any Lot may be least the percentage of the Lot size as outlined in Table 12.21 C.10-3 below or 1,000 square feet, whichever is greater.

**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**
**ZonePercentage of Lot Size**
R1 25%

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,319.5 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 0.11 | 0.50 | 0.00 | 0.06 |
| 2 | 15.00% | 29.99% | | 0.05 | 0.45 | 0.00 | 0.02 |
| 3 | 30.00% | 44.99% | | 59.18 | 0.40 | 1.12 | 23.67 |
| 4 | 45.00% | 59.99% | | 315.06 | 0.35 | 5.97 | 110.27 |
| 5 | 60.00% | 99.99% | | 3644.21 | 0.30 | 69.05 | 1093.26 |
| 6 | 100.00% | 4000.00% | | 1259.39 | 0.00 | 23.86 | 0 |
| | | Totals: | | 5,278 | | 100% | 1,227.28 |

## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 97
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-003

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 97: 5,278 square feet; 0.12 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
Shown in F.B. 40412 pg. 257 dated 12/20/95
Description: Spike in PP #828393H (n. side 1' up) s/s Grand View Dr. E/O Hse # 8354 & opp. Hse # 8353.

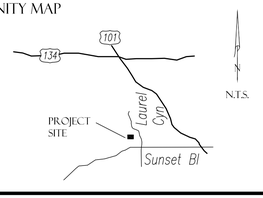
## Date of Survey:

Topography: 27 August 2001
Slope Analysis: 19 May 2016

## Note:

This slope analysis has been accurately calculated.

VICINITY MAP




PREPARED FOR:

ROBERT ANDERSON, ARCHITECT

PREPARED BY:


J.O. NELSON
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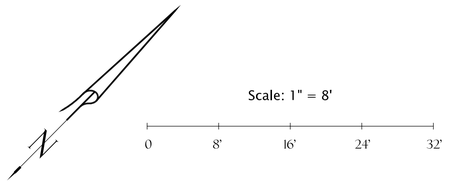
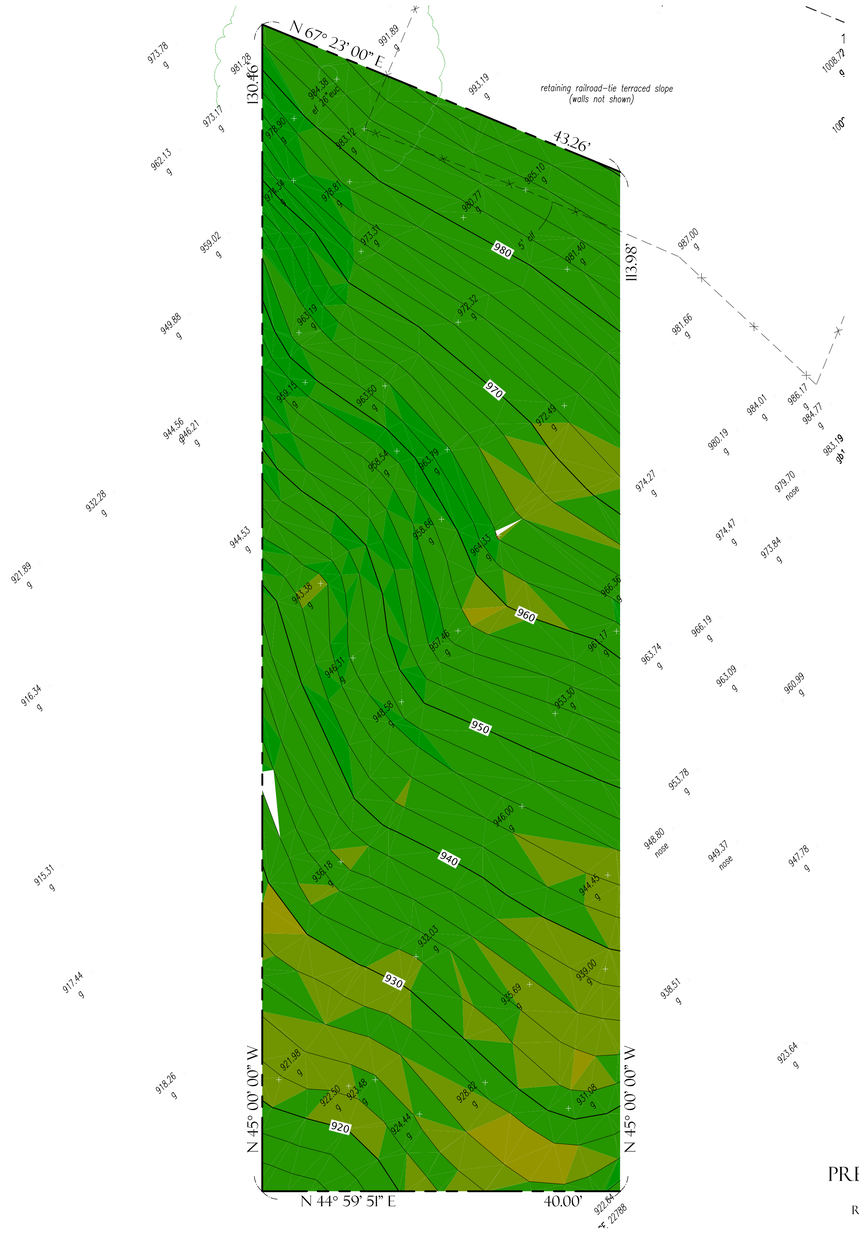
LICENSED LAND SURVEYOR
JAMES O. NELSON
No. 6831
EXP. 09-30-16
STATE OF CALIFORNIA

# SLOPE ANALYSIS MAP




## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 98
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-004

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 98: 4,889 square feet; 0.11 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
Shown in F.B. 40412 pg. 257 dated 12/20/95
Description: Spike in PP #828393H (n. side 1' up) s/s Grand View Dr. E/O Hse # 8354 & opp. Hse # 8353.

## Date of Survey:

Topography: 27 August 2001
Slope Analysis: 19 May 2016

## Note:

This slope analysis has been accurately calculated.

Municipal code, chapter 1 (planning and zoning code)
Chapter 1 General Provisions and Zoning
Article 2 specific planning – zoning
Sec 12.21 general provisions

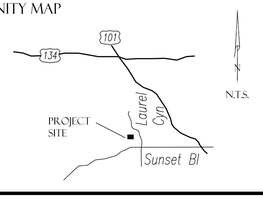
(2) **Guaranteed Minimum Residential Floor Area.** Notwithstanding the above, the maximum Residential Floor Area for all Buildings and Accessory Buildings on any Lot may be least the percentage of the Lot size as outlined in Table 12.21 C.10-3 below or 1,000 square feet, whichever is greater.

**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**
**ZonePercentage of Lot Size**
R1 25%

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,222.25 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 0.03 | 0.50 | 0.00 | 0.02 |
| 2 | 15.00% | 29.99% | | 0.06 | 0.45 | 0.00 | 0.03 |
| 3 | 30.00% | 44.99% | | 77.13 | 0.40 | 1.58 | 30.85 |
| 4 | 45.00% | 59.99% | | 782.27 | 0.35 | 16.00 | 273.79 |
| 5 | 60.00% | 99.99% | | 3530.06 | 0.30 | 72.20 | 1059.02 |
| 6 | 100.00% | 4000.00% | | 499.45 | 0.00 | 10.22 | 0 |
| | | Totals: | 4,889 | | | 100% | 1,363.7 |

VICINITY MAP




PREPARED FOR:

ROBERT ANDERSON, ARCHITECT

PREPARED BY: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JAMES O. NELSON
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STATE OF CALIFORNIA

# APPENDIX J

# Noise Study

# NOISE IMPACT ANALYSIS

# CRISLER WAY RESIDENCES PROJECT

# CITY OF LOS ANGELES, CALIFORNIA

Prepared for:

Envicom Corporation
Attn: Mitchel Morrison
4165 E Thousand Oaks Blvd. Suite 290
Westlake Village, CA, 91362

Date:

December 14, 2018

Project No.: P18-046 N

# NOISE SETTING

## BACKGROUND

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is commonly defined as unwanted sound. Sound can be characterized by a variety of parameters that describe the rates of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of sound pressure ratioed to an assumed zero sound level is called a decibel (dB).

Because sound or noise can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale similar to the Richter Scale is used to keep sound intensity numbers at a convenient and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called "A-weighting", written as dB(A). Any further reference to decibels in this discussion written as "dB" should be understood to be A-weighted.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or, alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL).

## NOISE COMPATIBILITY GUIDELINES

Table 1 shows the noise/land use compatibility guideline for City of Los Angeles land uses as contained in the Noise Element of the City of Los Angeles General Plan. A 55 dB CNEL exposure is considered the most desirable target for the exterior of noise sensitive land uses such as homes, hotels and schools. It is also recognized that such a level may not always be possible in areas of substantial traffic noise intrusion. Exposures up to 65 dB CNEL for residential uses are considered conditionally acceptable if all measures to reduce such exposure have been taken. Noise levels above 70 dB CNEL are considered normally unacceptable except in unusual circumstances.

## Table 1

## City of Los Angeles Land Use Compatibility

| Land Use Category | Day-Night Average Exterior Sound Level (CNEL dB) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| Residential Single Family, Duplex, Mobile Home | A | C | C | C | N | U | U |
| Residential Multi-Family | A | A | C | C | N | U | U |
| Transient Lodging, Motel, Hotel | A | A | C | C | N | U | U |
| School, Library, Church, Hospital, Nursing Home | A | A | C | C | N | N | U |
| Auditorium, Concert Hall, Ampitheater | C | C | C | C/N | U | U | U |
| Sports Arena, Outdoor Spectator Sports | C | C | C | C | C/U | U | U |
| Playground, Neighborhood Park | A | A | A | A/N | N | N/U | U |
| Golf Course, Riding Stable, Water Recreation, Cemetery | A | A | A | A | N | A/N | U |
| Office Building, Business, Commercial, Professional | A | A | A | A/C | C | C/N | N |
| Agriculture, Industrial, Manufacturing, Utilities | A | A | A | A | A/C | C/N | N |

A = Normally acceptable. Specified land use is satisfactory, based upon assumption buildings involved are conventional construction, without any special noise insulation.

C = Conditionally acceptable. New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning normally will suffice.

N = Normally unacceptable. New construction or development generally should be discouraged. A detailed analysis of noise reduction requirements must be made and noise insulation features included in the design of a project.

U = Clearly unacceptable. New construction or development generally should not be undertaken.

An interior CNEL of 45 dBA is mandated in Title 24 of the California Code of Regulations for multiple family dwellings, hotel and motel rooms. In 1988, the State Building Standards Commission expanded that standard to include all habitable rooms in residential use, including single-family dwelling units. Since typical noise attenuation within older, existing residential structures with closed windows is at least 20-25 dB, an exterior noise exposure of 65 dBA CNEL is generally the noise land-use compatibility guideline for residential dwellings in California. Newer construction practices with standard features such as double paned windows typically offer about 30 dB of noise attenuation.

Therefore, interior residential noise exposure of 45 dBA CNEL with windows and doors closed can be achieved with an exterior noise loading of 75 dB. Requiring that windows and doors remain closed to achieve an acceptable interior noise level will typically necessitate the use of air conditioning and/or mechanical ventilation.

## NOISE ORDINANCE

The City's noise standards for non-transportation sources are articulated in the Noise Ordinance. The Ordinance regulates noise from one land use crossing the property line of an adjacent property line. Chapter IX of the Los Angeles Municipal Code restricts the level of noise that one type of land use or activity may broadcast across an adjacent land use. Noise ordinance standards are stated with respect to ambient levels found without the contribution of an identified noise source. If ambient levels are low, Section 111.03 of the Los Angeles Municipal Code established presumed ambient noise levels as a function of zoning and times of day. Table 2 shows the presumed ambient noise levels to be used as an evaluation baseline.

During the daytime, some deviation from these thresholds is allowed for short-term (less than 15 minute) noise generation. The nocturnal noise standard has no provisions for any deviation for purposes of sleep protection. The noise ordinance numerical standards apply to "stationary" sources of noise generation (mechanical equipment such as air conditioning, refrigeration, heating, pumping, etc.). A number of special noise generation activities have specific prohibitions as to time, manner or place. If such activities are not specifically prohibited by ordinance, the noise constraint for general stationary sources is that they may not increase the ambient level by more than 5 dB above ambient (measured or presumed minimum) levels shown in Table 2.

## Table 2

## City of Los Angeles Noise Ordinance

Daytime levels are to be used from 7:00 a.m. to 10:00 p.m. and nighttime levels from 10:00 p.m. to 7:00 a.m.)

| | **PRESUMED AMBIENT NOISE LEVEL (dB(A))** | |
|---|---|---|
| **ZONE** | **DAY** | **NIGHT** |
| A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5 | 50 | 40 |
| P, PB, CR, C1, C1.5, C2, C4, C5, and CM | 60 | 55 |
| M1, MR1, and MR2 | 60 | 55 |
| M2 and M3 | 65 | 65 |

At the boundary line between two zones, the presumed ambient noise level of the quieter zone shall be used.

If the noise occurs more than 5 but less than 15 minutes in any period of 60 consecutive minutes between the hours of 7:00 a.m. and 10:00 p.m. of any day -5 dB.

If the noise occurs five minutes or less in any period of 60 consecutive minutes, between the hours of 7:00 a.m. and 10:00 p.m. of any day -5 dB additional.

## LAND USE NOISE IMPACTS

### IMPACT SIGNIFICANCE CRITERIA

Noise impacts are considered significant if:

1. They create violations of noise standards, or,

2. They substantially worsen an already excessive noise environment, or,

3. They substantially increase an existing quiet environment even if noise standards are not violated by the proposed action.

The term "substantial increase" is not defined by any responsible agency. The limits of perceptibility by ambient grade instrumentation (sound meters) or by humans in a laboratory environment is around 1.5 dB. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dB difference. A threshold of 3 dB is commonly used to define "substantial increase." An increase of +3 dBA CNEL in traffic noise would be considered a significant impact if the total noise along the affected segment also exceeds 65 dB CNEL (the City of Los Angeles exterior noise threshold for noise-sensitive land uses).

The primary noise impact typically identified with land use intensification such as that for the proposed residential project is construction activities. Heavy equipment will create short-term noise increases for existing sensitive uses near the project site. Such impacts may be important for possible nearby noise-sensitive receptors such as any existing residential uses. The focus of this analysis is to ensure that the project does not adversely impact the acoustic environment of the surrounding community.

### CONSTRUCTION NOISE IMPACTS

For this analysis, a noise impact is considered potentially significant if project construction activities extended beyond ordinance time limits for construction or construction-related noise levels exceed the ordinance noise level standards unless technically infeasible to do so. The project entails construction of four hillside homes. Construction noise levels will vary at any given receptor depending on the construction phase, equipment type, duration of use, distance between the noise source and receptor, and the presence or absence of barriers between the noise source and receptor.

The City of Los Angeles limits construction activities to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. Construction is not permitted on any national holiday or on any Sunday.

In addition, Section 112.05 of the Los Angeles Building Code specifies the maximum noise level of powered equipment or powered hand tools. Use of any powered equipment or powered hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction and industrial machinery is prohibited. However, the above noise limitation does not apply where

compliance is technically infeasible (Section 112.05, Los Angeles Municipal Code). "Technically infeasible" means that the above noise limitation cannot be complied with despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment. An inability to reduce construction equipment noise exposure to 75 dBA or less at any off-site, noise sensitive use could be considered a significant, but temporary, noise impact.

In addition, the Los Angeles CEQA Guidelines have established that a project would normally have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use; or

- Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or

- Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at anytime on Sunday.

### OFF-ROAD EQUIPMENT

The City of Los Angeles limits construction activities to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. Additionally use of any powered equipment or powered hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction and industrial machinery is prohibited unless technically infeasible.

Project construction activities would first focus on building the access road and then the four homes. Because of the steep terrain only smaller construction equipment and assorted other hand tools and would be used. Large equipment like dozers would not be on site. The mini excavator (model G35) planned for use has a 30 hp engine versus a traditional excavator with a 158 hp engine. This will reduce potential construction noise at the closest residential uses.

In 2006, the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model that includes a national database of construction equipment reference noise emissions levels. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power during a construction phase. The usage factor is a key input variable that is used to calculate the average Leq noise levels.

Table 1 identifies highest ($L_{max}$) noise levels associated with each type of equipment identified for use, then adjusts this noise level for distance to the closest sensitive receptor and the extent of equipment usage (usage factor), which is represented as $L_{eq}$. The table is organized by construction activity and equipment associated with each activity

Quantitatively, the primary noise prediction equation is expressed as follows for the hourly average noise level (Leq) at distance D between the source and receiver (dBA):

Leq = Lmax @ 50' – 20 log (D/50') + 10log (U.F%/100) – I.L.(bar)

Where:

Lmax @ 50' is the published reference noise level at 50 feet
U.F.% is the usage factor for full power operation per hour
I.L.(bar) is the insertion loss for intervening barriers

For a construction project such as the proposed project, the project engineer predicts the construction fleet could include equipment such as shown in Table 3. Table 3 describes the noise level for each individual piece of equipment individually at a reference 50 foot distance.

**Table 3**
**Construction Equipment Noise Levels**

| Phase Name | Equipment | Usage Factor[1] | Noise @ 50 feet (dB)[2] | Hourly Noise Level @ 50 feet (dB)) |
|---|---|---|---|---|
| Site Prep and Grading Building Construction | Skid Steer Loader/Bobcat* | 40% | 76 | 72 |
| | Roller | 20% | 80 | 74 |
| | Paver | 50% | 77 | 74 |
| | Rough Terrain Forklift | 40% | 75 | 71 |
| | Mini-Excavator* | 40% | 75 | 71 |
| | Drill Rig | 20% | 79 | 73 |
| Building Construction | Skid Steer Loader/Bobcat** | 40% | 76 | 72 |
| | Rough Terrain Forklift | 40% | 75 | 71 |

*excavator but 6 dB less due to size (30 hp versus 158 hp)
**front end loader but less by 3 dB due to size
Source: FHWA's Roadway Construction Noise Model, 2006

1. Estimates the fraction of time each piece of equipment is operating at full power during a construction operation
2. The Lmax values presented are the actual measured values summarized in the Roadway Noise Model User Guide (FHWA 2006) unless the actual is unavailable in which case the equipment specifications were used.

This project could have setbacks closer than the 50 foot reference distance. The distances that were examined are as follows:

15-20 feet from edge of new road to closest adjacent outdoor use (swimming pool)

20 feet from edge of new road to closest existing residential structure

55 feet from closest proposed home from existing residential structure

At these setback distances, the noise levels shown in Table 4 would likely be observed:

**Table 4**
**Construction Noise Equipment Levels at Off-Site Sensitive Uses**

| Phase Name | Equipment | Noise Level @ 20 feet (dB) | Noise Level @ 55 feet (dB) |
|---|---|---|---|
| Site Prep and Grading Building Construction | Bobcat | 80 | 71 |
| | Roller | 82 | 73 |
| | Paver | 82 | 73 |
| | Rough Terrain Forklift | 79 | 70 |
| | Excavator | 79 | 70 |
| | Drill Rig | 81 | 72 |
| Building Construction | Bobcat | 80 | 71 |
| | Rough Terrain Forklift | 79 | 70 |

In the absence of any shielding, noise level at the closest outdoor recreational use would exceed the City of Los Angeles suggested construction noise level of 75 dB. A typical building with single pane windows can reduce noise levels by 25 dB with the windows closed (U.S. Environmental Protection Agency (EPA), 1974). However, most modern homes are constructed with dual paned windows which can afford up to a 30 dB noise reduction with closed windows.

Therefore, the expected indoor noise level at the closest residence with closed windows would be approximately 52 dB during site preparation and grading and approximately 50 dB during construction. For indoor noise environments, the highest noise level that permits relaxed conversation with 100 percent intelligibility throughout the room is 45 dB. Speech interference is considered to be highly intrusive when normal conversation is precluded at 3 feet, which occurs when ambient noise levels substantially exceed 60 dB. An interior noise level of 52 dB at indoor locations would maintain a marginally acceptable interior noise environment with closed dual paned windows. In some cases, this noise reduction could be maintained only on a temporary basis, since it requires that windows remain closed at all times assuming homes have air conditioning.

The potential for construction-related noise to adversely affect nearby residential receptors would depend on the location and proximity of construction activities to these receptors. Most construction equipment will be located at a much greater setback than the worst case examples provided in Table 4. Spherically radiating point sources of noise emissions are atmospherically attenuated by a factor of 6 dB per doubling of distance. Because the project is located on a hillside, noise barriers such as sound curtains would not be feasible.

Construction noise is maximally anticipated to be 82 dBA exterior and 52 dBA at interior of the closest residence north of the project site when roadway construction equipment operates near the closest receptor locations during grading activities. After grading the worst-case noise levels would decrease to 80 dB exterior and 50 dB interior. As discussed, because of the steep slope, a sound curtain could not be utilized for mitigation. Therefore, construction noise may occasionally be audible and the following significance thresholds could be exceeded.

Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use.

- There is a minimal separation distance between the site and the nearest residential use, construction noise levels could potentially exceed exterior noise levels by more than 10 dB. Because the project on a steep slope, there is no reasonable means to mitigate construction noise (e.g. fences or temporary barriers) to less than this threshold.

Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.

- As noted above, even with quiet suburban background noise levels construction noise could potentially exceed ambient noise levels by 5 dB for more than 10 days in a three month period. Again, reasonable means of construction noise mitigation such as a temporary fence would not be feasible because the adjacent sensitive uses are at a higher elevation than the project site.

Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at anytime on Sunday.

- Construction is not anticipated to occur after 9:00 p.m. or before 7:00 a.m.or anytime on Sundays and therefore this condition will be met by adherence to standard hours of construction.

**Construction Parking and Pass-By truck noise**

The construction crew is expected to park on site and there are an estimated daily maximum of 12 workers (24 in and outs per day) during the most intensive activities. Once the Crisler Way extension is constructed, crews will use that roadway to avoid parking on Grand View Drive. Lot 95 will provide a flat surface area for temporary construction parking and equipment staging. In addition, the contractor will arrange for a mini-van to shuttle workers to the site during the most intensive activities, thereby reducing street traffic.

Although grading is balanced on site, construction equipment and vendor deliveries will require site access. Although a truck pass-by could be noisy, it would only last a few seconds. Because the relevant noise metric is a CNEL, or weighted daily average, a few truck trips in a day would be more than balanced by no truck trips for the other hours.

## CONSTRUCTION ACTIVITY VIBRATION

Construction activities generate ground-borne vibration when heavy equipment travels over unpaved surfaces or when it is engaged in soil movement. The effects of ground-borne vibration include discernable movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. Vibration related problems generally occur due to resonances in the structural components of a building because structures amplify groundborne vibration. Within the "soft" sedimentary surfaces of much of Southern California, ground vibration is quickly damped out. Groundborne vibration is almost never annoying to people who are outdoors (FTA 2006).

Groundborne vibrations from construction activities rarely reach levels that can damage structures. Because vibration is typically not an issue, very few jurisdictions have adopted vibration significance thresholds. Vibration thresholds have been adopted for major public works construction projects, but these relate mostly to structural protection (cracking foundations or stucco) rather than to human annoyance.

A vibration descriptor commonly used to determine structural damage is the peak particle velocity (ppv) which is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in in/sec. The range of such vibration is as follows:

**Human Response To Transient Vibration**

| Average Human Response | ppv (in/sec) |
|---|---|
| Severe | 2.00 |
| Strongly perceptible | 0.90 |
| Distinctly perceptible | 0.24 |
| Barely perceptible | 0.03 |

Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2013.

Over the years, numerous vibration criteria and standards have been suggested by researchers, organizations, and governmental agencies. There are no Caltrans or Federal Highway Administration standards for vibration.

According to Caltrans, the threshold for structural vibration damage for modern structures is 0.5 in/sec for intermittent sources, which include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. The American Association of State Highway and Transportation Officials (AASHTO) (1990) identifies maximum vibration levels for preventing damage to structures from intermittent construction or maintenance activities for residential buildings in good repair with gypsum board walls to be 0.4–0.5 in/sec. The damage threshold criterion of 0.2 in/sec is appropriate for older fragile buildings (typically historic). Below this level there is virtually no risk of building damage. Although the structures adjacent to the proposed project are not considered fragile, to be conservative, the lower damage threshold of 0.2

in/sec was used for this analysis. The predicted vibration levels generated by construction equipment anticipated for use are shown below in Figure 5.

**Table 5**
**Estimated Vibration Levels During Project Construction**

| Equipment | PPV at 15 ft (in/sec) | PPV at 25 ft (in/sec) | PPV at 50 ft (in/sec) | PPV at 60 ft (in/sec) | PPV at 75 ft (in/sec) | PPV at 100 ft (in/sec) |
|---|---|---|---|---|---|---|
| Large Bulldozer | 0.191 | 0.089 | 0.031 | 0.024 | 0.017 | 0.011 |
| Loaded trucks | 0.152 | 0.076 | 0.027 | 0.020 | 0.015 | 0.010 |
| Jackhammer | 0.070 | 0.035 | 0.012 | 0.009 | 0.007 | 0.004 |
| Small Bulldozer | 0.006 | 0.003 | 0.001 | 0.001 | <0.001 | <0.000 |

Source: FHWA Transit Noise and Vibration Impact Assessment

The calculation to determine PPV at a given distance is:

PPVdistance = PPVref * (25/D)^1.5

Where:

PPVdistance = the peak particle velocity in inches/second of the equipment adjusted for distance,

PPVref = the reference vibration level in inches/second at 25 feet, and

D = the distance from the equipment to the receiver.

Large equipment such as bulldozers will not be used for this project due to constraints resulting from steep hillside construction. However, equipment on par with small bulldozers such as bobcats and loaders may be used though they have a much lower vibration potential.

Small construction equipment could be operated as close as 15-20 feet from the closest property line. However, even at 15 feet, the predicted vibration levels generated by smaller construction equipment would be well below levels that could create structural damage in fragile buildings (i.e., 0.2 in/sec). The vibration level is considered acceptable; therefore construction activity vibration impacts are judged as less-than-significant.

## MITIGATION AND SUMMARY

Construction activities from project development may exceed noise levels allowed by Section 112.05 of the City of Los Angeles Municipal Code at the adjacent residential uses. The noise limitation of the Los Angeles Municipal Code does not apply where compliance is technically infeasible. Technically infeasible means that the noise standard cannot be met despite shields, sound barriers and/or other noise reduction devices or technique during the operation of equipment. For this project, because of terrain constraints, it would not be feasible to construct a temporary soundwall that would block noise to homes at a higher elevation. In order to comply with City Ordinance standards the following mitigation measure is placed on construction:

- Any powered equipment or powered hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction and industrial machinery is prohibited unless no means exist to reduce such noise below 75 dBA.

Grading permits issued by the City of Los Angeles require the use of standard measures to reduce construction activity noise impact potential. These compliance measures include:

- Construction activities are limited to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. Construction is not permitted on any national holiday or on any Sunday.
- Haul routes for construction equipment and supplies shall avoid conflicts with noise-sensitive land uses to the extent feasible by virtue of scheduling or points of access.
- Staging areas shall be established to minimize impacts to adjacent residences where feasible.

The selection of quiet equipment where feasible and compliance with standard conditions would reduce construction activity impacts to less than adopted significance thresholds. However, construction activity noise is in very close proximity to adjacent neighbors and may have a nuisance impact even if all noise control requirements are met. The incorporation of additional discretionary actions is therefore recommended to minimize this noise nuisance potential. The project thus proposes voluntary measures to reduce potential annoyance from construction related activities:

- Work around trash collection days until a staging area is established
- During times of high activity, shuttle construction workers from an off-site location.

Vibration levels resulting from project construction equipment is not anticipated to exceed any structural damage levels at the closest sensitive use.

# Traffic Analysis for the Construction Phase Construction Traffic Management Plan

APPENDIX K

# Construction Traffic Management Plan

for the

**1800, 1806, 1812, AND 1818**
**CRISLER WAY RESIDENCES PROJECT**

City of Los Angeles Case No.: ENV-2015-4131-MND

Zoning Administrator Case Nos.: ZA-2015-4125-ZAD, ZA-2015-4130-ZAD, ZA-2015-4146-ZAD, and ZA-2015-4149-ZAD




Prepared By:

CAC Development
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December 18, 2018

**Overview**

Construction on the proposed 1800, 1806, 1812, and 1818 Crisler Way Residences Project (project) is anticipated to begin in Q1 2019, with completion of all outdoor components (site prep, grading, road improvement, foundations [12 months], vertical construction [8 months], and landscape/hardscape [4 months]) within 24 months and all interior finishes within 8 months for a total duration of approximately 30 months (some phases overlap). The duration of the construction is extended primarily due to establishing an on-site equipment staging area which will allow work to progress without affecting the existing local traffic flow on Grand View Drive. Additionally, we are balancing the site in cut and fill – therefore the road work and foundation work must be done in sequence.

- Phase 1 (Site Prep / Grading / Road Improvement / Foundations) – approximately 12.0 Months
- Phase 2 (Rough Vertical Construction) – approximately 8.0 Months with overlapping trades
- Phase 3 (House Finishing) – approximately 8.0 Months with overlapping trades
- Phase 4 (Hardscape / Landscape) – approximately 4.0 Months

  NOTE: Phases 2, 3 & 4 will partially overlap

**Phase 1 Construction-Related Traffic** (Site Prep / Grading / Road Improvement / Foundations)

Construction activities associated with Phase 1 include creation of an initial on-site equipment staging area, grading, excavation and construction of foundations for both the road and the houses.

This phase of construction is anticipated to occur in an estimated duration schedule of approximately 12.0 months.

Equipment Delivery – The construction equipment utilized during this phase potentially includes a mini-excavator, drilling rig, bobcat front-end loader, a roller, and a paver or similar. All off-road construction equipment will be delivered on a flatbed truck. Equipment will arrive on approximately three vehicles over a period of 2-3 days. It is expected that the equipment delivery will occur on the first two days of Phase 1 (after 10:00 AM), with the equipment to be removed from the site on the final two days of this phase (prior to 3:00 PM). A maximum of about three vehicles per day is anticipated for both delivery and removal of equipment from the site, resulting in a total of up to approximately three inbound and three outbound construction vehicle trips on days that equipment delivery or removal occurs.

Job Site Mobilization – Delivery and setup of job site trailer, temp power, temp restrooms, and any temporary construction site safety fencing. This scope is expected to occur over an approximately five-day period concurrent with the delivery of construction equipment during the project's grading activities. It is expected that the job site trailer, portable restrooms, safety fencing materials, and temporary power-related equipment will be delivered on a total of approximately

four flatbed or pickup trucks, with deliveries resulting in approximately four such vehicles in a single day (after 10:00 AM and prior to 3:00 PM), or up to approximately eight construction vehicle trips (four inbound, four outbound) on those days.

Debris Haul Trucks – This phase is expected to involve site preparation activities such as light grading, the removal of debris, excavation, hauling of debris, and related material from the project site. Grading will occur for approximately 10 weeks and will overlap with the beginning of excavation. Excavation and on-site earth movement are anticipated to occur over a period of +/- 4 weeks. All trucks will be aware that Grand View Drive is a narrow hillside residential street and therefore all truck activity will be coordinated to prevent arriving and departing trucks or other equipment from traveling on this roadway concurrently, thereby minimizing potential congestion.

Foundations - "Standard" concrete pumps (towed behind pickup trucks) and concrete pump boom trucks (that travel under their own power) will be utilized during foundation construction. A total of one to two "standard" concrete pumps will be delivered (towed behind pickup trucks) to the site between 9:30 AM and 10:30 AM, and removed from the site no later than 3:00 PM on days that concrete pours are scheduled, resulting in a maximum of about four total vehicle trips per day (two inbound and two outbound), assuming that the trucks used to tow the "standard" concrete pumps will remain on the site to reposition the pumps throughout the pumping process as necessary. Additionally, a total of one concrete pump boom truck could also be required; this equipment will arrive at the project site between 9:30 AM and 10:30 AM, remaining on the site through the day as needed before departing the site no later than 3:00 PM on each day it is required, resulting in a total of two daily trips (one inbound in the morning, one outbound in the afternoon) on days when it is needed. Finally, rebar, forms, and other construction materials will be delivered to the construction site via flatbed trucks, at the rate of about three deliveries per week.

During peak Phase 1 construction activity, only about one load of materials is anticipated to be delivered in a single day (between the hours of 9:00 AM and 3:00 PM), resulting in a total of approximately two daily trips (one inbound, one outbound). It is anticipated that the construction equipment utilized during this phase of construction will not be delivered to or removed from the project site on days that concrete pouring/pumping operations are scheduled to occur.

Concrete Mixer/Delivery Trucks – Throughout the Phase 1 construction period, it is anticipated that concrete will be delivered and poured on the project site via eight-yard concrete mixer trucks, although each truck will only carry about six cubic yards of concrete to reduce weight on the local hillside streets along the construction access route. Although the activity levels will vary throughout this phase during the peak of concrete pouring activity, a total of up to about 30 cubic yards of concrete will be delivered and poured at the project site in a single day. This maximum activity level will require approximately 5 concrete mixer trucks, resulting in a total of about 10 concrete truck trips (5 inbound, 5 outbound). During peak concrete pour days, the earliest concrete mixer truck will arrive at the construction site no earlier than 9:00 AM and the last concrete mixer truck departing from the project site no later than 3:00 PM each day. Similar to excavation, haul trucks used in the Phase 1 construction operations, up to two concrete mixer trucks, will be staged on the project site, while a third truck is being offloaded. Additional trucks will be staged at an off-site location outside the Laurel Canyon and Kirkwood Bowl neighborhoods (to be determined at a later date) to await their position in the staging queue. All trucks will be in radio or phone communication with on-site personnel regarding when to proceed from the off-site staging location to the construction site. Grand View is a narrow residential street, all truck activity will be coordinated to prevent arriving and departing trucks from traveling on this roadway simultaneously to minimize congestion.

Construction Personnel – Through the duration of grading, excavation and foundation construction activities, up to approximately 4 to 12 construction workers will be on the project site at any particular time. These workers will park at a remote parking lot located outside the Kirkwood Bowl area (to be determined at a later date) and be transported via a shuttle van to the project site. Assuming an average occupancy of 6.0 workers per vehicle, one or, sometimes, two passenger shuttle vans will be needed to transport construction personnel to the project site and depart the site following worker delivery, resulting in a total of approximately two trips (one inbound, one outbound) at the beginning of each work day, and an at the end of the work day as the workers are transported from the site. For construction workers to be on the project site and have the appropriate equipment ready for work, personnel will arrive at the project site at approximately 8:00 AM each morning. Similarly, the construction workers will be transported from the project site at the end of each work day.

**Phase 2 Construction-Related Traffic** (Rough Vertical Construction)

Phase 2 activities include the general construction of the exterior structure of the residences, including structural steel, framing, mechanical, electric, plumbing, windows and doors, etc. This phase of construction is anticipated to occur with limited overlap to Phase 1 activities and is estimated to have an 8.0-month duration.

Equipment and Materials Delivery – The construction equipment associated with this phase of construction, including a rough-terrain fork lifts, a bobcat loader, or similar equipment and will be delivered via trailer (towed behind pickup trucks) or flatbed truck. It is expected that this equipment will be delivered to the project site between about 9:30 AM and 10:30 AM and will remain on the site until such time that this equipment is no longer needed where it will be removed, prior to 3:00 PM. The removal of such construction equipment will not occur on the same day as its delivery to the site. Both the delivery and removal of the equipment could result in a total of approximately eight construction vehicle trips (four inbound, four outbound) on those days that equipment is to be delivered to or removed from the site.

Additionally, structural steel, lumber, plumbing, electrical, and other construction materials will also be delivered to the project site during Phase 2. It is anticipated that the delivery of lumber, structural steel, window and door assemblies, drywall, etc. to the project will utilize up to two ten-wheel or stake bed trucks per day (between about 9:30 AM and 3:00 PM) up to two times per week throughout Phase 2, resulting in about four total vehicle trips (two inbound, two outbound) on such days as these deliveries are necessary. Other construction materials are expected to be delivered via flatbed truck and/or heavy-duty pickup truck at a rate of up to approximately two truckloads per day, up to two times per week, resulting in a total of about four vehicle trips (two inbound, two outbound) per day. It is also possible that other construction materials deliveries could occur on the same day, resulting in a total of about eight daily trips (four inbound, four outbound) on such days throughout the Phase 2 construction period. Further, throughout the duration of this (and subsequent) phases of construction, incidental construction debris will be removed from the project site via flat-bed stake trucks, at a frequency of approximately one load per week. This activity will result in two daily trips (one inbound, one outbound) on those days when removal occurs.

Construction Personnel – It is anticipated that up to 20 construction workers could be on the

project site during the peak activity period of the Phase 2 construction. Similar to previous phases, all construction workers will park at a remote parking location outside the Kirkwood Bowl and Laurel Canyon neighborhoods (to be determined at a later date), and then be transported via shuttles vans to the construction site. Assuming an average occupancy of 12.0 workers per shuttle van, a total of about four worker-related shuttle van trips (two inbound, two outbound) are expected at the beginning and end of each work day as the workers are transported to the off-site parking location. As with all other phases of construction, all workers will arrive between 8:00 AM and 9:00 AM and depart prior to 5:00 PM each day.

**Phase 3 Construction-Related Traffic** (House Finishing)

The Phase 3 activities include the finish construction of the shell and interior of the project houses such as tile and stone, drywall, interior doors, hardscape, landscape and other finishes. This phase of construction is anticipated to begin in conjunction with the completion of Phase 2, and is anticipated to completed within approximately 8.0 months of its initiation. Activities associated with the project's Phase 3 construction is anticipated to overlap minimally with the completion of Phase 2 activities.

Equipment and Materials Delivery – Additional off-road construction equipment deliveries for Phase 3 will not be necessary because equipment will already be on site from the previous Phase 1 and Phase 2. Further, finish lumber, interior doors, drywall, cabinets, and other construction materials will also be delivered to the site during this phase. These materials are expected to be delivered via flatbed truck and/or heavy-duty pickup truck at a rate of up to about three deliveries per week throughout the Phase 3 period, resulting in about six vehicle trips (three inbound, three outbound) per day when deliveries occur. Additionally, throughout this phase, construction debris will be removed from the project site via flat-bed stake trucks, at a frequency of approximately one load per week.

Construction Personnel – Throughout the duration of Phase 3, up to 20 construction workers could be on the project site during the peak activity periods. Similar to the previous construction phases, all construction workers will park at a remote location outside the Kirkwood Bowl and Laurel Canyon neighborhoods (to be determined at a later date), and then be transported to and from the construction site via shuttle van(s). Assuming 12 workers for each shuttle van, a total of approximately 4 construction worker-related shuttle van trips (two inbound, two outbound) are expected to occur at the beginning and end of each work day. Again, as with all other phases of project construction, all workers are expected to arrive at the site between about 8:00 AM and 9:00 AM (prior to the delivery of any equipment or materials) and depart the site prior to 5:00 PM each evening following completion of work and the departure or removal of all construction-related delivery vehicles and applicable equipment.

**Phase 4 Construction-Related Traffic** (Hardscape / Landscape)

The Phase 4 construction activities include hardscape and landscape. This phase of construction is anticipated to begin in conjunction with the completion of Phase 3, and is anticipated to completed within approximately 3.0 months of its initiation. Activities associated with the project's Phase 4 construction is anticipated to overlap minimally with the completion of Phase 3 activities.

Equipment and Materials Delivery – Additional off-road equipment deliveries during Phase 4 will not be necessary because equipment will already be on site from the previous Phase 1, 2 and 3. Completion of driveways, walks and decks are scheduled to be done during this phase. As well as all landscaping. The materials needed are expected to be delivered via flatbed truck and/or

heavy-duty pickup truck at a rate of up to about three deliveries per week throughout the Phase 4 construction activity period, resulting in about six vehicle trips (three inbound, three outbound) per day when deliveries occur. Additionally, throughout this phase construction debris will be removed from the project site via flat-bed stake trucks, at a frequency of approximately one load per week.

Construction Personnel – Throughout the duration of Phase 4, up to 8 construction workers could be on the project site during the peak activity periods. Similar to the previous construction phases, all construction workers will park at a remote location outside the Kirkwood Bowl and Laurel Canyon neighborhoods (to be determined at a later date), and then be transported to and from the construction site via shuttles vans. Assuming 12 workers for each shuttle van, a total of approximately 4 construction worker-related shuttle van trips (one inbound, one outbound) are expected to occur at the beginning and end of each work day. Again, as with all other phases of the project's construction, all workers are expected to arrive at the site between about 8:00 AM and 9:00 AM (prior to the delivery of any equipment or materials) and depart the site prior to 5:00 PM each evening following completion of work and the departure or removal of all construction-related delivery vehicles and applicable equipment.

**Additional Construction Traffic Control Restrictions**

Vehicle size may not exceed 10-wheel truck unless approved by the City of Los Angeles.

Although construction-related roadway closures, detours, and other disruptions to local traffic are not anticipated due to the provision of an on-site equipment staging area, all traffic management related to construction activity, potential delays, and alerts regarding unanticipated road conditions or delays will be coordinated with the local police, fire, and emergency response agencies. Per the Construction Traffic Management Plan ("CTMP") during all construction activities that require access to the construction site by construction-related vehicles, flaggers are to be stationed at the specified predetermined locations along the prescribed streets to direct both construction-related and/or public traffic to minimize the effects of such activity. All flaggers shall be qualified and trained in accordance with the current California Manual on Uniform Traffic Control Devices ("CAMUTCD"). Additionally, priority access to the existing homes along all travel routes will be granted to all residents and non-construction related vehicles. No construction-related vehicles will be permitted to stage on any roads within Laurel Canyon at any time. All appropriate efforts will be made to keep the area surrounding the proposed construction site clean and to minimize local impacts regarding traffic, access, and noise.

When possible, trucks and other vehicles queued or staged at the construction site, as well as any unused equipment, will be parked with their engines off to reduce vehicle emissions.

The name and telephone number of a construction representative for the subject project, as well as the name and telephone number for a City agent representing the Department of City Planning or Department of Building and Safety, shall be clearly posted on the temporary construction fencing at all times.

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***TRAFFIC ANALYSIS FOR THE CONSTRUCTION PHASE OF THE CRISLER WAY PROJECT, LOS ANGELES, CALIFORNIA***

Associated Transportation Engineers (ATE) is providing the following traffic analysis for the Crisler Way Project (the "Project") located in the City of Los Angeles. The traffic analysis evaluates potential traffic impacts during the construction phase of the Project.

The analysis focuses on construction traffic (worker trips and equipment/material deliveries) along the access route between Laurel Canyon Boulevard and the Project site. Concerns include impedance to neighborhood access along the access roadways, safety for roadway users given the roadway widths and curvatures, and impacts to the physical condition of the access roadways by construction traffic.

## PROJECT DESCRIPTION

The Project in proposing to construct four single-family residences on four vacant residential lots at 1800, 1806, 1812, and 1818 Crisler Way in the City of Los Angeles. Figure 1 shows the location of the Project site. The Project includes a 20-foot wide and 185-foot long extension of Crisler Way from Grand View Drive for access to the proposed residences. Figure 2 shows the Project site plan.

**Site Preparation and Home Construction**

Grading for site preparation would generate 789 cubic yards of cut - all of which would be used as fill for the improvements to Crisler Way. Since the Project would balance grading quantities on the site there would be no import or export of soil via trucks.

The grading/site preparation phase of the construction project would be undertaken in multiple stages. A breakdown of the stages, durations, approximate number of workers, and worker parking locations is provided in Table 1.

**Table 1**
**Project Construction Schedule – Grading and Site Preparation**

| Stage | Activity | Duration | Workers | Crew Parking | Off-Site Staging |
|---|---|---|---|---|---|
| 1 | Install primary and secondary protection debris walls at bottom of all four lots | 2 weeks | 6 | Off site | Yes – 1 truck |
| 2 | Mobilization: 4 men dropped off at site to clear debris and vegetation of staging area with hand tools. At end of day, a flatbed truck will arrive and haul debris away. | 2 weeks | 4 | On site | No |
| 3 | Create an initial staging pad: 4 men dropped at site, Bobcat S300 (72" x 72") and Mini Excavator G35 62"x86" will be delivered to site by a 10 wheel 24' flatbed truck, unloaded off Grandview as the only inconvenience, 15 minutes at most for each delivery. This equipment will create the pad in one day. | 1 week | 4 | On site | No |
| 4 | Drilling Rig G135 8'x20' delivered by a 10 wheel 24' flatbed truck will be placed completely on the created pad, not on the street. Drill 6 temporary shoring piles on Lot 95. The drilling rig is equipped with a boom as part of the 20' length, a separate crane is not needed. The Drilling Rig will set 6 "I Beams" W12x65 and 25' long brought up in three loads, one load delivered per day. This will reduce the weight on the street and reduce unloading time. The truck delivering the steel beams will only partially be on Grand View Drive. Delivery will be at 12 noon to minimize truck traffic. Equipment to remain on site throughout construction progressing down Crisler Way. Concrete pour of all 6 temporary shoring piles, one six-yard truck, 2 to 3 hours at most will be partially on Grand View. Install lagging in "I Beams" 4"x12"x8' long wood beams delivered by a 12' flatbed truck completely off the street. Lagging set in one day by 4 to 6 workers dropped off at site. | 6 weeks | 12 | On site | No |
| 5 | With the temporary shoring in place, between the Bobcat, small excavator, and the drilling rig, all equipment onsite can cut further along the road, backfilling onto Lot 95 temporary shoring and start the foundation of Lot 96. | 3 weeks | 10 | On site | No |
| 6 | Drilling 36" diameter solider piles | 8 weeks | 6 | On site | No |
| 7a | 50% install of steel cages and concrete piles | 3 weeks | 10 | On site | No |
| 7b | 100% install of steel cages and concrete piles | 3 weeks | 10 | On site | No |
| 8 | Sleeves and waterproofing installation | 2 weeks | 12 | On site | No |
| 9 | Construction of 10" concrete wall between soldier piles | 6 weeks | 12 | On site | No |
| 10 | Waterproofing, drains, backfill and re-compaction | 4 weeks | 12 | On site | No |
| 11 | Underground utility line installation | 4 weeks | 4 | On site | No |
| 12 | Backfill utility trenches | 3 weeks | 6 | On site | No |
| **Grading and site preparation Total** | | **47 weeks** | | | |
| Source: CAC Development, email correspondence with Envicom Corporation, November 27, 2018. | | | | | |

As shown, grading and site preparation would last 50 weeks. The number of workers would range from 4-12 per day for the various phases. The number of workers onsite could be higher due to overlapping stages.

Construction of the homes would occur over multiple phases after the site preparation/grading work is completed. A breakdown of the home construction activities, durations, approximate number of workers, and worker parking locations is provided in Table 2.

**Table 2**
**Project Construction Schedule – Home Construction**

| Activity | Duration [a] | Workers | Crew Parking |
|---|---|---|---|
| Foundations | 8 months | 8 | On site |
| Framing | 8 months | 6 | On site |
| Rough Plumbing | 4.5 months | 3 | On site |
| Rough Mechanical | 3.5 months | 3 | On site |
| Rough Electrical | 4 months | 4 | On site |
| Drs/Win Installation | 3 months | 4 | On site |
| Roofing | 3 months | 4 | On site |
| Exterior Stucco/siding | 6 months | 6 | On site |
| Insulation | 1.5 months | 3 | On site |
| Drywall | 4 months | 6 | On site |
| Cabinets | 4 months | 4 | On site |
| Tile/Stone | 4 months | 4 | On site |
| Finish Carpentry | 4 months | 4 | On site |
| Flooring/Appliances | 2 months | 4 | On site |
| Finish Elect/Mech/Plumb | 2 months | 6 | On site |
| Landscape/Hardscape | 3 months | 8 | On site |

[a] Several home construction activities may be performed concurrently and therefore do not sum to a total duration. CAC Development estimates home construction to be a 15-month process.
Source: CAC Development, July 1, 2016 Construction Schedule for the Crisler Project and email correspondence with Envicom Corporation, December 19, 2016.

Since some of the activity durations may be performed at the same time, the construction phase will be less than the sum of durations shown in Table 2. The Applicant anticipates a 15-month process for home construction. Home construction would start approximately 9 months after work on the extension of Crisler Way begins, thereby reducing overlapping traffic and giving crews an onsite staging area for work on the houses.

As stated in the permit application, the Applicant, contractors, and subcontractors would adhere to the allowable construction schedules to the maximum extent possible in order to consolidate trips and avoid parking on Grand View Drive.

**Construction Staging Area**

The Applicant expects to achieve "off Grandview Parking" within two weeks of starting construction by providing an on-site location for construction parking and equipment staging on Lot #95 (the first lot adjacent to Grand View – see Figure 2). Lot #95 contains an unused building foundation from a prior structure that will provide a flat surface area for temporary construction parking and staging. During construction of the homes, crews will use the extension of Crisler Way as a temporary construction parking and equipment staging area to avoid parking and staging on Grand View Drive.

The applicant has indicated that the largest piece of equipment expected to navigate the access route is a 24-foot flatbed truck. The vehicle has a 20-foot wheelbase and totals approximately 30 feet in length. An Autoturn analysis was performed using these vehicle dimensions to determine whether the truck is able to maneuver from Grand View Drive to the construction staging area. It is assumed that the truck would back into the staging area to deliver materials and then turn left onto Grand View Drive when exiting. Figure 3 shows that the vehicle is able to adequately back into the staging area. The truck must complete a 4-point turn when exiting from the staging area onto Grand View Drive. It is recommended that additional construction personnel be provided to direct traffic while the vehicle is maneuvering through the turn.

**Construction Work Hours**

All construction activities would be performed in accordance with applicable State and federal laws and City Codes and policies with respect to building construction and activities. As provided in Section 41.40 of Los Angeles Municipal Code, the permissible hours of construction within the City are 7:00 AM to 7:00 PM Monday through Friday and between 8:00 AM and 4:00 PM on Saturdays and national holidays. No construction activities are permitted on Sundays.

The Applicant has also committed to the following measures to avoid or minimize potential impacts on the surrounding neighborhood.

- Construction crews will not work on Saturdays.
- The contractor will shuttle workers to the Project site in a mini-van to avoid construction traffic and parking on Grand View Drive.
- Construction crews will not work on Thursdays, trash collection days, until the on-site construction staging area on Lot #95 is created.

**Construction Equipment**

The assumed off-road equipment fleet for the construction project is listed in Table 3. Construction may also involve delivery trucks, tools, and other equipment necessary for

completion of the Project. On-road construction vehicles would consist of one ten-wheel 24' flatbed truck, cement trucks with a 6 CY capacity, a shuttle van, power tools, and other equipment necessary.

**Table 3**
**Off-Road Equipment Fleet for Project Construction**

| Construction Phase | Off-Road Equipment | Dimensions |
|---|---|---|
| Site Preparation, Grading and Roadway Improvement | 1 "Bobcat" skid steer loader – S300 | 72" x 72" |
| | 1 mini excavator - G35 | 62" x 86" |
| | 1 drilling rig G135 with boom | 8' x 20' |
| | 1 roller (compacter) | 101" x 52" |
| | 1 paver | 166" x 60" |
| Vertical Construction | 1 rough terrain forklift | 142" x 86.5" |
| | 1 Bobcat loader – S300 | 72" x 72" |
| Source: CAC Development email correspondence with Envicom Corporation, December 19, 2016, and Construction Management Schedule from Rigo's Construction, Foundation Contractor. | | |

**Temporary Street Closures**

Construction activities may necessitate temporary lane closures on streets adjacent to the Project site on an intermittent basis for utility relocations/hook-ups, delivery of materials, and other construction activities as required. However, site deliveries and staging of equipment and materials would be organized to remain onsite in the most efficient manner possible to reduce temporary impacts to the neighborhood and surrounding community. Once the temporary construction parking and staging area on Lot #95 is ready, the remaining construction equipment would be staged onsite for the duration of construction. Traffic lane and right-of-way closures, if required, will be properly permitted by the City agencies and will conform to City standards.

**TRIP GENERATION**

Traffic generated during the construction project was estimated based on the construction estimates provided in Tables 1 and 2. The applicant has indicated that a maximum of 10 vehicles would travel to the site per day which includes delivery vehicles, worker shuttles, and employee vehicles. The delivery vehicle trips include a smaller cement truck with a 6 CY capacity. Table 4 shows an estimate of the average daily trips (ADT) that would be generated during the Grading/Site Preparation and Home Construction phases.

**Table 4**
**Trip Generation Estimates**

| Phase | Trips per Day | |
|---|---|---|
| | Vehicles (a) | Trips (b) |
| Grading/Site Preparation | 10 | 20 ADT |
| Home Construction | 10 | 20 ADT |
| (a) Assumes delivery vehicles, worker shuttles and employee vehicles.<br>(b) Trips assume 1 inbound + 1 outbound trip per vehicle. | | |

As shown in Table 4, peak construction traffic is estimated at up to 20 trips per day (10 inbound trips + 10 outbound trips). The estimates shown in Table 4 assume some overlap in construction activities and are therefore overestimate the day-to-day traffic generation. Most days would experience lower trip generation since a lower number of workers and/or deliveries will be required for the Project.

The relatively minor amount of traffic that would be generated by the construction project would not impact the volume-to-capacity ratios on the adjacent roadway network. Existing traffic volumes on the network between Laurel Canyon Boulevard and the Project site are relatively low and the roadways operate at "Level of Service" A, indicating relatively free flow conditions. However, construction traffic on the roadway network between Laurel Canyon Boulevard and the Project site has the potential to affect safety and access for roadway users, given the roadway widths and curvatures.

## POTENTIAL ACCESS ROUTES

There are two potential routes for construction traffic to access the Project site, as illustrated on Figures 4 and 5. Both routes take access from Laurel Canyon Boulevard and use a portion of Kirkwood Drive. ATE surveyed the two routes to determine the best route for roadway users given the roadway widths and curvatures, while minimizing impedance to neighborhood access along the two routes.

### Traffic Route A

As shown in Figure 4, this route begins at Laurel Canyon Boulevard and uses Kirkwood Drive to Yucca Trail to Grand View Drive to the Project site. The segment of Kirkwood Drive between Laurel Canyon Boulevard and Yucca Trail is a two-lane road with curbs on both side of the road. Parking is allowed on one side of the road. Photo A illustrates a typical section of Kirkwood Drive. The segment of Kirkwood Drive between Laurel Canyon Boulevard and Yucca Trail is 26 feet wide from curb to curb, which allows for two-way traffic. Construction traffic would turn from Kirkwood Drive onto Yucca Trail at a Stop sign controlled intersection and then proceed along Yucca Trail to Grand View Drive. Photo B illustrates the segment of Yucca Trail adjacent to Kirkwood Drive. As shown, Yucca Trail is a narrow roadway. Yucca Trail varies in width between Kirkwood Drive and Grand View

Drive. Some areas are as narrow as 10 feet and some as wide as 15 feet (see Photo C). There are many areas marked with No Parking signs. The narrow width requires vehicles traveling in opposing directions to pass at widened areas (or near residential driveways). Vehicles traveling downhill are sometimes required to back up short distances to allow for uphill vehicles to pass. There is also narrow sharp turn (more than 90 degrees) where Yucca Trail transitions to Grand View Drive. From that point, Grand View Drive continues to the Project site. Grand View Drive is also a narrow roadway (see Photo D), with some areas are as narrow as 10 feet. No Parking signs are also prevalent along Grand View Drive and the narrow width requires vehicles traveling in opposing directions to pass at widened areas (or downhill vehicles back up short distances to allow for uphill vehicles to pass).

**Traffic Route B**

As shown in Figure 5, this route begins at Laurel Canyon Boulevard and uses Kirkwood Drive to Grand View Drive to the Project site. As noted, Kirkwood Drive is 26 feet wide and allows for two-way traffic. Construction traffic would turn from Kirkwood Drive onto Grand View Drive and proceed to the Project site. An Autoturn analysis was conducted to determine whether the 24-foot flatbed truck would be able to navigate the sharp curve from Kirkwood Drive to Grand View Drive. As shown in Figure 6, the vehicle is able to maneuver through the turn with a 4-point turn. It is recommended that additional construction personnel be provided to direct traffic while the vehicle is maneuvering through the turn. Photo E shows the Kirkwood Drive/Grand View Drive intersection. The segment of Grand View Drive between Kirkwood Drive and the Project site is also narrow (some areas as narrow as 10 feet) and requires vehicles traveling in opposing directions to pass at widened areas (or downhill vehicles back up short distances to allow for uphill vehicles to pass). Figure 7 identifies these choke points along the access route, where the roadway narrows to less than 16 feet and prohibits two vehicles to pass in either direction. As shown, the roadway narrows to a minimum of 10 feet in some locations. The 24-foot flatbed truck would be able to maneuver along the access route at these choke points. Photo F illustrates a typical section of Grand View Drive between Kirkwood Drive and the Project site. There are many areas marked with No Parking signs. However, vehicles were observed parking in those locations (see Photo G).

**Recommended Route**

Based on the field review of the two routes, Route B is recommended for access to and from the Project site. This route uses a longer portion of Kirkwood Drive (which is 26 feet wide and allows for two-way traffic), is safer for roadway users given the roadway widths/curvatures; and would minimize impedance to neighborhood traffic.

It is noted that the permit application states that waste generated by the construction project would use Grand View Drive to Yucca Trail to Kirkwood Drive to Laurel Canyon Boulevard. Instead, Route B is recommended for hauling waste from the Project site (i.e. Grand View Drive to Kirkwood Drive to Laurel Canyon Boulevard).

## EQUIPMENT AND MATERIAL DELIVERIES

The construction project will require several pieces of large equipment to be transported to the site (i.e. bobcat, grader, tractor/backhoe, fork lift). Given the size of the trucks required to transport these large pieces of equipment, it is recommended that the contractors consider driving large equipment to the site when possible. Equipment could be transported via trucks on Kirkwood Drive from Laurel Canyon Boulevard to Grand View Drive and then unloaded from the transport trucks and driven to the Project site along Grand View Drive.

The foundation phase of the construction project will require delivery of concrete to the site. A standard size concrete truck has a load capacity of 10 cubic yards. The applicant has indicated that cement trucks with a capacity of 6 cubic yards will be used. It is recommended that these smaller concrete trucks be used for transporting foundation materials to the Project site since Grand View Drive is narrow and there is the potential to encounter opposing traffic.

## MITIGATION MEASURES

The following mitigations are recommended in order to minimize potential traffic impacts during the construction phase of the Project.

1. Inform neighborhood residents of the construction project. A website is recommended to inform residents of the status of the construction project. In addition, either a neighborhood meeting, mail out, or direct delivery should be provided to inform residents of the details of the construction project. Information should include, but not be limited to, the duration of the construction project, construction days of week, hours of day, etc., and the amount of construction traffic expected on construction days.

2. Inform neighborhood residents and the public of construction traffic by posting signage along the construction route.

3. Create a construction hotline number for neighborhood residents to voice problems associated with construction traffic.

4. The applicant should develop a traffic control plan pursuant to City of Los Angeles requirements. The plan would detail the placement of warning signs, traffic control personnel, etc. The traffic control plan should identify the size of trucks to ensure that trucks can adequately maneuver the designated routes. The plan should also include provision for use of flagmen at the Kirkwood Drive/Grand View Drive intersection and the Grand View Drive/Crisler Way extension to facilitate deliveries, as necessary.

5. Trucks transporting construction equipment and materials to/from the site should be scheduled outside of the morning and afternoon peak commuter periods (A.M. Peak Commuter Period = 7:00 to 9:00 A.M. and P.M. Peak Commuter Period = 4:00 to 6:00 P.M.).

6. Smaller capacity concrete trucks (6 CY capacity) should be used for transporting foundation materials to the Project site.

7. Notify area residents of approximate times when trucks will be transporting construction equipment and materials to/from the site. Oversized trucks should be routed with a pilot car pursuant to the California Vehicle Code. Also notify area residents of days (and hours of day) when multiple concrete trucks will be serving the site for foundation work.

8. Prohibit worker and construction vehicle parking on neighborhood roads.

9. Provide shuttle services for construction workers during phases that do not provide onsite parking. The Applicant expects to achieve onsite parking within two weeks of starting construction by providing a construction parking and equipment staging area on Lot #95. Prior to that time, workers should park offsite and be shuttled to the site.

10. Require the applicant to repair damage to the pavement structure and curbs along the construction route between Laurel Canyon Boulevard and the Project site resulting from Project construction activity. Inspection and video of the roadway should be completed prior to the construction project in order to document existing conditions. Upon completion of the construction project, the roadway should then be inspected to document any damage to the roadway.

11. Given the length of the construction period (24 months), periodic inspection and maintenance should be performed along the access route to the site to address any roadway deterioration due to construction traffic.

This concludes our traffic impact analysis for the construction phase of the Crisler Way Residential Project.

Associated Transportation Engineers,

Scott A. Schell, AICP, PTP
Principal Transportation Planner

SAS/DLD

Attachments




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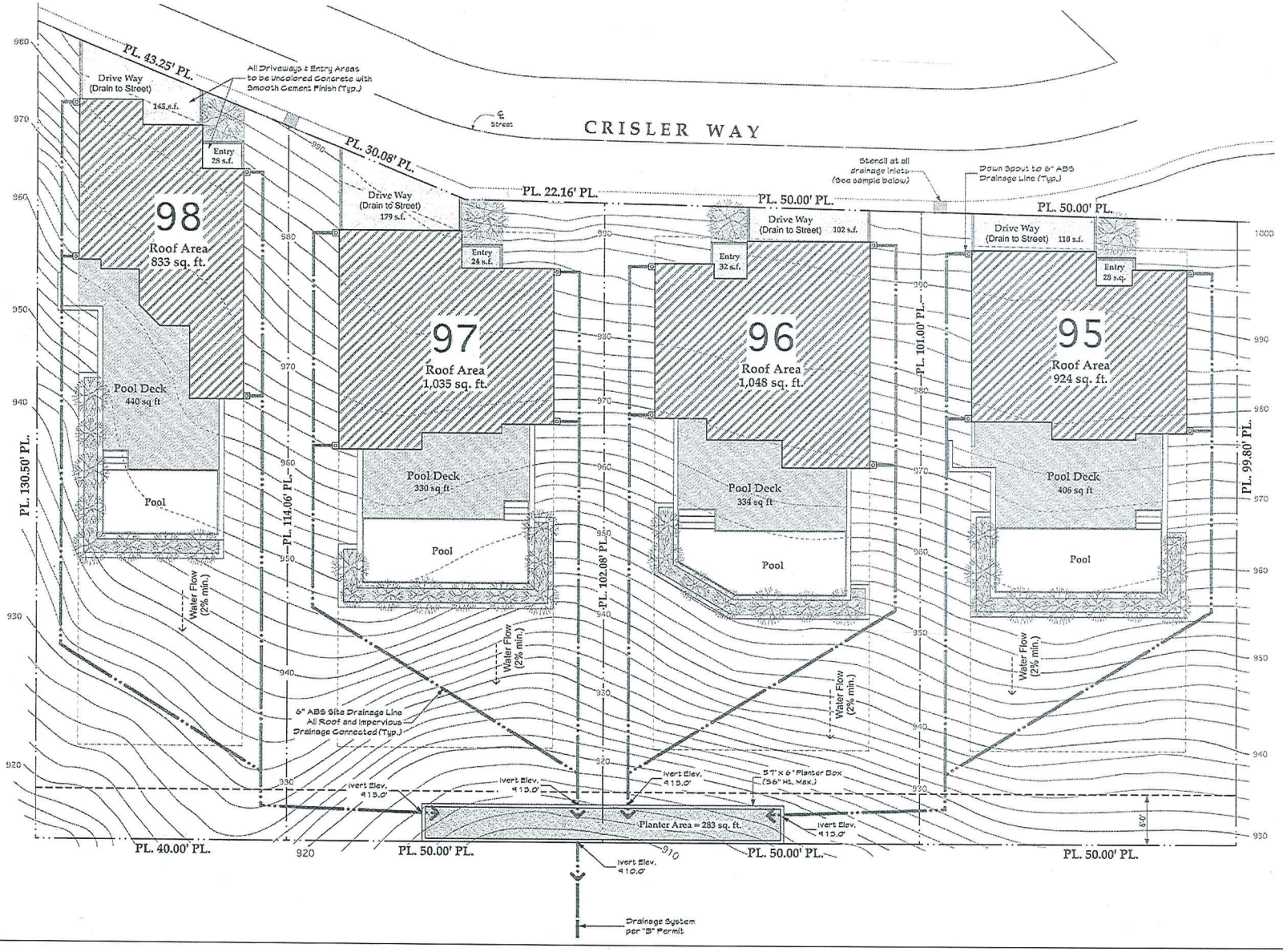
PROJECT SITE LOCATION

FIGURE 1

EKM - ATE#16090

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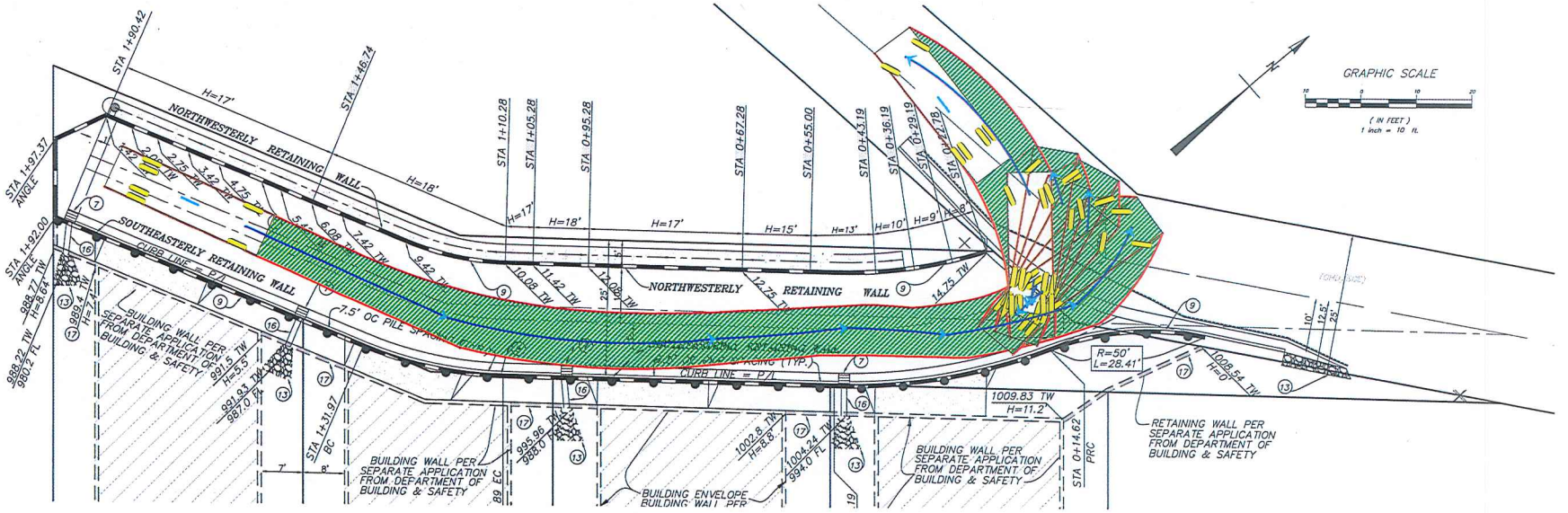
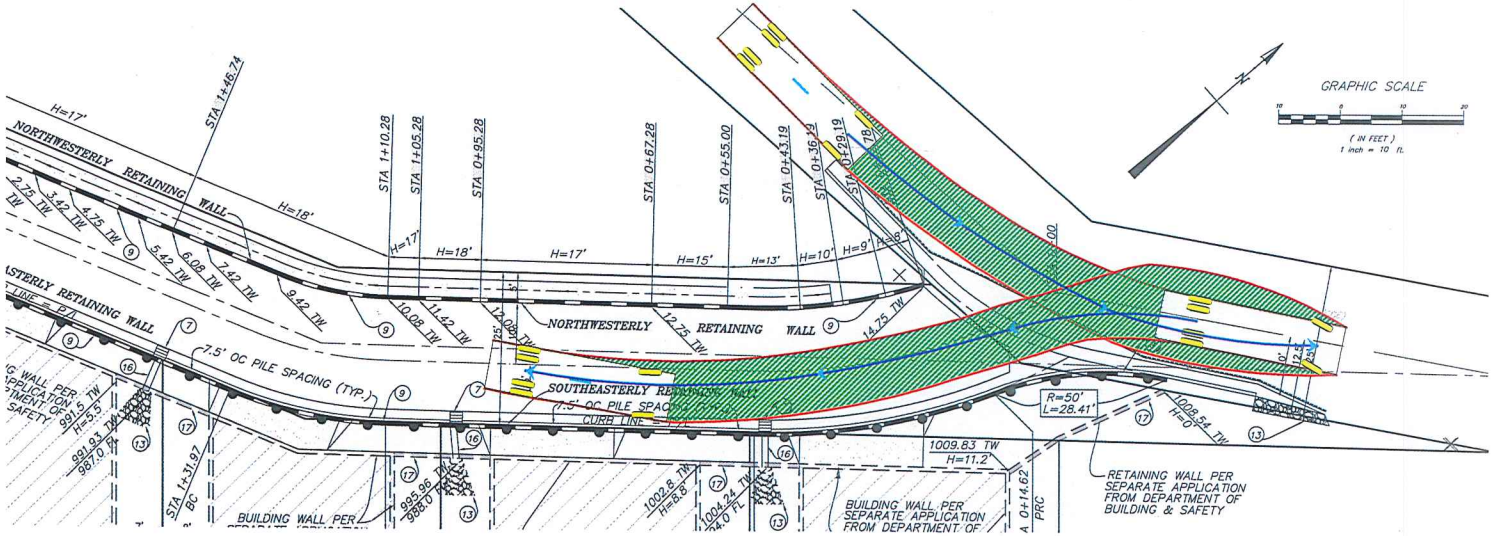
# PROJECT SITE PLAN

FIGURE 2

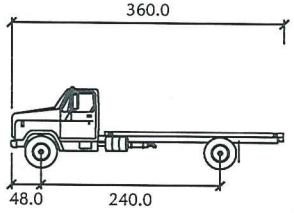
EKM - ATE#16090




OUTBOUND TURNING MOVEMENT




INBOUND TURNING MOVEMENT




24-foot Flatbed Truck

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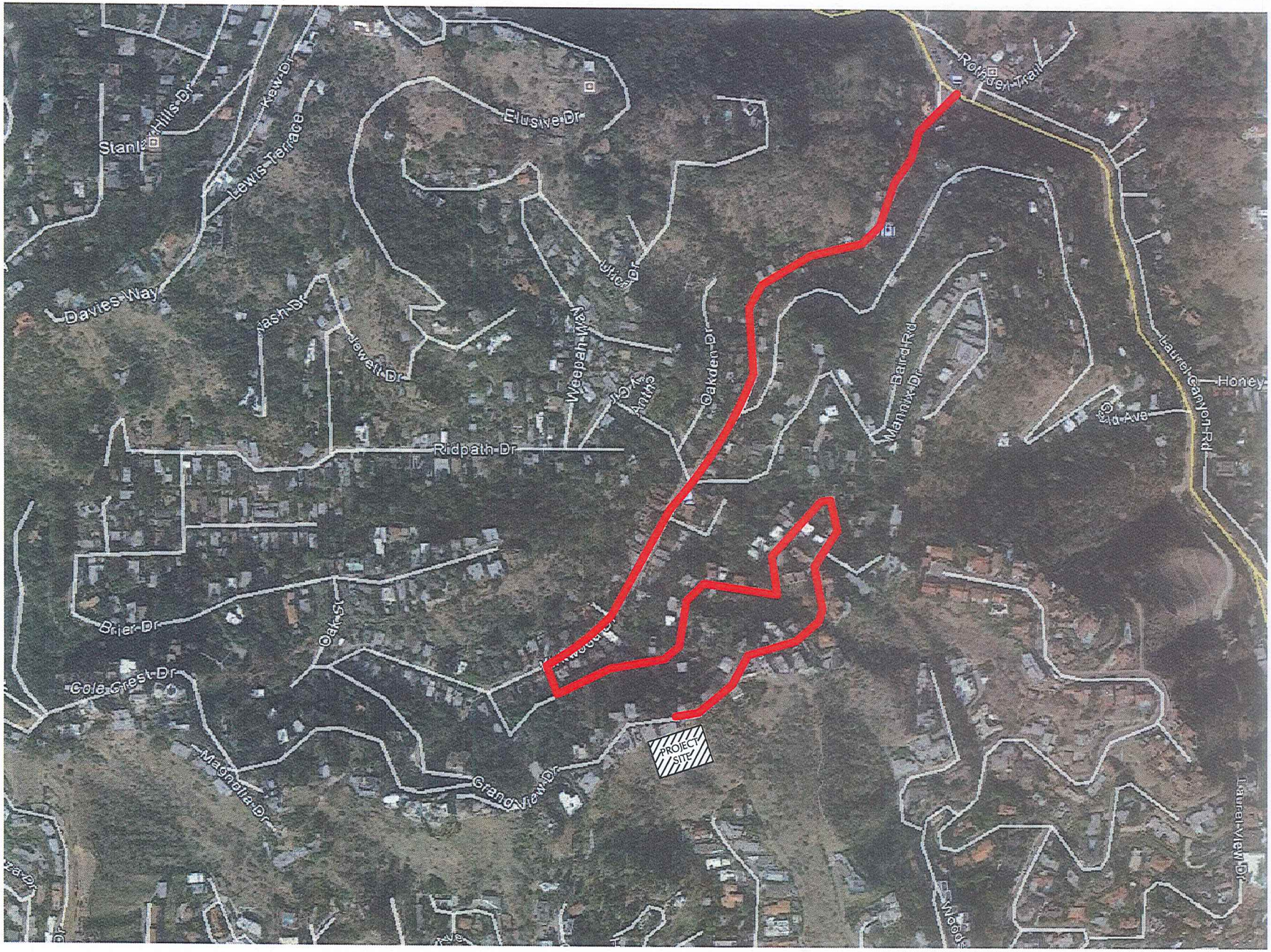
# AUTOTURN ANALYSIS: GRAND VIEW DRIVE TO CONSTRUCTION STAGING AREA

FIGURE 3

EKM - ATE#16090

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TRAFFIC ROUTE A

FIGURE 4

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TRAFFIC ROUTE B (RECOMMENDED)

FIGURE 5

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AUTOTURN ANALYSIS: KIRKWOOD DRIVE TO GRAND VIEW DRIVE

FIGURE 6

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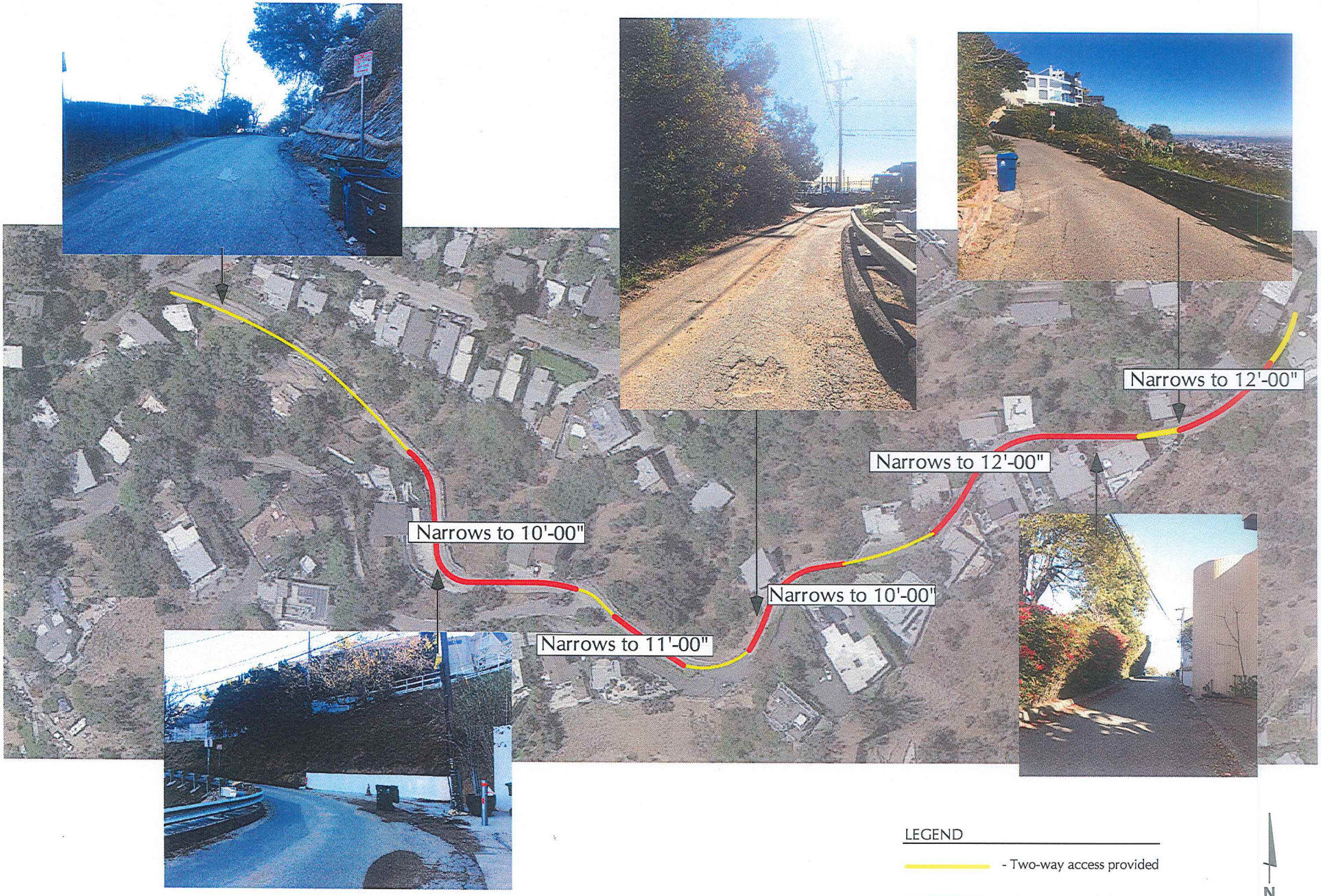


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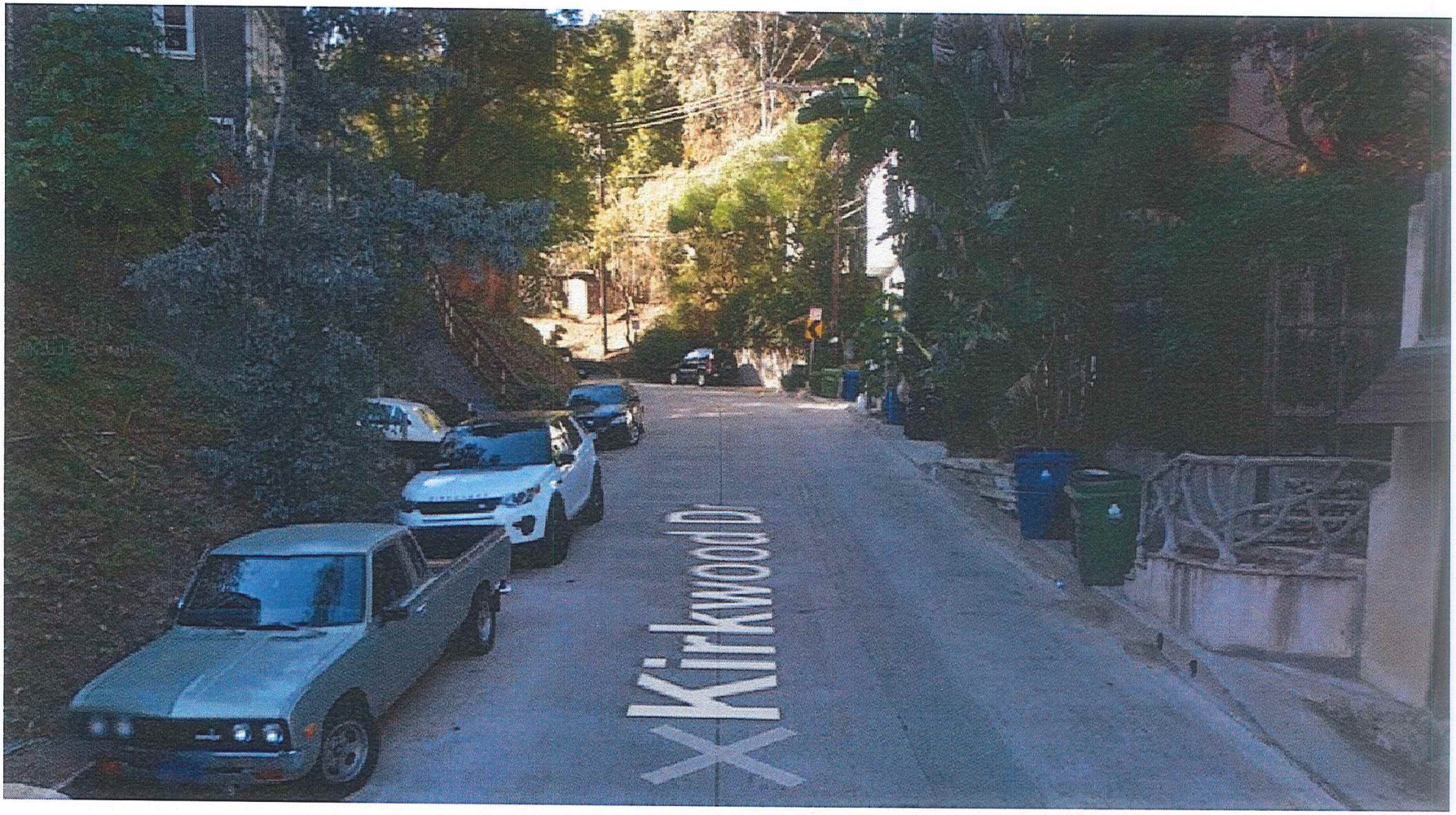
CHOKE POINTS ALONG ACCESS ROUTE: KIRKWOOD DRIVE TO GRAND VIEW DRIVE

FIGURE 7

EKM - ATE#16090




ASSOCIATED
TRANSPORTATION
ENGINEERS

KIRKWOOD DRIVE - TYPICAL

PHOTO A

EKM - ATE#16090

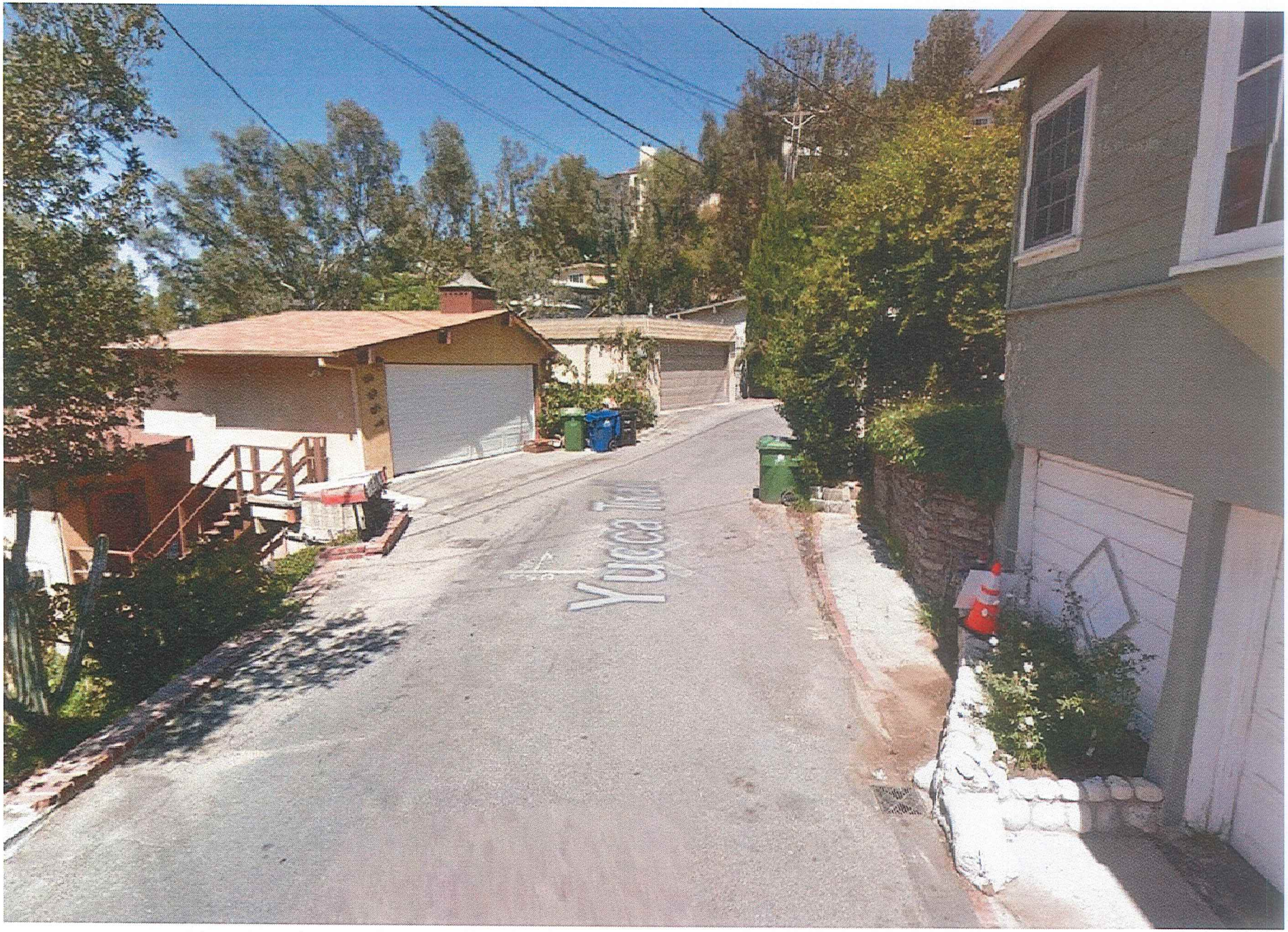



Associated
Transportation
Engineers

YUCCA TRAIL ADJACENT TO KIRKWOOD DRIVE

PHOTO B

EKM - ATE#16090




Associated
Transportation
Engineers

YUCCA TRAIL - TYPICAL

PHOTO C

EKM - ATE#16090

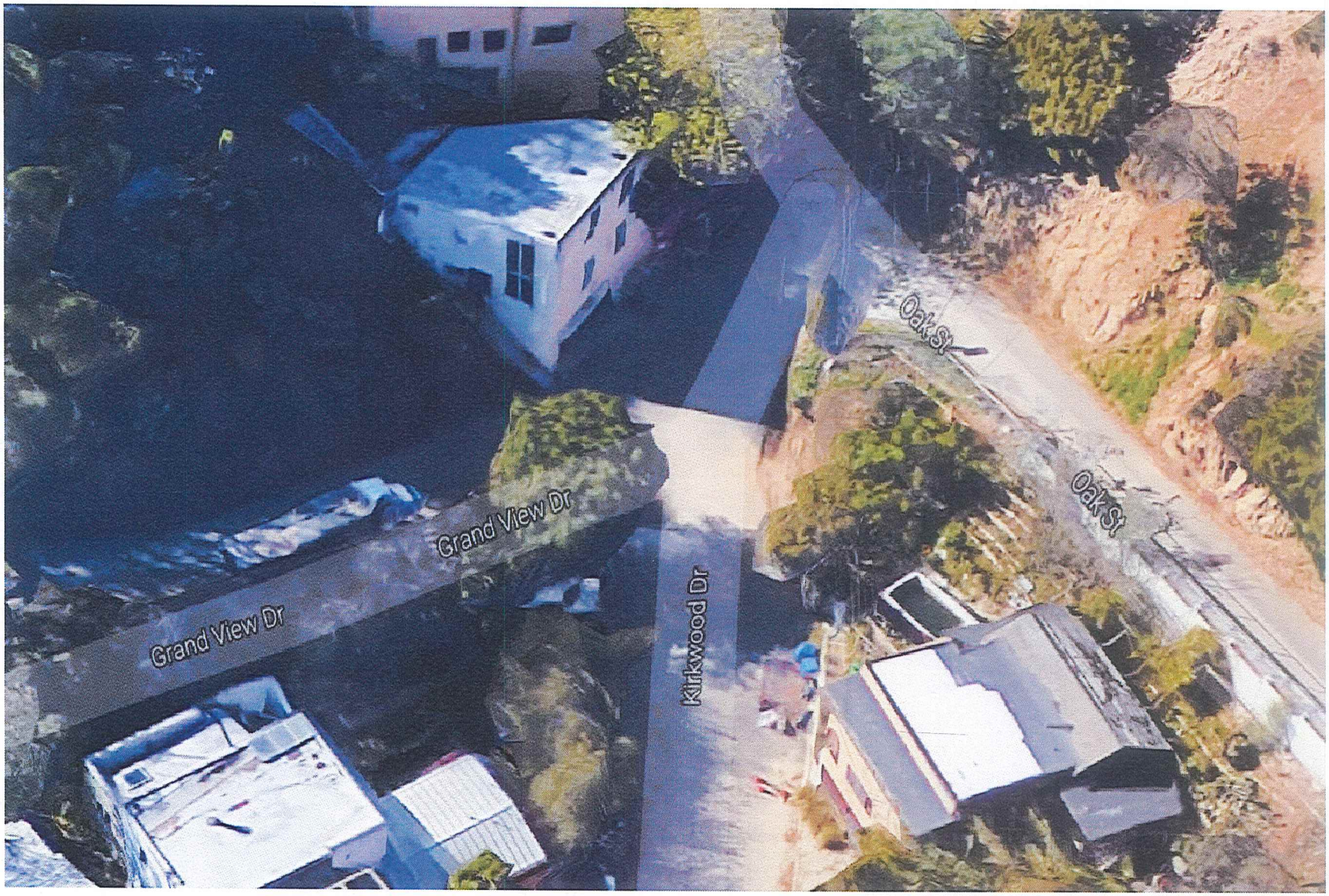



Associated
Transportation
Engineers

GRAND VIEW DRIVE - TYPICAL

PHOTO D

EKM - ATE#16090




ASSOCIATED
TRANSPORTATION
ENGINEERS

KIRKWOOD DRIVE/GRAND VIEW DRIVE INTERSECTION

PHOTO E

EKM - ATE#16090




ASSOCIATED
TRANSPORTATION
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GRAND VIEW DRIVE - TYPICAL

PHOTO F

EKM - ATE#16090




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ENGINEERS

ILLEGAL PARKING ON GRAND VIEW DRIVE

PHOTO G

EKM - ATE#16090

# Cumulative Air Quality, GHG, and Noise Impact Analyses

APPENDIX L

# CUMULATIVE AIR QUALITY, GHG and NOISE ANALYSES

## 1800, 1806, 1812, AND 1818
## CRISLER WAY and CUMULATIVE AREA PROJECTS

## LOS ANGELES, CALIFORNIA

Prepared by:

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Prepared for:

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Date:

December 14, 2018

Project No.: P18-046 CI

# SCOPE

The proposed 1800, 1806, 1812, and 1818 Crisler Way Residential project sites are located within the boundaries of the Hollywood Community Plan Area of the City of Los Angeles, California. The project consists of construction of four (4) single-family residences on four lots.

In addition to the Crisler Way project, other related projects in the area could be under construction at the same time or use portions of the same construction access route to the project site, necessitating a cumulative impact analysis. For air quality and GHG this would increase regional emissions and possibly localized emissions. Noise and vibration impacts could be additive at any single receptor and worse than when considering an individual project. Because hillside homes can require extensive grading and potential earthworks export, noise and vibration associated with truck haul could intensify at residences along common haul routes.

For this analysis, in addition to the 1800, 1806, 1812, and 1818 Crisler Way project, an additional eight planned residences are considered and are located within an approximate 1,600-foot (0.3 mile) distance of the Crisler Way project site. As a worst case, in addition to the Crisler Way construction of 4 homes, construction of these additional 8 area homes could overlap at some stages of construction of the proposed project and rely on portions of the same construction access route, namely, from the intersection of Laurel Canyon Road and Kirkwood Drive to Grand View Drive. Cumulative air quality and noise impacts have been evaluated for this expanded scope. For purposes of this analysis, 4 of the 8 additional homes are assumed to require disposal of 1,500 CY each of earthworks for a total of 6,000 CY of export. The nearest disposal site is considered to be the Sunshine Canyon Landfill in Sylmar. To simulate a worst case, all four homes were modeled to all undergo grading and disposal simultaneously. The other residential lots are assumed to be balanced on site. All homes are assumed to undergo simultaneous construction and earthworks disposal to model a worst-case scenario.

# AIR QUALITY

In addition to consideration of the impact from the four proposed Crisler Way residences, an additional 8 homes are presumed to undergo construction at the same time. Therefore, the combined emissions from the 12 homes has been evaluated and compared to applicable construction emissions thresholds.

The South Coast Air Quality Management District (SCAQMD) has established construction emissions criteria. Projects with daily emissions that exceed any of the following emission thresholds are recommended by the SCAQMD to have a significant impact under CEQA guidelines.

**Table 1**
**Daily Emissions Thresholds**

| Pollutant | Construction | Operations |
|---|---|---|
| ROG | 75 | 55 |
| NOx | 100 | 55 |
| CO | 550 | 550 |
| PM-10 | 150 | 150 |
| PM-2.5 | 55 | 55 |
| SOx | 150 | 150 |
| Lead | 3 | 3 |

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Although the standards shown in Table 1 typically apply to discrete projects, for this analysis, because the possibility of multiple projects in the vicinity all being under construction at varying stages, the cumulative emissions were considered relative to the individual project standards above.

In the original Crisler Way air quality analysis, estimated construction emissions for the 4 homes were modeled using CalEEMod2016.3.2 to identify maximum daily emissions for each pollutant during project construction. The modeled prototype construction equipment fleet and schedule shown in Table 2 was obtained from the project architect and applicant.

**Table 2**
**Crisler Way 4-Residences**
**Construction Activity Off-Road Equipment**

| Phase Name and Duration | Equipment |
|---|---|
| Site Preparation, Grading, and Roadway Improvement (12 months) | 1 skid steer loader |
| | 1 excavator |
| | 1 bore/drill rig |
| | 1 roller |
| | 1 paver |
| Vertical Construction (15 months) | 1 Rough Terrain Forklift |
| | 1 skid steer loader |

Utilizing the indicated equipment fleet and durations the following worst-case daily construction emissions were calculated by CalEEMod and are shown in Table 3. Emissions for year 2019 assume the worst-case day is site preparation and grading. Because the Crisler Way development will balance on-site, these numbers do not include any soils disposal. They do include worker commuting and materials/vendor deliveries.

**Table 3**
**Crisler Way 4-Residences Project**
**Construction Activity Emissions**
**Maximum Daily Emissions (pounds/day)**

| Maximal Construction Emissions | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
|---|---|---|---|---|---|---|
| **Year 2019 (Grade and Prep)** | 1.1 | 11.9 | 11.6 | 0.0 | 1.6 | 1.0 |
| **Year 2020 (Vertical Construction)** | 0.4 | 3.1 | 3.9 | 0.0 | 0.4 | 0.2 |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |

*CalEEmod output in appendix. Only unmitigated conditions were necessary and are reflected in this report. Possible mitigation modeling is exclusively for dust control (watering site 2-3 times per day) if necessary and only affects particulate emissions.

The cumulative analysis considers an additional 8 residences being constructed within the approximate time period of the proposed project, and therefore the summary above for 4-homes was increased by a factor of 3 to reflect 12 units as follows in Table 4.

**Table 4**
**Cumulative 12 Residences**
**Construction Activity Emissions**
**Maximum Daily Emissions (pounds/day)**

| Maximal Construction Emissions | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
|---|---|---|---|---|---|---|
| **Year 2019** | 3.3 | 35.7 | 34.8 | 0.0 | 4.8 | 3.0 |
| **Year 2020** | 1.2 | 9.3 | 11.7 | 0.0 | 1.2 | 0.6 |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |

Construction emissions from will not exceed thresholds even with 12 homes undergoing hillside construction. However, the numbers above do not consider soil haul associated with transporting excess earthworks.

As discussed, it was assumed that half of the new homes will balance on site and half will require 1,500 CY of earthwork export. Because the local roads are narrow, smaller 10 CY capacity trucks were assumed for soil haul. This would result in the generation of 300 truck trips (one way) per home, or 1,200 trips for four homes.

Sunshine Canyon Landfill in Sylmar is the closest disposal area. The landfill is about 22 miles from the project site. Therefore, the 1,200 one-way truck trips would require a total of 26,400 miles of on-road travel. Assuming all soil haul occurs within a two-week period, the daily haul emissions would be 2,640 miles per day (26,400 total miles/ 10 days).

EMFAC2017, the most current version of the California Air Resources Board tool for estimating emissions from on-road vehicles, was used to calculate truck haul emissions associated with disposal of earthworks. EMFAC2017 emissions calculations were based on 2,640 miles per day of truck haul and are shown in Table 5.

**Table 5**
**Earthworks Truck Haul Emissions**
**Daily Emissions (pounds/day)**
**2,640 miles/day**

| Maximal Haul Emissions | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
|---|---|---|---|---|---|---|
| **Year 2019** | 1.9 | 42.1 | 8.3 | 0.1 | 1.0 | 0.9 |

Source: EMFAC2017 Output

Combining the emissions from construction modeled without earthworks and truck haul associated with earthworks export would provide the cumulative emission shown in Table 6.

**Table 6**
**Cumulative 12 Residences**
**Construction and Earthworks Haul Activity Emissions**
**Maximum Daily Emissions (pounds/day)**

| Maximal Construction Emissions | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
|---|---|---|---|---|---|---|
| **Year 2019** | 5.2 | 77.8 | 43.1 | 0.1 | 5.8 | 3.9 |
| **Year 2020** | 1.2 | 9.3 | 11.7 | 0.0 | 1.2 | 0.6 |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |

Even if all 12 homes are constructed at the same time and undergo grading at the same time, daily emissions are still projected to be less than the SCAQMD thresholds with a healthy margin of safety. As a perspective, thresholds are not typically exceeded for small projects such as construction of 12 homes. It usually requires a large development to trigger an exceedance.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

## LOCALIZED TRUCK HAUL AQ RISK

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs) and evaluate peak day emissions.

The worst-case assumption is that 4 homes undergo simultaneous grading and haul. If all haul occurs over a 2-week period there will be 300 truck trips per house, or 1,200 trips for four homes/10 days = 120 trips per day.

For this localized analysis, all trucking associated with soil disposal was assumed to overlap on the same day and that all trucks could impact a single residence. If the 120 daily haul trips could impact a single home, that impact could extend for an assumed 1,000 linear foot air quality impact zone per haul truck. Therefore, a single home could be exposed to 22.7 miles of exhaust during a worst-case day (120 trips x 1,000 feet = 22.7 miles).

**Table 7**
**Earthworks Truck Haul Emissions**
**Daily Emissions (pounds/day)**
**22.7 miles/day**

| Maximal Haul Emissions | ROG | NOx | CO | $SO_2$ | PM-10 | PM-2.5 |
|---|---|---|---|---|---|---|
| **Year 2019** | 0.01 | 0.33 | 0.05 | <0.01 | 0.01 | 0.01 |

Using the most stringent LST thresholds for a 1 acre site with a 25 meter separation distance the following impacts are calculated in Table 8.

**Table 8**
**LST and Project Emissions (pounds/day)**

| LST 1.0 acres/25 meters<br>NW Coastal LA County | CO | NOx | PM-10 | PM-2.5 |
|---|---|---|---|---|
| **Max Allowable Emissions Per Receptor** | 1,531 | 103 | 4 | 3 |
| Max Haul Emissions | 0.05 | 0.33 | 0.01 | 0.1 |

CalEEMod Output in Appendix

LSTs were compared to the maximum daily truck haul. As seen above, emissions will remain below the LST thresholds with a significant margin of safety. Localized air quality emissions associated with truck haul on common routes would have a less-than-significant impact.

## OPERATIONAL IMPACTS

Operational emissions were originally calculated for the 4-unit Crisler Way project in CalEEMod. The following summarizes the Crisler Way only project and then the impact of all 12 homes. Emissions were derived by adjusting the Crisler Way only emissions by a factor of 3 as shown in Table 9.

**Table 9**
**Crisler Way 4-Residence Project**
**Daily Operational Impacts**

| | Operational Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| **Source** | **ROG** | **NOx** | **CO** | **$SO_2$** | **PM-10** | **PM-2.5** |
| Area | 1.2 | 0.1 | 2.4 | 0.0 | 0.3 | 0.3 |
| Energy | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mobile | 0.1 | 0.4 | 1.0 | 0.0 | 0.3 | 0.1 |
| **Total** | **1.3** | **0.5** | **3.4** | **0.0** | **0.6** | **0.4** |
| SCAQMD Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Exceeds Threshold? | No | No | No | No | No | No |

**Table 10**
**Cumulative 12 Residences**
**Daily Operational Impacts**

| | Operational Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| **Source** | **ROG** | **NOx** | **CO** | **$SO_2$** | **PM-10** | **PM-2.5** |
| Area | 3.6 | 0.3 | 7.2 | 0.0 | 0.9 | 0.9 |
| Energy | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mobile | 0.3 | 1.2 | 3.0 | 0.0 | 0.9 | 0.3 |
| **Total** | **3.9** | **1.5** | **10.2** | **0.0** | **1.8** | **1.2** |
| SCAQMD Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Exceeds Threshold? | No | No | No | No | No | No |

As shown in Table 10, the operational impacts of all 12 cumulative residences is much less than the suggested SCAQMD thresholds. Cumulative operational emissions are less-than-significant with a healthy margin of error.

# GREENHOUSE GAS EMISSIONS

In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT $CO_2e$ for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an officially adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

## CONSTRUCTION ACTIVITY GHG EMISSIONS

During project construction, the CalEEMod2016.3.2 computer model predicts the annual $CO_2e$ emissions for construction of the Crisler Way project. To obtain the cumulative impact for 12 homes the Crisler Way impacts were increased by a factor of 3.

**Table 11**
**Construction Emissions (Metric Tons $CO_2e$)**

| | $CO_2e$ | |
|---|---|---|
| | **Crisler Way Only** | **All 12 Homes** |
| **2019 Grading/Prep** | 288.0 | 864.0 |
| **2019 Construction** | 95.1 | 285.3 |
| **2020 Construction** | 22.8 | 68.4 |
| **Soil Haul** | na | 4.7 |
| **Total** | **405.9** | **1,222.4** |
| **Amortized** | **13.5** | **40.8** |

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are below 3,000 MT/year and therefore considered individually less-than-significant.

## PROJECT OPERATIONAL GHG EMISSIONS

Table 12 shows the total operational and annualized construction emissions for the Crisler Way project and the 12 cumulative homes.

**Table 12**
**Operational Emissions**

| **Consumption Source** | **MT $CO_2e$** | |
|---|---|---|
| | **Crisler Way Only** | **All 12 Homes** |
| Area Sources | 1.4 | 4.2 |
| Energy Utilization | 24.2 | 72.6 |
| Mobile Source | 56.3 | 168.9 |
| Solid Waste Generation | 2.3 | 6.9 |
| Water Consumption | 3.3 | 9.9 |
| Construction | 13.5 | 40.8 |
| **Total** | **101.0** | **303.3** |
| Guideline Threshold | 3,000 | |
| Exceeds Threshold? | No | No |

Total project GHG emissions are substantially below the proposed significance threshold of 3,000 MT suggested by the SCAQMD. Hence, the cumulative impacts will not result in generation of a significant level of greenhouse gases.

# NOISE

Because noise impacts are primarily influenced by distance separation, the approximate distances between Crisler Way and the other 8 cumulative area projects was measured as shown in Table 13.

**Table 13**
**Distance Between Crisler Way and Other Cumulative Homes**

| Address: | Distance in Feet |
|---|---|
| 8551 Cole Crest | 1,560 |
| 8495 Cole Crest | 1,185 |
| 8461 Grand View | 815 |
| 8413 Grand View | 480 |
| 8301 Grand View | 500 |
| 8289 Grand View | 600 |
| 8426 Brier Drive | 1,025 |
| 8424 Brier Drive | 975 |

For this analysis, a MEI (Maximally Exposed Individual) is considered to be immediately adjacent to the Crisler Way site and this home would also be noise impacted by the 8 other area projects.

Spherically radiating point sources of construction noise emissions are atmospherically attenuated by a factor of 6 dB per doubling of distance, or about 6 dB in 100 feet of propagation. The impact radius pre-supposes a clear line-of-sight and no other machinery or equipment noise that would mask project construction noise. With buildings and other barriers to interrupt line-of-sight conditions, the potential "noise envelope" around individual construction sites is reduced. Because the project area is highly developed, there are numerous intervening structures.

In the Crisler Way noise study, the maximum noise from construction equipment was estimated to be 82 dB Leq at the closest MEI to the 4-residence site. To determine the impact from other project sites at this MEI, attenuation related to distance and intervening structures was calculated. These adjustments would provide the following residual noise level at the Crisler Way MEI.

**Table 14**
**Construction Noise Level at Cumulative Sites**

| Adjustment for distance from Crisler Way to/ | Distance Attenuation (dB) | Attenuation for Intervening Structures (dB) | Residual Construction Noise (dB) at MEI |
|---|---|---|---|
| 8551 Cole Crest | -30 | -10 | 42 |
| 8495 Cole Crest | -27 | -10 | 45 |
| 8461 Grand View | -24 | -10 | 48 |
| 8413 Grand View | -20 | -10 | 52 |
| 8301 Grand View | -20 | -10 | 52 |

| | | | |
|---|---|---|---|
| 8289 Grand View | -22 | -10 | 50 |
| 8426 Brier Drive | -26 | -10 | 46 |
| 8424 Brier Drive | -25 | -10 | 47 |

Because of the logarithmic nature of decibels, the addition of all the residual noise levels from the 8 locations to the 82 dB Leq predicted to at the Crisler Way MEI would be minor. The addition of the residual noise levels from all 8 project sites is only 82.1 dB. The noise increase of +0.1 dB CNEL would not be noticeable.

In addition, this analysis is conservative by taking only a -10 dB credit for intervening structures when some sites are 0.3 miles away. Though difficult to precisely calculate, the credit would be much higher.

Unlike construction equipment, truck haul noise could affect a single receptor located along the common haul route. The worst-case assumption is that all homes overlap during the 10 days of earthworks export/haul creating 60 round trips (120 one-way trips) per day. If all trucks passed by a single receptor there would be an increase in noise. For a 35 mph speed limit this would equate to a CNEL of slightly less than 61 dB assuming all haul occurs during the daytime. Exposures up to 65 dB CNEL for residential uses are considered conditionally acceptable. Because a CNEL is a 24 hour average, a few seconds of truck travel is diluted by the remaining 24-hours of no truck haul noise. In addition. It is very unlikely that all cumulative projects would be grading during the same 10-day period and that every single truck for the four homes would pass by any single residence.

## VIBRATION

Within the "soft" sedimentary surfaces of much of Southern California, ground vibration is quickly damped out. The distances from any one site to the MEI are 480 to 1,560 feet. At these distances, vibration even for a large bulldozer which is not anticipated to be used on these steep hillside sites would be <0.001 in/sec. The construction vibration level at the MEI attributed to the Crisler Way project are expected to be around 0.006 in/sec. The conservative damage threshold for older homes of 0.2 in/sec would not be compromised.

Another source of cumulative impacts is truck haul on common haul routes. As discussed, the project proposes smaller trucks because of limited roadway access. Since vehicles traveling on local roadways are supported on flexible suspension systems and pneumatic tires, these vehicles are not an efficient source of ground vibration. Even large trucks at high speeds traveling on a smooth roadway creates a relatively low level of vibration. There is not a cumulative increase in ground vibration from the presence of multiple trucks. More trucks can potentially result in more vibration peaks, though not higher peaks if pavement is in poor condition. The pavement in the project area is in good repair and smaller trucks passing through the narrow canyon roads would travel at a relatively low travel speed. Truck haul vibration would be cumulatively negligible even along common haul routes.

# Comment Letters Received During Public Review Period

APPENDIX M

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Los Angeles, California 90067-4308
(310) 203-8080 (310) 203-0567 Fax
www.jmbm.com

75529-1

May 11, 2018

**VIA E-MAIL (Jack.Chiang@lacity.org)**

Mr. Jack Chiang
Associate Zoning Administrator
City of Los Angeles, Department of City Planning
200 N. Spring Street, Room 1020
Los Angeles, CA 90012

Re: **1800, 1806, 1812 and 1818 Crisler Way**
Case No(s): ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD & ZA-2015-4149-ZAD
ENV Case No. ENV-2015-4131-MND (A-F)
**Hearing Date:** May 22, 2018

Dear Mr. Chiang:

This office represents the homeowners of 1698 and 1694 Marmont Avenue, two single-family homes located at the terminus of Marmont Avenue, and immediately below the very steep hillside lots that the applicant in the above referenced case numbers proposes to develop. Our clients are extremely concerned over this application, which requests City approval to construct four large single-family homes and a new street cantilevered over steep hillside lots (the "Project"). These lots are incredibly steep; so steep, that the Project's slope band analysis ("SBA") reveals that more than 80% of each individual lot has a slope of 60% or more. In fact, much of these lots are comprised of unbuildable sheer walls with slopes of 100% or more. For these reasons, our clients not only fear for their privacy and quality of life, but also for their safety. Given the uniqueness of this site, as well as the indisputable health and safety hazards this Project will generate, we strongly oppose the Project and urge the City to deny this application.

While we have several significant concerns with the Project that will be further detailed in future correspondence, an objection that requires the City's immediate attention relates to the Project's blatant failure to comply with the Los Angeles Municipal Code ("LAMC"). On May 8, 2018, our office reviewed the Project plans on file with the Department of City Planning. In our review, we found that the Project plans fail to comply with many of the Baseline Hillside Ordinance's ("BHO") most important limitations, including height, floor area, and retaining wall requirements. Accordingly, this application cannot be considered, or at

minimum, must be continued until the Project plans are brought into substantial conformance with City codes and the environmental documents are amended to reflect these changes.

The Project's inconsistencies with the LAMC are not minor in nature. For example, the SBA prepared for each home – which is used to determine the maximum permitted Residential Floor Area ("RFA") allowed on a lot pursuant to LAMC 12.21.1(A).1 - was prepared incorrectly in reliance on older, now inapplicable LAMC section. In this regard, the approved SBAs use incorrect Floor Area Ratio zone calculations, resulting in inaccurate RFA calculations for each lot. **Figure 1** below illustrates the inaccuracies contained in the Project's SBA. As each home was designed in reliance on these inaccurate RFA calculations, there are all designed in violation of the LAMC. The same is true with respect to the Project's height. LAMC 12.21.C.10-4 provides that the maximum height for hillside single-family home developments in this zone is 33 feet. Several portions of the Proposed building exceed the 33 ft threshold, including sizable portions of the roof structure and chimney. **Figure 2** below illustrates the portions of the proposed homes that violate the City's height restrictions. LAMC Section 12.21(C).10 is unambiguous in stating that "[a]t no point shall any given section of any part of the proposed Building or Structure exceed the maximum envelope height." Additionally, by designing each home in reliance on the retaining walls constructed as a part Crisler roadway, each home contains more retaining walls than allowed under LAMC 12.21(C).8. The Project cannot design around the BHO's retaining wall limitations for single-family homes by building structurally necessary retaining walls in the street instead of on the residential lot it is supporting. It is apparent, therefore, that the Project as proposed in connection with this Zoning Administrator's Determination ("ZAD") request fails to comply with the LAMC and the BHO.

Moreover, the Project applicant cannot claim that the Project was vested in reliance on older LAMC provisions in effect at the time the building permit applications were filed or issued. Pursuant to California law, courts have consistently held that a developer's right to complete a project as proposed does not vest until (1) a valid building permit, or its functional equivalent, has been issued, and (2) the developer has performed substantial work and incurred substantial liabilities in good faith reliance on the permit. *Avco Community Developers, Inc. v South Coast Reg'l Comm'n* (1976) 17 C3d 785, 791; *Toigo v Town of Ross* (1998) 70 CA4th 309. This Project cannot establish either prong. First, the building permits at issue are invalid and were subject to a September 15, 2015, Notice of Intent to Revoke issued by the Department of Building and Safety. An invalid building permit vests no rights, even if expenditures have been incurred in good faith reliance on the permit. *Pettitt v City of Fresno* (1973) 34 CA3d 813.[1] Second, the developer must have initiated substantial construction work, which was not done here. Soft costs, such as the costs associated with processing permits or zoning approvals, will not result in vested rights. As the court in *Avco* explained, "work undertaken pursuant to governmental approvals preparatory to construction of buildings can form the basis of a vested right to build a structure that does not comply with the laws applicable at the time a building permit is issued." *Avco,* 17 C3d 785, 793

[1] A developer has no vested right based on a permit that he had reason to know might have expired. *Strong v County of Santa Cruz* (1975) 15 C3d 720. A developer has no vested rights to a use that was not allowed under the zoning code. *City of Monterey v Carrnshimba* (2013) 215 CA4th 1068, 1097.

The Project also cannot claim to be vested under LAMC Section 12.26, which only provides vesting protections to "valid building permit applications." Here, the Project's building permit applications did not comply with the LAMC at the time the building permits were issued, which is why they were subject to the above referenced Notice of Intent to Revoke. Thus they were not "valid applications" and cannot receive vesting protections. Moreover, even if these applications were "valid" and properly accepted by DBS, any vested rights predicated on the permit applications have long since expired. The LAMC provides that any vesting protections provided under LAMC 12.26.A.3 expire "18 months after the plan check fee is paid, or if a permit is issued during that time, when the building permit terminates pursuant to Section 98.0602." LAMC Section 98.0602 provides as follows:

> Every permit issued shall be valid for a period of two years from the date thereof, provided that any permit shall expire on the one hundred and eightieth (180) day from date of issuance if the work permitted thereunder has not been commenced; or shall expire whenever the Department determines the work authorized by any permit has been suspended, discontinued or abandoned for a continuous period of 180 days.

Here, vesting protections have been extinguished in every respect. First, the 18 month period provided for plan check expired long ago. Second, the permits are no longer valid because the Project did not commence within 180 days of permit issuance. Third, it has been more than two years since the building permits were issued. Accordingly, this Project must be brought into compliance with current LAMC requirements before this ZAD may be considered.

While we have several other objections to the Project and its environmental documents, we do not believe it is appropriate for the City to require our client and other project opponents to bear the expense of opposing a Project that cannot be permitted in the first instance. Accordingly, we request that the hearing scheduled for May 22nd be continued or taken off calendar until the Project comes into compliance with the LAMC.

Sincerely,



BENJAMIN M. REZNIK and
DANIEL FREEDMAN of
Jeffer Mangels Butler & Mitchell LLP

cc: Emma Howard, Senior Planning Deputy, Council District 4.
Victor Cuevas, Assistant Chief, Permit and Engineering Bureau, LADBS
Terry Kaufmann-Macias, Esq., Supervising City Attorney, Office of the City Attorney
Aidan O'Brien MD, President, Concerned Citizens of Kirkwood Bowl Foundation
Jamie Hall, Esq., Channel Law Group
Robin Greenberg, President, Bel Air-Beverly Crest Neighborhood Council

Figure 1

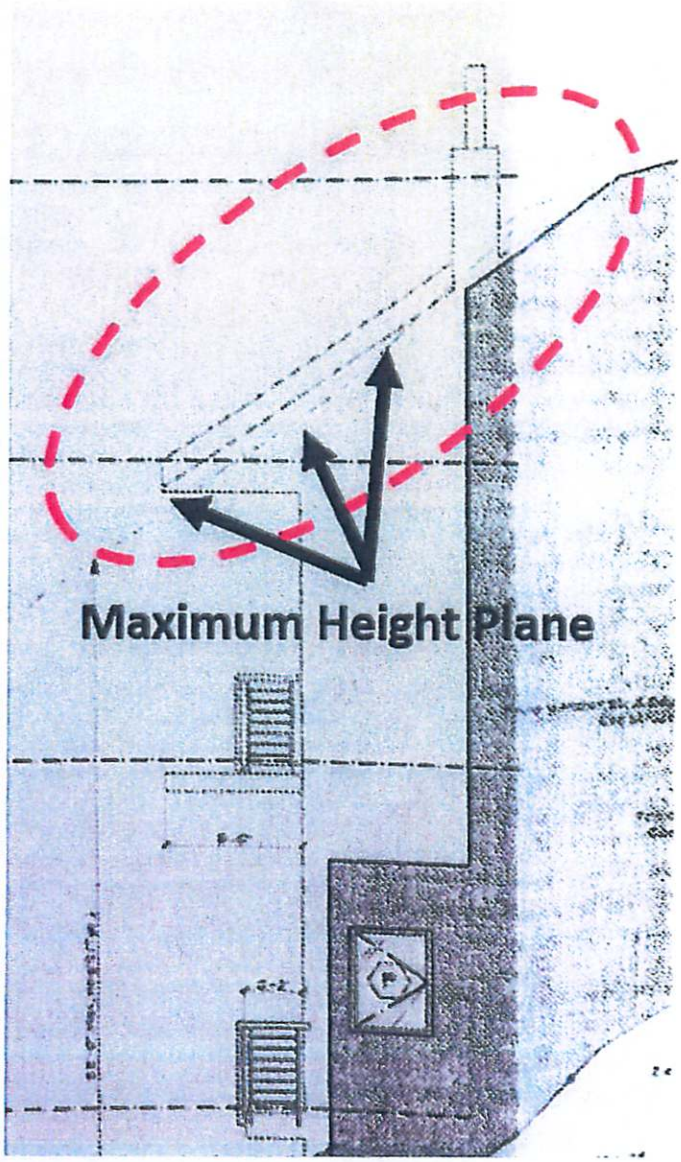
## Slope Band Ratios Provided in the LAMC

| Table 12.21 C.10-2a<br>Single Family Zone Hillside Area Residential Floor Area Ratios (RFAR) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Slope Bands (%) | R1 | RS | RE9 | RE11 | RE15 | RE20 | RE40 | RA |
| 0 - 14.99 | 0.45 | 0.45 | 0.40 | 0.40 | 0.35 | 0.35 | 0.35 | 0.25 |
| 15 - 29.99 | 0.45 | 0.40 | 0.35 | 0.35 | 0.30 | 0.30 | 0.30 | 0.20 |
| 30 - 44.99 | 0.40 | 0.35 | 0.30 | 0.30 | 0.25 | 0.25 | 0.25 | 0.15 |
| 45 - 59.99 | 0.35 | 0.30 | 0.25 | 0.25 | 0.20 | 0.20 | 0.20 | 0.10 |
| 60 - 99.99 | 0.30 | 0.25 | 0.20 | 0.20 | 0.15 | 0.15 | 0.15 | 0.05 |
| 100 + | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## Slope Band Ratios Provided in the Project SBA

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 310.44 | 0.50 | 6.13 | 155.22 |
| 2 | 15.00% | 29.99% | | 298.57 | 0.45 | 5.89 | 134.36 |
| 3 | 30.00% | 44.99% | | 69.02 | 0.40 | 1.36 | 27.61 |
| 4 | 45.00% | 59.99% | | 154.56 | 0.35 | 3.05 | 54.10 |
| 5 | 60.00% | 99.99% | | 2959.05 | 0.30 | 58.39 | 887.71 |
| 6 | 100.00% | 4000.00% | | 1276.36 | 0.00 | 25.18 | 0 |

# Figure 2



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May 21, 2018

**VIA ELECTRONIC MAIL**

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**RE: ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ENV-2015-4131-MND**

Dear Mr. Chiang and Mr. Hernandez:

According the page 3 of the Mitigated Negative Declaration (MND) for the proposed project:

> The proposed Project consists of the construction, use, and maintenance of four (4) single-family residences, retaining walls, and swimming pools on four (4) contiguous vacant lots numbered 95 through 98 fronting a Substandard Hillside Limited Street, Crisler Way, that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area. Therefore, the Project would provide a 185-linear foot extension of Crisler Way off of the existing Grand View Drive for access to the residences.

The lots for the four single-family homes do not have current sewer connections, and according to page 106 of the MND, "(b)ased on the configuration of sewer lines serving the project site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118

(#201501511325)" as indicated on the Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015 for the project, prepared by Robert Anderson, Architect. "Project sewer flows would then connect to the existing lines under Marmont Avenue." The project thus requires offsite improvements in the form of the Crisler Way extension and infrastructure improvements such as a new sewer line. The four single-family homes, the extension of Crisler Way and the required infrastructure improvements are connected actions that must be fully addressed in the same environmental document, as required by California Environmental Quality Act (CEQA) Guidelines 15003(h). As demonstrated in this comment letter, the City has not fully complied with this requirement.

Furthermore, as detailed in this comment letter, the City is improperly processing the proposed project using an MND. This letter demonstrates that the proposed project is not eligible for an MND and that an Environmental Impact Report (EIR) must be prepared for the project, in conformance with the requirements of the CEQA. Given the potential for significant impacts, which are not mitigated and may not be mitigatible, as well as the potential for cumulative impacts, an EIR is required for the project. The standard for when an EIR is required is articulated in CEQA Guidelines Section 15064(f)(1), which states:

> . . . if a lead agency is presented with a fair argument that a project **may** have a significant effect on the environment, the lead agency **shall** prepare an EIR **even though** it may also be presented with other substantial evidence that the project will not have a significant effect.

This letter, along with other comment letters being provided by residents and upcoming hearing testimony, will provide the City with a fair argument supported by substantial evidence that the project may result in significant adverse impacts, triggering the need for an EIR.

Defects in the existing MND, the substantial evidence supporting a fair argument that the proposed project will have a significant impact and that an EIR is required for the project, and the numerous ways that the City has not complied with the requirements of CEQ are detailed below.

## I. Violation Of CEQA Guidelines Section 15063(d)(2) – Inadequate Description Of The Environmental Setting

There are a number of unusual circumstances in the project vicinity that increase the potential for the proposed project to result in significant impacts. These existing conditions, which are part of the environmental setting, are not adequately described or considered when evaluating the potential of the project as proposed to result in significant impacts.

*I.a.* *Inadequate Description of Existing Crisler Way*

Page 6 of the MND explains that:

> The project site is located along a to-be constructed extension of Crisler Way south of existing residences on the south side of Grand View Drive. The Project includes a 185-linear foot extension of Crisler Way, a Substandard Hillside Limited Street that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area as required by the LAMC.

However, the MND fails to describe the existing condition of Crisler Way. It is unclear from the description in the MND whether or not Crisler Way currently exists in a substandard form or unpaved form, and its existing roadway width. The potential for impacts is very different if the project merely requires a limited widening of Crisler Way, or if it requires construction of a street that currently does not exist.

In addition, the MND fails to adequate describe existing conditions along the proposed Crisler Way alignment. The environmental document for the project needs to identify both the improved and unimproved portions of Crisler Way in the project vicinity. The environmental document needs to make clear that Crisler Way in the project vicinity is currently a paper road, meaning that it exists only on paper, as shown in **Figure 1a and 1b**. The existing roadway terminates at approximately 1746 Crisler Way. The environmental document needs to explain not only the length of the Crisler Way extension included as part of the project, but to explain what the full length is, of the unimproved portion of Crisler Way from approximately 1746 Crisler Way to the proposed connection with Grand View Drive (Grand View) at approximately 8350 Grand View, and the number of lots along the unimproved alignment. This is important to an understanding of the potential growth-inducing impacts of the proposed project.

The environmental document also needs to indicate that Crisler Way would be constructed on a steep undeveloped hillside, and provide information on the nature of existing slopes and soils along the proposed Crisler Way alignment. As shown in **Figure 1b** and **Figure 2a and 2b** and **Figure 3**, the Crisler Way extension would be constructed on the side of a steep hill and would connect to Grand View Drive at 8350 Grand View, just east of the home at 8354 Grand View Drive. The MND fails to provide existing slope information along the proposed Crisler Way alignment or to provide the reader with a clear sense of the geography and topography of the area.

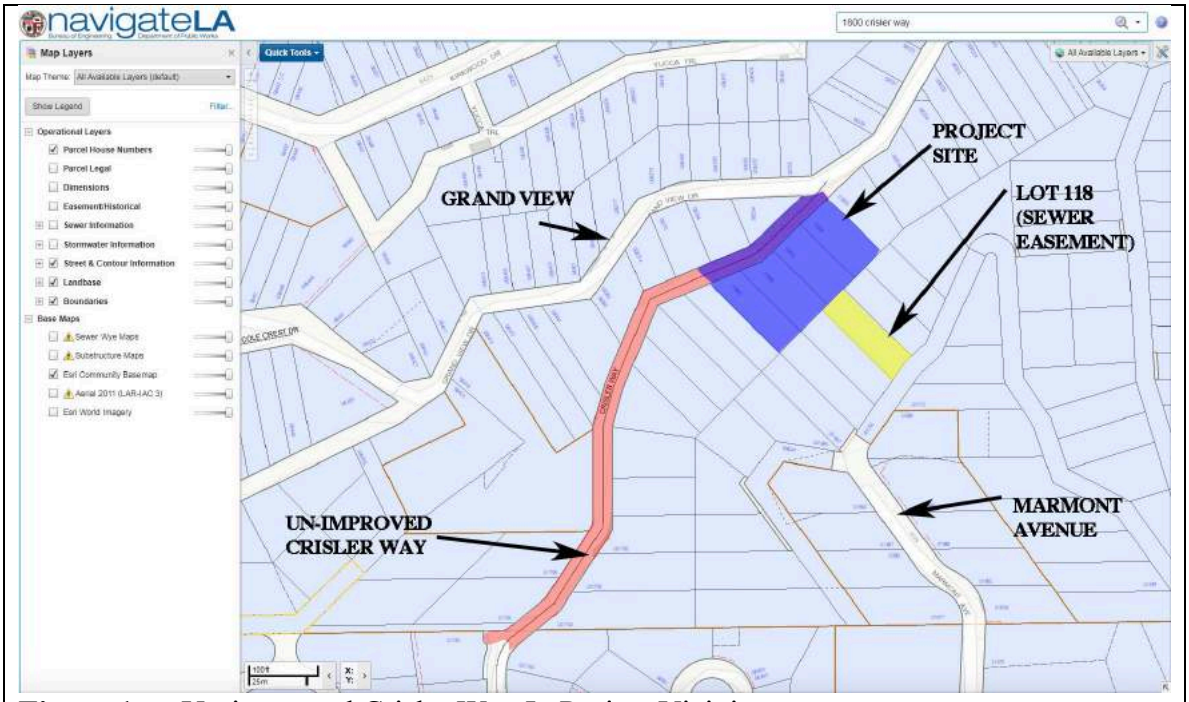



**Figure 1a** – Un-improved Crisler Way In Project Vicinity




**Figure 1b** – Steep Slope From Crisler Way terminus to Grand View Drive at Crest of Hill



Figure 2a – Project Site Looking West on Grand View Drive



Figure 2b – View North Showing Start of Crisler Way Extention Just East 8354 Grand View, Grand View Drive, Marmont Avenue and Existing Terminus of Crisler Way



Figure 3 – View of Project Site From Marmont Avenue Terminus

*I.b.* *Inadequate Description of Marmont Avenue Conditions and Existing Sewer Infrastructure*

The proposed project would extend sewer lines to connect to the existing line (green) in Marmount Avenue via Lot 118. The environmental document for the project needs to fully describe conditions on Marmont Avenue, including the location and capacity of sewer lines and wyes, and the fact that Lot 118 is located on a paper street, as shown in **Figure 4**. The environmental document needs to include a figure, like **Figure 4**, showing the location of the project in relation to Lot 118 and existing sewer infrastructure. This information is necessary to an understanding of likely impacts associated with sewer line construction and connection and the number of connections the project may be required to provide, which should also be explained in the environmental document for the proposed project.

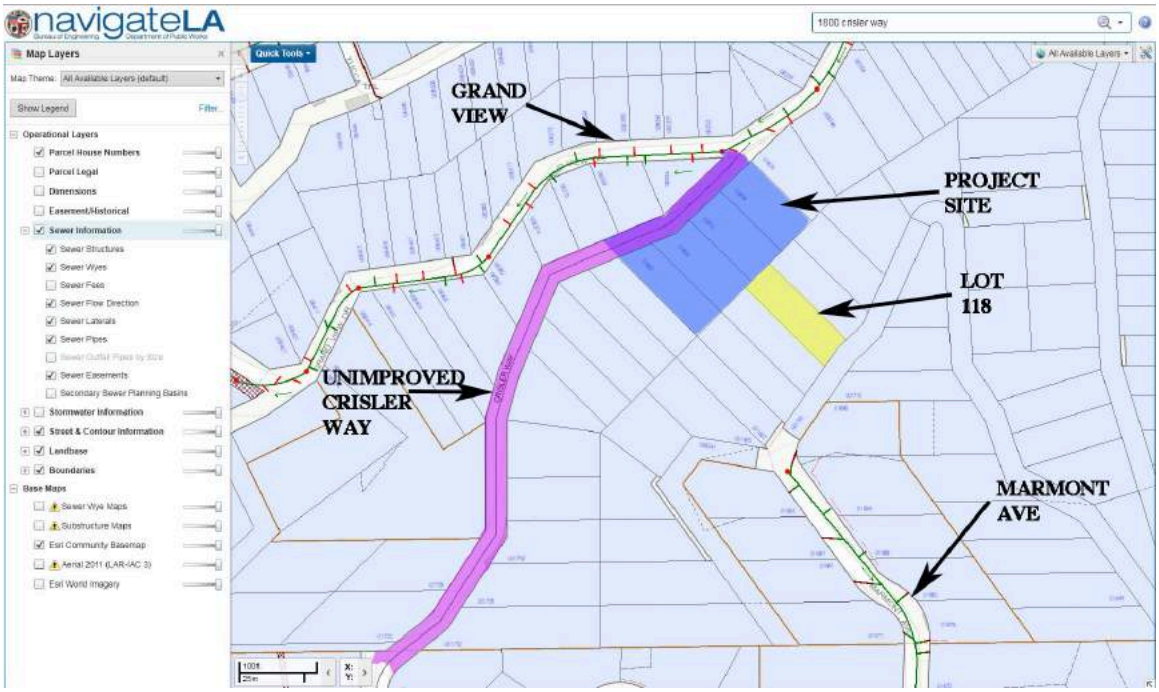


Figure 4: Project Site In Relation To Marmont Avenue and Existing Sewer Infrastructure

*I.c. <u>Inadequate Description of Grand View Drive Access, A Substandard Street With Existing Condition Issues</u>*

Page 8 of the MND provides a discussion of "site access and street improvements." The discussion notes that Grand View Drive is a Substandard Hillside Limited Street, but fails to provide any information on the actual width of Grand View Drive in the project vicinity. This information should be included to provide a reader with a fuller understanding of roadway safety issues. The environmental document should explain not only that Grand View Drive is identified by the City as a Substandard Roadway, but also should explain that existing roadway widths are between 10-14 feet.

In addition, the environmental document should address the location and number of roadway failures along potential access roads to the project site, including Grand View Drive. Not only is Grand View Drive narrow, it has existing condition issues. As explained in a report prepared by LandPhases Inc., Consulting Engineering Geologists (12/2/16), entitled *Engineering Geologic Memorandum, Recommended Mitigation Of The Existing Wood Retaining Wall Supporting The Downslope Side Of The City Street At The Subject Property, 8301 Grand View Drive, Hollywood Area, City Of Los Angeles, California*:

> As discussed in the referenced engineering geologic report by LP, dated August 22, 2016, a wood retaining wall is present along the western margin of Grand View Drive located immediately to the east and upslope of the subject property. The wood retaining wall is approximately 4 to 5 feet high, consists of vertical wood posts with horizontal lagging, and is providing lateral support of the downslope (west) edge of the street. Based on our recent site

observations, the existing wood retaining wall shows signs of deflection and undermining. There is also visible evidence of settlement of the portion of the City street located adjacent to the wall, as well as evidence of past attempts (most likely by Public Works) to mitigate the undermining and settlement by the infilling of ground cracks and undermining voids with cement and asphalt. Furthermore, it should be noted that the use of a wood retaining wall in the City of Los Angeles is considered a "non-conforming" condition as these types of retaining walls are subject to weathering, insect infestation, decay, pre-mature failure, and often lack proper engineering and foundation support.

Based on the findings of our engineering geologic study, the existing wood retaining wall is not performing adequately, is considered non-conforming, and constitutes a stability hazard to the City street and subject property.

This is not the only portion of Grand View Drive with condition issues. Grand View Drive has experienced a failure at 8461 Grand View Drive as a result of rain-related erosion, as shown in **Figure 5**.

Furthermore, as shown in **Figure 6**, there have been a number of roadway failures in the project area. The generation of possible project construction traffic on a roadway with these types of condition issues is an unusual circumstance with the potential to result in significant roadway and other infrastructure impacts.

I.d. *Failure to Describe Project's Location in an Area That Has Experienced Infrastructure Failures*

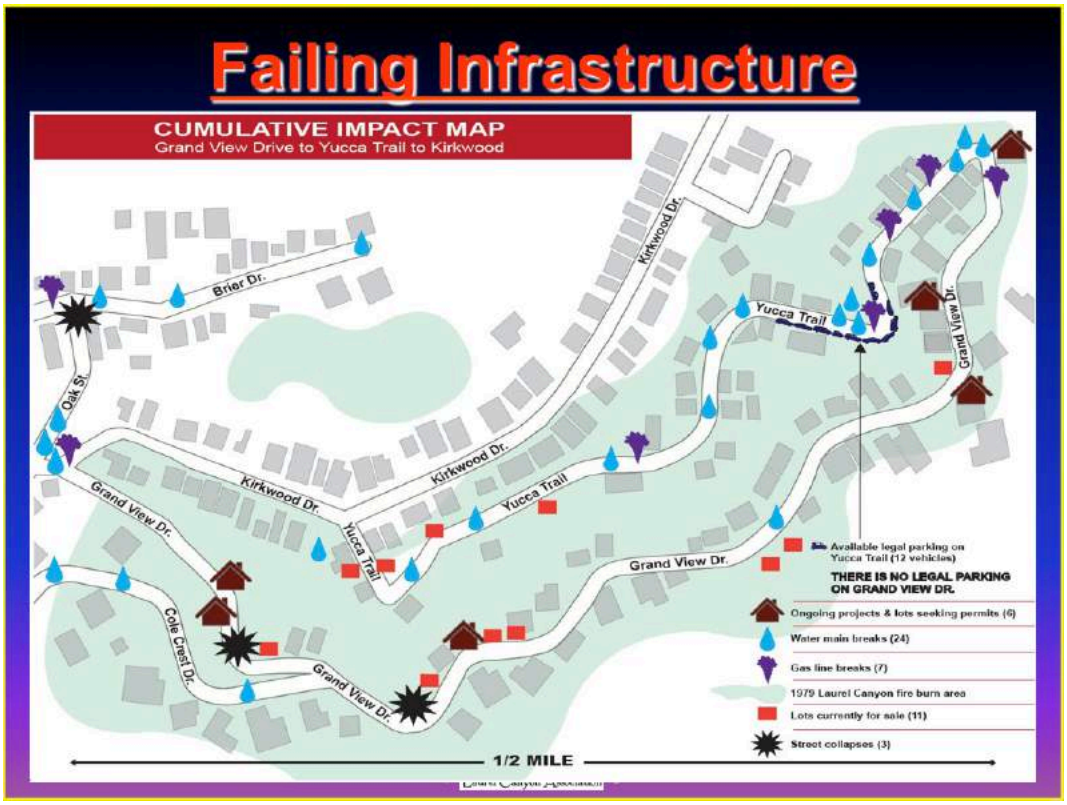
As shown in **Figure 6**, the project site is located in an area that has experienced an unusual amount of infrastructure failure in the form of street collapses (3), water main breaks (24), and gas line breaks (7). For example, there was a roadway failure at 8461 Grand View Drive (resulting from a microburst in approximately 2014). The project area has experienced a number of hydrant and pipeline failures. See, for example, the hydrant failure described in **Attachment A**. There is reason to suspect that these failures are due to both heavy equipment vehicles from construction activity and the area's geological conditions. As a result of damage to the roadway and underlying utilities, the City has had to incur substantial repair costs (see **Attachment B**). This is an unusual circumstance. As a result, project construction methods and vehicles have the potential to contribute to additional infrastructure failures, which is a potentially significant impact of the proposed project that is not addressed in the MND.

Figure 5: Photos Showing Grand View Drive Failure At 8461 Grand View Drive





Figure 6: Infrastructure Failures In Project Area






I.e. *Failure to Describe Roadway Weight Restrictions In Project Area*

Grand View Drive and Yucca Trail currently have a weight restriction of 6,000 pounds. This is not mentioned in the MND for the project or in the Traffic Analysis for the Construction Phase included in Appendix F. This restriction is intended to limit damage to these substandard roadways. Weight restrictions on likely access routes are an unusual circumstance and indicative of the potential for project construction traffic to result in significant project impacts in the form of increased roadway and infrastructure failures.

Normal concrete weights about 4,000 lb. per cubic yard. Lightweight concrete weighs about 3000 lb. per cubic yard. If a truck is carrying 10 cubic yards of normal concrete, then the weight of the concrete is approximately 40,000 lb. The truck will weigh approximately 26,000 lb. for a total of 66,000 lb.[1] This is substantially more than the 6,000 pound weight restriction. Project construction vehicles often weigh substantially more than 6,000 pounds (see **Attachment C**). So, restricting the weight of construction vehicles is likely infeasible, and there is therefore the potential for unmitigated impacts to local roadways resulting from construction vehicles. In the absence of mitigation requiring the applicant to post a Construction Damage Bond for any damage incurred along the roadways accessed by project construction and delivery vehicles, the potential for costly impacts remains. (See **Attachment B** for bids to repair recent damage to Grand View Drive).

I.f. Inadequate Description of Site Access Limitations

As shown in the following figures, access to the proposed Crisler Way spur roadway is limited, and is taken off of Laurel Canyon. As shown in **Figure 7(a)** the proposed project is in essence located along a narrow loop road. The Grand View area is essentially a cul-de-sac within a cul-de-sac, as shown in **Figure 7(b)**. The limited entry and exit routes to the project site and Kirkwood Bowl area and the narrow streets result in the potential for project traffic to interfere with residential and emergency access to the area. Construction vehicle access routes are likely to be limited by sharp turns, narrow widths, and hillside grades affecting the choice of routes. **Figure 7(a)** shows the route to the site recommended in the Traffic Analysis in MND Appendix F. As can be seen from **Figure 7(a)** construction vehicles would need to make a sharp right hand turn from narrow Grand View Drive to turn onto Crisler Way, to access the project site, which may not be feasible for trucks and large equipment. The need for a sharp turn into and out of the project site area is not described in the Traffic Analysis contained in **Attachment F** to the MND. An understanding of the roadway configuration and proximity to neighboring uses is important to assessing the potential for construction-related impacts of the project. Although the MND and MND Appendix F did acknowledge that roadways serving the project site are narrow in width and have sharp curves in places, the environmental

[1] www.tx-taca.org/members/files/2011/07/Concrete-and-cement-faq.pdf

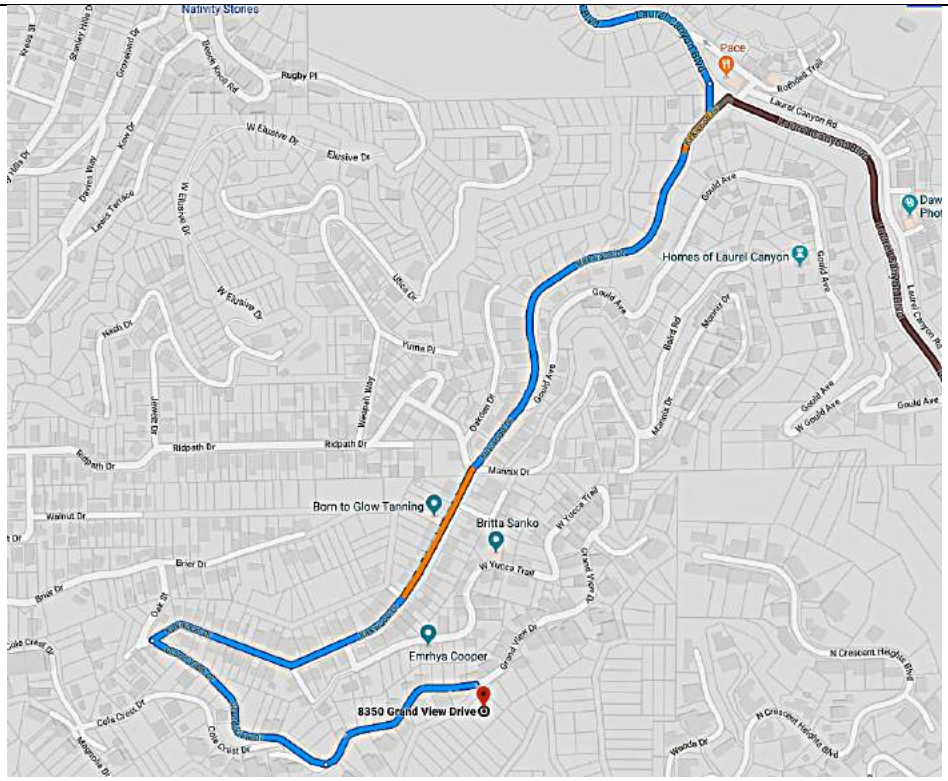



Figure 7a – Route to Project Site From Laurel Canyon Via Traffic Route B - Kirkwood Drive and Grand View Drive – Note Need For Sharp Right Hand Turn to Access Site

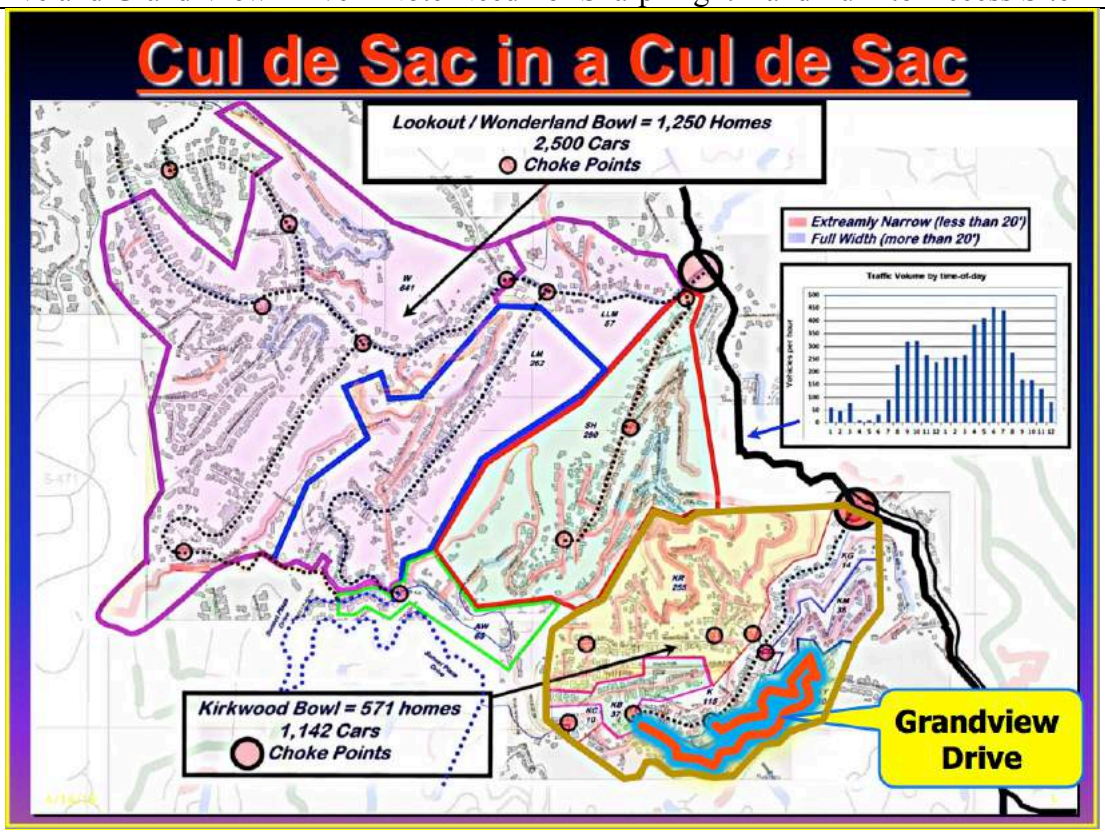



Figure 7b – Location In A Cul de Sac

document fails to provide sufficient information regarding roadway conditions and access issues, or provide a map showing the recommended routing showing the Crisler Way turn. As a result the analysis of the potential for traffic impacts is underestimated and the potential for impacts remains, as detailed in Section V of this comment letter.

*I.g. Inadequate Description of Existing Slope Conditions*

As shown in **Figures 2 and 3**, the project site is located on a steep slope. The MND does indicate, on page 43, that as: "noted in the LADBS Approval Letter, the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope." This is the only substantive description of existing slope conditions in the area and is very non-specific as to the location of slopes, particularly slopes of 1:1. The environmental document for the project needs to include a copy of the slope analysis. In addition, the quoted language from the MND does not identify slopes along the proposed extension of Crisler Way; the description is only of the area "below the proposed extension of Crisler Way." The MND is deficient in its description of geotechnical conditions for the whole site (Crisler Way extension and single-family lots). This is evidence of the MND's failure to analyze the whole of the action.

I.h. *Inadequate Description of Very High Fire Severity Zone Conditions in Project Area and Fire History*

The property has been officially mapped in a "Very High Fire Hazard Severity Zone" due to its location in a fire-prone hillside area of the City. It is identified as such in the City's ZIMAS system and on the Parcel Profile Reports for the project site. The City has defined the "Very High Fire Hazard Severity Zone" as follows:

> **"**Any area within the City of Los Angeles that poses a significant threat of fire from adjoining natural brush hillside areas and which is determined by the following factors: topography, infrastructure, fire protection, population density, types of construction, weather, existing fire codes and ordinances, and fire history." LAMC Section 57.202.

The City's Zone Information and Map Access System ("ZIMAS") describes the Very High Fire Hazard Severity Zone as follows:

> "Lands designated by the City of Los Angeles Fire Department pursuant to Government Code 51178 that were identified and recommended to local agencies by the Director of Forestry and Fire Protection based on criteria that includes fuel loading, slope, fire weather, and other relevant factors. These areas must comply with the Brush Clearance Requirements of the Fire Code. The Very High Fire Hazard Severity Zone (VHFHSZ) was first established in the City of Los Angeles in 1999 and replaced the older 'Mountain Fire District' and 'Buffer Zone.'"

While the MND recognizes that the project is located in a Very High Fire Severity Zone, it fails to note that the project is located in the general area burned by the 1979 Kirkland Bowl Fire, as shown in **Figure 8** which is developed from the information contained in **Attachment D**. This figure shows the locations of the houses that burned in the Kirkland Fire (red), the project (yellow) and other cumulative project in the Kirkland Bowl area (blue). In fact the home at 8350, the approximate address of the proposed turnoff from Grand View Drive to the Crisler Way extension burned in the Kirkland Bowl Fire which is why there is not a home at this location. The MND needs to not only identify that the project is in a Very High Fire Severity Zone, but also should disclose that the project site burned in the Kirkland Bowl fire and discuss the conditions that exacerbated fire damage in the area. Failure to adequately discuss fire risks in the project area has resulted in a failure to adequately identify emergency access and response impacts of the proposed project.

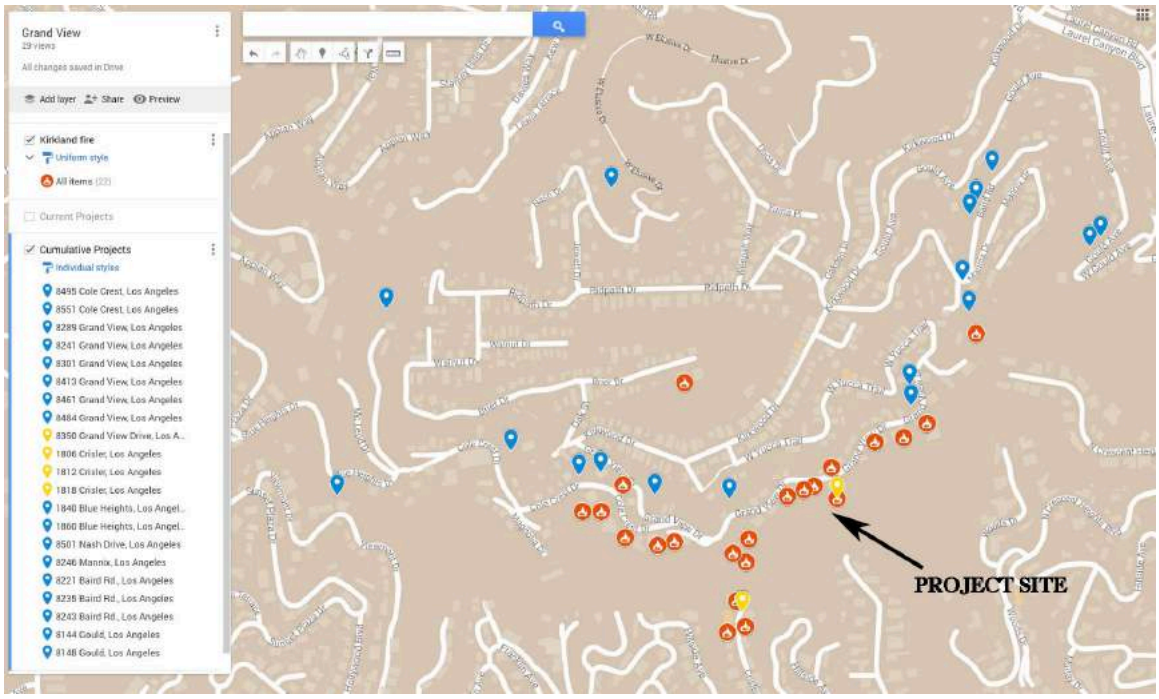


Figure 8: Location of Proposed Project (Yellow) and Cumulative Projects (Blue) In Relation To Homes That Burned In Kirkland Fire (Red)

## II. Violation of Public Resources Code 21167.2(c) and/or CEQA Guidelines Section 15150 – Failure to Make All Cited Documents Readily Accessible to the Public

Because important technical studies and projects plans were not included in the MND, we were forced to have someone go downtown and go through the project files. However, not all of the information sought was available in the project files, which lacked, for example, the geotechnical studies, storm water drainage plan, sewer plans, and Crisler Way plans and associated documents. See **Attachment E**, which contains emails with planning staff in which we were directed to chase around City Hall to different departments to obtain the requested studies. As a result, our ability to review

the MND and project has been compromised. The fact that information about the project as a whole was not in the project file is demonstrative of the fact that the MND fails to analyze the whole of the action. Concerned citizens should not be forced to take time off work to go downtown to review the project file in order to obtain the information necessary to understand the proposed project.

## III. Violation Of CEQA Guidelines Sections 15063(D)(1) And 15071 – Inadequate, Incomplete And/Or Inaccurate Project Description

### *III.a. Inadequate Description of Required Permits*

Page 1 of the MND indicates that:

> The Applicant is requesting approvals and permits from LADBS and other municipal agencies for construction activities including, but not limited to, grading and construction of the single-family residences and improvements to Crisler Way in accordance with the LAMC.

The MND fails to identify the specific permits required/sought and the other municipal agencies required to grant such permits. The MND permit discussion fails to identify the permits and agreements required for off-site services and utilities and the required timing of such permits relative to project approval.

### III.b. *Inadequate Description of Crisler Way Extension*

The MND fails to provide an adequate description of the Crisler Way extension and the nature and type of construction required. In 2015 the Department of Public Works inappropriately issued a B Permit for this roadway extension, without first conducting required CEQA review. An appeal of the B-permit issuance was filed, which the City never heard, and the B-permit expired on January 12, 2018, as shown in **Attachment F**.[2] As shown in **Attachment F**, the roadway extension includes storm drains, which are not addressed or described in the MND. As explained in **Attachment G** – Appeal to Board of Public Works of CEQA Determination for B Permit No. BR402571 (Public Resources Code Section 21151(c)), dated July 2, 2015 from Channel Law, the plans submitted as part of the B Permit application show that the Crisler Way extension would require up to 30 caissons and two large retaining walls. A marked up screenshot of the plans is provided in **Figure 9**.

[2] Available at: https://engpermits.lacity.org/bpermits/common/final_permit.cfm?ref_no=8910

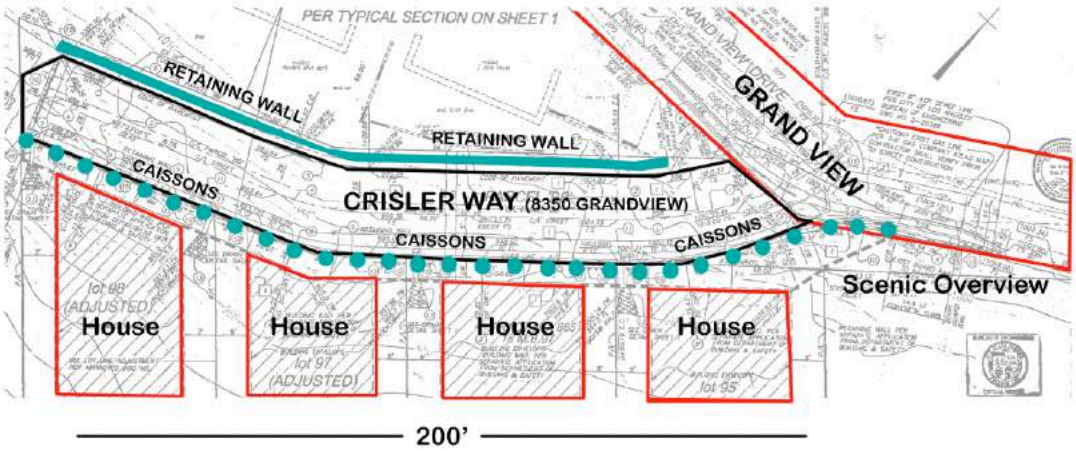



Figure 9: Crisler Way Extension

The MND project description fails to provide a description of the design of the proposed Crisler Way extension, and the nature of included/required public services and utilities. The environmental document for the project must disclose the location of all storm drain facilities included for Crisler Way and indicate the location of the connection to the greater storm drain system. The MND also fails to indicate whether the Crisler Way extension will be a public or private street. As a result of the lack of adequate project description, the MND analysis of potential project impacts is fatally flawed, since the air quality, noise and other technical studies fail to fully address potential impacts associated with the design and construction of this roadway.

III.c. *Inadequate Description of Proposed Sewer Connection*

The MND indicates that Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325)" as indicated on the Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015 for the project, prepared by Robert Anderson, Architect. "Project sewer flows would then connect to the existing lines under Marmont Avenue." (See **Figure 4** for an understanding of the location of Lot 118 in relation to the project site). However, the MND fails to adequately identify all of the required easements for the project and the location and number of sewer wyes required for the project. In addition, the environmental document for the project must identify if the installation of the new sewer line results in requirement to provide wyes or other sewer facilities to adjacent unserved parcels. Furthermore, the MND should identify the routing of the sewer lines from each of the single-family homes, and the depth and length of trenching required for installation and connection to existing facilities. In the absence of this information, the analysis of potential project impacts is fatally flawed, since the air quality, noise and other technical studies fail to fully address potential impacts associated with the design and construction of required sewer facilities.

III.d. *Inadequate Description of Required Infrastructure*

Page 85 of the MND indicates, as part of the discussion of fire protection impacts, that: "the Project design features the installation of a new fire hydrant at the intersection of Crisler Way and Grand View Drive so the proposed residences would be located within 300 feet of a fire hydrant, and entrances to the residences would be within 150 feet of an improved edge or approved fire lane to reduce potential fire hazards." However, this is not included in the project description and the MND provides no information on existing water lines, their capacity and the construction activity required to install the new hydrant. As a result there are the potential for air quality, noise, and emergency and residential access impacts that are not addressed in the MND.

The MND fails to disclose that the Crisler Way extension is required to include storm drains (see **Attachment F**). In addition, the MND fails to explain how and where the storm drains will be connected to existing storm drain facilities and the capacity of such facilities. As a result, the discussion of potential infrastructure impacts in the MND is fatally flawed.

III.e. *Inadequate Description of Los Angeles Municipal Code Requirements*

Page 9 of the MND indicates that the project is located in a hillside area, but fails to note that the project is subject to the City's Hillside Development Standards or to describe applicable standards and analyze the project's consistency with those standards.

III.f. *Inadequate Description of Proposed Single-Family Homes*

The MND includes Figure 3, which shows the footprint of the four proposed single-family dwellings, but the MND lacks figures showing project elevations, or other typical project plan sheets. The environmental document for the project should include a full set of project plans as well as visual simulations for the project. This information is necessary in order to more fully understand the project in relation to existing topography, the nature of project grading and construction, and to allow members of the public to verify the project's consistency with Los Angeles Municipal Code (LAMC) requirements. Given the missing information in the MND, we were forced to have someone go downtown and go through the project files. Based on the plan information obtained, it does not appear that the project is consistent with the requirements of the Baseline Hillside Ordinance, as discussed more fully in Section V of this comment letter. Concerned citizens should not be forced to take time off work to go downtown to review the project file in order to obtain the information necessary to understand the proposed project.

III.g. *Failure to Describe Required Retaining Walls*

The MND makes reference in a number of places to the fact that the proposed project requires the construction of retaining walls, but never provides information on the number, location and heights of such retaining walls. This information is necessary in order to assess whether the project complies with the City's Hillside Development

Standards/Baseline Hillside Ordinance. According to the September 19, 2012 Geotechnical Report for the project at page 5, the project includes:

> Retaining walls to 6 to 21 feet high are proposed along the *uphill* side of the proposed private street. Pile-supported retaining walls from 5 to 7-1/2 feet high are proposed along the downslope side of the proposed street. The new proposed construction plans provide specific information concerning the construction of four hillside residences and swimming pools on the subject property. Retaining walls associated with the construction of the individual residences are proposed up to 22 feet high. Retaining walls used to create the level rear yard areas are proposed up to 12 feet high.

III.h. *Inadequate and Inaccurate Grading Summary*

The MND on page 8 indicates that total grading for Crisler Way amounts to 789 cubic yards (cy) of fill obtained from cuts for construction of the four houses, and that the amount of cut and fill precisely balances. The following back-of-the-envelope calculation of likely earth movement for roadway construction is based on the limited project information for the Crisler Way portion of the project obtain from the Bureau of Engineering. Based on this calculation, it is unlikely that the grading information in the MND is correct and that cut and fill amounts will precisely balance. The MND should include the grading plan for the project as a whole, including roadway construction and the trenching required for sewer, storm drain and fire hydrant installation.

| Road | | | |
|---|---|---|---|
| ( 29 ) 3' dia piles @ 36' | 189 | cy | |
| 10" pocket wall between 3' piles | 84 | cy | |
| road slope cut 25' x 16' h( foot& wall up | 1556 | cy | |
| road pavement & recomp bottom | 486 | cy | part dirt comes back |
| Dirt volume front set back 5'x22'x210' | 855 | cy | dirt comes back |
| | | | |
| total road | 3170 | | |

In addition, the MND fails to include a grading staging plan to demonstrate that earth volumes removed from the residential parcels will be immediately used for roadway construction. Given the steep slopes in the area, and the lack of places to store earth, it is likely that earth may need to be stored off-site, pending use as fill. The MND fails to account for this, or to provide the information necessary for an independent verification of cut and fill balancing claims. The MND does indicate that a staging area will be created on lot 95, but fails to indicate if the associated grading/pad configuration is temporary or permanent and sufficient for both parking, staging and dirt. From the information available, it appears that that the MND understates project cut and fill requirements. Associated impacts (air quality, traffic) are also likely understated.

*III.i.* *Inadequate Description of Site Preparation and Grading*

Table 3-5 in the MND provides an estimate of the duration of various construction activities. The Table fails to note, with the exception of Stage 4 – creation of temp. 10 ft. wide road on Crisler Way, install security fence – whether the cited activity is associated with roadway or single-family home construction.

III.j. *Inadequate Description of Construction Parking and Equipment Staging*

Page 10 of the MND states that complete on-site parking will be available within two month of construction following the creation of a staging area on Lot 95. However, the MND fails to indicate how parking and equipment staging will be handled during the first two months. Similarly, page 11 of the MND indicates:

> The Applicant expects to be able to achieve "off Grandview Parking" within two months of starting construction by providing an on-site location for construction parking and equipment staging on lot #95, the first lot adjacent to Grand View Drive. Lot #95 contains an unused building foundation from a prior structure that will provide flat surface area for temporary construction parking and staging. During construction, crews will use the extension of Crisler Way as a temporary parking and equipment staging area to avoid parking and staging on Grand View Drive.

This implies that on Grand View parking will occur during the first two month of project construction. This would result in significant residential and emergency access impacts, given the narrow width of Grand View Drive in the project vicinity.

Given the roadway width and likely construction methods, it is unclear whether project construction can be accomplished without any staging on Grand View Drive. As detailed in **Attachment G**, residents in the area experienced very real impacts as a result of the way construction was conducted at 8401 Grand View Drive and the need for construction equipment to be staged from the street, as shown in **Figures 10(a) and 10(b)**, which depict the type of equipment used during pile drilling and installation.

As can be seen from these photos, and given that the project similarly may require drilled pile foundations and currently has no land for construction staging in the first few months of construction activity (see **Figures 2 and 3**), it is likely that construction equipment will be used which can not quickly be moved in the event of an emergency, or to allow residents to access their homes and that for some portion of project construction activity will occur from Grand View Drive. The extreme slope of the parcels, combined with the narrow width of the existing streets, and the possible lack of existing staging area on the project site are unusual circumstance with the potential to result in construction-traffic related impacts if not properly mitigated.

**Figures 10(a) and 10(b)** also illustrate the problem construction equipment may have making a sharp right turn from Grand View Drive onto Crisler Way. A sharp right



Figure 10 (a) and (b): Construction at 8401 Grand View Drive Blocking Roadway

hand turn would be required if project traffic is to avoid Yucca Trail, as shown in **Figure 7(a).** The narrow roadway, combined with the need for a sharp turn to access the project site is an unusual circumstance with the potential to increase the likelihood of accidents and roadway blockages which would be significant impacts of project construction.

III.k. *Inadequate Description of Project Equipment*

Table 3-7 lists the assumed equipment fleet for project construction, which includes during site preparation, 1 bobcat, 1 grader, 1 tractor/loader/backhoe and during construction 1 rough terrain fork lift, 1 forklift, 1 bobcat, 1 tractor/loader/backhoe. However, project construction required the drilling of 36" solider piles and installation of steel cages and concrete piles. This typically involves drilling rigs and cranes (See **Figure 10**). However, this type of equipment is not included in Table 3-7 or assumed in the noise analysis for the project. In addition, construction will require cement trucks and other haul vehicles which need to been included in the construction fleet. Given roadway constraints in the area, the environmental document needs to provide information on the size and weight (loaded and unloaded) of vehicles and equipment used for construction that must be transported to the site. This information if necessary to demonstrate that the use of lighter, smaller construction vehicles is actually feasible, as assumed in the analysis of construction impacts to local roadways, and that such vehicles will comply with weight restrictions along the project route, or the potential for impacts remains.

III.l. *Inadequate Description of Temporary Street Closures*

As detailed on page 12 of the MND, it is anticipated that construction activities may necessitate temporary lane closures on streets adjacent to the project site on an intermittent basis. Given roadway constraints in the project area, any lane or street closures would have the potential to result in significant emergency and residential access impacts.

III.m. *Inadequate Cumulative Projects List*

The cumulative projects list includes only eight projects, however, there are additional cumulative projects in the vicinity which need to be addressed in the analysis, as shown on **Figure 11**, and listed in recent MND's from the City, including those for 8301 Grand View Drive, 8495 Cole Crest and 8551 Cole Crest, including:

- 1840 Blue Heights
- 1860 Blue Heights
- 8484 Grand View Drive

The MND analysis thus underestimates the potential for cumulative impacts, including traffic, emergency access, air quality, and noise impacts.

Figure 11 – Cumulative Projects In The Area

## IV. Violation of CEQA Guideline Section 15003(h) – Failure to Consider The Whole Of The Action

Although the MND recognizes that the Crisler Way extension is part of the project, the MND fails to adequately describe the Crisler Way extension, or to adequately analyze the potential impacts of Crisler Way construction. Similarly, the MND fails to adequately describe required sewer, storm drain, fire hydrant, drainage, and other required improvements, or to adequately analyze the potential impacts of such improvements. For example, it does not appear that the grading figures provided in the MND include the trenching required for sewer infrastructure installation on and off-site, and the MND fails to address storm drains and associated drainage for Crisler Way.

## V. Violation of CEQA Guidelines Section 15358 – Failure to Address Growth-Inducing Effects

A key purpose of CEQA is to identify the environmental effects, or impacts of a proposed project, as explained in CEQA Guidelines Section 15002. As explained in CEQA Guidelines Section 15358, impacts include the potential growth inducing effects of a project:

**15002. GENERAL CONCEPTS**

(a) Basic Purposes of CEQA. The basic purposes of CEQA are to:
(1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify the ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

**15358. EFFECTS**

"Effects" and "impacts" as used in these Guidelines are synonymous.
(a) Effects include:
(1) Direct or primary effects which are caused by the project and occur at the same time and place.
(2) Indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Growth-inducing effects occur when a project extends infrastructure to an undeveloped area removing a barrier to future development. For example, in *City of Antioch v. City Council of the City of Pittsburg* (1st Dist. 1986) 187 Cal.App.3d 1325, the court explained that "[c]onstruction of the road way and utilities cannot be considered in isolation from the development it presages." (Id. At p. 1335). This project will extend both a roadway and infrastructure such as sewer lines and storm drains into an area that is not developed, and may thus encourage future completion of the remaining Crisler Way gap, and development along Marmont Way. The City needs to address the potential for growth-inducing impacts to result from the proposed project in the environmental document for the project.

## VI. Violation Of CEQA Guidelines Section 15063, 15064 And 15070(A) – Lack Of Substantial Evidence Supporting Impact Judgments In The Initial Study and Violation of CEQA Guidelines Section 15063(C)(3)(A) – Failure to Identify Significant Impacts of the Project

*VI.a. Aesthetics*

| I AESTHETICS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☒ | ☐ | ☐ | ☐ |
| b) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☒ | ☐ | ☐ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

As noted on page 17 of the MND: "Scenic vistas are generally described in two ways: panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, or feature of interest)." "Views of the project site are available from neighboring residential properties along Grand View Drive, Crisler Way, Hillside Avenue, Hillside Way, Marmont Ave and from distant mid-city locations." Currently residences are located on the ridgeline of the hillside on Grand View Drive. Unlike the existing residential neighborhood along Grand View Drive, the proposed project would be constructed on the side of the undeveloped hillside, as shown in **Figures 2b and 3**. The proposed project therefore has the potential to affect a scenic vista, and degrade the existing natural character of the site. In addition, the proposed project would introduce a new light source on a prominent and visible slope. The potential for light and glare impacts therefore exists.

The MND fails to provide project elevations or visual simulations to show that aesthetic impacts would be less than significant. Given that the proposed project would introduce new roadway and residential uses on an undeveloped hillside slope, there is the potential for significant aesthetic impacts. The MND does not provide substantial evidence to the contrary.

On page 18 the MND argues that the project's impact on the existing visual character of the area would be less than significant, in part because: "The proposed building heights would not conflict with LAMC height restrictions." This is not true. Based on the project plans contained in the project file at City Hall, the height of 1800 Crisler would be 46 feet (high point 1004.5', low point 958.5'), 1806 Crisler would be 45 feet, 1812 Crisler would be 55 feet in height (high point 1020', low point 965') and 1818 Crisler Way would be 46 feet in height (high point 1020', low point 974'). See **Figures 12, 13, 14 and 15**.

According to page 14-15 of the 2011 *Baseline Hillside Ordinance A Comprehensive Guide to the New Hillside Regulations,* Section 4. Height Limits, the following maximum height limits apply:

Table 5
Maximum Height of Structures (in feet)

| Height Districts | R1 | RS | RE9 | RE11 | RE15 | RE20 | RE40 | RA |
|---|---|---|---|---|---|---|---|---|
| When the roof of the uppermost story of a building or structure or portion thereof has a slope of 25% or greater, the maximum height for said portion of building or structure thereof shall be as follows: | | | | | | | | |
| 1, 1L, & 1VL | 33 | 33 | 33 | 36 | 36 | 36 | 36 | 36 |
| 1XL | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 1SS | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| When the roof of the uppermost story of a building or structure or portion thereof has a slope of less than 25%, the maximum height for said portion of building or structure thereof shall be as follows: | | | | | | | | |
| 1, 1L, & 1VL | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 30 |
| 1XL | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 30 |
| 1SS | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |

The residential lots included in the proposed project are zoned R1-1, which would allow for a maximum height of 33 feet with a roof slope of 25% of greater. The proposed single-family homes included in the proposed project exceed these heights. Section 4b of the *Comprehensive Guide* does allow the zoning administrator to allow structure of up to 45 feet:




Figure 12 – Exterior Elevation 1800 Crisler Way

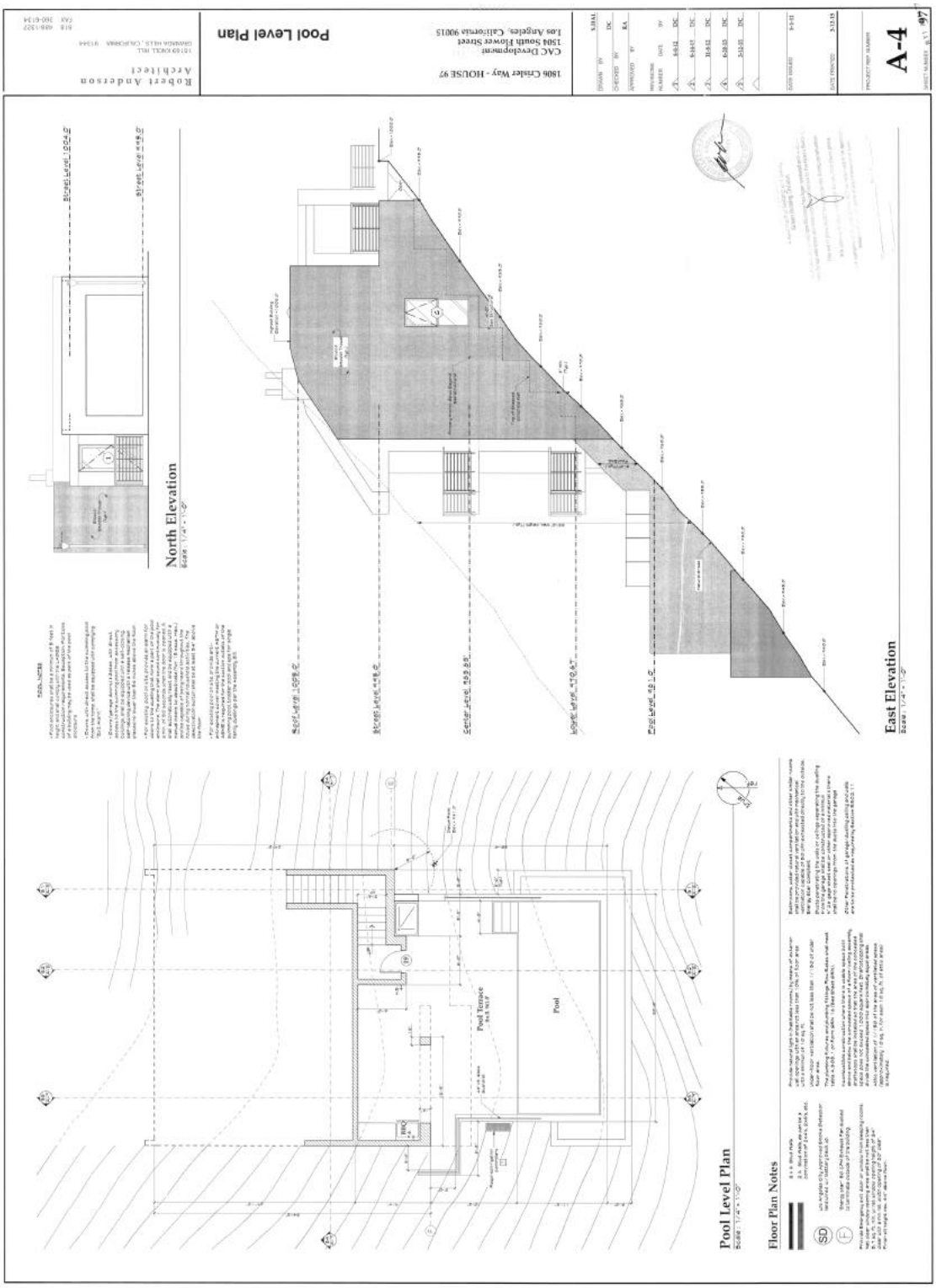



Figure 13 – Elevation 1806 Crisler Way

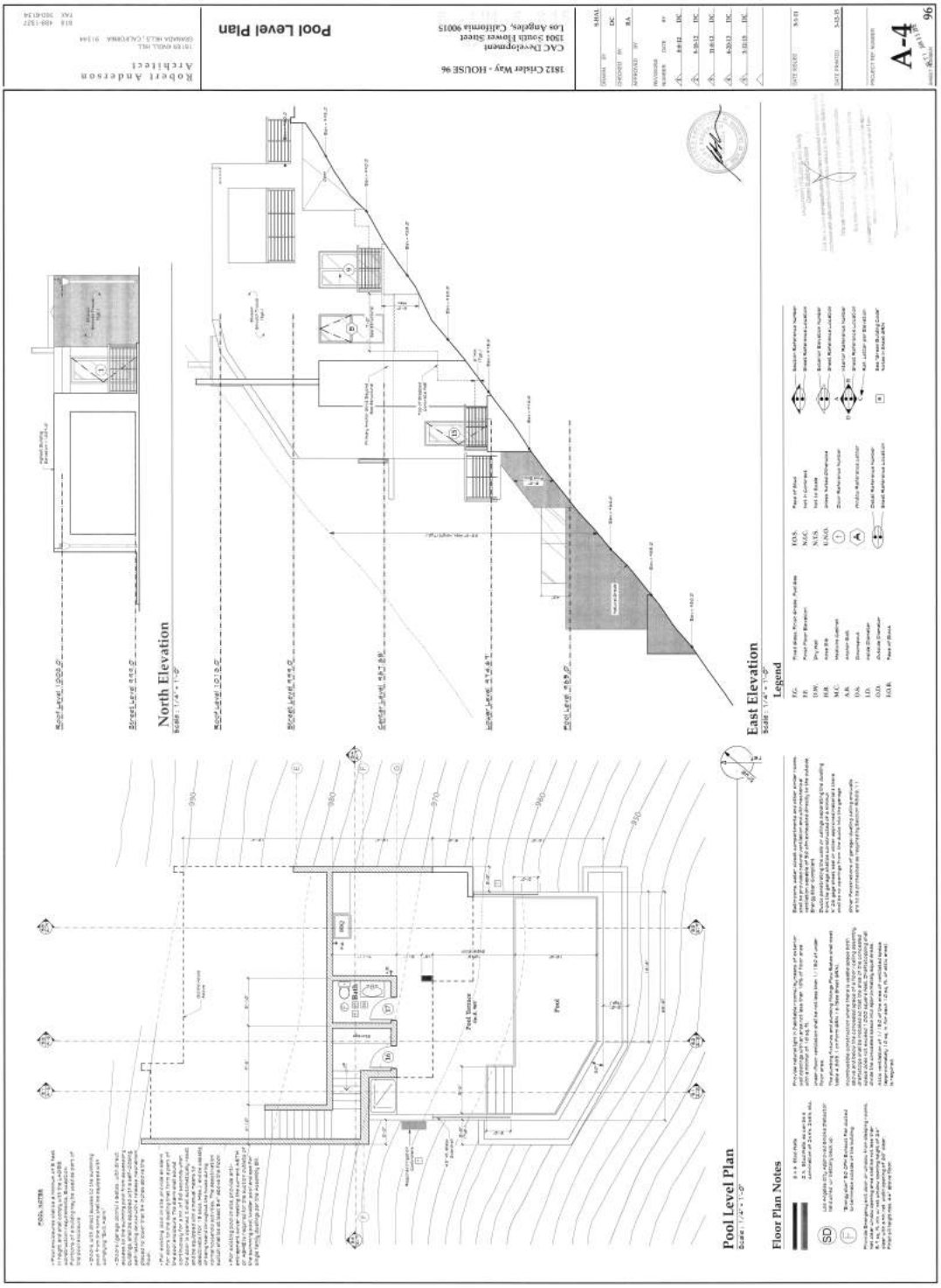



Figure 14 – Elevation 1812 Crisler Way

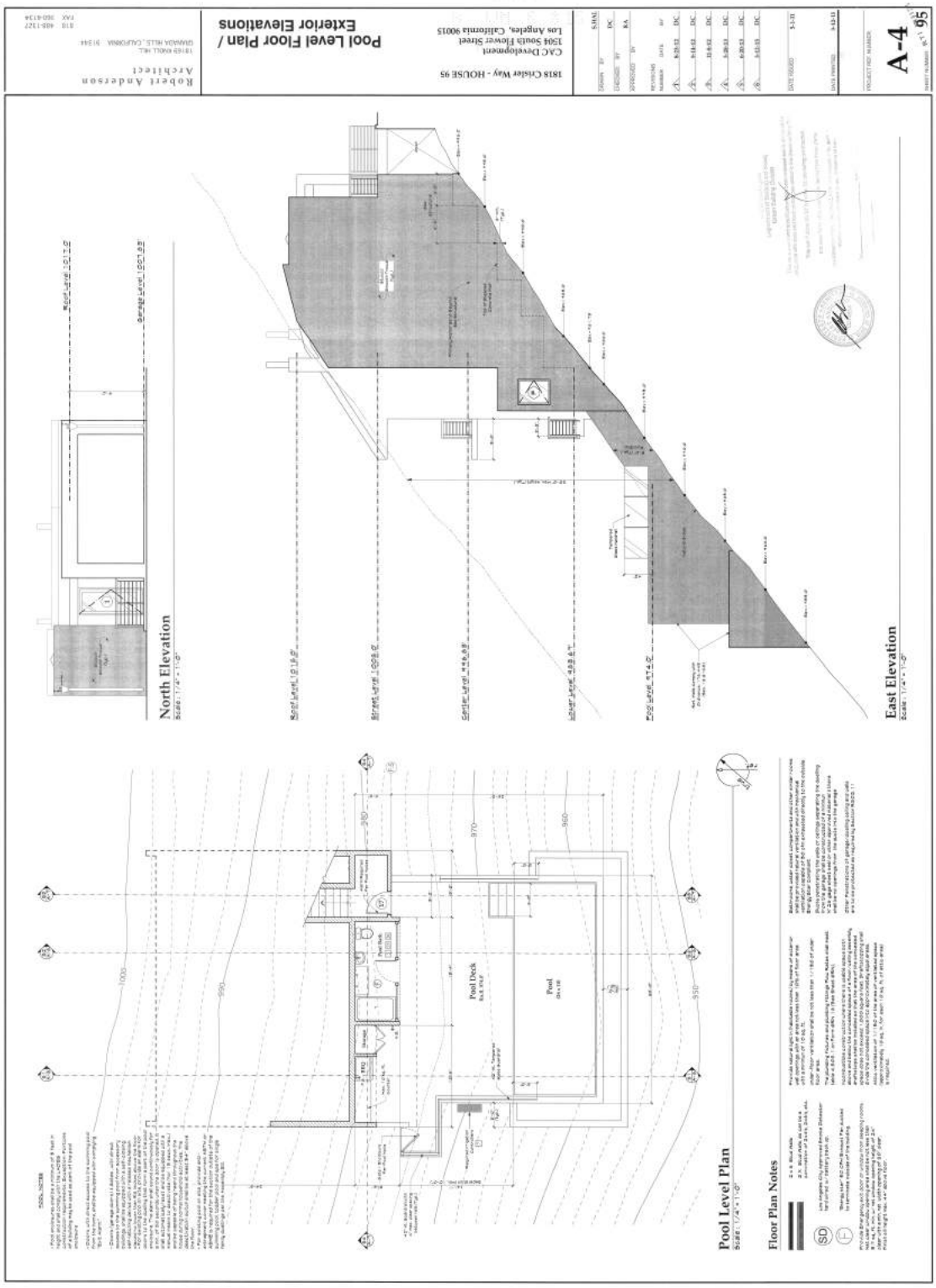
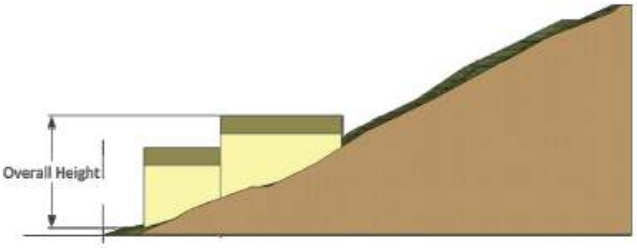



Figure 15 – Elevation 1818 Crisler Way

**b. *Zoning Administrator's Authority.* *[§ 12.21 C.10.(d)(2) of the LAMC]***

A Zoning Administrator may allow Structures which exceed the maximum envelope height requirements of Table 5 – Maximum Height of Structures; however, the increase in height may not result in a Building or Structure which exceeds an overall height of 45 feet, pursuant to the authority and procedures established in Section 12.24 X.28 of the LAMC.

The overall height shall be measured from the lowest Elevation point within 5 horizontal feet of the exterior walls of a Building or Structure to the highest Elevation point of the roof Structure or parapet wall.




However, at least three of the proposed single-family homes exceed the allowable height limits, in violation of the Baseline Hillside Ordinance that was adopted in response to the proliferation of out-of-scale development in hillside areas and to protect the hillsides. The excessive height of the proposed single-family homes and the violation of the Baseline Hillside Ordinance standards further supports the project's potential to result in significant aesthetic impacts.

*VI.b. Biological Resources – Wildlife Corridor*

| **IV BIOLOGICAL RESOURCES** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☒ | ☐ | ☐ | ☐ |
| b) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☒ | ☐ | ☐ | ☐ |
| c) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

The Santa Monica Mountains Conservancy (Conservancy) was established by the California State Legislature in 1980 via the Santa Monica Mountains Conservancy Act. The proposed project is located within the Santa Monica Mountains Zone. The Zone was also established by the Legislature via the Santa Monica Mountains Conservancy Act, which is codified at Section 33001 et. seq. of the Public Resources Code (PRC). PRC Section 33001 states as follows:

> The Legislature hereby finds and declares that the Santa Monica Mountains Zone, as defined in Section 33105 , is a unique and valuable economic, environmental, agricultural, scientific, educational, and recreational resource that should be held in trust for present and future

> generations; that, as the last large undeveloped area contiguous to the shoreline within the greater Los Angeles metropolitan region, comprised of Los Angeles and Ventura Counties, it provides essential relief from the urban environment; that it exists as a single ecosystem in which changes that affect one part may also affect all other parts; and that the preservation and protection of this resource is in the public interest.

So, the Legislature itself declared that the Santa Monica Mountains Zone is a *unique* and *valuable* environmental resource that provides essential relief from the urban environment and noted the importance of the connectivity of the system. The Santa Monica Mountains Conservancy Act goes on to say the following:

> . . .in the absence of a governmental mechanism to perform such evaluations, piecemeal development projects were occurring within the zone which resulted in the irreplaceable loss of open space and recreational resources, in the physical and biological deterioration of air, land, and water systems within the zone, and adversely affected regional life-support systems, including fish and wildlife, therefore being harmful to the needs of the present and future population of the region.

The Legislature further declared in PRC Section 33008 that:

> (a) The Legislature finds and declares that there are existing problems of substandard lots, incompatible land uses, conflicts with recreational use, and inadequate resource protection which, in some cases, cannot be addressed in a feasible manner by local government exercise of the police power or federal land acquisition as part of the Santa Monica Mountains National Recreation Area, and that it is necessary to enact the provisions of this division as a complement to the full exercise of the police power by local governments and the acquisition of lands by the federal government for the Santa Monica Mountains National Recreation Area.
> (b) The Legislature further finds and declares that the people of the State of California have an interest in the protection of resources and the use of lands acquired or managed by the conservancy pursuant to this division, and that the conservancy in carrying out its duties pursuant to this division acts on behalf of the State of California.

The Conservancy is thus the chief State planning agency for the Santa Monica Mountains. As noted in the MND, the proposed project is located within a designated wildlife corridor on the Santa Monica Mountains Conservancy's Eastern Santa Monica Mountain Habitat Linkage Planning Map (2017) adopted via Resolution No. 17-01 on January 23, 2017 by the Conservancy. Resolution No. 17-01 states in part:

> WHEREAS, the eastern Santa Monica Mountains habitat linkage between the San Diego (405) freeway and Griffith Park is of regional scientific significance; and

WHEREAS, the subject habitat linkage system and the Mulholland Drive Scenic Corridor are a cultural treasure for the City of Los Angeles; and

WHEREAS, the efficacy of the subject habitat linkage system could be severed by new fencing on just one or two residential parcels; and

WHEREAS, the subject habitat linkage system has never been comprehensively mapped and such mapping is essential to adequately assess the impacts of proposed development projects; and

WHEREAS, a Habitat Linkage Planning Map for the Eastern Santa Monica Mountains adopted by the Santa Monica Mountains Conservancy as the principal State planning agency for the area is beneficial to the City of Los Angeles Department of Planning's efforts to maintain habitat connectivity; and

WHEREAS, the Los Angeles City Council (Koretz) adopted a motion to designate the subject area as a Regional Wildlife Habitat Linkage Zone in the Municipal Code and for the Planning Department to work in consultation with the Santa Monica Mountains Conservancy, the Mulholland Design Review Board, and Citizens for Los Angeles Wildlife (CLAW) to prepare an ordinance to create a Wildlife Corridor in the eastern area of the Santa Monica Mountains; and

WHEREAS, the proposed Eastern Santa Monica Mountains Habitat Linkage Planning Map represents an initial comprehensive step to delineate the majority of habitat blocks and connecting wildlife corridors between the 405 and 101 freeways for planning, conservation, and environmental impact analysis purposes;

*Therefore Be It Resolved,* That the Santa Monica Mountains Conservancy hereby:

1. FINDS that the proposed action is consistent with the *Santa Monica Mountains Comprehensive Plan*.
2. ADOPTS the proposed Eastern Santa Monica Mountains Habitat Linkage Planning Map (Version January 2017).

As noted on page 38 of the MND, the proposed project is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map adopted by the Santa Monica Mountains Conservancy, and that "the linkage could be affected by Project construction and operation (e.g., night time lighting and noise)." However, the MND dismisses the project's potential to result in significant impacts to the wildlife corridor because:

Project construction and operation activities would primarily occur during the daytime hours as specified in the LAMC, limiting the potential noise

> and lighting impacts during the nighttime hours when most wildlife species likely to traverse the area would be active. As such, significant direct and/or indirect impacts to wildlife corridors and habitat connectivity are not anticipated. Thus, the construction and operation of the proposed residences and extension of Crisler Way would not substantially interfere with migratory corridors or impede wildlife movement and impacts to wildlife corridors and habitat linkages would be less-than-significant, no avoidance or mitigation measures are recommended.

The MND thus ignores the impact on the wildlife corridor and habitat linkage block of replacement of open space and habitat on the project site with four single-family residences, a roadway and associated infrastructure. The MND also ignores potential growth-inducing and cumulative impacts of the project on the wildlife corridor and habitat linkage acreage. **Figure 16** illustrates the amount of open space potential removed from the wildlife corridor and habitat linkage block as a result of the proposed project. In the absence of a restrictive covenant on a portion of the project site for wildlife movement purposes the potential for impacts to an important habitat linkage/wildlife corridor in the Santa Monica Mountains remains.

The MND also attempts to diminish the project's potential impacts to the wildlife corridor by making use of the significance threshold on page C-6 of the City's 2006 L.A. CEQA Thresholds Guide, as stated on page 37 of the MND:

> Based on the criteria established in the L.A. CEQA Thresholds Guide, a project would normally have a significant impact on biological resources if it could result in the interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species.

However, the City's CEQA Thresholds were not formally adopted by the City per CEQA Guidelines 15064.7(b), and since the threshold in question is less protective of the environment than the language in the CEQA Guidelines Initial Study Checklist provided above, the more protective language should prevail. Furthermore this threshold guide, which was published in 2006, predates the SMMC map, and fails to recognize the larger connectivity needs of Santa Monica Mountain habitat as articulated by the State of California in the Santa Monica Mountains Conservancy Act. Project impacts remain significant and unmitigated.

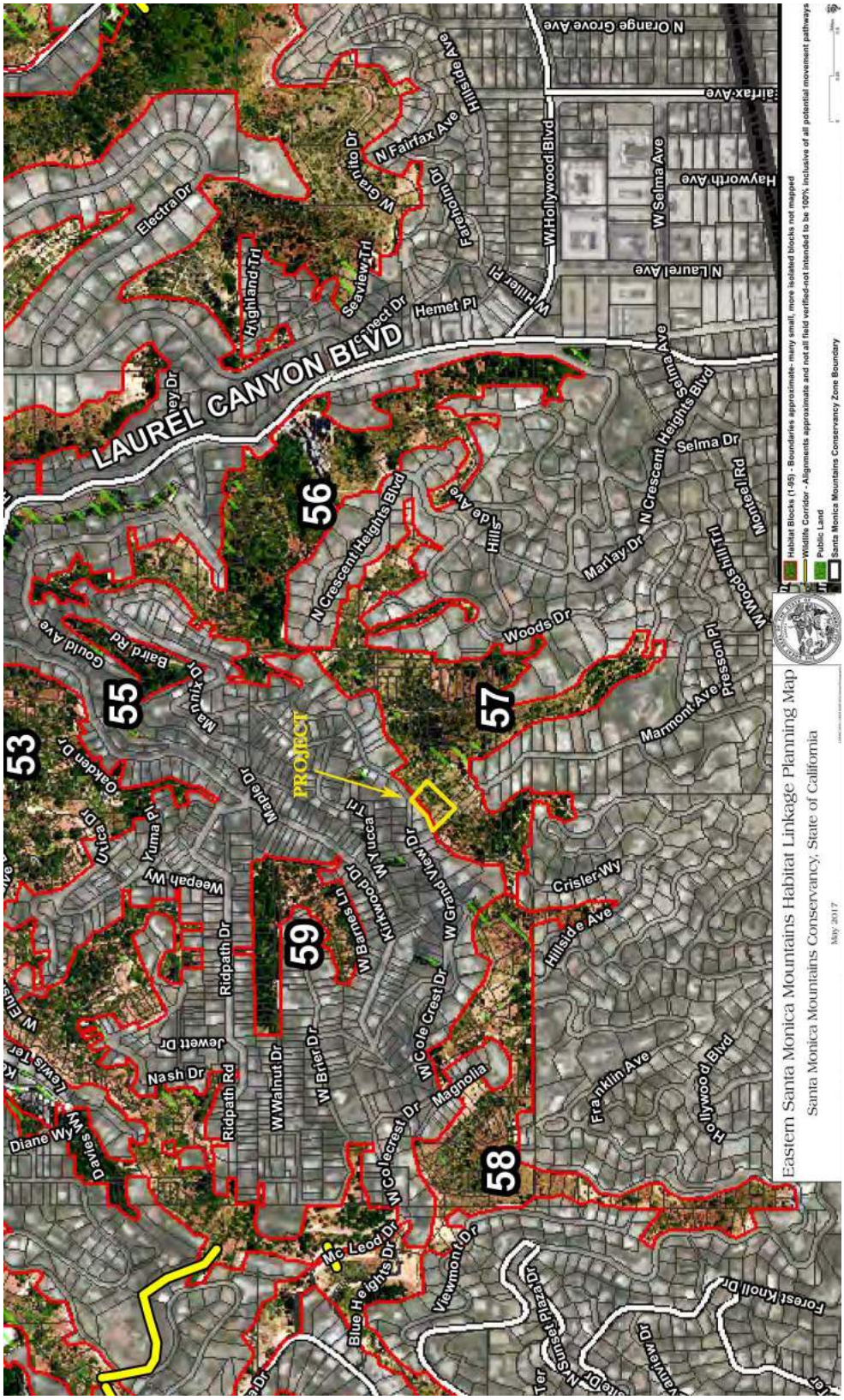



Figure 16 – Location of Project Within SMMC Habitat Linkage Area

*VI.c. Geology and Soils*

| **VI GEOLOGY AND SOILS** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| iv) Landslides? | ☒ | ☐ | ☐ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgements**:

According to ZIMAS and page 45 of the MND: "The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides." We have not been able to review the current geotechnical reports for the project as a whole, since the geotechnical reports for the project are not in the project file (see **Appendix E**). We were only able to obtain a copy of the September 19, 2012 Soils and Geology Report (PG1091) and associated Correction Letter. We are therefore unable to verify that impacts would be reduced to a level considered less than significant.

According to page 46 of the MND:

> The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced with the following Regulatory Compliance Measure (RCM) RC-GEO- 3 which, requires the Applicant to submit a Geology and Soils Report to the Department of Building and Safety for review. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

> Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development.

The MND is deficient because is fails to provide information on the remedial grading, retaining walls, and conventional and/or drilled-pile foundations required for the project or to identify the required conditions/mitigations specified in the report. In addition, it is unclear whether the 2015 geotechnical report for the project addressed the project as a whole, since it appears that the B-permit for Crisler Way and the permits for the four single-family dwellings, which were issued June 8, 2015, were processed separately. As noted on page i of the MND:

> The proposed residences were previously permitted by the Los Angeles Department of Building and Safety (LADBS); however, subsequent to the issuance of the building permits, LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the building permits because the project site fronts a Substandard Hillside Limited Street that is not fully improved and the Applicant had not obtained the requisite approvals as required by Los Angeles Municipal Code (LAMC) Sections 12.24 X.28(a)(7)(i) and (ii).

The MND fails to indicate whether any changes have been made to the proposed project, from the project that the City mistakenly issued permits for in 2015, and thus it is unclear whether the 2015 geotechnical report and the 2015 Geology and Soils Report Approval Letter address the project as currently proposed. According to page 46 of the MND:

> Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the **2014 City of Los Angeles Building Code**. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than significant. (Emphasis added).

Although the project applications for each of the four single-family homes were filed in November of 2015, they were not accepted for review until March of 2017, as shown in **Attachment H**. Projects submitted after January of 2017 are subject to the

2017 Building Code. Since the applications were not accepted for review until March of 2017, the projects should arguably be subject to the 2017 building code and the approval letter may not be accurate. In the absence of a clear and complete project description, public access to the geotechnical, soils and grading reports, and a determination of whether the project is subject to the 2017 building code, the potential for soil stability impacts remains. In addition, as noted in MND Appendix D: "The subject lots are located below the proposed Crisler Way at the top of an approximately 200 foot high average slope gradient of about 40 degrees with localized areas steeper than 1: 1. The earth materials at the subsurface exploration locations consist of up to 2 feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock." Therefore the potential for grading and construction to result in the loss of topsoil also remains potentially significant.

*VI.d. Hazards and Hazardous Materials*

| **VIII HAZARDS AND HAZARDOUSMATERIALS** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☒ | ☐ | ☐ | ☐ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As discussed earlier in this comment letter, the proposed project is located in a High Fire Severity area on a site that previously burned in the Kirkwood Bowl Fire (see **Figure 8**) in an area is characterized by very narrow roadways. Maintenance of roadway and emergency access is a very important issue for residents along these narrow streets. Both Yucca Trail and Grand View Drive are substandard streets of limited width. (See MND Appendix F).

As noted in the City of Los Angeles's analysis of the Kirkwood Bowl/Laurel Canyon fire (see **Attachment D**) which destroyed 23 homes, including 14 on Grand View Drive and three on Crisler Way, partially ruined another five structures, and caused an estimated $4 million in damages in 1979:[3]

> The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

[3] City of Los Angeles Department of Fire, Analysis of Greater Alarm Operations, 9-16-79, page 1-2.

> The primary reasons for the structure losses were high temperatures for the previous two weeks, low humidity, wind from the south-southwest, 10 to 12 knots, delayed alarm, wood siding, structures built on ridges, with minimal brush clearance, and the fire starting at the base of a very steep slope (approximately 70 degrees), covered with dense brush. With all of these conditions combined, the fire swept up the slope, exposing the houses on three ridges, where the houses sustained almost total destruction.

As further explained by the Los Angeles Fire Department, factors that contributed to the magnitude of the fire damage and inhibiting the emergency response included:[4]

> Narrow streets, some practically inaccessible to fire apparatus, coupled with hordes of sightseers, residents and numerous teams from the news media, clogged the streets with autos and foot traffic. This condition prevailed throughout the height of the incident and hampered our operations severely.

The City is thus in the process of cumulative recreating the factors that interfered with the emergency response and evacuation.

Access to the project site via the recommended route (Route B) will require construction equipment to make a sharp right-hand turn from Grand View Drive onto Crisler Way, and a sharp left-hand turn when leaving the site, as shown in **Figure 17**. It is unclear whether this routing is even feasible. The alternate route would require the use of Yucca Drive, described in MND Appendix F as a narrow roadway which varies in width between 10 and 15 feet with a narrow sharp turn (more than 90 degrees) where Yucca Trail transitions to Grand View Drive.

The MND acknowledges that project construction will result in temporary or partial street closures due to construction activity (MND page 58). As shown in **Figure 7**, site access in the area is limited. As discussed earlier in this comment letter, the MND fails to indicate where construction staging will take place during the first two months of the project, and during the drilling of roadway caisson. It is therefore likely that large construction equipment may block Grand View Drive during at least several months of project construction and that the MND has not adequately described significant street closure and emergency access impacts of the project.

[4] City of Los Angeles Fire Department, Activities During the Laurel Canyon Bush Fire, page 2.

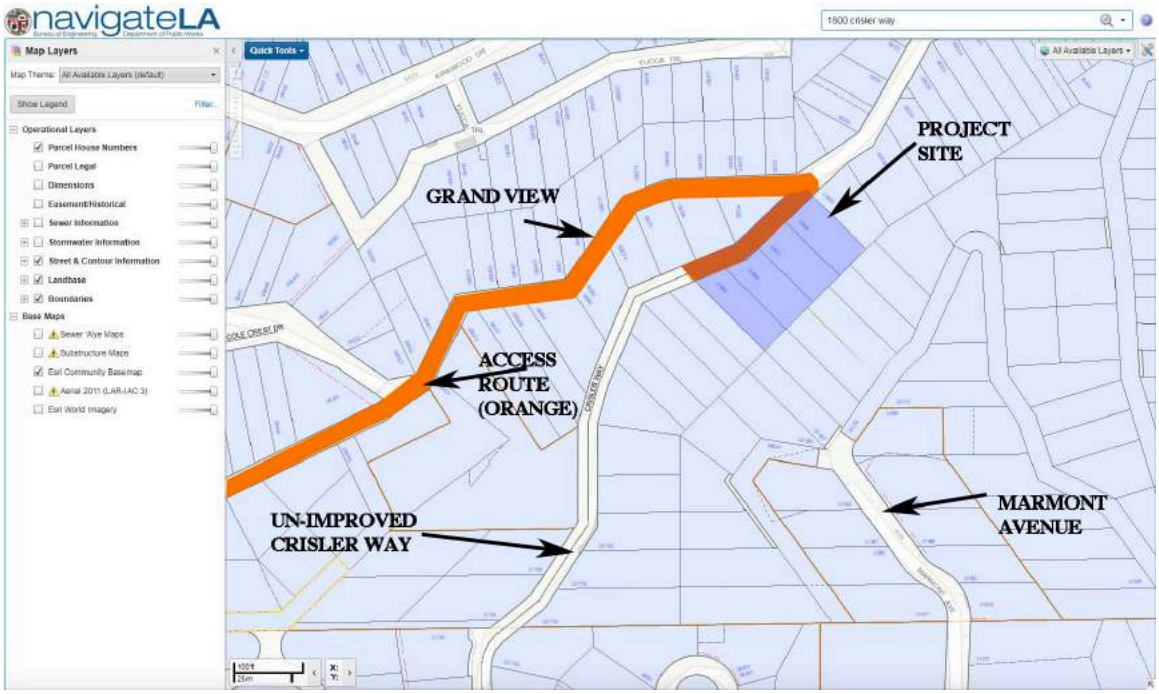



Figure 17 – MND Recommended Access Route B

The MND includes two mitigation measures to address emergency access impacts that are identified in the MND as potentially significant:

**MM HAZ-1 Hillside Construction Staging and Parking Plan**

The Construction Staging Plan shall include, but not be limited to: identifying where all construction materials, equipment, machinery, and vehicles will be stored on-site and/or out of the public right-of-way of Crisler Way through the grading and construction phases of the project; and identifying the proposed locations of all on-site and off-site staging areas for construction delivery vehicles. This plan shall also include the following:

- No construction equipment or material shall be permitted to be **stored** within the public right-of-way.
- Delivery drivers for construction materials shall be required to follow the designated travel plan.
- Truck traffic directed to the project site for the purpose of delivering materials, construction-machinery, or removal of graded soil shall be limited to off-peak traffic hours, **Monday through Friday** only. No truck deliveries shall be permitted on Saturdays, Sundays, or City Holidays.

- All deliveries during construction shall be coordinated so that only one vendor/delivery vehicle is at the site at one time, and that a construction supervisor is present at such time.
- A radio operator shall be on-site to coordinate the movement of material and personnel, in order to keep the roads open for emergency vehicles, their apparatus, and neighbors.
- A minimum of two flag persons are required. One flag person is required at the entrance to the project site and one flag person at the next intersection along Grand View Drive.
- Truck crossing signs are required within 300 feet of the exit of the project site in each direction.
- The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by grading, and at all times shall provide reasonable control of dust caused by wind.
- No person shall perform grading within areas designated "hillside" unless a copy of the permit is in the possession of a responsible person and available at the site for display upon request.
- The applicant shall identify a construction manager and provide a telephone number for any inquiries or complaints from residents regarding construction activities. The telephone number shall be posted at the site readily visible to any interested party during site preparation, grading and construction.
- The Construction Parking Plan shall identify where all contractor, subcontractor, and laborers will park their vehicles so as to prevent blockage of two-way traffic on streets in the vicinity of the construction site.
- During all phases of site development, all construction vehicle parking and queuing related to the project shall be in substantial compliance with the approved Construction Staging and Parking Plans, to the satisfaction of the Department of Building and Safety and the Department of Transportation.

**MM HAZ-2 Emergency Evacuation Plan**

Prior to the issuance of a building permit, the applicant shall develop an emergency response plan in consultation with the Fire Department. The emergency response plan shall include but not be limited to the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments.

Mitigation Measure MM HAZ-1 would allow delivery and soil removal activity Monday through Friday. On page 94 of the MND it states that:

The Applicant has also committed to the following design features to avoid or minimize potential traffic impacts on the surrounding neighborhood.

- Construction crews will not work on Saturdays.

- The contractor will shuttle workers to the project site in a van to avoid construction traffic and parking on Grand View Drive.
- Until the on-site construction staging area on Lot #95 is created, construction crews will not work on Thursdays, trash collection days.

Why are these measures not included in MM HAZ-1 to ensure that they are requirements?

Mitigation Measure MM HAZ-1 only prohibits construction equipment and materials from being stored in the public right-of-way. It does not prohibit use of the equipment from the public right-of-way or prohibit street closures that would impede emergency access. Mitigation Measure MM HAZ-2: emergency Evacuation Plan is meaningless if heavy equipment is blocking Grand View Drive. None of the Mitigation Measures prohibit construction staging or equipment use from Grand View Drive. The potential for significant emergency access and fire-related impacts remains.

In addition, the MND fails to recognize and address the hazards posed to nearby properties from project construction. As detailed in the letter by Aidan O'Brien, M.D., contained in **Attachment I**, Dr. O'Brien's property was extensively damaged during construction of 8401 Grand View including damage from machines crashing into the house. The property at the junction of Kirkwood and Grand View was damaged when a mobile crane crashed into it. Construction resulted in street damage from Kirkwood to that site that has never been properly repaired. In addition, residents suffered numerous lengthy street closures.

Not only did residents suffer these impacts, but there were multiple episodes of objects on the steep project site falling on downslope properties. This resulted in one resident, Hanna Melzer, moving away due to safety fears. As described by Ms. Melzer in an email to the City dated July 1, 2006 and included in **Attachment I**:

> I can't stay in my back yard or open my doors and windows because stones and pieces of asphalt will be rolling down from the road deterioration. The wire fences that Mr. Smith put up "for protection" will not protect my family and my house since he is storing metal pieces and debris not even on his property but in-between his property and 8383 Grandview. I do have experience of stones rolling down from Mr. Smith's area down to my property, hitting my house and my deck where minutes before my children were playing basketball with their playdate.

The MND for the proposed project fails to recognize the hazards posed by construction on steep slopes. As shown in **Figures 12-15**, the project site contains extreme slopes. The environmental document for the proposed Project fails to recognize these potential construction-related hazards or to provide mitigation to reduce impacts to a level considered less than significant. There is no mitigation requiring a compensation fund be established for repairs and injuries suffered by residents as a result of project construction. There are no mitigations that would insure the safe storage of construction materials on site, or safe use of construction vehicles. The MND on page 46 states that the project "would also install a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope," but this has not been made a requirement of the project, and the required design and strength of the fencing needed to

catch heavy rolling objects has not been analyzed or addressed in the MND. The potential for construction hazards remains Potentially Significant.

**Cumulative Impacts** – The MND provides no mitigation for cumulative access impacts associated with the construction of the proposed project and the cumulative projects listed in the MND and this comment letter. The MND indicates that site preparation and grading will take approximately 50 weeks and 15 months for home construction for a total construction time of almost 2¼ years. Given the volume of cumulative projects and time required for construction, given site challenges in this area, it is highly likely that more than one project would be undergoing construction at the same time. There are no provisions for ensuring that no concurrent development occurs, or for addressing the combined access impacts of multiple construction projects occurring at the same time along these very narrow roadways. The potential for cumulative access impacts remains.

*VI.e. Land Use and Planning - Violation Of CEQA Guidelines Section 15063(D)(5) – Failure To Include A Discussion Of Project's Consistency With Applicable Land Use Controls*

| **X LAND USE AND PLANNING** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

The MND lacks any real discussion of the project's consistency with existing zoning, and the City's the Baseline Hillside Ordinance. LAMC 12.21.C.10-4 provides that the maximum height for hillside single-family home developments in this zone is 33 feet. As detailed in Section VI.a. of this comment letter, the proposed single-family homes appear to exceed the height limitations for projects subject to the Baseline Hillside Ordinance.

As noted on page 69 of the MND: "Per LAMC requirements, the Project is required to improve Crisler Way to a roadway width of 20 feet to provide a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area." However, the Project is requesting a Zoning Administrator's Determination to allow the construction, use, and maintenance of a new three-story single family residence on a lot which does not have vehicular access from a 20-foot wide continuous paved roadway from the driveway apron to the boundary of the hillside area as otherwise required by LAMC Section 12.21 C.10(i)(3)." In addition, the project and MND fail to address whether the project provides the required right-of-way width, in addition to the roadway width of 20 feet, and thus whether proposed Crisler

Way is consistent with the LADOT Complete Streets Manual which is Chapter Nine of the Los Angeles Mobility Plan.

As noted in Section III.g. of this comment letter, according to the September 19, 2012 Geotechnical Report for the project at page 5, the project includes:

> Retaining walls to 6 to 21 feet high are proposed along the *uphill* side of the proposed private street. Pile-supported retaining walls from 5 to 7-1/2 feet high are proposed along the downslope side of the proposed street. The new proposed construction plans provide specific information concerning the construction of four hillside residences and swimming pools on the subject property. Retaining walls associated with the construction of the individual residences are proposed up to 22 feet high. Retaining walls used to create the level rear yard areas are proposed up to 12 feet high.

The number and height of retaining walls appear to exceed what is allowed by the City's Retaining Walls In Hillside Areas, Ordinance No 176,445 LAMC 12.21(C)8, which specifies that:

> Retaining walls are subject to the following restrictions:
>
> (a) A maximum of one free standing vertical or approximately vertical retaining wall may be built on any lot with a maximum height of 12 feet as measured from the top of the wall to the lower side of the adjacent ground elevation. However, as shown in the diagram below, a maximum of two vertical or approximately vertical walls or portions of a wall can be built if they comply with the following:
>
> (i) The minimum horizontal distance between the two walls is three feet,
>
> (ii) Neither of the two walls exceed a height of 10 feet measured from the top of each wall to the lower side of the adjacent ground elevation at each wall, and
>
> (iii) In no case shall the height of a wall located in a required yard exceed the height allowed by Section 12.22 C.20.(f) of this Code.

In addition, the height of the driveway bridges appear to be higher than 3'6" in violation of LAMC 12.21A17(a)(3). There would appear to be substantial evidence in the record that the project as proposed is not consistent with existing zoning, despite the lack of adequate analysis in the MND.

*VI.f. Noise*

| **XII NOISE** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project result in:* | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☒ | ☐ | ☐ | ☐ |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | ☒ | ☐ | ☐ | ☐ |
| c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

As noted on page 8 of Appendix E of the MND for the proposed project, the Noise Impact Analysis:

- "In the absence of any shielding, noise level at the closest outdoor recreational use would exceed the City of Los Angeles suggested construction noise level of 75 dB."

- "A typical building with single pane windows can reduce noise levels by 25 dB with the windows closed (U.S. Environmental Protection Agency (EPA), 1974). However, most modern homes are constructed with dual paned windows which can afford up to a 30 dB noise reduction with closed windows. Therefore, the expected indoor noise level at the closest residence with closed windows would be approximately 59 dB during grading and approximately 52 dB during construction. For indoor noise environments, the highest noise level that permits relaxed conversation with 100 percent intelligibility throughout the room is 45 dB. Speech interference is considered to be highly intrusive when normal conversation is precluded at 3 feet, which occurs when ambient noise levels substantially exceed 60 dB. An interior noise level of 59 dB at indoor locations would maintain a barely acceptable interior noise environment with closed dual paned windows. In some cases, this noise reduction could be maintained only on a temporary basis, since it requires that windows remain closed at all times assuming homes have air conditioning."

- "Because the project is located on a hillside, noise barriers such as sound curtains would not be feasible."

- "Construction noise is maximally anticipated to be 89 dBA exterior and 59 dBA at interior of the closest residence north of the project site when roadway construction equipment operates near the closest receptor locations during grading activities. After grading the worst case noise levels would decrease to 82 dB exterior and 52 dB interior. As discussed, because of the steep slope, a sound

curtain could not be utilized for mitigation. Therefore, construction noise may occasionally be audible and the following significance thresholds could be exceeded."

The MND on page 9 concludes that the proposed project would result in the following significant noise impacts:

> Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use.
>
> - "There is a minimal separation distance between the site and the nearest residential use, construction noise levels could potentially exceed exterior noise levels by more than 10 dB. Because the project on a steep slope, there is no reasonable means to mitigate construction noise (e.g. fences or temporary barriers) to less than this threshold."
>
> Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
>
> - As noted above, even with quiet suburban background noise levels construction noise could potentially exceed ambient noise levels by 5 dB for more than 10 days in a three month period. Again, reasonable means of construction noise mitigation such as a temporary fence would not be feasible because the adjacent sensitive uses are at a higher elevation than the project site.

The Noise Analysis for the proposed project thus identifies significant noise impacts resulting from project construction activities. The estimate of the magnitude of construction noise impact in the Noise Analysis may be understated because it assumes that existing homes in the project vicinity have dual paned window. No evidence is provided in the MND that potentially impacted homes have dual paned windows. Impacts would be 5dB greater for homes without dual paned windows.

On page 75, the MND concludes that through "compliance with regulatory requirements limiting construction noise, including the limitations specified in LAMC Chapter XI, Noise Regulation (Section 112.05) and Chapter IV, Public Welfare (Section 41.40), and the implementation of MM NOI-1 and MM NOI-2, construction noise impacts would be reduced to less-than significant." However, as noted on page 12 of the Noise Study in MND Appendix E:

> The noise limitation of the Los Angeles Municipal Code **does not apply where compliance is technically infeasible**. Technically infeasible means that the noise standard cannot be met despite shields, sound barriers and/or other noise reduction devices or technique during the operation of equipment. For this project, because of terrain constraints, it would not be

feasible to construct a temporary soundwall that would block noise to homes at a higher elevation.

There has been no showing in the MND that compliance with Municipal Code requirements is technically feasible. Similar to the City's Municipal Code, the two mitigation measures for significant noise impacts included in the MND also contain an infeasibility out:

> **MM NOI-1** The use of powered construction equipment or powered hand tools that produce a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction machinery is prohibited **to the extent feasible**.
>
> **MM NOI-2 Increased Noise Levels (Grading and Construction Activities)**
>
> To reduce the impact of temporary construction noise on adjacent residences, the Project shall comply the following measures:
> - Construction activities shall be limited to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. Construction is not permitted on any national holiday or on any Sunday.
> - Construction equipment and supply haul routes shall avoid conflicts with noise sensitive land uses **to the extent feasible** through scheduling and points of access.
> - Construction staging areas shall be established to minimize impacts to adjacent residences **where feasible**.

Existing regulatory requirements and the noise mitigation measures contained in the MND have not been shown to require compliance with noise standards or to be feasible. The potential for significant noise impacts therefore remains.

**Cumulative Impacts** – The MND fails to adequately address the potential cumulative noise impacts that could result from simultaneous construction of the project and one or more of the cumulative projects. The MND indicates that site preparation and grading will take approximately 50 weeks and 15 months for home construction for a total construction time of almost 2¼ years. Given the length of project construction and proximity of cumulative projects in the areas, the potential for a significant unmitigated cumulative noise impact during construction remains.

*VI.g. Public Services*

| XIV PUBLIC SERVICES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services? | | | | |
| a) Fire protection? | ☒ | ☐ | ☐ | ☐ |
| b) Other public facilities? | ☒ | ☐ | ☐ | ☐ |

As detailed in Section VI.d. of this comment letter, the propose project has the potential to interfere with emergency access which may result in a significant unmitigated impact on fire protection during project construction. The proposed project would also introduce new residential uses on a parcel that has already burned. The potential for fire protection impacts remains.

The MND fails to analyze the project's potential impacts on other public services such as sewer and water. The proposed project will result in the construction of sewer lines and connections, and a new fire hydrant. The MND fails to analyze the potential impacts of these components of the project on existing capacity. In addition, the MND fails to analyze the potential impacts of the installation of a new fire hydrant on the hydrant system in the project vicinity, which has experienced a number of failures. In the absence of such an analysis, the potential for impacts remains.

As detailed in Section I.d. of this comment letter, the project area has been experiencing a number of infrastructure failures, due in part to existing geotechnical conditions and the use of local roadways for transport of heavy construction equipment and materials. The Traffic Analysis for the proposed project included as Appendix F to the MND on page 8 tacitly acknowledges the potential for project construction vehicles to damage local roadways by suggesting the following mitigation measures:

5. Smaller capacity concrete trucks (less than 10-yard capacity) should be used for transporting foundation materials to the Project site.

9. Require the applicant to repair any damage to the pavement structure and curbs along the construction route between Laurel Canyon Boulevard and the Project site. Inspection and video of the roadway should be completed prior to the construction project in order to document existing conditions. Upon completion of the construction project, the roadway should then be inspected to document any damage to the roadway.

10. Given the length of the construction period (24 months), periodic inspection and maintenance should be performed along the access

route to the site to address any roadway deterioration due to construction traffic.

Given the project's potential to damage the pavement structure in the project area, the project also has the potential to increase other infrastructure failures in the area. The MND fails to acknowledge these potential impacts or to provide mitigation for such infrastructure failure impacts should they occur as the result of the project or the project's contribution to cumulative development in the area.

**Cumulative Impacts** – The MND does not adequately address the potential fire service/emergency service impacts of simultaneous construction of more than one project along Yucca Trail and Grand View Drive, and the likely impacts on emergency response times (including police) during construction. In addition, the potential for construction work to spark a fire has not been adequately analyzed. The MND does not address the question of at what point additional hillside development in the Kirkwood Bowl area will necessitate the addition of police or fire facilities in order to maintain response time standards.

The MND does not adequately address the potential cumulative impacts of heavy vehicles on both the roadway and other infrastructure. The potential for cumulative infrastructure impacts remains.

*VI.h. Transportation and Traffic*

| **XVI TRANSPORTATION/TRAFFIC** | | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *Would the project:* | | | | | |
| a) | Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, | ☒ | ☐ | ☐ | ☐ |
| d) | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☒ | ☐ | ☐ | ☐ |
| e) | Result in inadequate emergency access? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

MND page 93 states that:

Project construction would require crew worker vehicles and trucks during site preparation. The addition of these vehicles into the neighborhood street system could contribute to temporary traffic increases in the Project vicinity for the approximate 24-month duration of construction. However, to reduce the temporary impact of construction traffic in the neighborhood, the construction contractor has **voluntarily** agreed to

shuttle work crew members to the site in a van to avoid parking on the adjacent street."

However, the MND does not include a mitigation measure requiring the applicant to shuttle workers to the site and there is therefore no guarantee that this voluntary measure will be implemented. The potential for worker-related construction traffic remains.

Page 95 of the MND states that the project would: "establish an on-site construction parking and equipment staging area on Lot #95 to allow for no parking on Grand View Drive **within two months** after beginning construction." In addition, use of Grand View Drive for construction vehicle parking until the staging area on Lot #95 is operational is allowed by Mitigation Measure MM TRA-3. As written, this indicates use of Grand View Drive for at least the first two months of the project. Similarly MND page 94 states that by: "establishing an on-site construction staging area on Lot #95, the Project would allow for complete off Grand View Drive parking within two months following the beginning of construction." There remains the potential for significant impacts to the narrow roadway system in the area during the two months before on-site construction staging is established on Lot #95. Furthermore, no analysis is provided in the MND to demonstrate that the staging area on Lot#95 is adequate for project storage and parking needs, or that, given the narrow widths of Grand View Drive and Crisler Way, that during site preparation and grading construction vehicles will have adequate access and turning capacity. Table 3-5 indicates that a 10 ft. wide road will be created on Crisler Way starting in week 7 of site preparation and grading, but does not indicate when the roadway will be expanded to 20 feet in width. The potential for operational impacts during construction remains. (See also discussion in Section VI.d.) Therefore, the contention in the MND that construction traffic impacts would be less-than-significant is invalid. The potential for significant access impacts on Grand View Drive remains.

MND page 94, under Temporary Street Closures indicates that:

> Construction activities may necessitate temporary lane closures on streets adjacent to the project site on an intermittent basis for utility relocations/hook-ups, delivery of materials, and other construction activities as required. However, equipment and material staging would be organized to **remain on site to the maximum extent possible** and deliveries and material pick up would be organized **in the most efficient manner possible** to reduce temporary construction traffic impacts on the neighborhood and surrounding community.

However, the MND fails to characterize the degree to which equipment and material staging would remain on-site, verse occur from Grand View Drive, other than to say this would occur **to the maximum extent feasible**, or to explain how deliveries and material pick up would be organized **in the most efficient manner**. The potential for significant access impacts on Grand View Drive remains.

As acknowledged on page 97 of the MND:

> The Traffic Report found that construction traffic between Laurel Canyon Boulevard and the project site has the potential to affect safety and access for roadway users given the roadway widths and curvatures. As recommended, Project construction traffic would follow Access Route B to avoid narrow roadway widths and sharp curves on Yucca Trail. Nevertheless, the introduction of construction vehicles and equipment on narrow roadways with sharp curves along Access Route B could create temporary hazardous roadway conductions. (sic)

No mitigation measure is provided in the MND requiring the use of Access Route B. The MND and Traffic Study for the project contained in MND Appendix F document the potential safety hazards associated with Access Route A, which uses Kirkwood Drive to Yucca Trail to Grand View Drive to Crisler Way. The potential safety hazards associated with the recommended access route, Access Route B are not fully addressed in the MND. Access Route B would use Kirkwood Drive to Grand View Drive to Crisler Way. The need for a sharp turn into and out of the project site area (see **Figures 7 and 17** in this comment letter) is not described in the Traffic Analysis contained in Attachment F to the MND or shown on MND Appendix F Figure 4. The potential for the configuration of the intersection of Crisler Way and Grand View Drive to result in the potential for safety hazards both during construction when vehicles, are making a sharp turn onto and off of Grand View Drive at this location, and during operation, has not been properly analyzed, given the MND's and Traffic Study's recommendation of this routing for project traffic. There is potential for significant hazards associated with this design feature, which has not been addressed in the MND. This is a potentially significant impact of the proposed project.

The following inadequate mitigation measures are provided in the MND to address potentially significant project traffic and traffic safety impacts:

> **MM TRA-1** To minimize construction traffic and roadway hazards associated with the construction access route, which include sharp curves and narrow roadway widths, the project proponent shall provide a mechanism to inform area residents potentially affected by construction traffic prior to the commencement of construction activities. Relevant project information must include, but would not be limited to, the expected duration of the construction project, the weekdays during which construction is expected, hours of construction, and the amount of construction traffic expected. The project proponent must also post temporary signage along the construction access route and at the project site with a hotline number for residents affected to voice problems associated with construction traffic.

Mitigation MM TRA-1 merely requires the applicant to inform residents about construction traffic, but does nothing to prevent the impacts of such traffic. In addition, as written, the mitigation measure merely requires the provision of a hotline number for

residents to voice problems. However, the measure in no way requires the project applicant to address those problems.

> **MM TRA-2** To minimize construction traffic and roadway hazards along the access route, the project proponent shall prepare a construction traffic control plan conforming to City of Los Angeles requirements. The Traffic Control Plan must detail the placement of warning signs, traffic control personnel needed, and assurance the size of trucks anticipated can adequately maneuver along the designated access route. The Traffic Control Plan must also provide for the use of flagmen along Grand View Drive to facilitate deliveries as necessary.

Mitigation Measure MM TRA-2 fails to state what will happen if it can not be shown that project trucks can adequately maneuver along the designated access route, or to require the analysis to consider the turn from Grand View Drive to Crisler Way. The mitigation measure must be written to show that construction permits will not be granted if the truck sizes are too large for safe maneuvering of the designated access route, to require the truck fleet in the Traffic Control Plan is actually is used, and to provide penalties for use of vehicles larger than specified in the Traffic Control Plan. The measure should also provide for review and comment on the Traffic Control Plan by local residents, prior to Plan approval.

> **MM TRA-3** To minimize construction traffic and roadway hazards along the access route, the project proponent must, **to the extent feasible**, schedule trucks transporting construction materials and equipment to and from the construction site to arrive or depart outside of the morning and afternoon peak commuter periods. Morning peak commuter periods are defined as 7:00 A.M. to 9:00 A.M. and afternoon peak commuter periods are defined as 4:00 P.M. to 6:00 P.M. **To the extent feasible**, the project proponent shall use smaller capacity concrete trucks with equal to or less than 10 cubic yards for transporting foundation materials to and from the site.

Measure MM TRA-3 is meaningless since it includes the language "to the extent feasible" thus providing no real restriction. The measure must be re-written to remove the "to the extent feasible" language and to make the voluntary prohibition on construction work on Thursday (trash day) prior to provision of adequate off-site parking and storage area, mandatory. In addition, the mitigation measure must prohibit the use of any type of truck weighing more than the existing weight restrictions for Grand View Drive and Yucca Trail.

> **MM TRA-4** To minimize construction traffic and roadway hazards along the access route, the project proponent shall prohibit construction vehicle parking on neighborhood roads once the vehicle and equipment staging area on Lot 95 is operational.

Measure MM TRA-4 would thus allow for parking of construction vehicles on neighborhood roads prior to Lot 95 being operational, thereby allowing for potentially significant access impacts during this period.

> **MM TRA-5** To repair potential physical damage to the roadways along the construction access route, the project proponent shall inspect and video record the existing condition of the pavement and curbs along the construction route between Laurel Canyon Boulevard and the project site prior to construction. To address roadway deterioration due to construction traffic during construction, the project proponent shall periodically inspect and **reasonably maintain** the roadway along the construction access route. Upon completion of construction, the project proponent shall inspect and document damage to the construction access route.

MM TRA-5 is written as if it is almost a voluntary measure. There is no requirement to submit the video record of pre and post-project roadway conditions to the City for review, and no mechanism for the City to mandate specific repairs. The measure calls for the applicant to reasonably maintain the roadway, but provides no standards for what constitutes reasonable maintenance. The measure requires upon completion of the project that the applicant inspects and documents damage to the construction access route, but not that the report be submitted to the City or the damage repaired. In addition, the measure fails to require the applicant post bond to ensure funding for the repair of all damage to any infrastructure or property.

The mitigation measures provided fails to insure that access impacts will be less than significant. The potential for access impacts remains. The mitigation measures provided fail to ensure that damage to local infrastructure will be mitigated to a level that is less than significant.

The potential for the proposed project to result in inadequate emergency access has also been documented in Section VI.d. and VI.g. of this comment letter.

**Cumulative Impacts** – The MND fails to address the ability of the existing roadways to handle the impact on traffic generation from cumulative development both during construction and operation. While these trip generation numbers are small, so too is the capacity of the existing street system. The potential for cumulative impacts to both access and infrastructure remains.

*VI.i. Utilities and Service Systems*

| **XVIII UTILITIES AND SERVICE SYSTEMS** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |

| XVIII UTILITIES AND SERVICE SYSTEMS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

As shown in **Figure 4**, the project site is not currently served by existing sewer facilities and will be required to construct new sewer lines and wyes. Based on the need for a sewer line/storm drain easement on Lot 118, the applicant may be required to provide wyes for lots along the new sewer line. The MND fails to address or describe this issue.

According to page 106 of the MND:

> The Project area is served by a network of sewer lines located beneath major streets that convey sewage from the Site and surrounding residences to Hyperion. As part of pre-construction, detailed gauging and evaluation will be needed as part of the permitting process to identify a specific sewer connection point for the project site. Though existing regulations established in the City of Los Angeles Sewer Allocation Ordinance (No. 166060), LA Sanitation does not make a determination of sewer capacity until the Los Angeles Department of Building and Safety has established that the proposed Project's plans and specifications are acceptable for plan check. . .
>
> The Applicant will be required to submit a Sewer Capacity Availability Request (SCAR) to verify the anticipated sewer flows and points of connection and to assess the condition and capacity of the sewer lines receiving additional sewer flows from the proposed Project. If the Bureau of Sanitation determines the sewer system has insufficient capacity to serve the proposed Project, the developer may be required to replace or build new sewer lines to a point in the sewer system with sufficient capacity to accommodate the proposed Project's increased flows. Based on the configuration of sewer lines serving the project site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325). Project sewer flows would then connect58 to the existing lines under Marmont Ave. . .
>
> These proposed sewer infrastructure improvements to update or expand the sewer lines in the Project vicinity would be limited to trenching, excavating and backfilling the sewer lines beneath the public right-of-way. Such construction activities would be localized in nature and would

generally involve temporary partial lane closures of short duration typically lasting a few days to a few weeks.

Given that LA Sanitation has apparently not made a determination of sewer capacity and the applicant has apparently not submitted a Sewer Capacity Availability Request, and the MND fails to demonstrate the existence of adequate sewer capacity, the potential for sewer-related impacts thus remains. In addition, it is unclear that the project's analysis of air quality, noise and traffic impacts have addressed impacts associated with sewer construction, in the required analysis of the project as a whole.

The MND fails to address the construction and operation of the storm drains included in the design of the Crisler Way extension. The MND fails to explain where and how these storm drains will be connected to the larger storm drain system and if that system has adequate capacity to handle the flows from the new storm drains included in the roadway design. In the absence of such an analysis, the potential for impacts remains.

The MND fails to address the potential for project and cumulative construction traffic to increase the incidences of infrastructure failure along the project access routes. Given the number of infrastructure failures in the area (see Section I.d. of this comment letter), and the substandard roadways in the area, there is the potential for project construction traffic to result in significant infrastructure impacts and the project to contribute to significant cumulative infrastructure impacts in the form of damage to the systems. Measure TRA-5 does not address impacts to infrastructure other than the roadway. The potential for significant project and cumulative impacts to infrastructure systems in the area remains.

VI.j. *Mandatory Findings of Significance*

| **XVIV MANDATORY FINDINGS OF SIGNIFICANCE** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Does the project:* | | | | |
| a) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☒ | ☐ | ☐ | ☐ |
| b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

Cumulative development has the potential to result in significant emergency access, transportation impacts, and utility impacts as detail above. Issue XVIV.b., therefore, remains Potentially Significant. An EIR is therefore required for the project.

Project and cumulative development has the potential to result in significant emergency access, transportation impacts, and public service and utility impacts as detailed above, which will adversely effect human beings either directly or indirectly. Issue XVIV.c., therefore, remains Potentially Significant. An EIR is therefore required for the project.

**VII. Violation Of CEQA Guidelines Section 15070(B)(1) – Lack Of Evidence Mitigation Measures Would Avoid The Effects Or Mitigate Effects To The Point Where Clearly No Significant Effects Would Occur**

As detailed in Section VI of this letter, the MND lacks any real demonstration that project mitigations would reduce impacts to a level considered less than significant. It is impossible to judge whether impacts are mitigated to the point where "clearly no significant effects would occur." In addition, as detailed in this comment letter, a number of the mitigation measures are infeasible or ineffective as written and the potential for impacts thus remains.

**VIII. Violation Of CEQA Guidelines Section 15070(B)(1) - Infeasible Mitigation Measures**

Potentially infeasible mitigation measures and mitigation measure which will not reduce impacts to a level which is less than significant are included in the MND, as detailed above in Section VI of this comment letter. Given the presence of infeasible and ineffective mitigations, the potential for significant unmitigated impacts remains.

**IX. Violation Of CEQA Guidelines Section 15074(D) – Legitimate Concerns Regarding Enforcement Of Mitigation Measures**

The City has received numerous comments throughout the project review process for various projects in hillside areas regarding the City's inadequate enforcement of mitigation measures. The City's ability to enforce mitigation measures and standard conditions of approval has been shown to be problematic for other projects on substandard streets in hillside areas. See for example the hearing audio transcript from the Central Area Planning Commission Regular Meeting of Tuesday, September 8, 2015, 4:30 P.M. regarding a project on Stanley Hills Drive. Issues of enforcement are repeatedly discusses on Track 3 of the tape of the hearing. (See **Attachment J** for links to the audio). In particular, Planning Department indicates on Track 3 at minute 46:00-49:30 that they are not responsibility for mitigation monitoring.

The wording of MND mitigations evidences no progress on this issue. To address Citizen concerns we would suggest that the following elements be included in each mitigation measure:

- Required action
- Timing of Required Action
- Party responsible for implementation of the required action (with a phone list of all parties for all mitigation measures to be provided to residents prior to issuance of first permits)

- Party responsible for monitoring compliance with the required action (with a phone list of all parties for all mitigation measures to be provided to residents prior to issuance of first permits)
- The specification that future permits will not be issued if compliance with the measure is not met (for example a statement that: the occupancy permit for the project shall not be issued until compliance is demonstrated to the satisfaction of (the applicable City Department head)
- A specified fine for failure to comply with the specified timing
- A specified fine for per day or per occurrence violations documented by the public, the City Department head's contact information for submission of violation documentation, and the nature of documentation required for per day and per occurrence violation events.
- A requirement that the applicant pays for police or fire presence during key construction activities that might result in temporary street blockage.

Residents on Grand View Drive have already experienced inadequate City enforcement of mitigations applied to past projects on the street, as detailed in **Attachments I and J**.[5] In the case of construction of 8401 Grand View Drive, not only did the City provide inadequate mitigation enforcement, but on "April 2, 2012, the Department of Building and Safety ((("LADBS") issued a notice to the property owner to immediately stop all work in progress after it was found that the Department of City Planning erred in signing-off on the building permits for the addition and the swimming pool, as detailed in the ZAD for Case No. ZA-2012-1026(ZAA)(ZAD)." Given the City's failure to follow up on violations during the construction of 8401 Grand View Drive and the City's improper issuance of building permits on Grand View Drive, residents have very real concerns about the ability of the City to ensure that mitigations intended to reduce impacts will be enforced.

This concern is exacerbated by the fact that the City has not provided a Mitigation Monitoring Plan for the project for public review.

## X. Violation Of CEQA Guidelines Section 15064(H) Failure to Adequately Address Cumulative Impacts

As detailed in Section VI, the MND fails to adequately address the potential for the project to contribute to significant cumulative impacts in the project area. Not only does the City need to prepare an EIR to address the potentially significant impacts of the project, the City needs to prepare an EIR to address the potential cumulative impacts of the project. As noted in the CEQA Guidelines:

[5] See also Channel 4 News video at: https://www.youtube.com/watch?v=QJXbfFJmSaw

15355. CUMULATIVE IMPACTS

"Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
(a) The individual effects may be changes resulting from a single project or a number of separate projects.
(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

15064 DETERMINING THE SIGNIFICANCE OF THE ENVIRONMENTAL EFFECTS CAUSED BY A PROJECT

(h) (1) When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The MND contains a list of projects that may potentially be constructed in this neighborhood in the near-term. Several additional projects have been identify in recent environmental documents for projects in the area, as explained in Section III.m. This represents a significant amount of construction. Given the unique street constraints of the area, it is questionable whether the area can tolerate this level of sequential or cumulative development. Cumulative projects will exacerbate the potential impacts described in Section VI of this comment letter resulting in cumulatively considerable impacts. In addition, cumulative development will contribute to ongoing traffic and emergency access and safety concerns by increasing the population in the area subject to high fire risk and by making emergency evacuations more time consuming and difficult.

The City's on-going practice of permitting construction and increasing the density of development along a ridgeline oo steep hillside slope in a high fire severity area on what is essentially a one-way street is both a highly questionable practice and a potential source of liability for the City. Based on the plans available for these cumulative projects, they would appear to represent exactly the type of development cited by the Los Angeles City Fire Department as contributing to the severity of the Kirkwood Bowl/Laurel Canyon Fire – i.e. structures built in close proximity to each other, on ridge

tops with very steep slopes coming right up to foundations, on very winding narrow streets, with single ingress and egress.[6]

## XI. Violation Of CEQA Guidelines Section 15074(D) And Guidelines Section 15070(B)(2) – There Is Substantial Evidence In The Record That The Project As Revised May Have A Significant Effect On The Environment

There is substantial evidence in the record that the project will result in significant project and cumulative impacts. As detailed in this letter the MND fails to provide substantial evidence that impacts can clearly be reduced to a level considered less than significant. In contrast, a fair argument supported by substantial evidence has been presented that the potential for significant impacts remains.

## XII. Conclusion – The City Of Los Angeles Has Violated CEQA Guidelines Section 15073.5(D) – An EIR Is Required When There Is Substantial Evidence That The Project May Have A Significant Impact.

This comment letter demonstrates an EIR is required for the project. The lead agency has been presented with a fair argument that the project may have a significant effect on the environment, that the existing analysis and mitigation measures are inadequate, and that the project would result in a cumulatively considerable contribution to cumulative impacts. An EIR for the project is, therefore, required.

Sincerely,



Jamie T. Hall

ATTACHMENTS

A. Hydrant Failure
B. Roadway Repair Cost Example
C. Weight of Construction Vehicles
D. Information on the Kirkland Fire
E. Emails With City Staff Documenting Information Not Included In Project File
F. Expired B-Permit
G. Letter From Channel Law – Appeal To Board of Public Works of CEQA Determination for B-Permit No BR402571 (Public Resources Code Section 21151(c)
H. Case Planning Information For the Four Single-Family Residences
I. Resident Testimony Regarding Harm From Similar Past Projects
J. Audio Links, Central Area Planning Commission Meeting, September 8, 2015

[6] See Fire analysis by Los Angeles Fire Department in Attachment D.

# Exhibit A

LOCAL / L.A. Now

# Hollywood Hills neighborhood awakens to mudslide after hydrant ruptures



Mud fills the street on Hillside Avenue in the Hollywood Hills after abroken fire hydrant sent debris and mud onto a number of streets including Hillside and Franklin avenues and Kings and Queens Roads. (Mel Melcon / Los Angeles Times)

By **Veronica Rocha** • **Contact Reporter**

MAY 18, 2016, 9:07 AM

A ruptured fire hydrant triggered a mudslide Wednesday in a Hollywood Hills neighborhood and caused delays along a stretch of Sunset Boulevard.

The fire hydrant burst about 12:30 a.m. in the 8400 block of Grand View Drive, according to Kim Hughes, spokeswoman for the Los Angeles Department of Water and Power. It is unclear whether the fire hydrant was struck or malfunctioned.

Water and debris flowed downhill into streets and buried the driveways of some homes in thick mud.

DWP crews shut off water to the hydrant to stop the leak.

**See the most-read stories this hour >>**

Crews are working with fire officials to restore water to the area and clean up the debris.

Meanwhile, the Los Angeles County Sheriff's Department has advised drivers to avoid Sunset between Kings and Queens roads in West Hollywood due to heavy traffic and ongoing cleanup efforts.

A broken hydrant also sent a flood of water and mud onto Coldwater Canyon Boulevard in Studio City on Friday. A motorist had crashed into the hydrant.

**veronica.rocha@latimes.com**

**For breaking news in California, follow VeronicaRochaLA on Twitter.**

**ALSO**

**Person on 10 Freeway in West Covina is killed by hit-and-run driver**

**Nanny fights off would-be kidnapper who tried to snatch a stroller with a baby**

**Giant space shuttle tank arrives in L.A. by sea**

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**This article is related to:** Avalanches and Landslides

# Exhibit B

# CITY ENGINEER'S ESTIMATE

## City of Los Angeles - Department of Public Works - Bureau of Engineering
## Emergency Geotechnical/Structural Construction Services Project
## Grand View Drive Bulkhead
### W.O. No. E1907365

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | JOHN S. MEEK COMPANY, INC. | | PPC CONSTRUCTION, INC. | | CALEX ENGINEERING COMPANY | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL |
| 1 | Mobilization (General Requirements, Sections 01292 and 1721) | LS | | | $11,775.00 | | $11,500.00 | | $33,400.00 | | $27,500.00 |
| 2 | **Allowance for Differing Site Conditions (General Requirements, Sections 01212 and 01253)** | **LS** | | | **$23,630.00** | | **$23,630.00** | | **$23,630.00** | | **$23,630.00** |
| 3 | **Allowance for Utility & Service Line Relocation or Permanent Support (General Requirements, Section 01212)** | **LS** | | | **$20,000.00** | | **$20,000.00** | | **$20,000.00** | | **$20,000.00** |
| 4 | Traffic Control | LS | | | $3,000.00 | | $13,000.00 | | $7,000.00 | | $1,800.00 |
| 5 | Clearing and grubbing, prior to grading slope | EA | 400 | $3.00 | $1,200.00 | $3.50 | $1,400.00 | $10.00 | $4,000.00 | $16.00 | $6,400.00 |
| 6 | Drill 8 holes ea. 36" diameter x 41 ft deep, for Soldier Beams | LF | 328 | $300.00 | $98,400.00 | $63.00 | $20,664.00 | $105.00 | $34,440.00 | $134.00 | $43,952.00 |
| 7 | Supply 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $150.50 | $49,364.00 | $106.00 | $34,768.00 | $130.00 | $42,640.00 |
| 8 | Install 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $48.50 | $15,908.00 | $32.00 | $10,496.00 | $50.00 | $16,400.00 |
| 9 | Supply, pump and place concrete for embedded portion of soldier beams | CY | 51 | $135.00 | $6,885.00 | $352.00 | $17,952.00 | $324.00 | $16,524.00 | $255.00 | $13,005.00 |
| 10 | Supply, pump and place slurry for cantilevered portion of soldier piles | CY | 20 | $135.00 | $2,700.00 | $130.00 | $2,600.00 | $190.00 | $3,800.00 | $470.00 | $9,400.00 |
| 11 | Excavation for lagging and backdrain, including sawcut and removal of AC, haul-away and dispose | CY | 40 | $85.00 | $3,400.00 | $190.00 | $7,600.00 | $200.00 | $8,000.00 | $325.00 | $13,000.00 |
| 12 | Supply 8" x 1'-6" x 8 ft long pre-cast lagging panels | EA | 30 | $450.00 | $13,500.00 | $542.00 | $16,260.00 | $770.00 | $23,100.00 | $530.00 | $15,900.00 |
| 13 | Install 8" x 1'-6" x 8 ft long precast lagging panels | EA | 30 | $175.00 | $5,250.00 | $385.00 | $11,550.00 | $407.00 | $12,210.00 | $238.00 | $7,140.00 |
| 14 | Place 24" wide drain consisting of 3/4" rock wrapped in geofabric filter, at backside of lagging, geofabric and hydroauger array, prior to backfilling | CY | 10 | $100.00 | $1,000.00 | $275.00 | $2,750.00 | $330.00 | $3,300.00 | $768.00 | $7,680.00 |
| 15 | Construct fill in lifts, certified 90% min. relative compaction | CY | 32 | $110.00 | $3,520.00 | $113.00 | $3,616.00 | $175.00 | $5,600.00 | $220.00 | $7,040.00 |
| 16 | Erosion control groundcover hydro-mulch with native seed mix per building code | SF | 700 | $3.00 | $2,100.00 | $2.40 | $1,680.00 | $5.00 | $3,500.00 | $4.40 | $3,080.00 |
| 17 | Supply and install metal-beam vehicular guardrail per Standard Plan S-462, Type 2 | LF | 82 | $120.00 | $9,840.00 | $158.50 | $12,997.00 | $141.00 | $11,562.00 | $195.00 | $15,990.00 |
| 18 | Construct AC pavement 6" - 8" thick with 12" CMB | SF | 175 | $28.00 | $4,900.00 | $22.00 | $3,850.00 | $22.00 | $3,850.00 | $50.00 | $8,750.00 |
| 19 | Construct AC Berm (curb) at edge of pavement | LF | 50 | $40.00 | $2,000.00 | $44.50 | $2,225.00 | $50.00 | $2,500.00 | $114.00 | $5,700.00 |
| **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | | **$295,100.00** | | **$238,546.00** | | **$261,680.00** | | **$289,007.00** |
| | | | | | | **{ Low }** | **-19.16%** | **{ Low }** | **-11.32%** | **{ Low }** | **-2.06%** |

# CITY ENGINEER'S ESTIMATE

## City of Los Angeles - Department of Public Works - Bureau of Engineering
## Emergency Geotechnical/Structural Construction Services Project
## Grand View Drive Bulkhead
### W.O. No. E1907365

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | CLARKE CONTRACTING CORPORATION | | BALI CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL |
| 1 | Mobilization (General Requirements, Sections 01292 and 1721) | LS | | | $11,775.00 | | $11,775.00 | | $11,775.00 |
| 2 | **Allowance for Differing Site Conditions (General Requirements, Sections 01212 and 01253)** | **LS** | | | **$23,630.00** | | **$23,630.00** | | **$23,630.00** |
| 3 | **Allowance for Utility & Service Line Relocation or Permanent Support (General Requirements, Section 01212)** | **LS** | | | **$20,000.00** | | **$20,000.00** | | **$20,000.00** |
| 4 | Traffic Control | LS | | | $3,000.00 | | $4,800.00 | | $5,090.00 |
| 5 | Clearing and grubbing, prior to grading slope | EA | 400 | $3.00 | $1,200.00 | $10.00 | $4,000.00 | $11.00 | $4,400.00 |
| 6 | Drill 8 holes ea. 36" diameter x 41 ft deep, for Soldier Beams | LF | 328 | $300.00 | $98,400.00 | $185.00 | $60,680.00 | $429.00 | $140,712.00 |
| 7 | Supply 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $174.00 | $57,072.00 | $141.00 | $46,248.00 |
| 8 | Install 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $131.00 | $42,968.00 | $207.00 | $67,896.00 |
| 9 | Supply, pump and place concrete for embedded portion of soldier beams | CY | 51 | $135.00 | $6,885.00 | $370.00 | $18,870.00 | $271.25 | $13,833.75 |
| 10 | Supply, pump and place slurry for cantilevered portion of soldier piles | CY | 20 | $135.00 | $2,700.00 | $150.00 | $3,000.00 | $212.75 | $4,255.00 |
| 11 | Excavation for lagging and backdrain, including sawcut and removal of AC, haul-away and dispose | CY | 40 | $85.00 | $3,400.00 | $240.00 | $9,600.00 | $192.75 | $7,710.00 |
| 12 | Supply 8" x 1'-6" x 8 ft long pre-cast lagging panels | EA | 30 | $450.00 | $13,500.00 | $475.00 | $14,250.00 | $901.00 | $27,030.00 |
| 13 | Install 8" x 1'-6" x 8 ft long precast lagging panels | EA | 30 | $175.00 | $5,250.00 | $315.00 | $9,450.00 | $112.00 | $3,360.00 |
| 14 | Place 24" wide drain consisting of 3/4" rock wrapped in geofabric filter, at backside of lagging, geofabric and hydroauger array, prior to backfilling | CY | 10 | $100.00 | $1,000.00 | $650.00 | $6,500.00 | $435.00 | $4,350.00 |
| 15 | Construct fill in lifts, certified 90% min. relative compaction | CY | 32 | $110.00 | $3,520.00 | $205.00 | $6,560.00 | $141.50 | $4,528.00 |
| 16 | Erosion control groundcover hydro-mulch with native seed mix per building code | SF | 700 | $3.00 | $2,100.00 | $3.00 | $2,100.00 | $1.25 | $875.00 |
| 17 | Supply and install metal-beam vehicular guardrail per Standard Plan S-462, Type 2 | LF | 82 | $120.00 | $9,840.00 | $141.00 | $11,562.00 | $138.00 | $11,316.00 |
| 18 | Construct AC pavement 6" - 8" thick with 12" CMB | SF | 175 | $28.00 | $4,900.00 | $45.00 | $7,875.00 | $59.25 | $10,368.75 |
| 19 | Construct AC Berm (curb) at edge of pavement | LF | 50 | $40.00 | $2,000.00 | $100.00 | $5,000.00 | $11.50 | $575.00 |
| **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | | **$295,100.00** | | **$319,692.00** | | **$407,952.50** |
| | | | | | | **{ High }** | **8.33%** | **{ High }** | **38.24%** |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | MIKE PRLICH AND SONS, INC. | | JOHN S. MEEK COMPANY, INC. | | CLARKE CONTRACTING COPRORATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization per THE General Requirements, Section 01292 (combined bundled projects) | LS | | | $ 28,000.00 | | $ 28,000.00 | | $ 28,000.00 | | $ 28,000.00 |
| **2** | **Allowance for Differing Site Conditions per the General Requirements, Sections 01212 and 01253 (combined bundled projects)** | **LS** | | | **$ 30,000.00** | | **$ 30,000.00** | | **$ 30,000.00** | | **$ 30,000.00** |
| 3 | Traffic control and signs (combined bundled projects) | LS | | | $ 8,000.00 | | $ 30,000.00 | | $ 11,000.00 | | $ 15,000.00 |
| 4 | Clearing and grubbing, including demo and disposal of interfering existing timber, asphalt and concrete (combined bundled projects) | LS | | | $ 7,000.00 | | $ 43,000.00 | | $ 41,800.00 | | $ 17,000.00 |
| **Grand View Drive Bulkhead (8460)** | | | | | | | | | | | |
| 5 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 180 | $ 70.00 | $ 12,600.00 | $ 85.00 | $ 15,300.00 | $ 41.00 | $ 7,380.00 | $ 50.00 | $ 9,000.00 |
| 6 | Drill five 36" diameter holes, 28' deep | LF | 140 | $ 140.00 | $ 19,600.00 | $ 100.00 | $ 14,000.00 | $ 212.50 | $ 29,750.00 | $ 195.00 | $ 27,300.00 |
| 7 | Supply, pump, and place concrete for 14' deep embedded portion of soldier beam | CY | 19 | $ 400.00 | $ 7,600.00 | $ 120.00 | $ 2,280.00 | $ 500.00 | $ 9,500.00 | $ 350.00 | $ 6,650.00 |
| 8 | Supply, pump, and place slurry backfill for upper 14' portion of soldier beam | CY | 19 | $ 300.00 | $ 5,700.00 | $ 90.00 | $ 1,710.00 | $ 115.00 | $ 2,185.00 | $ 100.00 | $ 1,900.00 |
| 9 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 10 | $ 300.00 | $ 3,000.00 | $ 300.00 | $ 3,000.00 | $ 257.00 | $ 2,570.00 | $ 700.00 | $ 7,000.00 |
| 10 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 180 | $ 270.00 | $ 48,600.00 | $ 90.00 | $ 16,200.00 | $ 76.70 | $ 13,806.00 | $ 80.00 | $ 14,400.00 |
| 11 | Furnish four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 170.00 | $ 19,040.00 | $ 152.00 | $ 17,024.00 | $ 95.00 | $ 10,640.00 | $ 175.00 | $ 19,600.00 |
| 12 | Install four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 100.00 | $ 11,200.00 | $ 72.00 | $ 8,064.00 | $ 87.00 | $ 9,744.00 | $ 75.00 | $ 8,400.00 |
| 13 | Furnish one Hollow Structural Section (HSS) 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 28' long | LF | 28 | $ 460.00 | $ 12,880.00 | $ 125.00 | $ 3,500.00 | $ 700.00 | $ 19,600.00 | $ 600.00 | $ 16,800.00 |
| 14 | Install one HSS 20x12x1/2" soldier beam, 28' long | LF | 28 | $ 150.00 | $ 4,200.00 | $ 36.00 | $ 1,008.00 | $ 105.00 | $ 2,940.00 | $ 90.00 | $ 2,520.00 |
| 15 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 36 | $ 750.00 | $ 27,000.00 | $ 835.00 | $ 30,060.00 | $ 675.00 | $ 24,300.00 | $ 520.00 | $ 18,720.00 |
| 16 | Reinstall existing metal beam guardrail with new Type 1 posts (Standard Plan S-462-2) | LF | 60 | $ 200.00 | $ 12,000.00 | $ 35.00 | $ 2,100.00 | $ 138.00 | $ 8,280.00 | $ 190.00 | $ 11,400.00 |
| 17 | Supply and install new metal beam guardrail with new Type 1 posts (Standard Plan. S-462-2) | LF | 30 | $ 200.00 | $ 6,000.00 | $ 100.00 | $ 3,000.00 | $ 250.00 | $ 7,500.00 | $ 200.00 | $ 6,000.00 |
| 18 | Asphalt Concrete (AC) pavement 8" thick over 12" thick CMB | SF | 500 | $ 28.00 | $ 14,000.00 | $ 28.00 | $ 14,000.00 | $ 25.00 | $ 12,500.00 | $ 49.00 | $ 24,500.00 |
| 19 | Supply and install AC berm (10" high per modified Standard Plan 412) | LF | 50 | $ 110.00 | $ 5,500.00 | $ 50.00 | $ 2,500.00 | $ 45.00 | $ 2,250.00 | $ 90.00 | $ 4,500.00 |
| 20 | Hydromulch with seed mix / vegetative plantings | SF | 1,200 | $ 4.00 | $ 4,800.00 | $ 2.50 | $ 3,000.00 | $ 3.00 | $ 3,600.00 | $ 1.25 | $ 1,500.00 |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | MIKE PRLICH AND SONS, INC. | | JOHN S. MEEK COMPANY, INC. | | CLARKE CONTRACTING COPRORATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| **Grand View Drive Bulkhead (8417)** | | | | | | | | | | | |
| 21 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 150 | $ 70.00 | $ 10,500.00 | $ 85.00 | $ 12,750.00 | $ 41.00 | $ 6,150.00 | $ 50.00 | $ 7,500.00 |
| 22 | Drill four 36" diameter holes, 22' deep | LF | 88 | $ 140.00 | $ 12,320.00 | $ 120.00 | $ 10,560.00 | $ 254.50 | $ 22,396.00 | $ 225.00 | $ 19,800.00 |
| 23 | Supply, pump, and place concrete for 11' deep embedded portion of soldier beam | CY | 12 | $ 400.00 | $ 4,800.00 | $ 100.00 | $ 1,200.00 | $ 500.00 | $ 6,000.00 | $ 350.00 | $ 4,200.00 |
| 24 | Supply, pump, and place slurry backfill for upper 11' portion of soldier beam | CY | 12 | $ 300.00 | $ 3,600.00 | $ 90.00 | $ 1,080.00 | $ 150.00 | $ 1,800.00 | $ 100.00 | $ 1,200.00 |
| 25 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 24 | $ 300.00 | $ 7,200.00 | $ 300.00 | $ 7,200.00 | $ 257.00 | $ 6,168.00 | $ 700.00 | $ 16,800.00 |
| 26 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 150 | $ 270.00 | $ 40,500.00 | $ 90.00 | $ 13,500.00 | $ 76.70 | $ 11,505.00 | $ 80.00 | $ 12,000.00 |
| 27 | Furnish three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 140.00 | $ 9,240.00 | $ 170.00 | $ 11,220.00 | $ 106.00 | $ 6,996.00 | $ 210.00 | $ 13,860.00 |
| 28 | Install three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 100.00 | $ 6,600.00 | $ 90.00 | $ 5,940.00 | $ 127.00 | $ 8,382.00 | $ 175.00 | $ 11,550.00 |
| 29 | Furnish one HSS 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 22' long | LF | 22 | $ 655.00 | $ 14,410.00 | $ 137.00 | $ 3,014.00 | $ 760.00 | $ 16,720.00 | $ 600.00 | $ 13,200.00 |
| 30 | Install one HSS 20x12x1/2" soldier beam, 22' long | LF | 22 | $ 150.00 | $ 3,300.00 | $ 46.00 | $ 1,012.00 | $ 110.00 | $ 2,420.00 | $ 90.00 | $ 1,980.00 |
| 31 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 28 | $ 750.00 | $ 21,000.00 | $ 900.00 | $ 25,200.00 | $ 685.00 | $ 19,180.00 | $ 520.00 | $ 14,560.00 |
| 32 | Reinstall existing metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 35 | $ 200.00 | $ 7,000.00 | $ 50.00 | $ 1,750.00 | $ 225.00 | $ 7,875.00 | $ 255.00 | $ 8,925.00 |
| 33 | Supply and install new metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 10 | $ 200.00 | $ 2,000.00 | $ 200.00 | $ 2,000.00 | $ 665.00 | $ 6,650.00 | $ 415.00 | $ 4,150.00 |
| 34 | AC pavement 8" thick over 12" thick CMB | SF | 480 | $ 28.00 | $ 13,440.00 | $ 30.00 | $ 14,400.00 | $ 25.00 | $ 12,000.00 | $ 49.00 | $ 23,520.00 |
| 35 | Supply and install AC berm (8" high per Standard Plan 412) | LF | 60 | $ 90.00 | $ 5,400.00 | $ 40.00 | $ 2,400.00 | $ 65.00 | $ 3,900.00 | $ 90.00 | $ 5,400.00 |
| 36 | Hydromulch with seed mix / vegetative plantings | SF | 840 | $ 4.00 | $ 3,360.00 | $ 2.50 | $ 2,100.00 | $ 3.00 | $ 2,520.00 | $ 1.25 | $ 1,050.00 |
| **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | **$** | **451,390.00** | **$** | **383,072.00** | **$** | **418,007.00** | **$** | **429,885.00** |
| | | | | | | **{ Low }** | **-15.14%** | **{ Low }** | **-7.40%** | **{ Low }** | **-4.76%** |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | PPC CONSTRUCTION, INC. | | ENVIRONMENTAL CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization per THE General Requirements, Section 01292 (combined bundled projects) | LS | | | $ 28,000.00 | | $ 28,000.00 | | $ 25,000.00 |
| **2** | **Allowance for Differing Site Conditions per the General Requirements, Sections 01212 and 01253 (combined bundled projects)** | **LS** | | | **$ 30,000.00** | | **$ 30,000.00** | | **$ 30,000.00** |
| 3 | Traffic control and signs (combined bundled projects) | LS | | | $ 8,000.00 | | $ 15,800.00 | | $ 30,000.00 |
| 4 | Clearing and grubbing, including demo and disposal of interfering existing timber, asphalt and concrete (combined bundled projects) | LS | | | $ 7,000.00 | | $ 9,600.00 | | $ 95,000.00 |
| **Grand View Drive Bulkhead (8460)** | | | | | | | | | |
| 5 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 180 | $ 70.00 | $ 12,600.00 | $ 151.00 | $ 27,180.00 | $ 200.00 | $ 36,000.00 |
| 6 | Drill five 36" diameter holes, 28' deep | LF | 140 | $ 140.00 | $ 19,600.00 | $ 125.00 | $ 17,500.00 | $ 300.00 | $ 42,000.00 |
| 7 | Supply, pump, and place concrete for 14' deep embedded portion of soldier beam | CY | 19 | $ 400.00 | $ 7,600.00 | $ 345.00 | $ 6,555.00 | $ 1,200.00 | $ 22,800.00 |
| 8 | Supply, pump, and place slurry backfill for upper 14' portion of soldier beam | CY | 19 | $ 300.00 | $ 5,700.00 | $ 189.00 | $ 3,591.00 | $ 600.00 | $ 11,400.00 |
| 9 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 10 | $ 300.00 | $ 3,000.00 | $ 220.00 | $ 2,200.00 | $ 200.00 | $ 2,000.00 |
| 10 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 180 | $ 270.00 | $ 48,600.00 | $ 200.00 | $ 36,000.00 | $ 200.00 | $ 36,000.00 |
| 11 | Furnish four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 170.00 | $ 19,040.00 | $ 83.00 | $ 9,296.00 | $ 100.00 | $ 11,200.00 |
| 12 | Install four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 100.00 | $ 11,200.00 | $ 69.00 | $ 7,728.00 | $ 100.00 | $ 11,200.00 |
| 13 | Furnish one Hollow Structural Section (HSS) 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 28' long | LF | 28 | $ 460.00 | $ 12,880.00 | $ 447.00 | $ 12,516.00 | $ 200.00 | $ 5,600.00 |
| 14 | Install one HSS 20x12x1/2" soldier beam, 28' long | LF | 28 | $ 150.00 | $ 4,200.00 | $ 283.00 | $ 7,924.00 | $ 100.00 | $ 2,800.00 |
| 15 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 36 | $ 750.00 | $ 27,000.00 | $ 953.00 | $ 34,308.00 | $ 1,500.00 | $ 54,000.00 |
| 16 | Reinstall existing metal beam guardrail with new Type 1 posts (Standard Plan S-462-2) | LF | 60 | $ 200.00 | $ 12,000.00 | $ 150.00 | $ 9,000.00 | $ 100.00 | $ 6,000.00 |
| 17 | Supply and install new metal beam guardrail with new Type 1 posts (Standard Plan. S-462-2) | LF | 30 | $ 200.00 | $ 6,000.00 | $ 236.00 | $ 7,080.00 | $ 100.00 | $ 3,000.00 |
| 18 | Asphalt Concrete (AC) pavement 8" thick over 12" thick CMB | SF | 500 | $ 28.00 | $ 14,000.00 | $ 20.00 | $ 10,000.00 | $ 20.00 | $ 10,000.00 |
| 19 | Supply and install AC berm (10" high per modified Standard Plan 412) | LF | 50 | $ 110.00 | $ 5,500.00 | $ 90.00 | $ 4,500.00 | $ 50.00 | $ 2,500.00 |
| 20 | Hydromulch with seed mix / vegetative plantings | SF | 1,200 | $ 4.00 | $ 4,800.00 | $ 1.50 | $ 1,800.00 | $ 2.00 | $ 2,400.00 |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | PPC CONSTRUCTION, INC. | | ENVIRONMENTAL CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| **Grand View Drive Bulkhead (8417)** | | | | | | | | | |
| 21 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 150 | $ 70.00 | $ 10,500.00 | $ 151.00 | $ 22,650.00 | $ 200.00 | $ 30,000.00 |
| 22 | Drill four 36" diameter holes, 22' deep | LF | 88 | $ 140.00 | $ 12,320.00 | $ 193.00 | $ 16,984.00 | $ 450.00 | $ 39,600.00 |
| 23 | Supply, pump, and place concrete for 11' deep embedded portion of soldier beam | CY | 12 | $ 400.00 | $ 4,800.00 | $ 345.00 | $ 4,140.00 | $ 1,000.00 | $ 12,000.00 |
| 24 | Supply, pump, and place slurry backfill for upper 11' portion of soldier beam | CY | 12 | $ 300.00 | $ 3,600.00 | $ 189.00 | $ 2,268.00 | $ 600.00 | $ 7,200.00 |
| 25 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 24 | $ 300.00 | $ 7,200.00 | $ 220.00 | $ 5,280.00 | $ 200.00 | $ 4,800.00 |
| 26 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 150 | $ 270.00 | $ 40,500.00 | $ 200.00 | $ 30,000.00 | $ 200.00 | $ 30,000.00 |
| 27 | Furnish three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 140.00 | $ 9,240.00 | $ 85.00 | $ 5,610.00 | $ 100.00 | $ 6,600.00 |
| 28 | Install three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 100.00 | $ 6,600.00 | $ 94.00 | $ 6,204.00 | $ 100.00 | $ 6,600.00 |
| 29 | Furnish one HSS 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 22' long | LF | 22 | $ 655.00 | $ 14,410.00 | $ 447.00 | $ 9,834.00 | $ 100.00 | $ 2,200.00 |
| 30 | Install one HSS 20x12x1/2" soldier beam, 22' long | LF | 22 | $ 150.00 | $ 3,300.00 | $ 283.00 | $ 6,226.00 | $ 100.00 | $ 2,200.00 |
| 31 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 28 | $ 750.00 | $ 21,000.00 | $ 953.00 | $ 26,684.00 | $ 1,500.00 | $ 42,000.00 |
| 32 | Reinstall existing metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 35 | $ 200.00 | $ 7,000.00 | $ 206.00 | $ 7,210.00 | $ 100.00 | $ 3,500.00 |
| 33 | Supply and install new metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 10 | $ 200.00 | $ 2,000.00 | $ 461.00 | $ 4,610.00 | $ 100.00 | $ 1,000.00 |
| 34 | AC pavement 8" thick over 12" thick CMB | SF | 480 | $ 28.00 | $ 13,440.00 | $ 20.00 | $ 9,600.00 | $ 20.00 | $ 9,600.00 |
| 35 | Supply and install AC berm (8" high per Standard Plan 412) | LF | 60 | $ 90.00 | $ 5,400.00 | $ 80.00 | $ 4,800.00 | $ 80.00 | $ 4,800.00 |
| 36 | Hydromulch with seed mix / vegetative plantings | SF | 840 | $ 4.00 | $ 3,360.00 | $ 1.50 | $ 1,260.00 | $ 2.00 | $ 1,680.00 |
| **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | **$** | **451,390.00** | **$** | **443,938.00** | **$** | **642,680.00** |
| | | | | | | **{ Low }** | **-1.65%** | **{ High }** | **42.38%** |

# Exhibit C

CASE CONSTRUCTION

# 580N EP

*BACKHOE LOADER*

***TIER 4 FINAL CERTIFIED***



## ENGINE

| | |
|---|---|
| Model | FPT F5HFL463D |
| Emissions Certification | Tier 4 Final |
| Type | Diesel 4-stroke, Turbocharged |
| Cylinders | 4 |
| Bore/Stroke | 3.90 x 4.33 in (99 x 110 mm) |
| Displacement | 207 $in^3$ (3.4 L) |
| Fuel injection | Direct, high pressure common rail – HPCR |
| Fuel | Diesel |
| Engine speeds* | RPM |
| Rated speed – full load | 2200 |
| Low idle | 900 – 1000 |
| High idle – no load | 2330 – 2430 |
| Horsepower @ 2200 RPM: | |
| Gross | 74 hp (55 kW) |
| Net w/ viscous fan** | 72 hp (54 kW) |
| Net | 68 hp (51 kW) |
| Maximum torque @ 1400 RPM: | |
| Gross | 233 lb·ft (316 N·m) |
| Net w/ viscous fan | 228 lb·ft (310 N·m) |
| Net | 220 lb·ft (298 N·m) |
| Torque rise at rated speed | 35% +/- 5% |
| Radiator: | |
| Core type | Square wave |
| Core size area | 486 $in^2$ (3 145 $cm^2$) |
| Rows of tubes | 5 |
| 39° fan: | |
| Style | 7 blade suction |
| Diameter | 19.65 in (499 mm) |
| Ratio | 1.1:1 |
| Pump operating angle ratings: | |
| Side to side | Rated 35° |
| Fore and aft | Rated 35° |
| Oil filtration | Replaceable, full flow spin on |

NOTE: *Meets federal emission regulations.
**Viscous fan available as DIA w/ High Ambient Kit.

## DRIVETRAIN

Transmission – standard:
4F-4R Power Shuttle Synchromesh Transmission manual gear shift, fully synchronized

| Gear ratios | Forward/Reverse |
|---|---|
| 1st | 5.603/4.643 |
| 2nd | 3.481/2.884 |
| 3rd | 1.584/1.313 |
| 4th | 0.793/0.657* |

| Travel speeds | Forward mph (kph) | Reverse mph (kph) |
|---|---|---|
| 1st | 3.5 (5.6) | 4.2 (6.8) |
| 2nd | 5.5 (8.9) | 6.6 (10.6) |
| 3rd | 11.8 (19.0) | 14.1 (22.7) |
| 4th | 21.3 (34.3) | 25.5 (41.0) |

| | |
|---|---|
| Torque converter ratio | 3.2 |
| Differential lock | On-the-go push-button activation |
| Front 4WD/Rear axle: | |
| Differential ratio | 2.2/2.75 |
| Planetary hub ratio | 6.0/6.4 |
| Total reduction ratio | 13.3/17.6 |

Service brakes:
Individually applied, power assisted, hydraulically actuated, maintenance-free, self-adjusting, outboard mounted, wet disc, 2 per side.
Total disc area 384 $in^2$ (0.25 $m^2$)

| | |
|---|---|
| Parking brakes | Trans Mounted spring-applied hydraulic release – SAHR |

NOTE: Travel speeds at 2293 engine RPM specified: w/ 19.5 L x 24.0 tires. Speeds decrease w/ 17.5 L x 24.0 rear tires.

## ELECTRICAL

| | |
|---|---|
| Voltage | 12 Volts, negative ground |
| Alternator | 120 amp |
| Battery | 850 cold-cranking amps |
| Opt. batteries – 2 | 850 cold-cranking amps |
| Power plugs – 2 | 30 amps total |

## OPERATOR ENVIRONMENT

ROPS/FOPS certified protective canopy; Rear fenders extensions; Coat hook w/ garment strap; Interior rearview mirror, convex 3.54 in (90 mm) wide x 10.83 in (275 mm) high; Non-suspension seat – 180° swivel – Vinyl; 2 in (50 mm) retractable seat belt; Cup holder/storage tray mounted on left-hand fender; Right-hand storage compartment w/ lid.

Gauges:
Engine water temperature; Converter oil temperature; Fuel level; Tachometer/ hourmeter; Voltmeter.

Warning lights:
Air cleaner restriction; Alternator; A/C high pressure; Cold start; Engine oil pressure low; Hydraulic oil filter bypass; Parking brake engagement; Low fuel; Water in fuel.

Audible alarms:
Coolant temperature; Engine oil pressure; Parking brake engagement; Shuttle engagement/seat position; Backup; Converter temperature; Particulate Matter Regeneration.

| | |
|---|---|
| Horn | Dual switched front and rear |

## OPERATING WEIGHT

**Configuration 1 – SAE Transport:**
GP Loader Bucket, 2WD, Canopy, Boom Guard, Full of Fuel, SAE Carry, Tier 4 Final Engine, Extendahoe®, 4 Stick Mech BH, Standard Transmission, 17.5 L – 24 Rear Tires, 700 lb Front Counterweight.
15,795 lb (7 164 kg)

**Configuration 2 – SAE Transport:**
GP Loader Bucket, 4WD, 2 Door Cab, AC, Boom Guard, Full of Fuel, SAE Carry, 24 in HD BH Bucket, Tier 4 Final Engine, Pilot Controls, Standard Dipper, Manual Transmission, 19.5 – 24 Rear Tires.
15,810 lb (7 171 kg)

**Add-on weights:**

| | |
|---|---|
| Cab-over canopy | 309 lb (140 kg) |
| Fabricated stabilizer pads | 141 lb (64 kg) |
| Counterweights | 700 lb (318 kg) |
| Extendahoe® | 285 lb (129 kg) |
| 4WD w/ driveshaft guard | 283 lb (128 kg) |

SELECT EQUIPMENT

BY TYPE | BY INDUSTRIES

MINI EXCAVATORS FOR ALL INDUSTRIES

- BACKHOE LOADERS
- COMPACT TRACK LOADERS
- COMPACTION EQUIPMENT
- CRAWLER DOZERS
- EXCAVATORS
- FORKLIFTS
- MINI EXCAVATORS
- MOTOR GRADERS
- SKID STEER LOADERS
- TRACTOR LOADERS
- WHEEL LOADERS - COMPACT
- WHEEL LOADERS

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## FIND A DEALER

To start your search for one of our world-class construction equipment dealers, please enter the following information:

United States

Zip or City

SEARCH



## CASE MINI EXCAVATORS

Looking for superior power, productivity and fast cycle times all in one application? That's exactly what you'll find with CASE mini excavators. Regardless of space constraints, these compact excavators are able to perform landscaping, utility, demolition, construction or industrial jobs that require strength without a giant footprint. Increase productivity and performance with the independent, center-swing boom allowing you to dig around stationary objects or alongside obstacles.

Sorted By: **OPERATING WEIGHT**

### UNDER 3.5 METRIC TONS

### 3.5 - 4.5 METRIC TONS

*CX31B*



**OPERATING WEIGHT**
7,672 lb | 3480 kg
**ENGINE POWER**
23.1hp | 17.2 kW

More Details

*CX36B*



**OPERATING WEIGHT**

### OVER 4.5 METRIC TONS

*CX55B*



**OPERATING WEIGHT**
11,312 lb | 5130 kg
**ENGINE POWER**
37.4 hp | 27.9 kW

More Details

8,554 lb | 3880 kg
**ENGINE POWER**
23.1 hp | 17.2 kW

More Details

**NOT IN LIST?**
**TRY TO SEARCH FOR PRIOR MODELS:**

model

SEARCH

## WHY *CASE*

CASE sells and supports a full line of construction equipment around the world. Through CASE dealers, customers have access to a true professional partner—with world-class equipment and aftermarket support, industry-leading warranties and flexible financing.

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SELECT EQUIPMENT

BY TYPE | BY INDUSTRIES

COMPACTION EQUIPMENT FOR ALL INDUSTRIES

- BACKHOE LOADERS
- COMPACT TRACK LOADERS
- COMPACTION EQUIPMENT
- CRAWLER DOZERS
- EXCAVATORS
- FORKLIFTS
- MINI EXCAVATORS
- MOTOR GRADERS
- SKID STEER LOADERS
- TRACTOR LOADERS
- WHEEL LOADERS - COMPACT
- WHEEL LOADERS

10

## FIND A DEALER

To start your search for one of our world-class construction equipment dealers, please enter the following information:

United States

Zip or City

SEARCH



## CASE COMPACTOR MODELS

Leading the industry in performance level, CASE Compactors combine climbing power, high centrifugal forces and 360-degree visibility to provide you with superior productivity and power. Whether you are in need of an asphalt roller or a soil compactor, the three series compaction line offers easy operation and outstanding serviceability. Easy maintenance helps to minimize compactor downtime while maximizing your productivity from dusk to dawn.

There are a number of variables that determine the right roller for each compaction job, find out which CASE Compactor is right for you.

Sorted By: **ENGINE POWER**

### SINGLE DRUM

**SV208**



**ENGINE POWER**
99 hp | 73.8 kW
**OPERATING WEIGHT**
15,830 lb | 7180 kg

More Details

**SV210**



**ENGINE POWER**

### DOUBLE DRUM

**DV23**



**ENGINE POWER**
31 hp (23 kW)
**OPERATING WEIGHT**
5,400 lb (2450 kg)

More Details

**DV26**



**ENGINE POWER**

### PNEUMATIC

**PT240**



**ENGINE POWER**
99 hp | 74 kW
**OPERATING WEIGHT**
20,525 lb | 9310 kg

More Details

99 hp | 73.8 kW
**OPERATING WEIGHT**
19,445 lb | 8820 kg

More Details

31 hp (23 kW)
**OPERATING WEIGHT**
5,842 lb (2650 kg)

More Details

### *SV212*



**ENGINE POWER**
148 hp | 110 kW
**OPERATING WEIGHT**
25,530 lb | 11 580 kg

More Details

### *DV36*



**ENGINE POWER**
40 hp (30 kW)
**OPERATING WEIGHT**
9,480 lb (4300 kg)

More Details

### *SV216*



**ENGINE POWER**
148 hp | 110 kW
**OPERATING WEIGHT**
31,479 lb | 14 274 kg

More Details

### *DV45*



**ENGINE POWER**
40 hp (30 kW)
**OPERATING WEIGHT**
10,296 lb (4670 kg)

More Details

### *DV207*



**ENGINE POWER**
80 hp | 60 kW
**OPERATING WEIGHT**
16,226 lb | 7360 kg

More Details

### *DV210*



**ENGINE POWER**
99 hp | 74 kW
**OPERATING WEIGHT**
22,928 lb | 10400 kg

More Details

*DV209C*



**ENGINE POWER**
100 hp (74.4 kW)
**OPERATING WEIGHT**
21,030 lb (9,540 kg)

More Details

*DV210C*



**ENGINE POWER**
100 hp (74.4 kW)
**OPERATING WEIGHT**
22,730 lb (10,310 kg)

More Details

*DV213*



**ENGINE POWER**
130 hp | 97 kW
**OPERATING WEIGHT**
28,718 lb | 13030 kg

More Details

**NOT IN LIST?**
TRY TO SEARCH FOR PRIOR MODELS:

model

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Sorted By: **ENGINE POWER**

UNDER 75HP | 76HP - 100HP | OVER 100HP

*570N EP*



**ENGINE POWER**
74 hp (55 kW)
**OPERATING WEIGHT**
11,134 lb (5,051 kg)

More Details

NOT IN LIST?
TRY TO SEARCH FOR PRIOR MODELS: model

SEARCH

# Exhibit D

LAFIRE.COM
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September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

F-113 REV-(3-78)

**City of Los Angeles**
**DEPARTMENT OF FIRE**

ANALYSIS OF GREATER ALARM OPERATIONS

| LOCATION: | DATE: | TIME: | PLATOON: |
|---|---|---|---|
| Laurel Canyon Brush Fire | 9-16-79 | 14:57 | A XB C |
| **TYPE OF OCCUPANCY:** | **OCCUPANCY CODE** | | **ESTIMATE LOSS** |
| Brush and Structures | 850 | | $4,000,000. |

**COMPANIES AND CHIEF OFFICERS RESPONDING:**
26-Chief Officers
76-Companies

**EVALUATION OF OPERATIONS/SUGGESTED AREAS FOR IMPROVING FUTURE OPERATIONS:**

I. SUMMARY:
This fire was of major proportions on arrival of the first Companies. I do not believe that in the last 10 years we have been faced with the degree of property loss and potential loss in the early stages of any brush fire as posed by this one.

I would estimate that at least one-half to two-thirds of the structure loss occurred before the Fire Department laid the first line. The overall losses were minimized in relation to the potential because of the overwhelming efforts by every involved member. This is not to say that every action was correct and operational improvements are needed as will be addressed under "Operational Improvements."

This Form F-113, Analysis of Emergency Operations, is a very brief overview of the fire and suggestions on how I feel we can improve our operations for future incidents. One of the best learning tools I have found from this fire is in reviewing the tape recordings of radio communications, not once, but several times.

II. CONDITIONS AFFECTING FIRE:
The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

The majority of structure loss occurred prior to the arrival of Fire Companies, or before Fire Companies could be deployed into the area. In areas where Fire Department resources became operational, minimum fire loss progressed beyond that point.

The primary reasons for the structure losses were high temperatures for the previous two weeks, low humidity, wind from the south-southwest, 10 to 12 knots, delayed alarm, wood siding, structures built on ridges, with minimal brush clearance, and the fire starting at the base of a very steep slope (approximately 70 degrees), covered with dense brush. With all of these conditions combined, the fire swept up the slope, exposing the houses on three ridges, where the houses sustained almost total destruction.

The aforementioned conditions were evident as observed by the first-responding Companies, in that the loom-up had attained an altitude of between 1,000 to 1,500 feet, and between 5 and 10 structures were involved before the first Companies arrived.

The primary reason for the losses being limited to the immediate area of involvement was the result of the coordinated efforts of all resources deployed during the emergency.

III. FIRE FACTORS

A. Major brush fire in progress on arrival of first Company with 5 to 10 structures involved.
B. Access--Very limited narrow winding streets, obstructed roadways.
C. Weather--BBI 54--Extreme, (red flag alert).
D. Structural--Older, adjacent to brush, minimal brush (clearance) built on ridge tops with very steep slopes coming right up to foundations, wood siding, large trees.
E. Water--Old systems with tuberculated mains, poor grid system, and hydrant spacing on dead-end mains.

I. OPERATIONAL IMPROVEMENTS:

These are areas, where if I had this same fire today, I would consider different actions than taken on September 16, 1979, (date of fire). I think we can all learn from this incident and hopefully will implement operational changes and thinking to equip our Command Officers to more effectively deal with this type of major fire.

A. Additional simulated training of Command Officers and staff personnel in the Incident Command System.
B. With a fire moving this fast, the Incident Commander should call for the closest Engine Companies to be sent to staging with sufficient Chief Officers and make up strike teams and deploy as needed.
C. The Incident Commander should consider setting up the Command Post at a Fire Station with adequate facilities.
D. The Incident Commander should require OCD to give him sufficient operating channels, i.e. one or two for fire ground, command, and Incident Commander to OCD.
E. The Incident Commander should name the fire as soon as possible for communication purposes. (The Laurel Canyon Fire was called five different names during its course.)
F. Better communication with helicopters must be established. Consider a Chief as air observation with a high band walkie-talkie. I could see the helicopter overhead, but had difficulty communicating.
G. Division Commanders and strike team leaders should release resources if at all possible when other Divisions are in need. You don't have to spring a whole strike team, maybe a couple of Engines will help.
H. Field Commanders need additional training in how to properly access

and address OCD.

I. Incident Commander is the only person who should contact OCD. All other Commanders should either use the fire ground or command channels.

J. All Division sedans should be equipped with outside radio speakers and transmitting capabilities for each radio head.

K. Specific persons must be assigned to monitor and communicate on designated channels. Too many radio messages were not acknowledged or had to be reported several times.

L. A Documentation Officer is very important to coordinate information and resource status.

M. Two staging areas should be considered, especially if the fire could cut off access from one end into fire areas, i.e. Laurel Canyon closed; staging at Sunset could not service north flank of fire.

N. It is important that all major changes in fire behavior, assignments, communications channels, and staging areas be announced over all operational radio channels connected with the fire.

O. That damage assessment be started while the fire is still burning, if at all possible. This may be done by strike team leaders through their respective Division Commanders.

II. CONCLUSION:

This fire, in my opinion, was handled well; and the on-line personnel, whether ground, air, staff, or resource, did their very very best. There are lessons to be learned. Some are identified in this report, and I hope more will be identified during the formal critique.

The best lessons learned or improvements identified are only worthwhile if we do something about them.

**NAME: RANK: ASSIGN:** **DATE:**

D.F. Anthony A/C Div.I-"C" 9-28-79

DIST:
COMMANDER--BUREAU OF FIRE SUPPRESSION THROUGH CHANNELS (ORIGINAL)
COMMANDER--BUREAU OF FIRE SUPPRESSION THROUGH CHANNELS (DUPLICATE)
COMMANDER--TRAINING SECTION THROUGH CHANNELS (TRIPLICATE)

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September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

LOS ANGELES FIRE DEPARTMENT

JOHN C. GERARD
CHIEF ENGINEER AND GENERAL MANAGER

October 5, 1979

| | |
|---|---|
| TO: | Bureau Commander, Bureau of Fire Suppression and Rescue |
| FROM: | Robert S. Furr, Commander, Battalion 9, "C" Platoon |
| SUBJECT: | ACTIVITIES DURING THE LAUREL CANYON BRUSH FIRE |

September 16, 1979

| | |
|---|---|
| 1503 hours | - Dispatched to Sunset and Fairfax |
| 1515 hours | - Arrived at Command Post, Sunset and Fairfax. Assigned the command function of Division "A", and directed to report to Kirkwood and Laurel Canyon Boulevard. Identity of companies working on the fire in this area was not given - no other resources were available at this time. Strike Teams requested were responding and would be sent to Division "A" as soon as available. |
| 1525 hours | - Arrived at Kirkwood and Yucca Trail (in bottom of Canyon directly below main front of fire) Established operational base at this point - Communications with S & R and I.C. through not good, seemed to be best at this point. Several structures on ridge above us and to the south were involved or exposed directly in line of travel of fire - winds at this time were mild, probably gusting from 15 to 20 M.P.H. My attempts to contact and identify the companies working on the fire, on the ridge above were unsuccessful. Messages to S & R regarding this initial size-up were not acknowledged. |
| 1535 hours | - Battalion Chief Olsen, Strike Team Leader (ST #20) reported on scene without his entire Strike Team - I directed him to take charge of the unidentified companies on the ridge and incorporate them into his Strike Team. The street that ran along the ridge was Grandview and Strike Team #20 was directed to operate in this area. This line was the head of the fire - Strike Team #20 was |

hampered in their efforts to move into position by the civilian traffic that clogged the narrow streets - Hordes of news media Personnel added to the congestion.

1545 hours

- Strike Team #20 reported that several of his companie were isolated from exposed structures on Grandview, due to high voltage power lines falling and blocking streets - He also reported a severe loss of water pressure in this area. These problems were reported to S & R and Water and Power requested on the ridge.

1555 hours

- Fire spotted on hillside behind us to the north, several structures along Kirkwood were exposed and fire was sweeping up towards other structures on the ridge.

1600 hours

- Strike Team #22 (B/C Dianitto) reported on scene - They were directed to cover the exposed structures on Kirkwood and B/C Dianitto was directed to take the balance of his team to the 8400 block of Ridpath and Brier Drive. There he placed his companies strategically to head off the fire moving toward numerous structures. Strike Team #20 was successful in containing and extinguishing this sector of the fire with a minimal loss.

1610 hours

- L.A.P.D. appeared in the Canyon with an evacuation team (four sedans) over a P.A. they were announcing that all residents were to evacuate this fire area - I stopped the team and discussed the situation with the Officer in charge. I requested that they discontinue their activities until I could contact our I.C. for confirmation. My contact with the I.C. proved they were unaware of this action. I recommended to the L.A.P.D. command to reconsider the seriousness of this action and confirm this with their C.P. They discontinued their efforts of evacuation at this point.

1620 hours

- Containment of the fire at this point was evident - some structures were still burning but lines were in position for extinguishment and aided by excellent water drops, full extinguishment was in sight- The winds had favored us throughout the fire never becoming a predominant factor.

CONCLUSIONS:

Narrow streets, some practically inaccessible to fire apparatus, coupled with hordes of sight seer, residents and numerous teams from the news media, clogged the streets with autos and foot traffic. This condition prevailed throughout the height of the incident and hampered our operations severely. Inability to put adequate companies on the fire in the initial stages was due to the method employed requesting Strike Teams from OCD. It is my opinion and certainly a confirmed policy in some areas, to call for x number of companies and x number of B/C's to a staging area in the early stages of the fire. This allows the I.C. to put the first arriving units in the most critical areas. It also provides a positive control of documentation and assignment.

It occurs to me that development of the I.C.S. was somewhat out of sequence or priority, when I was assigned a critical field command function with no identifiable resources! The segment of the first alarm companies in the area of Division "A", were not under any specific command and my efforts to rally them together was futile, attempts to identify them by number only was not accomplished for approximately 45 minutes to 1 hour.

Regardless of the difficulties encountered in organization, the companies working on the fire on Grandview and without a specific command, displayed a high degree of initiative in augmenting their water supply from swimming pools. Their aggressiveness and ingenuity played a major roll in stopping the spread of fire.

Strike Team #22 under command of B/C Dianitto was an example of effectiveness of our I.C.S. This team reported as a unit to my command received a briefing, were assigned a mission and under positive direction accomplished their goal. Strike Team #22 kept me informed with short concise radio messages regarding the needs or changing situations in his area.

| | | | |
|---|---|---|---|
| COMPANY/STATION OR UNIT COMMANDER | ASSIGN. | DIVISION COMMANDER | ASSIGN. |
| BATTALION OR SECTION COMMANDER | ASSIGN. | BUREAU COMMANDER | OPERATIONS |

F-225 - REV. 2-78

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Historical Archive

September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

# FIRE! IN LAUREL CANYON

Los Angeles Herald Examiner, Monday, September 24, 1979

One of the most spectacular blazes of this year's brush-fire season occurred Sept. 16 in West Hollywood's Laurel Canyon, where a four-hour inferno destroyed 23 homes, partially ruined another five structures and caused an estimated $4 million damage. But what quickly became yesterday's news, remained a human tragedy for those left without homes or possessions.

For five days, a team of Los Angeles Herald Examiner reporters trooped from lot to lot in the charred Hollywood hills trying to record the effect of the fire on the people whose homes vanished in smoke.

Ironically, they discovered that two houses at 8280 and 8320 Grandview listed by the Los Angeles Fire Department as destroyed, in fact never existed. And, several houses that were ruined were not on any official list. Two structures listed as fatalities on Cole Crest, apparently referred to two houses at a different address.

The reporters also discovered Laurel Canyon homeowners were badly underinsured and whatever is done to rebuild the area -- with its narrow roads and limited water supply -- it will remain one of the city's most visible tinderboxes.

This report was prepared by staff writers Rudy Aversa, Ellen Futterman, Carol Gulotta, Andrew Jaffe, Robert Knowles, Sarai Ribicoff and Joel Sappell.

* * * * *

## 8464 COLE CREST DRIVE

**Lost:a 350-page book draft**
**and an 1831 Goethe Bible**

Wolfgang Brook, 51, an executive at a bead curtain plant, and actor James Dobson were finishing a tostada lunch on their patio, enjoying a somewhat smoggy view of the city. When Brook got up to take the dishes into the kitchen he saw the flames coming from next door ... "I screamed (to Dobson) to get out." They got their dogs -- an Afghan hound and whippet -- and ran for the car in the ground-floor garage.

## 8476 COLE CREST DRIVE

**It was a wood-stone affair**
**with a magnificent fireplace**

Jack R. Kime and George E. Hunt had lived in this view house for 15 years, according to neighbors. The house, constructed of wood and stone and built around a kidney-shaped swimming pool, they said, was designed by architect Ray Neutra. Little is known of the two men, who were not seen at the burned-out premises after the fire. At the time of the blaze, neighbors said only Hunt was inside and he was able to escape before flames engulfed the structure. No one knew if the two men would rebuild.

## 8482 COLE CREST DRIVE

At the last moment, Brook grabbed a porcelain statue and some Waterford crystal and threw them into the delta-shaped pool. They survived the holocaust. Everything else, including a 350-page draft of a book Dobson was writing and Brook's rare-book collection -- with an 1831 Goethe Bible -- was lost.

And the men had a close shave of their own. Just as they were about to leave, Brook discovered he couldn't get the automatic garage door to open, because power was out in the fire area. Several vital minutes were lost before Brook finally found the key to switch the door on to manual operation. The whole experience left both men shattered. "Insurance will never cover it," said the tired, defected Brook, picking up a pair of melted eyeglasses from the rubble around the pool,"but we'll rebuild."

### Actress lost video tapes of TV show, Warhol posters

Actress MacKenzie Phillips was on the way back from her honeymoon in Hawaii when the fire broke out. She and her husband Jeff Sessler, rushed from Los Angeles International Airport to the house, but arrived only in time to witness the still-smoldering ruins. A friend said she lost her collection of Andy Warhol posters and video tapes of the television show she costars in, "One Day at a Time." Worst of all, her pet cat, "Brains," either died in the fire or ran away.

Phillips is staying in a hotel temporarily and she is looking for a rental property to stay in during the rebuilding of her home. "I haven't been able to sleep thinking about that fireplace," she said.

One bright spot, however. Neighbors and police managed to keep her Mercedes 450 SL from being destroyed.

## 8500 COLE CREST DRIVE

### Police said he'd be arrested if he tried to save his house

Ernst Mayer had the frustration of being one of few residents away from home who reached the area possibly in enough time to save his own house from burning. The 43-year-old construction company owner saw the fire from the city at about 2:30 and immediately drove home in his Ford Mustang. Coming in from Blue Heights Drive to the west, he avoided police barricades making way for Fire Department vehicles.

Mayer rounded up eight neighborhood friends with trucks as a rescue crew. But police in the street and on his driveway kept him and his crew from the threatened property. Mayer steered the convoy up a hill for a quick escape and then tried to come back alone to rescue his pet cat, Tanya, who was locked inside the house. But, he again was stopped by a policeman.

"He told me he would arrest me if I tried to go in," remembered Mayer with obvious bitterness. "I only regret I didn't get his badge number." Mayer stood there, infuriated, watching the windows break in the fire ... then he heard the burglar alarm go off. About 5 p.m. the fire overtook the wood-frame structure, burning it to its foundation and gutting a cement-block garage and office complex below.

Besides all his office records, Mayer said he lost $20,000. worth of cameras, expensive underwater equipment and rare art brought back from overseas jobs, including a 14th-century Sukothai Buddah statue and a 2,000-book library. The cat was never found.

Mayer said he had little insurance. "The superscoopers dropped three loads on the house on the hill," he said pointing to a house that had been spared by the fire. "But nothing here until it was too late. I'm sure if we could have watered the roof and fought the blaze ourselves we could have saved this place. Instead it's gone. I told the cop (who stopped him) I had a gun inside. I was so mad, if I had got to it I might have blown his head off. It's a terrible thing standing and watching your home burn when you can still do something to save it."

Mayer said a decision about rebuilding would have to await a settlement of his insurance claims. Meanwhile, he was struggling to relocate the headquarters for his construction firm at another address.

## 8438 BRIER DRIVE

### It took 20 years to build; only $60 in coins remained

Michael Duzick, 62, a technical engineer for NBC-TV on sick leave with a back injury, was working in the back yard of his redwood home one ridge behind the fire when he saw flames on Grandview. The fire seemed as far away ... until a change of wind made it jump to Brier Drive.

Duzick saw the flames start up the hill. "It was so smoky. I'd take a breath, then hold it and water the hill, then run back for another breath," he recalled.

Two police officers tried to help by watering his roof, until the pressure dropped. "Then the police told me: "That's it. This is the end." A half-hour later, a fire truck arrived. But it was too late. A redbrick chimney and a cement stairway were all that remained of the rustic, $200,000 home. It had taken 20 years to build and all that survived was $60 in coins in a homemade wall safe.

Among the prized possessions lost in the fire: 12 hours of 60mm film on his children's travels, a 10-speaker homemade stereo system ("it sounded like Hollywood Bowl") and a collection of expensive cameras. He plans to rent a trailer and live on the property. "I don't know if I can rebuild it now," he said. "I'm too old."

## 1745 CRISLER WAY

### 'I cried and cried and cried and then collapsed'

All that was left amid the blackened rubble of Sid and Marie Loev's two-bedroom, single-story, 28-year-old house was a red-brick fireplace and a concrete front porch leading nowhere. Mrs. Loev, whose husband works as a camera salesman in Los Angeles, was dabbing at her eyes with a tattered tissue early this week, as she scanned what was once her $170,000 dream home. "We lost everything," the blond, middle-age woman said. "But we have each other...You can't buy a life."

The Loevs were at a Sunset Boulevard supermarket when they looked up and saw their street on fire. They tried to return to their hillside home, but were stopped at a police roadblock. All they could do was watch it burn from below.

## 1741 CRISLER WAY

### Wardrobe now consists of blue jeans and a T-shirt

Song writer Mike Hazlewood was lounging on the sundeck of his two-story home, listening to Stravinski's Violin Concerto in C, when he heard what sounded like "water from an open fire hydrant" gushing through the dense, dried brush on the hillside below.

But before the lanky, Englishman could peer down the steep cliff, fire was everywhere. "I couldn't believe it was happening. I had that feeling that everything was going to be OK until I saw a 50-foot-high flame devouring a home at the end of the street," he said. Though shaken, Hazlewood had the presence of mind to scoop up the manuscript of a musical he'd been working on for two years, a couple of tape recorders and then ran outside to his maroon, 1979 Cadillac Seville

## 1755 CRISLER WAY

### They scampered for safety in only a towel and a robe

Rather than brave the city's sweltering heat, Steve and Debra Karpf decided to spend Sunday in their air-conditioned bedroom, snacking and watching the Dallas Cowboys-Chicago Bears game on television. Outside, they heard what sounded like a 70-mph wind. Debra opened the drapes and saw flames. They immediately scampered for their lives -- Steve, with only a towel wrapped around his waist and Debra with a robe she threw on in a panic.

"I could actually feel the heat on my back as we ran down the street," Steve recalled. The couple said because of the smoke they did not have time to go into the downstairs area of the house and rescue their two cats. In addition to the cats, they lost two cars, including a prized

"I cried and cried and cried and then I collapsed," the stylish, retired teacher said. Besides their pet Sheltie dog, they lost a $4,000 Steinway piano, expensive camera and stereo equipment, a 1968 Barracuda parked in their two-car garage and a houseful of early American furnishings.

Loev, a stocky, rapid-talking man, said he plans to rebuild on the fire-charred site. "My wife's a little nervous about it," he said, wiping a hand over his curly hair. "But I'm not. Fires in the flatlands can be just as devastating."

parked in the garage.

As he sped away, he knew that everything else, including a $1,000 plus stereo system and a houseful of expensive French art prints, would be destroyed. "It was beautifully decorated," Hazlewood said of his view home. "Now it's a black pile of rubble." Hazlewood's wardrobe now consists only of a pair of blue jeans and a white T-shirt. Asked if he would rebuild, the ragged-looking bachelor replied: "I don't know. I just don't know."

1976 Cadillac convertible, a modest collection of antiques and a star-sapphire ring that had belonged to Karpf's grandfather.

But Karpf, who manages Nick's Fish Market restaurants, is most upset about sentimental items claimed by the flames, such as photographs of their 1978 wedding. All that was left of the towering three-bedroom house were two cinderblock walls, a fireplace and a murky, kidney-shaped swimming pool. "As each day goes by,"Karpf said, "we realize how lucky we were to get out...I guess we'll just have to start over."

## 8250 GRANDVIEW DRIVE

### She never had chance to get back inside her home

Leigh Christian and her baby, Toby, had just left home to shop at a Sunset Boulevard market when flames engulfed her one-story home. According to neighbor Don Connoley, the fire destroyed the home so quickly that the actress never had a chance to get back inside, Christian's husband, Norbert Aleaman, a film producer, was in France on business. Only a brick fireplace and the blue-and-white oval swimming pool remained of the redwood-and-glass ridgeline home.

Connoley said the couple's white Cadillac convertible burned along with the garage. The couple had another car, a Mercedes, which was not in the garage. The couple had another car, a Mercedes, which was not in the garage the day the fire broke out. A relative of the former owner of the house, Jacques A. Delepine, said it recently had been sold to a French investor, whom he declined to identify. He confirmed, however, that the new owner planned to rebuild.

Connoley speculated that Christian was lucky not to have been in the house during the fire. "It was the most incredibly scary thing," said Connoley. "But I guess Leigh was lucky not to be here."

## 8300 GRANDVIEW DRIVE

### Spiral staircase twisted like a giant dead insect

Jim Walker walked through the remains of the house he and his partner, Robert Huskinson, had been in the process of building for the past year. "There was a whole frame going 30 feet in the air," Walker said, "and now there's not more than an inch or two of ashes. The frames of the house and a guest house were gone with hardly a trace as were four 6-foot by 24-foot cantilevered wooden decks behind each house.

What remained were cinders, thousands of nails and a steel spiral staircase that had run up the center of the main house and now lay twisted out of shape on the ground, like a kind of giant multilegged dead insect. Looking at the scorched foundation, Walker laughed bitterly when he came across the words, "El Porto Construction 1978," inscribed in concrete. "When we poured the concrete, we put our name on it and we said, 'No one will ever see that again unless the house burns down.' " Walker said Huskinson had told him he wanted work on the house begun again at once.

## 8310 GRANDVIEW DRIVE

### They lost 'tons of clothes' and a new 924 Porsche

Film director Jack Frost Sanders was at a meeting at a midtown office building when he got a call from his answering service saying there was a fire near his home. The silver-haired young man ran to the roof of the office building and looked out at the hillside where his modernistic glass-and-wood home, designed by architect Raymond Neutra, literally was sandwiched by fire.

"I saw the homes on both sides go up," Sanders told a reporter later when he returned to the site. After he realized the hill was on fire, Sanders said he rushed to the bottom of the canyon, where he met his wife Nancy. The couple were prevented from going further by police and had to watch helplessly while their house burned to the ground.

"I'm convinced we could have saved it if they would have let us," Mrs. Sanders, a willowy blonde explained, when the couple returned to the site to search for mementos. She said they lost their collection of art deco furniture, including a baby grand piano, her fur coat, "tons of clothes," diamond jewelry and a new 924 Porsche.

They had planned to remodel the 1950s-vintage home, but now will have to rebuild. "It was all white-wood and glass...I guess we'll be able to start from scratch now," said a rueful Mrs. Sanders as she looked at their melted Porsche.

Pages of burned scripts were scattered around her feet. "One of the first things we did was make sure there were copies of the scripts we had in the house," said Mrs. Sanders. Only the swimming pool and patio furniture and said:"It's almost as if they're waiting for us to return."

## 8326 GRANDVIEW DRIVE

### Ceramic pots, charred plants stood askew near the lawn

Dick Pearce, also a film director, didn't want to discuss the details of the fire which completely gutted his newly purchased, one-story home. The athletic-looking man stood with his wife in the rubble of the home they had moved into only six months ago, talking quietly to an insurance adjuster about rebuilding. As a reporter approached, he said politely: "There are things I really don't want you to hear."

Ceramic pots with charred plants stood askew on the edge of the home's ashen lawn. The blackened shell of an AMC Hornet was the only reminder of the place where a garage once stood. And all that remained of the living room was a massive, rustic wall built around a stone fireplace.

When the reporter returned, Pearce seemed too shaken to discuss the fire. He confirmed that he was out of town at the time of the blaze and asked if other residents had indicated a desire to rebuild. When told that they had, he said that was heartening. "I love it here," said the tall vacant-eyed director. "It had lots of plants, outside and inside the house."

## 8350 GRANDVIEW DRIVE

### Free-lance photographer lost 15 years of his work



**Fifteen years of work was lost in this duplex at 8350 Grandview Drive**

Free-lance photographer Phil Groves, 30, lost 15 years worth of work when the duplex he rented went up in flames. Groves was down the hill when the fire started. He tried to drive in, but police wouldn't let him through the barricades. He parked his car and began running up the steep hill, scooping up water that was draining off the hill to keep his throat wet in the acrid air.

When Groves reached the house, he and his companion, Geri Price, who had been drinking beer at a neighbor's house when the fire broke out, tried to save his portfolios, negatives and slide collection. But the fire quickly devoured the cabinlike house built in the late 1800s.

John Schweitzer, a carpenter who rented the other half of the duplex house, according to Groves, lost his power tools, a few gold coins, some handcrafted furniture and a modest collections of diamonds.

Groves, who said his work has appeared in European men's magazines, said he didn't know where he would go now. "I was only living there for three months," he said in a soft British accent. All that remained of the two-story house was a large bathtub, tipped on its side and two fireplaces.

"I lost 15 years," said Groves, sipping a beer at the undamaged house of a neighbor across the street, where he was staying temporarily, "I guess I don't have to worry about material tings anymore." He then leaned out his neighbor's window and yelled to no one in particular: "I'm free."

## 8353 GRANDVIEW DRIVE
**Musician lost rock diaries spanning 25-year period**

## 8354 GRANDVIEW DRIVE
**Former actor will rebuild; says he'll take the chance**

Rock-blues singer John Mayall's three-story home was nicknamed "The Brain Damage Club," because of the great parties thrown there. A private movie-viewing room and swimming pool built into the side of the hill made the house ideal for barbecues and parties.

Mayall and a few friends were watching a movie in the house when the blaze started. They were able to escape, but the house with a film library of 2,000 hours of video-taped movies, many valuable 16th century antiques, a pornography collection dating back to the 1800s and rock'n'roll diaries spanning 25 years, was destroyed.

All that remained was a charred foundation and a hand-painted swimming pool, littered with soot and ash. Two cars, including a restored 1958 Volvo belonging to Mayall's son Jason, melted completely in the fire.

"We used to have some great barbecues here," said a blond in clog shoes and shorts, as she looked down on the remains of the Mayall home. "People used to jump out of the third story into the swimmingpool," she added, looking at a bedroom fireplace, the only remnant of the third floor. Neighbors said he had not yet decided whether to rebuild on the property.

It was just a lazy, carefree Sunday for Skip Ludwig as he sipped and dipped at Rock Hudson's Beverly Hills pool party. Yet a dozen miles away, Ludwig's $200,000 single-story home was ablaze--a fact he didn't learn until late that night when a kindly policeman drove him past the fire blockade and up to the charred remains. "I was hoping my home was saved, but I wasn't fooling myself," the former child actor said.

The fire ruined not only his spacious two-bedroom house but also valuable collections of Victorian antiques and early-1900s carnival glass, tin-type photographs of his ancestors and countless career mementos. A friend's AMC Pacer that Ludwid was "babysitting" also was burned. Ludwig, who bought the white-and-blue house just last year, said he plans to rebuild, but he recognized the possibility fore could claim any reincarnation of his dreamhouse. "That's a chance you take living in the hills. I'll take it," he said.

## 8364 GRANDVIEW DRIVE

### Loss of family heirlooms makes owner 'just sick'

Bill Whaling was late sending in his fire-insurance payment. The hairdresser finally mailed it Saturday morning, after being told it would take four days to be processed. Sunday, fire claimed the home he has lived in for 16 years.

Whaling was in Seattle on business when disaster struck, but his roommate, Gary Harworth, said the house was destroyed within minutes. "I was sitting in the house when I realized the fire was coming up the hill," said Harworth. "I got the dog (a German shepherd, Topaz), and the pet rabbit, put them in the car and drove down the street. But when I came back up to get the valuables pot of the house, the flames had spread."

Whaling sifted through the ashes, looking for valuables. But even before he returned from Seattle, a friend, Milly Paul, came to the premises with Harworth and recovered a box of gems Whaling kept hidden under a bed. Paul, who said she had once lived in the house, told a reporter the box contained gold, silver, some watches and turquoise Indian jewelry.

On his return, friends presented Whaling with the gems and the Cadillac Harworth moved before the fire got too close. But he insisted their recovery barely made up for his losses. "I don't know," said Whaling. "I lost everything. Family heirlooms, antiques, and an entire collection of valuable paintings." Harworth said he lost an uninsured Chevrolet Camaro in the blaze. Whaling said he would have to wait to see if the insurance company would honor his late payment and make good part of the loss before deciding whether to rebuild. "I'm just sick," he said. "If I don't have fire insurance, I don't know what I'll do."

## 8370 GRANDVIEW DRIVE

### Country-rock group sleeping after show at Disneyland

At the time of the fire, Michael Riley and several other members of the country-rock group Pure Prairie League were living in the two-story,four-bedroom wood-and-glass house. They were featured at Disneyland the night before and friends said the group was still sleeping when the fire hit.

Chi Nishida, a co-owner of the house, returned to the premises later to take pictures of the damage. The owner declined to give any information about the group, which lost all their clothes, records and stereo equipment and some instruments in the fire. But she confirmed she does plan to rebuild. No member of the group was seen near the site in the days that followed the fire.

"What else can I do?" said Nishida with a shrug, picking through pieces of broken glass and fire-eaten wood that were all that remained of the structure. "I hope there won't be a next time when it comes to fire in this area."

## 8410 GRANDVIEW DRIVE

### Cadillac flattened into 2-foot-high metal pancake

For 11 years, Chuck and Ann Schneider spent their weekends building the two-story home that dominates the ridgeline where Grandview Drive runs into Cole Crest. After the blaze, only a 10-foot-high pole of twisted metal, cement hunks and other unrecognizable materials remained. A Cadillac that was in the garage when the fire struck had been flattened into a 2-foot-high pancake of melted metal by a fallen garage ceiling.

Oddly, the red-brick walls of the curved, crescent-shaped pool enclosure withstood the flames, but the glass panes which shaded light from the pool deck were shattered by the intense heat and were scattered in heaps in and around the pool.

The couple was seen in the vicinity of the fire late Sunday, but were not available for interviews later. Neighbors, who couldn't recall the Schneiders' professions, said they kept pretty much to themselves. One recalled, however, they seemed "extremely sad" about the loss. "I heard that Chuck had attended a demonstration of those superscooper planes at LAX," said one neighbor. "It's ironic and sad that those planes couldn't help him save his house.

## 8416 GRANDVIEW DRIVE

### Outdoor Jacuzzi fried, leaving cracked-cement hole

On the hill, just to the west of the Schneider home, separated by a tall, chain-link fence, stood two other homes only a few feet apart. One, overlooking the Sunset Strip at 8416, belonged to Armand Riza and Dan Bramson. The other belonged to night club impresario Elmer Valentine. Both were burned so badly it was hard to tell where one house began and the other ended. (Valentine also owned a house at 8400 which only was partially damaged).

Flames nearly melted the electric gate that protected the two homes from intruders. Neither Riza nor Bramson were available for interviews. However, it was clear from the charred debris that they were able to rescue few of their possessions.

The white tile of the main bathroom was a heap on the ground. What appeared to have been some kind of outdoor Jacuzzi overlooking the city had been fried into little more than a cracked cement hole. After the garage floor fell about 10 feet down the hill, the heat from the ashes stretched a Mercedes sport coupe into a grotesquely elongated figure, with half of its hulk still on high ground and the other part 10 feet lower. Only the three-pronged Mercedes emblem on the auto's hubcaps identified the car as a premier German make.

Standing intact in the midst of the ruins on a still-standing brick fireplace mantel was a small statue of an Inca god, its hands clasped together in prayer. Friends think Riza now is

living in another house he owns, this one in Malibu. His roommate, Dan Bramson, who runs the Universal Amphitheater, has been in New York on business, according to friends.



**A charred Porsche sits buried beneath the remains of a house owned by Elmer Valentine on 8424 Grandview Drive, but the nightclub owner is more upset about his two missing dogs.**

## 8424 GRANDVIEW DRIVE

### Whisky-a-Go-Go owner searching for bull terriers

Elmer Valentine, owner of three Sunset Boulevard nightclubs--the Whisky-a-Go-Go, the Roxy and Rainbow Room -- was visiting friends when the fire erupted Sunday. His first thoughts were for his three bull terriers. He rushed home in his chartreuse Mercedes, but couldn't get through police roadblocks.

A day later he toured the neighborhood with two weepy teen-age girls but gruffly shooed away reporters. Finally, reached by at phone at his Whisky-a-Go-Go office, Valentin explained that he had found only one dog and was heartsick.

"There is no way I can replace my house. Only ashes of it are left," the bachelor said. "I am making some plans to rebuild. But right now I'm worried about my dogs

## 8446 GRANDVIEW DRIVE

### Two little girls fearful, still frightened after ordeal

G. Greely Wells Jr. animator and free-lance artist, was doing some yard work when he spotted the fire several hundred feet down the hill. Misjudging the speed of the wind, he took time out to run back inside and call the Fire Department. Meanwhile, the fire sped to the edge of his property and he heard a friend shout for him to gather up his two daughters, Beth, 8, and Meg, 6, who were inside watching television, and get out.

The Wells family piled into neighbor Dan Weiss' car and drove into the inky smoke that now clouded their way out of the canyon.

"A neighbor (Weiss) drove through the blaze and got them safely out of the area," Wells' ex-wife, Cathleen, explained. "The girls told me the fire was all

## 8450 GRANDVIEW DRIVE

### Resident says TV crews blocked firefighters' trucks

Dan Weiss, 53, who describes himself as a home-furnishings executive, was watering shrubs and plants that border his hillside home when he smelled smoke. Weiss shares the house with fabric salesman Ron McGraw, 40, who was down the street at the time, and high school teacher Darrell Parker, 34. Weiss recalls McGraw shouting to tell him there was a fire in the area. He said he yelled back to McGraw to alert his neighbor, artist Greeley Wells, and his two daughters at 8466 and then started to organize his own escape.

Leaving the area wasn't easy for the grizzled Weiss, who had spent most of a lifetime in the neighborhood. "I've been on this hill 26 years," he said, staring gravely at the wreckage.

The three men were left with

and trying to do everything I can to find them."

Two of the missing bull terriers, Bo, and Annie, may have escaped through a dog door when the fire started. A third terrier, Maggie May, wandered over to the wasted Ernst Mayer residence, where Mayer's friends caught and returned her. Valentine said the missing dogs both were wearing yellow identification tags around their necks at the time of the fire. He declined to discuss what was destroyed in the fire.

A friend described his one-story stucco house as "lavish." Certainly it was clear from the wreckage that the house had been spacious: there was a rectangular outdoor swimming pool, a stone fireplace and a wooden deck that skirted the hill. In the garage area was the burned frame of a Porsche 924. On the front stoop, four wine bottles -- their labels and corks charred but intact -- stood next to a ceramic turtle sitting on a rock.

"He's really upset about the dogs," explained a receptionist at Whisky-a-Go-GO. "We hoped the dogs would come to the club since they are familiar with the place but so far they haven't showed up. Everything is just so upsetting."

around the car as they drove through the hills. The kids said that if (Weiss) didn't know his way out of the area, they could have been badly injured. The fire was spreading that fast." Later, she said, the girls complained of having fears about the fire, which she tried to quiet by telling them they could use it for "show and tell" at school.

The Wells' redwood home burned to the ground. Not only did he lose his house, but he also lost all of his paintings. "As it was, one of the kids left the house barefoot and all Greeley had on was red underwear and some flip-flops." Mrs. Wells said. "There was no time to grab anything, they just got out as fast as they could."

The family cat, Biscuit, was also lost in the blaze, but may have escaped through a door opening. All attempts to locate the blotchy orange, black and white cat so far have failed. Mrs. Wells said her ex-husband was staying with a friend and planned to rebuild.

nightmares. "I can't sleep at night thinking how lucky we are to be alive," Weiss added. "It all happened so fast. By the time we got to the car, there were cinders as big as your first flying through the air. I remember trying to get the car started with one hand and get the electric windows closed with the other while cinders blew in on us." He drove the car into what he called a "solid wall of black smoke" feeling his way down the narrow road.

The fire was so intense it melted McGraw's Chevy Caprice and a Datsun 240Z, owned by a woman visiting the men from Airzona. The three men didn't have time to take any of their possessions. They left in bathing suits, Weiss receiving burns down the side of one leg. An ABC television crew took pity on them and donated pants and a T-shirt. Weiss was luckier than the other two: some friend gave him a pair of Gucci loafers.

Standing in the rubble of what was left of their house -- the outline of a stone fireplace and twisted water pipes which in a mocking afterstatement, a day after the fire, were still spouting water -- Weiss and his partners were unable to say for sure whether they would rebuild. "I have nothing left," said Weiss. "I have nothing left," said Weiss. "I'll be lucky to find my grandfather's diamond ring in this mess." His only criticism: that Fire Department trucks were blocked by television cameramen who converged on the tiny street. "Twenty minutes after the fire started, they still couldn't get a truck in here," he said.

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# Exhibit E

**Jason Hernandez** <jason.hernandez@lacity.org>
Date: Tue, May 15, 2018 at 3:38 PM
Subject: Re: 1800, 1806, 1812 and 1818 Crisler Way/Case Nos. ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD and ZA-2015-4149 ZAD/ENV 2015-4131-MND (A-F): HEARING DATE: May 22, 2018
To: Jamie Hall <jamie.hall@channellawgroup.com>

Hi Jamie,

All the information Aidan copied is the material we currently have. If you need to review letters that were referenced in the Geo and Soils Approval Letter, you should speak to LADBS about those files. Furthermore, our department does not review sewer plans as it does not fall under our expertise. The plan sets that are provided to LADBS during plan check add additional plan sheets that are not subject to our review because they do not fall under our purview.

Best,

On Tue, May 15, 2018 at 2:44 PM, Jamie Hall <jamie.hall@channellawgroup.com> wrote:

Hi Jason:

Aidan O'Brien made copies of all the materials in the case file and the list of documents I e-mailed you are NOT in the case file. Yet, they are referenced in the MND. Please advise.

**Jamie T. Hall**
Channel Law Group, LLP
8200 Wilshire Blvd., Suite 300
Beverly Hills, CA 90211
Main Number: (310) 347-0050
Direct: (310) 982-1760
Fax: (323) 723-3960
Email:jamie.hall@channellawgroup.com
Website: www.channellawgroup.com

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On Tue, May 15, 2018 at 2:41 PM, Jason Hernandez <jason.hernandez@lacity.org> wrote:

Hi Jamie,

You are free to review all materials provided to us that are found in the Crisler Way case files. All the technical studies that were provided to us are those available online. Let me know when you would like to come in so I can have the case files ready for your review.

Best,

On Tue, May 15, 2018 at 1:58 PM, Jamie Hall <jamie.hall@channellawgroup.com> wrote:

Dear Jason:

We are reviewing the MND for the Project and would like to request the following documents:

-- Plans for the roadway
-- The geotechnical reports for the four houses and the roadway, including:
- Addendum Report CYG-14-7350, 3/31/15
- Dept. Correction Letter 79258-01
- Addendum Report CYG-14-7350, 11/26/2014
- Dept. Correction Letter 79258
- GeologylSoil Report PG 1091
- Approval (Lots 97 & 98) Log # 36891
- Geology/Soil Report PG1224, 9/19/2012

-- Stormwater Drainage Plan, Robert Anderson, Architect, dated 3-12-2015, including Sheet Number A-1.1
-- Hovell and Pilarski Engineering, Inc., Sewer Plan and Profile, Grandview Sewer Main, Design Permit/Construction Permit BC-401804.
-- Sewer line plans for the four houses
-- Any other technical studies or plans that aren't included as technical appendices to the MND that are available in electronic format.

Thanks,

**Jamie T. Hall**
Channel Law Group, LLP
8200 Wilshire Blvd., Suite 300
Beverly Hills, CA 90211
Main Number: (310) 347-0050
Direct: (310) 982-1760
Fax: (323) 723-3960
Email:jamie.hall@channellawgroup.com
Website: www.channellawgroup.com

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# Exhibit F

**Reference Number** 8910 **Job Address:** 8350 GRAND VIEW DR.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CLASS "B" APPLICATION / PERMIT (DESIGN PHASE)**<br>ISSUED UNDER SECTIONS 62.105 TO 62.116<br>INCLUSIVE, LOS ANGELES MUNICIPAL CODE **(SEE REVERSE HEREOF)** | | | | | | | DISTRICT:<br>**WEST LA** | Work Order(s)<br>**BR402571** |
| I HEREBY REQUEST PERMISSION TO CONSTRUCT THE IMPROVEMENTS DESCRIBED BELOW UNDER PRIVATE CONTRACT AND, IF PERMISSION IS GRANTED, I AGREE TO CONSTRUCT SAME IN ACCORDANCE WITH PLANS AND/OR SPECIFICATIONS APPROVED BY THE CITY ENGINEER. I ALSO ACKNOWLEDGE THAT I HAVE REVIEWED THE GENERAL INFORMATION PRESENTED ON THE REVERSE OF THIS APPLICATION, AND AGREE TO THE PROVISIONS STATED THEREON. | | | | | | | SHEET NO. 1<br>OF 2 SHEETS | DATE ISSUED:<br>**01/12/2016** | DATE EXPIRES:<br>**01/12/2018** |
| MJR PROJECT/PROJECT:<br>**EBPER/ EBPERGEN** | PROGRAM: **7804** | ENGR DIST.: **E6201850** | | REIMB FLG: **YES** | | | DIR/INDIR: **D** | |
| **STREETS AND LIMITS TO BE IMPROVED**<br>(SEE CONSTRUCTION TOTALS AT RIGHT)<br>**GRAND VIEW DRIVE & CRISLER WAY (S.W. CORNER)**<br><br>ESTIMATED 2% Surcharge = **$696.00**<br>ESTIMATED 7% Surcharge = **$2,436.00** | | | | **INDICATE SCOPE**<br>**GRADING, PAVEMENT, CURB & GUTTER, DRIVEWAY, STORM DRAINS. (DEPOSITED $3,000.00 ON 9/7/2012.) (REQUIRED INSPECTION DEPOSIT AMOUNT = $37,932.00)THIS PERMIT SUPERCEDED THE CLOSED BC401611,P-35874 WAS APPROVED PER BC401611,PAID $53,737.00 ON 02/17/2015.** | | | | |
| ENGR. PLAN CHECK DEPOSIT<br>**$0.00** | Number of Trees<br>**0** | Wells<br>**0** | Tree Planting Fee<br>**$0.00** | District Map Number<br>**148.5 A 175** | DIVISION INDEX | DRAINAGE MAP<br>**470** | COUNCIL DISTRICt<br>**5** | **CONSTRUCTION ITEMS** / **ESTIMATED COST** |
| Sandblasting Fee<br>**$0.00** | DOT Sign Deposit<br>**$0.00** | Traffic Deposit<br>**$0.00** | | PROPOSED R/W NO. | | SPECIAL REFERENCES<br>**P-35874** | | GRADING / **$112,500.00** |
| CONST. - INSPECTION DEPOSIT<br>**$34,800.00** | TOTAL FEE DEPOSIT<br>**$37,932.00** | | | | | | | PAVING CURB / GUT. / SDWLK / **$371,500.00** |
| TYPE OF PROJECT<br>**Street Improvement** | TOTAL BOND DEPOSIT<br>**$580,000.00** | | | | | | | SEWER / **$0.00** |
| IMPROVEMENT BOND NO.<br>**CAO140257** | | | | | | | | STORM DRAIN / **$20,000.00** |
| LIABILITY INSURANCE NO. | LIAB. INSUR. EXPIR. DATE | | | | | | | STREET LIGHTS / **$0.00** |
| PRIVATE ENGINEER<br>**HOVEL & PILARSKI** | | | | | | | | TRAFFIC SIGNALS / **$0.00** |
| STREET ADDRESS<br>**4525 INDUSTRIAL ST. SUITE 4L** | | | | | | | | **SUBTOTAL** / **$504,000.00** |
| CITY<br>**SIMI VALLEY** | ZIP<br>**93062** | PHONE NO.<br>**805-522-1900** | | | | | | + % PCF / **$75,600.00** |
| OWNER (SEE REVERSE)<br>**AARON COHEN** | | | | | | | | CONSTRUCTION ESTIMATE / **$580,000.00** |
| STREET ADDRESS<br>**1504 S. FLOWER ST.** | | | | | | | | + % CIF / **$0.00** |
| CITY<br>**LOS ANGELES** | STATE<br>**CA** | ZIP<br>**90015** | | | | | | BOND ESTIMATE / **$580,000.00** |
| (AREA CODE) PHONE NO.<br>**818-335-0028** | DATE SIGNED BY APPLICANT | | | | | | | REGISTER RECEIPT VALIDATION |
| SIGNATURE (SEE REVERSE BEFORE SIGNING) | | | | **Job Address:**<br>**8350 GRAND VIEW DR.** | | | | |
| APPLICANT'S NAME (ADD TITLE IF OFFICER)<br>**ROBERT ANDERSON** | | | | | | | | |
| DISTRICT/DIVISION OFFICE | ISSUED BY:<br>**KATHLEEN HUGHEY** | | | DIST. ENGR. DATE<br>**Mike Patonai, P.E.** | | | | Permit Title:<br>**In conn. w/ building permit GRAND VIEW DR. (8350) & CRISLER WAY S.W. CORNER (IN CONN.W/ BLDG. PERMIT)** |
| TIME | DATE | | | | | | | |

**Job Address:** 8350 GRAND VIEW DR.

**GENERAL INFORMATION**
This form shall be used for all Class "B" Permits. It is not necessary to repeat the STREETS AND LIMITS breakdown on **CONSTRUCTION** B-PERMITS that are preceded by checking only permits.

**1. LIABILITY INSURANCE** and performance bonds are only required for approval of construction B-Permits.

**2. OWNER-APPLICANT** must be the owner of the affected property, and must be the same as the performance bond principal. Contractors for governmental agencies under faithful performance bonds shall be entered as OWNER-APPLICANT. Applicant issued to CORPORATIONS shall be executed by the President, Vice-President, Secretary or Asst. Secretary, and the CORPORATE SEAL shall be impressed.

**3. SAFETY ORDERS--**Sec. 6500 of the STATE LABOR OR CODE requires the APPLICANT to obtain a **STATE A DIVISION OF INDUSTRIAL SAFETY (DIS) PERMIT** and a copy of **STATE INDUSTRIAL SAFETY ORDERS** BEFORE BEGINNING WORK ON ANY TRENCH OR EXCAVATION **FIVE FEET OR DEEPER** into which a person must descend. City personnel will not enter such excavations until the required permit and safety orders have been obtained and are displayed on the job site.*****

**4. PCF** percentage factors apply to possible construction change orders. CIF percentage factors apply to cost increases through the life of the project. (See CONSTRUCTION ITEMS on the reverse side of this application.)

**5. PLAN CHECKING DEPOSITS** are subject to charges for blueprints, engineering, testing, traffic signal design, street lighting design, and administrative service. **CONSTRUCTION PERMIT DEPOSITS** may be charged against for blueprints, engineering, testing, surveying, inspection, administrative services, emergency light and barricade services, street tree planting and maintenance, street lighting burn tests, Street Name signs, traffic warning and regulatory signs, sandblasting and painting of traffic markings, erosion control, etc. Unused fees are refunded after closure of the permit. The applicant will be billed for unreimbursed charges (fee deficits).

**6. DESIGN OFFICE** will determine if applicant must dedicate a right of way to the City for construction purposes. The applicant shall open a right of way work order and deposit necessary fee with the REAL ESTATES SECTION, DEVELOPEMENT SERVICES DIVISION, BUREAU OF ENGINEERING.

**7. NOT MORE THAN ONE TRACT OR PARCEL MAP SHALL BE ASSIGNED TO A SINGLE B-PERMIT.**

**8. PERMITTEE SHALL STOP WORK AND CONTACT THE PERMITTING AGENCY PRIOR TO CUTTING OR EXCAVATING ANY DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK.**
**9. ANY DAMAGE TO DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK MUST BE REPAIRED IN KIND OR RECONSTRUCTED IN KIND BY THE PERMITTEE, AS DIRECTED BY THE PERMITTING AGENCY, IN A MANNER SATISFACTORY TO THE CITY ENGINEER AND THE INSPECTOR OF PUBLIC WORKS.**

**THIS CONSTRUCTION B-PERMIT MUST BE ON THE JOB SITE AL ALL TIMES.**

**THIS PERMIT VALID ONLY IF ACCOMPANIED BY A DIS PERMIT AND SAFETY ORDERS** (SEE NOTE 3 ABOVE). DIS PERMIT MAY BE OBTAINED FROM STATE DIVISION OF

**MULTIPLE PERMITTEE ENTRIES**
**Ref. No. 8910**

INDUSTRIAL SAFETY, 3460 WILSHIRE BOULEVARD, LOS ANGELES. **NOTE**: GOVERNMENTAL AGENCIES AND PUBLIC UTILITIES UNDER **PUC** CONTROL **ARE EXEMPT.** PRIVATE CONTRACTORS ACTING AS PERMITTEE FOR SUCH AGENCIES **ARE NOT EXEMPT**.

NOTE: CHARGES AGAINST THE PERMIT FEE DEPOSIT WILL BE COMPILED APPROXIMATELY 6 TO 8 WEEKS AFTER THE DATE FINAL INSPECTION IS COMPLETED. THE B-PERMIT WILL BE CLOSED AND THE IMPROVEMENT BOND EXONERATED AFTER ALL PERMIT FEE CHARGES HAVE BEEN ACCUMULATED AND PAID.

# Exhibit G

# Channel Law Group, LLP

8200 Wilshire Blvd
Suite 300
Beverly Hills, CA 90211

www.channellawgroup.com

ROBERT JYSTAD
JULIAN K. QUATTLEBAUM, III
JAMIE T. HALL *
CHARLES J. McLURKIN
NATASHA ERNST**

*ALSO Admitted in Texas
**ALSO Admitted in Oregon

Writer's Direct Line: (310) 982-1760
jamie.hall@channellawgroup.com


July 2, 2015

**VIA PERSONAL DELIVERY**

City Council
via Los Angeles City Clerk
200 N. Spring Street, Room 360
MS 160-01
Los Angeles, California 90012

**Re: Appeal to Board of Public Works of CEQA Determination for B-Permit No. BR402571 (Public Resources Code Section 21151(c))**

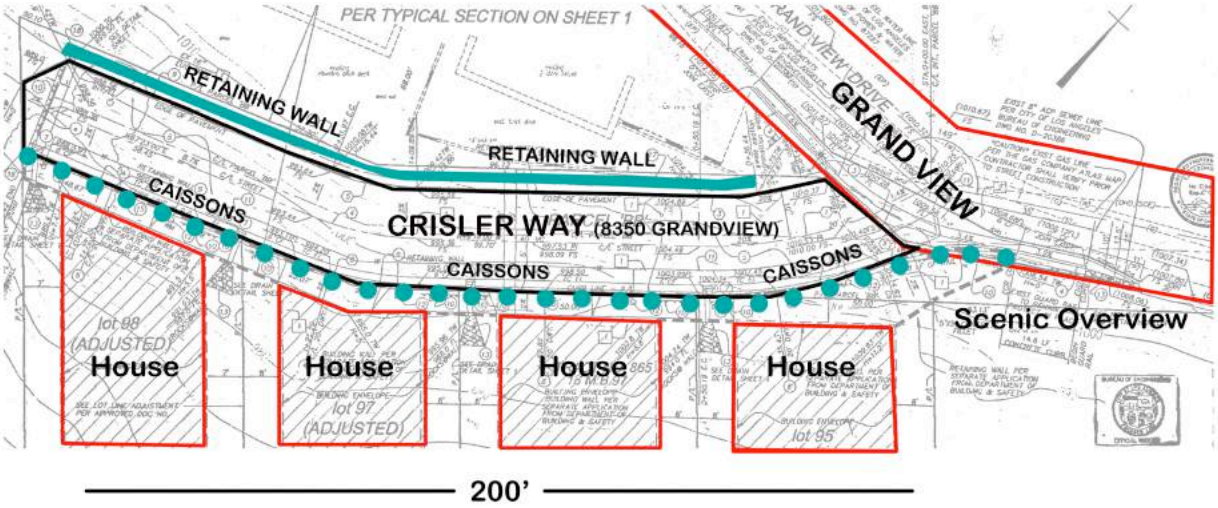
Dear Madame Clerk:

Concerned Citizens of Kirkwood Bowl ("CCKB"), an unincorporated association, hereby appeals any environmental determination (or failure to issue a determination) that has been issued for B-Permit No. BR402571 under the California Environmental Quality Act. This right to appeal is provided for via Public Resources Code Section 21151(c).

## The Project

The City of Los Angeles Bureau of Engineering ("BOE" or "City") approved B Permit No. BR402571 on or about June 17, 2015 (hereinafter referred to as "Project."). The B-Permit would authorize the construction of a road known as "Crisler Way" – which is a "paper road." In other words, it only exists on paper. In reality, the road is part of a steep undeveloped hillside in the Hollywood Hills in a neighborhood known as the "Kirkwood Bowl." The plans submitted for B-Permit No. BR402571 demonstrate that the road would facilitate the construction of four new single-family homes. The plans also show that the road would be approximately 200 feet in length and would require up to 30 caissons and two large retaining walls. A marked up screenshot from the plans is depicted below.

The Plans




**Non-Compliance with CEQA**

The City either did not conduct any review for the Project as required by the California Environmental Quality Act ("CEQA") or erroneously determined that the Project was exempt from CEQA. The City previously determined that the *dedication* of the road was exempt from CEQA in 2006 via Ordinance No. 177533. However, the City did not approve the construction of the road at that time – only the dedication of the road. In other words, no physical change to the environment was proposed at that time. In issuing the B-Permit, the City failed to comply with the California Environmental Quality Act ("CEQA") as follows:

**1. Failure to Conduct Preliminary Review under CEQA**

The City was required to conduct a Preliminary Review to determine whether the Project was subject to CEQA before approving the B-Permit. CEQA Guidelines §15060, Pub. Resources Code § 21065. CEQA Guidelines § 15060(c) establishes a clear duty, stating "a lead agency must first determine whether an activity is subject to CEQA . . . ." However, there is no evidence in the Record that the City performed a Preliminary Review for the Project. This failure to perform a Preliminary Review constitutes failure to perform the City's duty. *Davidon Homes v. City of San Jose* (1997) 54 Cal.App.4th 106, 117 ("There is no indication that any preliminary environmental review was conducted before the exemption decision was made. The agency produced no evidence to support its decision and we find no mention of CEQA in the various staff reports. A determination which has the effect of dispensing with further environmental review at the earliest possible stage requires something more.") The City's approval of the Project, in contravention of this duty, was an abuse of discretion.

**2. Unlawful "Piecemealing"**

There are reasonably foreseeable significant environmental impacts associated with the construction of four new single-family homes on a substandard hillside road. It is clear that construction of the road at issue is intended to facilitate development. In fact the plans for the B-

Permit use the word "building envelope" and outline spaces for four new homes. New single family homes constructed on Grand View generally require a zoning permit pursuant to LAMC 12.21 A.17, namely a Zoning Administrator's Determination (or "ZAD"), public hearings, and require extensive environmental review under CEQA. For example, there are three new homes proposed on Grand View at this time and the City is conducting an Initial Study and has proposed Mitigated Negative Declarations ("MNDs") for each of these projects. *See* ZA 2014-3436-ZV ZAD (8289 Grand View), ZA 2015-718-ZAD-ZAA (8461 Grand View) and ZA-2014-2854-ZAD-ZAA (8413 Grand View). An extensive environmental critique (consisting of 100 pages) was commissioned by residents for the home located at 8413 Grand View outlining the environmental impacts of that project. The City is still evaluating this project and has not issued any approval to date. There are similar, albeit heightened, environmental concerns related to the construction of a new road and four new homes along Crisler Way. Moreover, the road that Crisler Way will connect to (Grand View Drive) contains only one entry and exit point, has extremely limited parking, and is located in a high fire hazard severity zone. In fact, the historic Kirkwood Bowl fire occurred in 1979 at this exact location and burned down numerous homes. Also, the construction of the road itself will require excavation and hauling of dirt and there is no evidence that the City has approved a hauling route, which requires notice and a public hearing. In sum, there are very real environmental impacts associated with the Project that need to be analyzed.

The failure of the City to conduct an environmental review for the Project at this stage would amount to piecemealing, which is prohibited. *Berkeley Keep Jets Over the Bay Committee v. Board of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1358 ("There is no dispute that CEQA forbids "piecemeal" review of the significant environmental impacts of a project.") CEQA contemplates consideration of environmental consequences at the "earliest possible stage, even though more detailed environmental review may be necessary later." *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1346. The requirements of CEQA cannot be avoided by piecemeal review which results from "chopping a large project into many little ones-each with a minimal potential impact on the environment-which cumulatively may have disastrous consequences." *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283–284; *City of Antioch v. City Council* (1986) 187 Cal.App.3d 1325, 1333; *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370. For example, "[w]here an individual project is a necessary precedent for action on a larger project, or commits the lead agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project." CEQA Guidelines, § 15165.

**3. Cumulative and Growth-Inducing Impacts**

CEQA mandates that a public agency consider, among other impacts, a project's potential growth-inducing impacts. (CEQA Guidelines §15126(d), §15126.2(d); *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 368.) Here, the full improvement of this portion of Crisler Drive is likely to result in the development of at least four new homes that will be serviced by this roadway. The environmental effects of the road construction could therefore be cumulative and potentially growth-inducing.

**Conclusion**

Because the Project is not exempt from CEQA, the City should immediately issue a stop work order, conduct a public hearing and either rescind the B-Permit or require the Board of Public Works to conduct Initial Study under CEQA. *See* CEQA Guidelines § 15070(a).

If you have any questions, feel free to call me at 31-982-1760.

Sincerely,



Jamie T. Hall

# Exhibit H

# Department of City Planning

(/pdiscaseinfo/default.aspx)

# Case Summary & Documents

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4125-ZAD Search Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4125-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4125-ZAD

| | Type ↑ | Scan Date | Signed | |
|---|---|---|---|---|
| No Documents were found | | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1800 N CRISLER ST 90069 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,221-SQUARE-FOOT, 3-STORY, 33 FEET ONE FAMILY DWELLING AND ATTACHED 2-CAR GARAGE

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,221-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjA20 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjA20)



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# Department of City Planning
# Case Summary & Documents



**Case Number:** ZA-2015-4130-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4130-ZAD

| | Type ↑ | Scan Date | Signed | |
|---|---|---|---|---|
| No Documents were found | | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1806 N CRISLER WAY 90069 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33-FOOT HIGH ONE-FAMILY DWELLING WITH A TWO-CAR ATTACHED GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33FEET HIGH, ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjEx0 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjEx0)



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# Department of City Planning
# Case Summary & Documents



**Case Number:** ZA-2015-4146-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4146-ZAD

| | Type ↑ | Scan Date | Signed | |
|---|---|---|---|---|
| No Documents were found | | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1812 N CRISLER WAY 90046 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,653-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,653-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY 818-716-2689 [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjI40 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjI40)



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# Department of City Planning
# Case Summary & Documents



**Case Number:** ZA-2015-4149-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4149-ZAD

| | Type ↑ | Scan Date | Signed | |
|---|---|---|---|---|
| No Documents were found | | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1818 N CRISLER WAY 90046 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES]

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# Exhibit I

Phone: (323) 650 3655
Email : apobr@yahoo.com

8382 GrandView Drive

Los Angeles

CA 90046-1918

March 25, 2015

TO: Zoning Administrator
Staff Contact Luciralia Ibarra

FROM: Aidan P. O'Brien MD

SUBJECT: ZA 2014-2854(ZAD)(ZAA)/ March 31, 2105 Hearing
Project Location 8413 GrandView Drive

**********

I have lived at 8382 GrandView Drive for 32 years.

I am deeply concerned about a proposed project at 8413 GrandView.

I wish this letter to be included in the packet for the hearing on Tuesday March 31

I did not receive a notice of the hearing even though I am within 100 feet of the project.

I object to the proposed development at 8413 on the following grounds:

**Site**

Grand View Drive is a Substandard Hillside Limited Street

At 8413 the road is 142 inches - less than 12 feet. BHO requires 20 feet.

See attached **Photo 1** with two adults lying down and they cannot do it head to foot.



PHOTO 1 – Substandard Street Width

This is at an acute bend in the road with a guardrail where it will be impossible to maintain traffic flow. **Photo 2.**

**Photo 3** is at this point on Grand View and illustrates the nature of the problem. The caterpillar occupies the whole street. This went on for over two years with construction at 8401 after we had been assured it was "temporary."



PHOTO 2 – Bend in Road at Project Site



PHOTO 3 – Construction Equipment for 8401 Grand View Blocking Street

It will result in multiple road closures such as happened at 8401.

This will divert all the traffic to Yucca where there have been so many water breaks.

**Plans**

I do not see any plans as follows:

- No plan for ingress, egress, parking or placement of trucks and equipment to eliminate or minimize disruption, damage and prevention of emergency services
- No plan for off-site storage of supplies and equipment
- No plan for staging of vehicles and heavy equipment;
- No plan for protecting the Substandard Hillside Limited Street and the structures in, on and under them from further damage
- No plan for protecting the homes of residents near the project from damage.

My own property was extensively damaged during the last construction and I was never compensated.

A recent illegal assault on the Lot at 8413 adjacent to it resulted in damage to the foundation at 8417 **Photo 4**

Plans include a swimming pool suspended from the hillside directly above the properties on Yucca Trail. Even without a swimming pool with 8401 the properties beneath suffered great danger with objects falling such that Hanna Melzer of Yucca had to leave for her own safety and has never returned.

The Initial Study and Checklist indicates "555 cubic yards of Grading and 340 cubic yards to be exported off site. With the proposed swimming pool I feel it will be way beyond that and over the BHO Limit. This is from what happened at 8401 GrandView with similar terrain when truckloads of dirt were hauled away at all hours under cover of dark

An independent slope analysis will be required to validate the height.

The geologicals will have to be redone as well as an Environmental report.

**GrandView Drive Condition**

The road is falling apart from construction at 8460 GrandView. The City has not repaired it. **Photo 5**



PHOTO 5 – Roadway Erosion and Damage.

It is costing the city far more in constant repairs to GrandView than any revenue from permits. **This makes no financial sense.**

**Cumulative Impact**

The neighborhood has profound fatigue from "Over Construction" in a delicate area.

The lot was purchased for $140,000

It is now for sale for $450,000

Redfin Quote" Seller will work with buyer in getting approval of plans."

No one has ever met the actual owner of the lot.

For such a sensitive and connected area this seems seriously wrong.

What follows is an account of a development at 8401 GrandView that went profoundly wrong

In 2004 an application was made for construction at 8401 GrandView
There was a ZA Hearing 2004-4197.

Essentially no one showed up as they did not know about it.

I was within 20 feet of the project and never informed.

By the time I figured out what was proposed it had already been greenlighted.

The consequence of this was three years of dangerous out of control events in spite of appealing to every agency.

I am Chief of Anesthesiology at a large Regional Medical Center and believe I can competently document. I have four full binders of all I describe below. We had Channel 5 News, Chief of Building and Safety and Councilmember Jack Weiss out to the site. It developed into a huge problem both politically and in terms of community action.

Construction started on April 2006 and then went on for almost three years.

**Street Damage**

Massive street damage from the Kirkwood entrance to the site. This has never been repaired properly. Costs to the City will be huge – a fraction of whatever is gotten in permits.

**Street Closures**

Between April 29 and June 14 we had seven street closures for four hours each which always went to 8 hours. The builder thereafter just closed the street whenever he wanted without notice. This resulted in huge backups along GrandView and nowhere to turn around it was chaos with many near violent incidents.

**Traffic Flow**

See the scanned item 1 is from the ZA of 2004 (Page 13) highlighted in yellow. The problems of traffic on GrandView are made abundantly clear. Quote:

*" for five minutes the staff's car was entirely blocked form exiting GrandView Drive. A van illegally parked blocking more than half the road. Additional cars pulled up behind*

*the City's car. There was no room to either go around the parked vehicle or reverse. (Topography – up slope to the south side of the road, steep downslope to the north). The van had to move, going in excess of more than 10 lots east before vehicles passed."*

Nothing on GrandView has changed and it has only gotten worse.

**Property damage.**

I had repeated damage to the front of house from machines crashing into it- walls/lamps/ poles/tile. I stopped getting it repaired.

After it was over I just did all the repairs myself and had to have the whole repainted (even though it had a recent job).

Property at junction of Kirkwood and GrandView was damaged as a mobile crane crashed into it (Excuse - It wasn't my fault. It had no brakes!). Builder had run out of money and could not repair.

**Emergency Access**

My neighbor next door Shannan Nishida at 8370 GrandView broke her leg. There was a long delay to get to her as the street was blocked and the ambulance could not get through at Yucca Trail.

**Danger**

Multiple episodes of objects failing and hear misses.

Hanna Melzer of Yucca Trail left as she felt her children's lives were in danger.
This was featured prominently on Channel 5 news.

She has never returned.

**Neighbor Distress**

8410 and 8424 sold and moved out not being able to take it anymore.
Others wanted to leave but by then the situation was so bad they could not.

**Excavation/Grading**

This was way beyond anything they stated. Large trucks would appear after 8:00pm and be loaded with dirt and removed. This was a huge source of mess and distress.

**Storage**

There is no place to store materials on GrandView. Large rolls of Reebar were all over

the sides of a 12 foot road. Equipment was stored on top of Fire Hydrants!
To store items he without authorization broke into the DWP old water tower site.

**Workers**

No parking on GrandView. Employees drove cars along the narrow street and there were constant terrifying near misses.

Hard hats were rarely worn even under cranes and caterpillars. I was scared for the workers.

**Staging / Parking**

Virtually all items of ENV V11-40 were violated.

**********

I note on February 11, 2015 a Mitigated Negative Declaration prepared by the city states:

"*will reduce any potential adverse effects to a level of insignificance"*.

A Guiding item for ZA Determination is:

*"The Granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the same zone or vicinity in which the property is located."*

This project will unquestioningly:

- Be materially detrimental to the public welfare and injure property.
- Will cost the City way beyond anything acquired in permits.
- Will injure property and lives on the street.

if "... the dwelling will be a contemporary design which will blend in with the rest of the neighborhood. The side yard setback will be 9 feet on each side ... The building shall also be equipped with fire sprinklers through the house ... It will also provide a space for on coming vehicles to pull over to let them pass by. "

The proposed structure is to be built with one-story above street level. Properties located both west and east are two stories above street level. Given the surrounding topography, staff could not determine the existing height of surrounding structures along the downslope.

Given the configuration of the proposed structure, during a vehicle ingress/egress a vehicle should have a clear line-of-sight to both vehicles and pedestrians. The property is proposed to be positioned (northerly) along a downslope. Therefore, the site will not cast a shadow onto the southerly properties on an up slope. As far as the northerly downslope, the dwelling sits far enough from the property line as to not cast a shadow on abutting (northerly) properties. Light, and air will not be obstructed. Both the east and west properties on the northerly side of Grand View Drive seems to be built in a similar manner.

The applicant submitted signatures of property owners directly across Grand View Drive (up slope) and the signature for the west abutting property (vacant land).

During field investigation staff was approached by an abutting property homeowner who expressed concerns about large equipment on a 14-foot wide road, road availability for daily use, and excavating "on a steep unstable slope". Though distance toward the east may be considerable, staff found residents may utilize each exit/entry at the end of the road. With the narrow width of the road, the only turnaround are driveways. Upon completion of field investigation, for five minutes staff s car was entirely blocked from exiting Grand View Drive. A van illegally parked blocking more than half of the road. Additional cars pulled behind the City's car. There was no room to either go around the parked vehicle or reverse. (Topography--up slope on the south side of the road, steep downslope on the north). The van had to move, going in excess of more than 10 lots east before vehicles passed.

The Building and Safety referral document within the case file shows "Need "B" permit to widen street to 20 feet. Dedication required: 5.5 feet, improvement required: "B" permit street and curb, and gutter. The roadway does not contain encroachments prohibiting the passage of emergency vehicles."

**FINDINGS - SECTION 12.24-X.11 (Height, Yards, Coverage, Parking)**

1. **The request is in conformity with the public necessity, convenience, general welfare and good zoning practice and will be in substantial conformance with the various elements and objectives of the General Plan.**

   The Zoning Administrator Authority granted will be in conformity with the public necessity convenience, general welfare and good zoning practice.

   The involved site is located in an area of steep downslope. For this reason, room for expansion or construction is extremely limited. In order to stay within a reasonable building envelope with a minimum amount of destruction to the slope the requested zoning entitlements are required.

Now that you are all familiar with my home being down the hill from Mr. Smith property you might understand the DANGER and difficult situation that Mr. Smith is putting my family in ONCE AGAIN. My children are out of school for summer vacation and I find myself having to stay out of my home in the heat of the summer due to Mr. Smith unsafe conduct of building a house on his 8401 Grandview property. Not only for the street closure time which he is constantly violating. I come back home at 3pm because that is the time his street closure to use this heavy machinery ends, only to find out that he is still working from the street with heavy machinery digging, piling dirt way above his temporary retaining wall until 4:30pm. When I ask Mr. Smith for explanation, his contractor lies to me that the digger got stuck and they are waiting for a mechanic but once the dump-truck comes the digger miraculously self fixed and continues to work. How can I work things out with these people?

I can't stay in my back yard or open my doors and windows because stones and pieces of asphalt will be rolling down from the road deterioration. The wire fences that Mr. Smith put up "for protection" will not protect my family and my house since he is storing metal pieces and debris not even on his property but in-between his property and 8383 Grandview. I do have experience of stones rolling down from Mr. Smith's area down to my property, hitting my house and my deck where minutes before my children were playing basketball with their playdate. How would you feel if that child who was there was yours? I don't want to be writing you all in a few days that something terrible happened due to this negligence PLEASE prevent it NOW!!!!!!!!!!!!!!!
This is only the small things which can roll down. keep on reading....



How about one or two of these Reebar rolling down the hill?  The reebars are stored behind Mr. Smith's temporary "retaining wall"?  To be more precise, they are piled OVER the "temporary retaining wall"  those reebars are so massive that the ones against the wall are creating pressure against it wall.  Only a few days ago on June 21, Mr. Smith told Officer Lichtenstein from Parking Enforcement that they have to continue to clear the dirt from behind the wall beyond their permit hours because "the soil creates unsafe pressure on the wall since it was piled high."  When it's convenient  the wall is very safe for the heavy weight of the reebars.  To make the whole situation worse,  Mr. Smith who is unconcerned with any safety, replaced a metal plate with a wood plate in the temporary retaining wall.....
I am not an engineer but it just does not make any sense.



what is holding that woodplate?  Is it a 2"x4" board or a 2"x6" board? You can see it clearly in this picture...NOT MUCH.



I feel threatened and unsafe. I live in constant FEAR. I no longer trust Mr. Smith. He lies, he ignores basic safety rules. I feel you need to put a stop work order on Mr. Smith's activities at 8401 Grandview. A safety concious contractor who understands of the rules, regulations and follows them needs to take it over.

I can't be roaming the streets of LA with my two children because of Mr. Smith and his project I don't feel even safe to sleep at home or spend the day there. I am leaving my home until Wednesday morning since it is not a safe place for me to be but I am eagerly awaiting your answers. If you need to contact me, please call me on my cell 213 248-0452.

Thank you for taking the time to read this email and do something about it.

Hanna Melzer
8440 Yucca Trail
LA CA 90046

# Exhibit J

*Información en Espa`ol acerca de esta junta puede ser obtenida llamando al (213) 978-1300*

# COMMISSION MEETING AUDIO

**CENTRAL AREA PLANNING COMMISSION**
**REGULAR MEETING**
**TUESDAY, SEPTEMBER 8, 2015, 4:30 P.M.**
**CITY HALL, 10th FLOOR**
**200 NORTH SPRING STREET**
**LOS ANGELES, CA 90012**

**CLICK ON THE LINKS BELOW TO LISTEN TO AUDIO FROM THE MEETING**

***TO REQUEST A COPY ON COMPACT DISC,***
***PLEASE CONTACT THE DEPARTMENT OF CITY PLANNING PUBLICATIONS AT (213) 978-1255***

1. **TRACK #1**

   DEPARTMENTAL REPORT

2. **TRACK #2**

   COMMISSION BUSINESS

   **(NOTE: Item #3 & #4 were heard together-same track)**

3. **TRACK #3**

   CASE: **ZA-2013-2084-ZAD-1A**
   LOCATION: **2170-2172 STANLEY HILLS DRIVE**

4. **TRACK #3**

   CASE: **ZA-2013-2087-ZAD-1A**
   LOCATION: **2166 STANLEY HILLS DRIVE**

5. **TRACK #4**

   CASE: **ZA-2014-1621-ZAD-ZAA-1A**
   LOCATION: **2104 NORTH STANLEY HILLS DRIVE**

6. **TRACK #5**

   CASE: **DIR-2015-1365-SPR-CDO-1A**
   LOCATION: **928-1026 SOUTH BROADWAY**

*Informacion en Español acerca de esta junta puede ser obtenida llamando al (213) 978-1300*

# COMMISSION MEETING AUDIO

**CENTRAL AREA PLANNING COMMISSION**
**REGULAR MEETING**
**TUESDAY, FEBRUARY 24, 2015, 4:30 P.M.**
**CITY HALL, 10th FLOOR**
**200 NORTH SPRING STREET**
**LOS ANGELES, CA 90012**

**CLICK ON THE BLUE LINKS BELOW TO LISTEN TO AUDIO FROM THE MEETING**

***TO REQUEST A COPY OF A PORTION OR THE ENTIRE MEETING ON COMPACT DISC, PLEASE CONTACT THE DEPARTMENT OF CITY PLANNING PUBLICATIONS AT (213) 978-1255***

POLICY FOR DESIGNATED PUBLIC HEARING ITEM(S): 3 and 4.
Pursuant to the Commission's general operating procedures, the Commission at times must necessarily limit the speaking times of those presenting testimony on either side of an issue that is designated as a public hearing item. All requests to address the Commission on public hearing items must be submitted prior to the Commission's consideration on the item. TIME SEGMENTS noted herein are approximate. Some items may be delayed due to length of discussion of previous items.

**To ensure that the Commission has ample opportunity to review written materials, members of the public who wish to submit written materials on agenda items should submit them to the Commission office, 200 North Spring Street, Room 272, Los Angeles, CA 900152, at least 10 days prior to the meeting at which the item is to be heard in order to meet the mailing deadline.** ***Note: Materials received after the mailing deadline will be placed in the official case file.***

**Day of hearing submissions (10 copies must be provided) are limited to 2 pages plus accompanying photographs, posters, and PowerPoint presentations of 5 minutes or less.**

The Commission may RECONSIDER and alter its action taken on items listed herein at any time during this meeting or during the next regular meeting, in accordance with the Commission Policies and Procedures and provided that the Commission retains jurisdiction over the case.

AGENDAS are posted for public review in the Main Street lobby of City Hall East, 200 N. Main Street, Los Angeles, California, and are accessible through the internet World Wide Web at **http://www.planning.lacity.org**.

**In the case of a Commission meeting cancellation, all items shall be continued to the next regular meeting date or beyond, as long as the continuance is within the legal time limits of the case or cases.**

If you challenge these agenda items in court, you may be limited to raising only those issues you or someone else raised at this public hearing, or in written correspondence on these matters delivered to this agency at or prior to the public hearing.

If you seek judicial review of any decision of the City pursuant to California Code of Civil Procedure Section 1094.5, the petition for writ of mandate pursuant to that section must be filed no later than the 90th day following the date on which the City's decision became final pursuant to California Code of Civil Procedure section 1094.6. There may be other time limits which also affect your ability to seek judicial review.

**GLOSSARY OF ENVIRONMENTAL TERMS:**
CEQA – California Environmental Quality Act
CE – Categorical Exemption
EIR – Environmental Impact Report
MND – Mitigated Negative Declaration
ND – Negative Declaration

**1. DIRECTOR'S REPORT**

A. Items of interest.

**2. COMMISSION BUSINESS**

A. Advanced Calendar

B. Commission Requests

C. Minutes of Meeting – February 10, 2015

**3. ZA-2013-2084-ZAD-1A PART2 PART3**

**CEQA:** ENV-2013-2085-MND-REC1

**Plan:** Hollywood
**Council District:** 4 - LaBonge
**Expiration Date:** 3/12/15
**Appeal Status:** Not further appealable

**PUBLIC HEARING**

**LOCATION: 2170-2172 Stanley Hills Drive**

**REQUESTED ACTION:**
An appeal of the Zoning Administrator's decision to approve a Zoning Administrator's Determination pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit a remodeling of and an addition to two existing single-family dwellings on a lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code, and the Zoning Administrator's decision to adopt the recommendation of the Lead Agency by adopting Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**APPLICANT:** Ryan Noto
Representative: David Johnson

**APPELLANTS:** Matthew Friedman, Stanley Hills Drive Community of Neighbors, and 51 additional appellants (see attached list)

**RECOMMENDED ACTION:**
1. **Deny** the appeal.
2. **Sustain** the Zoning Administrator's decision and approve:
   a. a Zoning Administrator's Determination, pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit a remodeling of and an addition to two existing single-family dwellings on a lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway

apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code.

3. **Adopt** the Findings of the Zoning Administrator.
4. **Adopt** Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**Staff:** Sue Chang (213) 978-3304

**4.** **ZA-2013-2087-ZAD-1A** **(Heard w/ Item #3)**

**CEQA:** ENV-2013-2085-MND-REC1

**Plan:** Hollywood
**Council District:** 4 - LaBonge
**Expiration Date:** 3/12/15
**Appeal Status:** Not further appealable

**PUBLIC HEARING**

**LOCATION: 2166 Stanley Hills Drive**

**REQUESTED ACTION:**

An appeal of the Zoning Administrator's decision to approve a Zoning Administrator's Determination pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit the construction, use and maintenance of a new single-family dwelling on a hillside lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code, and the Zoning Administrator's decision to adopt the recommendation of the Lead Agency by adopting Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**APPLICANT:** Ryan Noto
Representative: David Johnson

**APPELLANTS:** Ronald K. Charles, Stanley Hills Drive Community of Neighbors, and 51 additional appellants (see attached list)

**RECOMMENDED ACTION:**

1. **Deny** the appeal.
2. **Sustain** the Zoning Administrator's decision and approve:
   a. a Zoning Administrator's Determination, pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit the construction, use and maintenance of a new single-family dwelling on a hillside lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code
3. **Adopt** the Findings of the Zoning Administrator.
4. **Adopt** Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**Staff:** Sue Chang (213) 978-3304

## 5. PUBLIC COMMENT PERIOD

The Area Planning Commission shall provide an opportunity in open meetings for the public to address it, on items of interest to the public that are within the subject matter jurisdiction of the Area Planning Commission. (This requirement is in addition to any other hearing required or imposed by law.) Persons making requests are encouraged to do so in writing and should submit 10 copies to the Area Planning Commission for its consideration.

**Persons wishing to speak must submit a speaker's request form *prior* to the commencement of the public comment period.**

Individual testimony within the public comment period shall be limited to five (5) minutes per person and up to ten (10) minutes per subject.

The next regular meeting of the Central, Area Planning Commission
will be held at **4:30 p.m.** on **Tuesday, March 10, 2015** at

City Hall
200 North Spring Street, 10th Floor
Los Angeles, California 90012

An Equal Employment Opportunity/Affirmative Action employer

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate. The meeting facility and its parking are wheelchair accessible. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or other services may be provided upon request. To ensure availability of services, please make your request no later than three working days (72 hours) prior to the meeting by calling the Commission Executive Assistant at (213) 978-1300 or by e-mail at APCCentral@lacity.org.

Connect Create Collaborate

Jason Hernandez <jason.hernandez@lacity.org>

# 1800, 1806, 1812, & 1818 Crisler Way, ENV-2015-4131-MND

**Garrett Weinstein** <garrett.weinstein@mrca.ca.gov> Wed, May 23, 2018 at 10:33 PM
To: Jason Hernandez <jason.hernandez@lacity.org>

Dear Mr. Hernández,

Please accept the attached letter and two accompanying figures regarding the proposed projects at 1800, 1806, 1812, and 1818 Crisler Way (ENV-2015-4131-MND). Please include in the project file and make available to all decision makers for the four projects.

Thank you,

Garrett Weinstein

Mountains Recreation & Conservation Authority

*A local public agency exercising joint powers of the Santa Monica Mountains Conservancy and the Conejo and Rancho Simi Recreation & Park Districts*

5810 Ramirez Canyon Rd.

Malibu, CA 90265

310-589-3230 x124

garrett.weinstein@mrca.ca.gov

**3 attachments**

**MRCA-1800-1818CrislerWy_ltr_5-23-18.pdf**
2933K

**MRCA_ CrislerWyProjects_rua_ENV-2015-4131-MND_5-23-18.pdf**
878K

**aerial ENV-2015-4131-MND 1800-1818 crisler way.pdf**
4324K

**MOUNTAINS RECREATION & CONSERVATION AUTHORITY**
Ramirez Canyon Park
5810 Ramirez Canyon Road
Malibu, California 90265
Phone (310) 589-3230 Fax (310) 589-3237

May 23, 2018

Mr. Jason Hernández
Department of City Planning
City of Los Angeles
200 North Spring Street, Room 621
Los Angeles, California 90012

**ENV-2015-4131-MND, ZA-2015-4125-ZAD, 1800 Crisler Way**
**ZA-2015-4130-ZAD, 1806 Crisler Way**
**ZA-2015-4146-ZAD, 1812 Crisler Way**
**ZA-2015-4149-ZAD, 1818 Crisler Way**

Dear Mr. Hernández:

The staff of the Mountains Recreation and Conservation Authority (MRCA) offers the following comments and recommendations on the four above-referenced subject proposed projects, and their associated subject Mitigated Negative Declaration and Initial Study (MND). The subject MND is deficient under the California Environmental Quality Act (CEQA) for failing to address multiple potentially significant impacts to wildlife movement that would result from the proposed projects.

The subject property lies within Habitat Block No. 57 on the Santa Monica Mountains Conservancy's "Eastern Santa Monica Mountains Habitat Linkage Planning Map". This habitat block, which is comprised of both public and private ownerships, is the southernmost area of undeveloped land able to facilitate east-west wildlife movement between lower Laurel Canyon (to the east) and similar habitat blocks to the west. Wildlife movement throughout these habitat blocks is becoming increasingly restricted due to development and associated impacts. One purpose of the afore-mentioned Habitat Linkage Planning Map is to provide decision makers with a visual representation of the undeveloped open space in the vicinity of specific projects remaining available to facilitate wildlife movement in the eastern Santa Monica Mountains.

The four subject proposed projects require the improvement of the paper-street Crisler Way southward from Grand View Drive, but the MND does not address the potential growth-inducing impacts of this street extension. The current northern terminus of the improved portion of Crisler Way is located within less than 600 feet of 1800 Crisler Way (Assessor Parcel No. (APN) 5556-022-004), the southernmost lot proposed for development. Further development along the paper street Crisler Way would potentially choke off the last remaining habitat linkage between Habitat Blocks 57 and 58, permanently obstructing wildlife movement and resulting in undeniable significant adverse biological impacts.

The MRCA regularly accepts dedications of conservation easements and deed restrictions via covenant, and our staff is available to assist with the drafting and recording of the required documents in either case.

MRCA staff supports the comments made in the May 21, 2018 letter from Jamie T. Hall with respect to the subject MND's deficiencies in the inadequately described environmental setting, the inadequately addressed issues of access from Grand View Drive, and the inadequately addressed growth inducing impacts of the subject proposed projects.

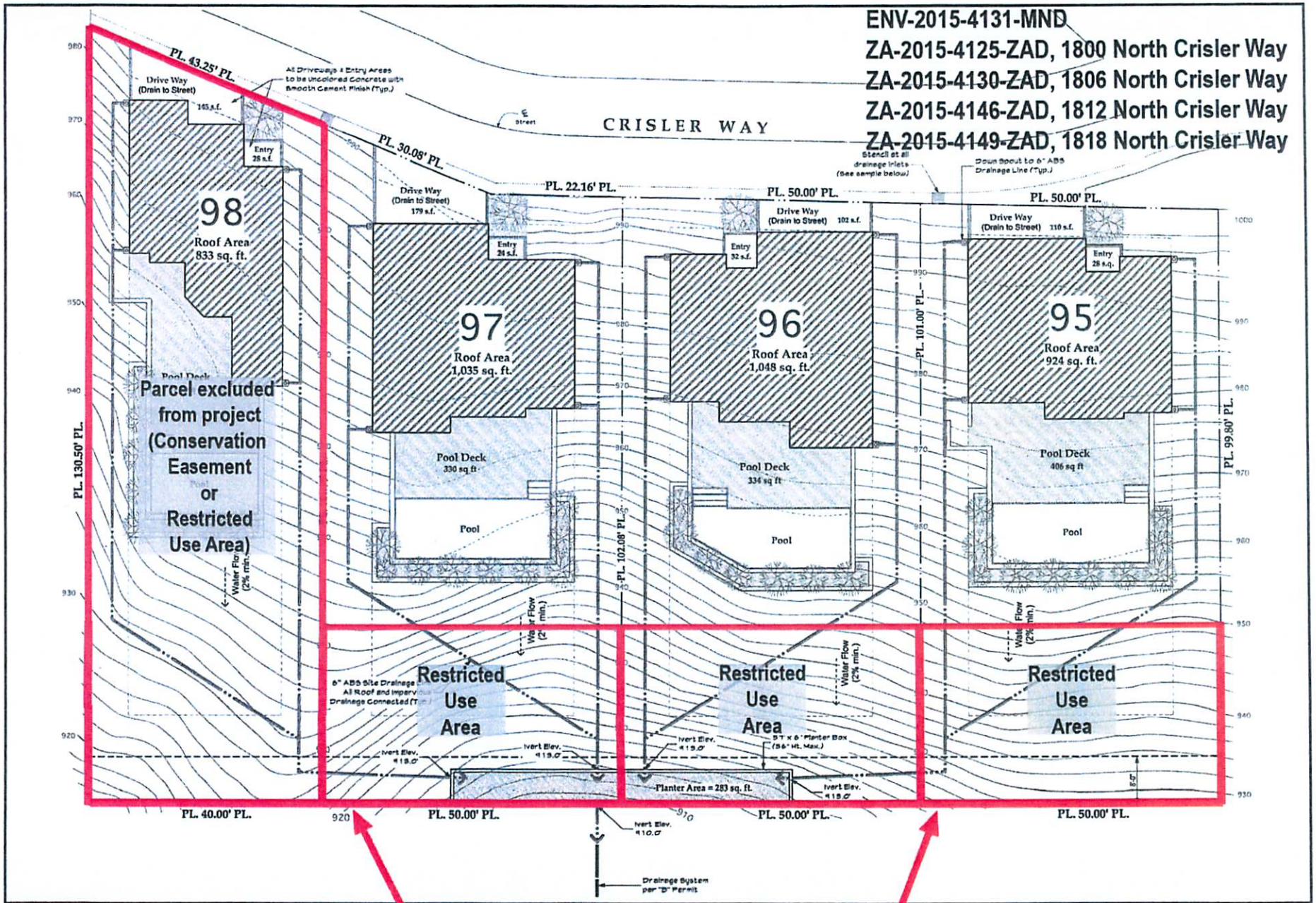
If you have any questions or clarifications, please contact me at 310-589-3230, ext. 124, or by e-mail at garrett.weinstein@mrca.ca.gov. Alternately, Paul Edelman, Chief of Natural Resources and Planning, may be contacted at 310-589-3200, ext. 128, or edelman@smmc.ca.gov. The applicant should feel encouraged to contact our agency. Thank you for your time and consideration.

Sincerely,

Garrett Weinstein
Project Analyst

Attachments: A – Diagram of Site Specific Recommendations, May 23, 2018
B – Aerial Map of Subject Properties and Surrounding Habitat

ENV-2015-4131-MND
ZA-2015-4125-ZAD, 1800 North Crisler Way
ZA-2015-4130-ZAD, 1806 North Crisler Way
ZA-2015-4146-ZAD, 1812 North Crisler Way
ZA-2015-4149-ZAD, 1818 North Crisler Way



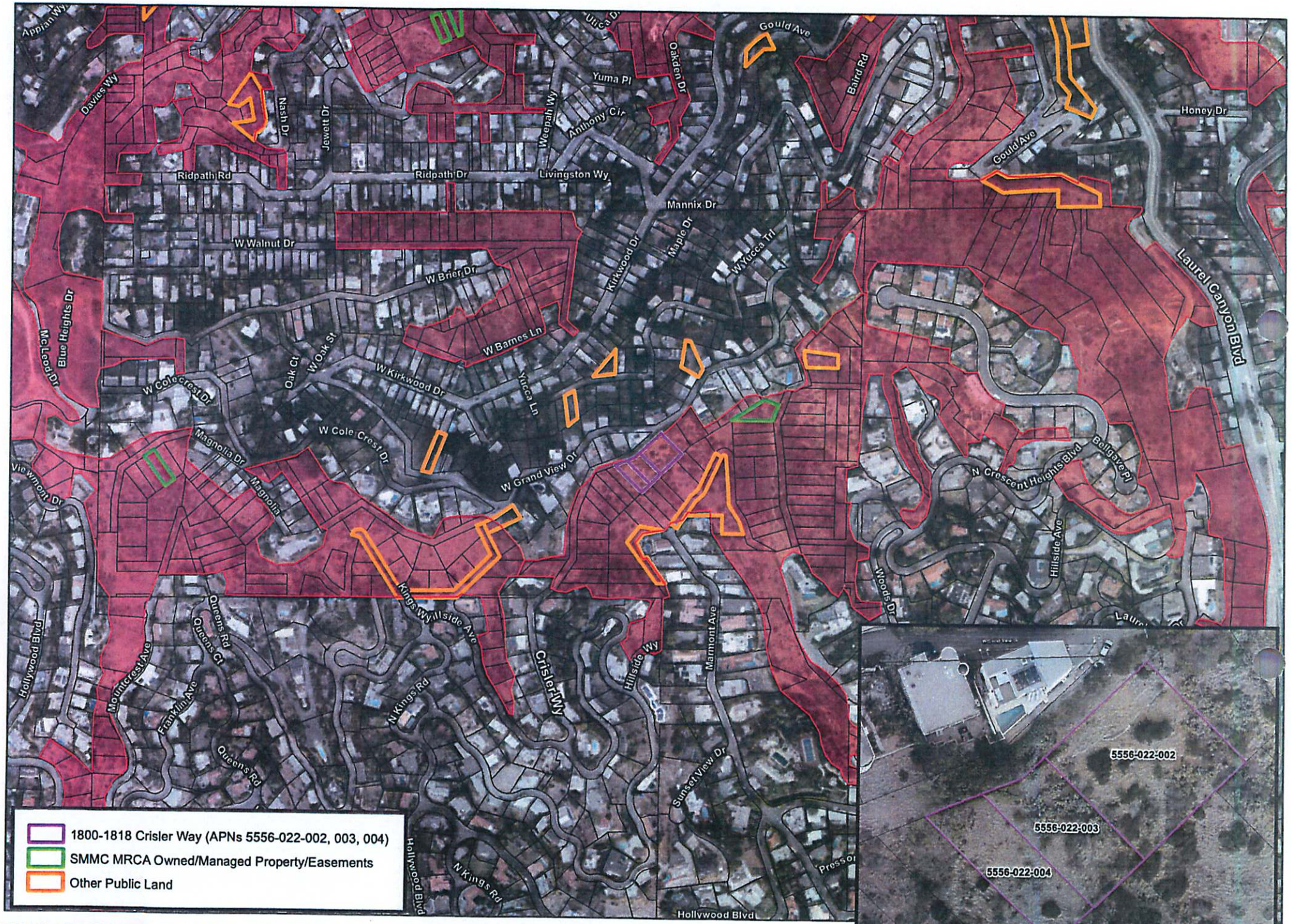

Source: Robert Anderson Architect, StormWater Drainage Plan, Map A 1.1, March 2015.

Approximate boundaries of recommended Deed Restrictions via Covenants for wildlife movement purposes. See letter from Mountains Recreation and Conservation Authority staff dated May 23, 2018.



## Proposed Site Plan

FIGURE 3




**ENV-2015-4131-MND, ZA-2015-4125-ZAD, ZA-2015-4130-ZAD, ZA-2015-4146-ZAD, ZA-2015-4149-ZAD**

MOUNTAINS RECREATION & CONSERVATION AUTHORITY

Feet
0 150 300

# Envicom Response to Comments Letter dated June 19, 2018

APPENDIX N

June 19, 2018

City of Los Angeles
Department of City Planning
200 North Spring Street
Los Angeles, CA 90012

**VIA ELECTRONIC MAIL**
Attn: Mr. Jack Chiang, Associate Zoning Administrator (jack.chiang@lacity.org)
cc: Ms. Darlene Navarrete, Senior Administrative Clerk (darlene.navarrete@lacity.org)
cc: Ms. Mindy Nguyen, Central Project Planning Division (mindy.nguyen@lacity.org)
cc: Mr. Jason Hernandez, Planning Assistant (jason.hernandez@lacity.org)

Subj: **1800, 1806, 1812, and 1818 Crisler Way Residences Project (Case No: ENV-2015-4131-MND ZA Case Nos: ZA-2015-4125-ZAD, ZA-2015-4130-ZAD, ZA-2015-4146-ZAD, and ZA-2015-4149-ZAD)**

Dear. Mr. Chiang,

Envicom Corporation compiled the following **Responses to Comment Letters** received based on technical input from the following project team members, and consultants:

- Architect – Robert Anderson of CAC Development
- Construction Manager – Rigo's Construction Inc.
- Attorney – Ed Casey of Alston and Bird LLP
- Owner's Representative – Erika Iverson of Rosenheim and Associates
- Biologist – Mr. Tyler Barns of Envicom Corporation
- Noise Consultant – Mr. Hans Giroux of Giroux and Associates
- Geotechnical Consultant – C.Y. Geotech Inc.

This letter provides responses to comments in the order they were received by the Lead Agency, the City of Los Angeles (City).

**COMMENT LETTER 1 - JMBM DATED MAY 11, 2018**

Comment 1-1

The commenter expresses client's concern over steepness of slopes on project site, referencing project Slope Band Analysis (SBA) that shows over 80% of each individual lot has a slope of 60% or more. For ease of reference, the SBA for each lot is provided in **Exhibit A**. Under topic VI. Geology and Soils, the MND cites the City Department of Building and Safety (DBS) approval letter that states, "the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope." A response letter prepared by C.Y. Geotech dated June 8,

2018, included in **Exhibit B**, indicated the static and seismic gross slope stability of the southeast-facing slope were updated by Geomatrix in the Geomatrix report dated September 10, 2012 due to the updated requirement for the use of seismic coefficient in the seismic slope stability analysis. This analysis indicated a factor of safety of 1.814 for static slope stability and a factor of safety of 1.260 for seismic slope stability. The factor for static slope stability of 1.814 is greater than the minimum code requirement of 1.5 and the factor for slope stability of 1.260 is greater than the code requirement of 1.0. Therefore, the slope stability analysis showed the project would exceed the code required minimums.

Proposed residences are designed to step up in elevation with the existing contour of the grade such that the windows of the proposed residences would not directly face windows on existing residences at the base of the slope or interfere with privacy or quality of life for adjacent residences at lower elevations. The MND addresses health and safety hazards under topic VII, Hazards and Hazardous Materials, which includes the installation of a temporary debris fence to catch soil and debris that might slip down the slope as a safety feature for existing residences at the bottom of the slope.

Comment 1-2

The Applicant filed complete entitlement applications for the proposed Project(s) on November, 12, 2015 and is subject to the Hillside Ordinance regulations in effect at that time (Ordinance 181,624 and 182,110). Pursuant to Section 41 of Ordinance 184,802, Projects requiring a discretionary entitlement from the Department of City Planning shall be not be subject to the provisions of this ordinance so long as an application for the complete entitlement is filed and a fee paid prior to the date on which this ordinance becomes effective. Any such project shall be subject to the regulations that were in effect on the date on which the application was filed.

Comment 1-3

The Residential Floor Area Calculations and the Building Heights for the proposed Project(s) are correctly based on LAMC regulations (Ordinance 181,624 and 182,110) in effect at the time the complete entitlement applications were filed and fees paid. The Slope Band Analysis Prepared for each lot is correctly based on Table 12.21 C.10-2a established by Ordinance 181,624:

**Table 12.21 C.10-2a**
**Single-Family Zone Hillside Area Residential Floor Area Ratios (FAR)**

| Slope Bands (%) | R1 | RS | RE9 | RE11 | RE15 | RE20 | RE40 | RA |
|---|---|---|---|---|---|---|---|---|
| 0 – 14.99 | 0.5 | 0.45 | 0.40 | 0.40 | 0.35 | 0.35 | 0.35 | 0.25 |
| 15 – 29.99 | 0.45 | 0.40 | 0.35 | 0.35 | 0.30 | 0.30 | 0.30 | 0.20 |
| 30 – 44.99 | 0.40 | 0.35 | 0.30 | 0.30 | 0.25 | 0.25 | 0.25 | 0.15 |
| 45 – 59.99 | 0.35 | 0.30 | 0.25 | 0.25 | 0.20 | 0.20 | 0.20 | 0.10 |
| 60 – 99.99 | 0.30 | 0.25 | 0.20 | 0.20 | 0.15 | 0.15 | 0.15 | 0.05 |
| 100 + | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Pursuant to LAMC Section 12.21.C.10(b)(2) under Ordinance 181,624, the Guaranteed Minimum Residential Floor Area for all buildings on a R1 Zoned lot may be at least the 25% of the Lot size of 1,000 SF whichever is greater.

Pursuant to 12.21.C.10(b)(3) under Ordinance 181,624 an additional 20% of the maximum residential floor area as determined by the slope band analysis or 30% for Lots utilizing the guaranteed minimum floor area is permitted if certain design options are utilized as specified in 12.21.C.10(b)(3)(i-vii).

The chimney height restrictions in effect at the time the applications were filed allowed for a 5'-0" maximum above the building envelope.

Lot 98 proposes a 1,221 SF single-family Home where the SBA indicates 1,363 SF is permitted. As indicated on Sheet A-4 of the project Architectural Plans in the project case file maintained by the City of Los Angeles Department of City Planning (DCP), Department of Building and Safety (DBS), or Department of Public Works (DPW), the chimney for the house on Lot 98 does not exceed the 33 FT Building Envelope line. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.

Lot 97 proposes a 1,581 SF single-family Home where the Guaranteed Minimum Residential Floor Area permits 1,319 SF and 1,583 SF with a 20% Bonus. The Applicant utilized a 20% floor area bonus and implemented the Cumulative Side Yard Setback option outlined in LAMC Section 12.21.C.10(b)(3)(iii). The max height of the chimney is 3'-6" above the building envelope. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.

Lot 96 proposes a 1,520 SF single-family Home where the Guaranteed Minimum Residential Floor Area permits 1,269 SF and 1,522 SF with a 20% Bonus. The Applicant utilized a 20% floor area bonus and implemented the Cumulative Side Yard Setback option outlined in LAMC Section 12.21.C.10(b)(3)(iii). The max height of the chimney is 2'-6" above the building envelope. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.

Lot 95 proposes a 1,501 SF single-family Home where the SBA indicates 1,515 SF is permitted. The max height of the chimney is 5'-0" above the building envelope. As a result, as shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with the regulations in effect at the time the application was filed.

LAMC Section 12.21.C.10(d)(1)(i)(7) explicitly permits roof structures above the specified height limit as specified in Table 12.21 C.10-5. Chimneys, exhaust ducts/ventilation shafts are permitted to project no more than 5 feet above the height limit.

The Applicant has sought retaining wall permits for each of the four lots. Each lot will have a total of two retaining walls as permitted by LAMC Section 12.21.C.8. The walls will not exceed 10 FT and are a minimum of 3 feet apart. Retaining walls associated with the construction of the Crisler Way right-of-way are part of the roadway improvement plans and are separate from the retaining walls necessary for the construction of the single-family homes.

Comment 1-4

Pursuant to Section 41 of Ordinance 184,802, projects requiring a discretionary entitlement from the Department of City Planning shall be not be subject to the provisions of this ordinance so long as an application for the complete entitlement is filed and a fee paid prior to the date on which this ordinance becomes effective. Any such project shall be subject to the regulations that were in effect on the date on which the application was filed. Further, the building permits were *not* subject to a Notice to Stop Construction and Notice of Intent to Revoke due to the design of the buildings; the building permits were subject to a Notice to Stop Construction and Notice of Intent to Revoke because the buildings would front substandard hillside street that was not improved as otherwise required by LAMC Section 12.21C10(i)(2) and (3).

Comment 1-5

The LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the permits not because the houses failed to conform with LAMC requirements, but because the houses were fronting a substandard hillside street that was not improved as otherwise required by LAMC Section 12.21C10(i)(2) and (3). As indicated in response to comment 1-4, pursuant to Section 41 of Ordinance 184,802, Projects requiring a discretionary entitlement from the Department of City Planning shall be not be subject to the provisions of this ordinance so long as an application for the complete entitlement is filed and a fee paid prior to the date on which this ordinance becomes effective. Any such project shall be subject to the regulations that were in effect on the date on which the application was filed.

**COMMENT LETTER 2 – CHANNEL LAW GROUP, LLP DATED MAY 21, 2018**

Comment 2-1

Commenter states the four homes, extension of Crisler Way, and required infrastructure improvements are connected actions that must be addressed in the same environmental document. The proposed Crisler Way extension and infrastructure improvements, including the sewer line, are all considered in the Project Description and Impact Analysis in the MND, allowing the City as Lead Agency to consider the "whole of an action" consistent with CEQA Guidelines Section 15003(h). The MND describes impacts related to the extension of utilities under topic XVIII., Utilities and Service Systems

Comment 2-2

Commenter states the comment letter provides a fair argument, supported by substantial evidence, the project may result in significant adverse impacts. As shown under each of the environmental topic areas in the MND, the impacts of the project can be reduced to less than significant through design features, compliance with regulatory requirements, and mitigation measures provided in the MND. Since all impacts can be reduced to less than significant, the project does not require an EIR.

Comment 2-3

CEQA Guidelines Section 15063(d)(2) state an Initial Study shall contain in brief form, "An identification of the environmental setting." Consistent with the referenced section, the MND adequately describes the existing conditions of the environmental setting to allow for an evaluation of project impacts on the environment. Topic VI. Geology and Soils, addresses steep slopes and Subsection 3.4, Surrounding Land Uses, of the Project Description characterizes surrounding land uses consisting of "vacant residential lots and existing single–family residences along winding hillside roads." Figure 1, Regional Map, Figure 2, Project Location Map, and the accompanying text describe the environmental setting. The existing steep topography in the Hollywood Hills is not an unusual circumstance, particularly in the context of existing, previously permitted houses on developed hillside lots surrounding the project site.

The Project Description in the MND states the proposed project "includes a 185-linear foot long by 20-foot wide extension of Crisler Way that would join Grand View Drive." This description and Figure 2, Project Location Map, depict the existing condition of Crisler Way as an unimproved road to be extended from Grand View Drive to serve the residences proposed by the project. Therefore, the MND adequately describes the existing environmental setting of the proposed project.

Comment 2-4

Subsection 3.5 of the Project Description and Figure 2, Project Location Map, describe existing conditions along the proposed extension of Crisler Way, referencing "the existing terminus of Crisler Way and Marmot Avenue to the south." Therefore, the project description which accurately describes the proposed "185-linear foot extension of Crisler Way" that would join Grand View Drive to serve the four lots for proposed development. No further extension of Crisler Way is contemplated by the proposed project.

Comment 2-5

Under topic VI. Geology and Soils, the MND describes the steep condition of the existing slopes on the hillside, providing an average slope gradient and the soil types along the proposed extension of Crisler Way. Section 3.0, Project Description, identifies the regional and local location of the project site, identifies the hillside setting of the development, and provides project location maps to give the reader a visual depiction of the existing topography and project location

in relation to major known features in area such as Laurel Canyon and Sunset Boulevards. As relevant for the impact analysis, the environmental topic areas characterize existing geography and topography of the site and surroundings. For example, section IV. Biological Resources, states "The Project site occurs on a hill with steep slopes immediately surrounded by residential development on the north, east, and west." These figures and descriptions provide sufficient slope information to give the general reader a sense of the geography and topography of the area. Appendix D of the MND provides the LADBS Geology and Soils Report approval letter with a list of the Geology and Soils Reports prepared for the project in the project case file maintained by the DCP, DBS, or DPW.

Comment 2-6

Environmental Topic XVIII., Utilities and Service Systems, addresses the proposed extension of sewer lines to serve the project and connection to existing sewer lines under the Marmont Avenue right of way to serve the proposed residences. The project does not propose improvements to Marmont Avenue so a detailed description of conditions in this offsite area not warranted and outside the scope of the proposed project. The disclosure of the proposed sewer infrastructure references Stormwater Drainage Plan Sheet Number A-1.1, dated 3-12-2015, prepared by architect Robert Anderson, which is a publicly-available document with a Vicinity Map that shows the location of Lot 118 in relation to the project site and the proposed sewer/storm drain easement on Lot 118 recorded on February 11, 2015 (#20150151325).

Comment 2-7

The environmental document explains roadway widths and associated safety issues related to Grand View Drive. Under topic XVI., Transportation and Traffic, the MND provides roadway width information stating, "The segment of Grand View Drive between Kirkwood Drive and the project site is narrow, some areas as narrow as 10 feet," and addresses roadway safety issues. For example, the MND states that this width requires "vehicles traveling in opposite directions to pass at widened areas or for vehicles traveling in one direction to back up short distances to allow for vehicles traveling in the other direction to pass," which provides the reader with a full understanding of existing roadway safety issues.

Comment 2-8

The MND provides mitigation measure TRA-5 which requires the applicant to address roadway deterioration due to project construction by periodically inspecting and, reasonably maintaining, the roadway along the construction access route. Upon completion of construction, mitigation measure TRA-5 requires the applicant repair potential physical damage to the roadways along the construction access route caused by project-related construction traffic. Furthermore, as project construction traffic would rely on Access Route B for access to and from the project site, construction traffic would not impact the wood retaining wall associated with 8301 Grand View Drive along the western margin of Grand View Drive, which is over 400 feet east of the project site.

Comment 2-9

The MND addresses potential infrastructure failures related to project construction by including mitigation measure TRA-5 requiring the applicant repair potential physical damage to the roadways along the construction access route caused by project-related construction traffic.

Comment 2-10

Grand View is are not subject to a truck weight restriction of 6,000 pounds The LADOT Hollywood-Wilshire District Office that serves the project area confirmed there are no posted weight restriction signs on Grand View Drive.[1] Therefore, Grand View Drive is an unrestricted street. Even if there were weight restriction signs, LAMC Section 80.36.0(c)4 expressly provides an exception for "Commercial vehicles coming from an unrestricted street having ingress or egress by direct route to and from such restricted streets when necessary for the purpose of making pickups or deliveries of goods…for the purpose of delivering materials to be used in the actual and bona fide…construction of any building or structure upon such restricted street for which a building permit has previously been obtained."

Comment 2-11

Under topic XVI. Transportation/Circulation, subsection "d" pertaining to hazards associated with design features (sharp curves), the MND notes project construction traffic would follow Access Route B to avoid narrow roadway widths and sharp curves on local roads. Once the on-site equipment staging area is available, haul trucks could back into the staging area to avoid the sharp right-hand turn onto the extension of Crisler Way. As described in the Construction Management Schedule prepared by Rigo's Construction Inc., provided in **Exhibit C**, construction equipment would be offloaded into the equipment staging area and construction equipment would not need to make a sharp right turn onto the proposed extension of Crisler Way.

Comment 2-12

The MND states the geology and soils impact analysis is based on the LADBS Geology and Soils Report Approval Letter ("LADBS Approval Letter") dated April 10, 2015, which is provided in Appendix D of the MND. The Geology and Soils Reports referenced therein are listed in Table 4.6-1, provided under topic VI. Geology and Soils, in the MND. The geology and soils reports listed in Table 4.6-1 total 15 documents in the MND itself because, as stated in the MND, based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code." In terms of geotechnical studies, under topic VI. Geology and Soils, the MND provided Table 4.6-1 which lists the relevant Project Geology and Soils Reports on which LADBS relied to issue building permits. This list includes

[1] Los Angeles Department of Transportation, Hollywood-Wilshire District Office, telecommunication with Envicom Corporation, June 14, 2018.

each report number, the date the report was prepared, and identifies the preparer of the report, information that would be needed to request each report for review. The LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the previously-issued permits *not* because of geotechnical conditions or slope stability issues, but because the houses were fronting a substandard hillside street that was not improved as otherwise required by LAMC Section 12.21C10(i)(2) and (3). Therefore, the MND analyzed the whole of the action including impacts related to the 185-foot extension of Crisler Way, which page eight of the MND described as a "spur" from Grand View Drive.

As noted in the response letter from C.Y. Geotech, Inc. dated June 8, 2018, provided in Exhibit B, a regional topographic map showing the site and site vicinity, including the top to the toe of the southeast-facing slope and Grand View Drive was enclosed in GeoSystems and Parmelee geology reports referenced in Table 4.6-1 on page 44 of the MND. This includes a geologic cross section showing the entire southeast-facing slope and subsurface earth materials and geologic structure. For convenience, the regional topographic map and geologic cross section showing the entire southeast-facing slope are provided in Appendix B of the report included in Exhibit B.

Comment 2-13

As acknowledged by the commenter, the MND disclosed the project's location in a Very High Fire Hazard Severity Zone (VHFHSZ), an area especially susceptible to wildfire risks. This disclosure acknowledges relevant hazards and satisfies CEQA requirements such that a listing of previous fire incidents is not necessary. In addition, page 60 of the MND discussed the applicable regulatory requirements for projects located in a VHFHSZ, including fuel modification requirements to protect people and structures from significant risk of loss, injury, or death involving wildland fires. Historical conditions which could have exacerbated fire damage in the area, including the burning of the house at 8350 Grand View Drive are past incidents transpiring years prior to the baseline of the proposed project and beyond the scope of the proposed action.

The Architect met several times with the Los Angeles Fire Department (LAFD) during the permit processing for the houses and extension of Crisler Way. As a result of the meetings, the Architect designed the project to address LAFD concerns regarding fire safety by locating all front doors within 150' of the intersection of Crisler and Grandview, designing the length of Crisler Way to be less than 200' so no turn around or hammerhead would be required, and locating a fire hydrant at the intersection of Crisler and Grandview. The LAFD signed the architectural plans on October 28, 2013.

The MND discloses and analyzes wildfire risks, the regulatory compliance measures the project would be required to implement to reduce these risks similar to existing single-family residences in the vicinity, and emergency access limitations. Topic VIII., Hazards and Hazardous Materials, references mitigation measures to minimize interference with emergency response or evacuation plans, by requiring the applicant to prepare Construction Traffic Control Plans – discussed under topic XVI, Transportation/ Circulation, in accordance with standard City requirements. Specifically, to mitigate potential interference with emergency evacuation plans, mitigation measure HAZ-1 requires the applicant to submit a Hillside Construction Staging and Parking Plan

for review and approval by the Board of Building and Safety Commissioners in accordance with standard City requirements. Mitigation measure HAZ-2 requires the preparation of an Emergency Evacuation Plan in consultation with the Fire Department for emergency exits and evacuation routes in accordance with standard City requirements. As concluded in the MND, compliance with these regulatory requirements and implementation of these mitigation measures would reduce impacts related to wildfire risks to less than significant.

Comment 2-14

Commenter states the project file lacked the geotechnical studies, storm water drainage plan, sewer plans, Crisler Way plans, and associated documents. In terms of geotechnical studies, under topic VI. Geology and Soils, the MND provided Table 4.6-1 which lists the relevant Project Geology and Soils Reports on which LADBS relied to issue building permits. This list includes each report number, the date the report was prepared, and identifies the preparer of the report, information that would be needed to request each report for review. In terms of the Storm Water Drainage Plan, the MND relied on the plan prepared by Robert Anderson, Architect, as Sheet Number A-1.1, dated 3-12-2015, of the approved plan set, which as cited in footnote 57 of the MND, and available the project case file maintained by the DCP, DBS, or DPW. This plan is appended hereto in **Exhibit D** for ease of reference. In terms of the sewer plans, the MND relied on the Sewer Plan and Profile prepared by Hovell and Pilarski Engineering, Inc., dated Feb 13, 2015, which was cited in footnote 58 of the MND, included in the list of References in Section 5.0 of the MND, and in the project case file maintained by the DCP, DBS, or DPW. This plan is appended hereto in **Exhibit E** for ease of reference.

In terms of detailed engineering plans and associated documents for Crisler Way, as a public street, the City Department of Public Works, Bureau of Engineering, would review and approve plans at a level of detail suitable for engineering purposes for the extension of Crisler Way in accordance with the applicable City roadway standards in the LAMC and other applicable City codes. The MND depicts the spatial extent of the Crisler Way extension, the dimensions of which are described in the MND to allow for an analysis of the environmental impacts, therefore providing the information necessary for the general reader to understand the project for an Initial Study and MND. As noted in CEQA Guidelines Section 15063(a)(3), "An initial study may rely upon expert opinion supported by facts, technical studies or other substantial evidence to document its findings. However, an initial study is neither intended nor required to include the level of detail included in an Environmental Impact Report (EIR)."

Comment 2-15

CEQA Guidelines Section 15063(D)(1) state an "Initial Study shall contain in brief form: A description of the project including the location of the project" which the MND does. Although CEQA Guidelines Section 15071 list the required contents of a negative declaration, a list identifying the permits and agreements required is not among the required contents listed. For the sake of clarity, the only discretionary approvals needed are a Zoning Administrator Adjustment pursuant to Los Angeles Municipal Code (LAMC) Section 12.24.X28 to permit the construction, use and maintenance of the single-family dwellings which front on a substandard hillside street

that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from a street improved with a 20-foot wide continuous paved roadway to the boundary of the designated Hillside Area, as otherwise required by LAMC Section 12.21C10(i)(2) and (3). .

Comment 2-16

The MND describes the extension of Crisler Way as a 185-linear foot long by 20-foot wide extension of Crisler Way that would join Grand View Drive, depicts the location on a project location map, and describes the nature and type of construction required. Specifically, the MND identifies grading quantities, recommends a construction access route to minimize impacts, details a construction schedule, designates a construction parking and equipment staging area, specifies work hours, identifies equipment types, and provides project-specific mitigation measures, including the preparation of a Construction Management Plan to minimize impacts resulting from the extension of Crisler Way.

Comment 2-17

Through the description of the proposed sewer line provided under topic XVIII, Utilities and Service Systems, the Sewer Plan and Profile cited in footnote 58, and the reference to the existing sewer information on the Bureau of Engineering application Navigate LA provided in footnote 59, the MND discloses the information needed for an evaluation of impacts to the existing sewer system for the purpose of environmental review. As explained in the MND under topic XVIII, Utilities and Service Systems b., "LA Sanitation does not make a determination of sewer capacity until the Los Angeles Department of Building and Safety has established that the proposed Project's plans and specifications are acceptable for plan check. This process ensures that the system can accept the anticipated wastewater flows from the Project at the time of connection, as opposed to prematurely committing to projects that are in the environmental review or entitlement process. At the time of connection, the Bureau of Sanitation will check the gauging of the sewer lines and make the appropriate decisions on how best to connect to the local sewer lines at the time of construction."

The purpose of the environmental analysis under CEQA is to disclose and evaluate impacts at a sufficient level of detail to enable potentially significant effects to be mitigated or avoided by specific revisions to the project or the imposition of mitigation measures. CEQA does not require technical perfection, but rather adequacy, completeness, and a good-faith effort at full disclosure (CEQA Guidelines 15003(i)). As an environmental review document, the MND does not need to specify plans at a level of technical precision such as the exact alignment for routing the sewer lines from each of the houses, which are shown on the Stormwater Drainage Plan Sheet Number A-1.1 referenced in the MND, or the exact depth and length of trenching required for installation and connection to existing facilities. The air quality, noise, and other technical studies address potential impacts associated with construction of the sewer facilities in sufficient detail to reach a conclusion regarding the significance of the impact under CEQA.

Comment 2-18

Details of a proposed project germane to a particular environmental topic, such as the inclusion of a fire hydrant for fire protection, may be disclosed in the analysis of particular impacts rather than the general project description. The air quality, noise, and other technical studies address potential impacts associated with construction of public utilities in sufficient detail to reach a conclusion regarding the significance of the impact under CEQA. Under topic XVIII, Utilities and Service Systems, the MND discloses the project features including a proposed drainage system within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325). The MND states the Project Stormwater Drainage Plan also features a Stormwater Planter to be located along the southern edge of the site to receive and direct stormwater drainage per City Bureau of Engineering (BOE) and LADBS requirements. As an environmental review document, the MND does not need to specify plans at a level of technical precision such as the capacity of existing storm drain facilities which serve existing single-family residences in the vicinity. However, as depicted on the Stormwater Drainage Plan, sheet number A-1.1, prepared by Robert Anderson, dated March 12, 2015, stormwater would enter drainage inlets located immediately south of the roadbed between the houses and flow to the infiltration planter at the lower end of the properties and from there to the storm drains to Marmont.[2] For ease of reference, the Stormwater Drainage Plan is provided in Exhibit D.

Comment 2-19

As noted in the comment letter, the MND states the project area is located in a Hillside Area and subject to the applicable zoning specified in the LAMC, of which the Hillside Development Standards are a part. As noted in response to comment 1-4, pursuant to Section 41 of Ordinance 184,802, Projects requiring a discretionary entitlement from the Department of City Planning shall be not be subject to the provisions of this ordinance so long as an application for the complete entitlement is filed and a fee paid prior to the date on which this ordinance becomes effective. Any such project shall be subject to the regulations that were in effect on the date on which the application was filed.

Comment 2-20

Figure 3, Proposed Site Plan, shows elevations above sea level for the site topography. The full set of project plans, consisting of at least 20 plan sheets, is available in the project case file, which show building elevations. Figure 12 - Exterior Elevation 1800 Crisler Way, Figure 13 - Elevation of 1806 Crisler Way, Figure 14 – Elevation of 1812 Crisler Way, and Figure 15 - Elevation 1818 Crisler Way, provide the elevations of the proposed residences based on architectural plan sheets with the elevation information available in the project case file maintained by DCP on architectural plan sheet numbers A-4 and A-5 for each of the proposed residences which are provided in **Exhibit F** for ease of reference.

[2] Robert Anderson, Email communication with Envicom Corporation, June 16, 2018.

Comment 2-21

As an environmental review document, as opposed to an entitlement application, the MND needs to provide a sufficient level of detail to evaluate the significance of impacts pursuant to CEQA, not the level of technical precision for final plans submitted for engineering purposes prior to permit issuance. Nevertheless, as discussed under topic X., Land Use and Planning, the project is consistent with the City General Plan, Community Plan, and zoning ordinance regulations in effect on the date on which the application was filed. As noted in **Exhibit G** of the comment letter, the BOE approved a permit to authorize the construction of Crisler Way with the retaining walls in the locations approved in permit No. BR402571.

The Applicant has sought retaining wall permits for each of the four lots. Each lot will have a total of two retaining walls as permitted by LAMC Section 12.21.C.8. The walls will not exceed 10 feet and are a minimum of 3 feet apart. Retaining walls associated with the construction of the Crisler Way right-of-way are part of the roadway improvement plans and are separate from the retaining walls necessary for the construction of the single-family homes.

Comment 2-22

As noted on page 9 of the MND, "grading would generate 789 cubic yards of cut, all of which would be used as fill for the improvements to Crisler Way; therefore, the Project would balance grading quantities on the site and result in no soil export because excess cut would be used to build the Crisler Way roadbed. The Total Project Cut from each of the four grading calculation sheets provided in Exhibit G sum to 789 cubic yards.

Comment 2-23

The grading calculations shown on plan sheet A-8 of the architectural plan set submitted to the project case file maintained by DCP, DBS, or DPW show cut and fill will balance. These grading calculations sheets are provided in Exhibit G for ease of reference. The dimensions of the construction equipment anticipated described in the Construction Management Schedule provided in Exhibit C show the staging area would sufficient for parking, equipment staging, and storage of fill soil.

Comment 2-24

Table 3-5, Project Construction Schedule – Site Preparation and Grading, relates to the Crisler roadway and site preparation for the proposed residences, both of which constitute the project site. Table 3-6, Project Construction Schedule – Home Construction, provides activities associated with single-family home construction as described therein, such as framing, plumbing, and roofing.

Comment 2-25

The MND indicates how parking and equipment staging will be handled during the first two months in Table 3-5, Project Construction Schedule - Site Preparation and Grading. The first two months, or eight weeks, consist of stages one through four. As noted in Table 3-5, off-site crew parking would only be needed during stages one and two, consisting of six workers and one truck. As noted in the project description, the has applicant committed to shuttle workers to the project site in a van to avoid construction traffic and parking on Grand View Drive while the staging area on Lot #95 is created. As shown in the Construction Management Schedule, provided in Exhibit C, construction workers would be shuttled to the site, dropped off, and the shuttle would park offsite to avoid obstructing the Grand View right of way.

Comment 2-26

The Construction Management Schedule prepared by Rigo's Construction Inc., included in Exhibit C, provides detailed descriptions of the size of construction equipment anticipated consisting of mini excavators and a drilling rig with a boom which would be initially delivered and quickly transferred – the construction management schedule estimates 15 minutes for delivery – to the on-site staging area to avoid restricting access on Grand View Drive. In a worst-case scenario, on day 12, pouring six temporary shoring piles is expected to partially block, up to five feet of Grand View Drive right of way for up to 3 hours. A temporary and partial blockage of up to five feet of Grand View Drive would still allow cars to pass. Given that construction equipment would be staged off of Grand View in an onsite equipment staging area and based on the physical dimensions of the equipment anticipated – a bobcat, mini-excavator, and drilling rig – project construction equipment would not completely block the full roadbed of Grand View as depicted in Figures 10(a) and 10 (b) of the comment letter for prior work on 8401 Grand View Drive project.

Comment 2-27

Based on the Construction Management Schedule prepared by Rigo's Construction Inc., included in Exhibit C, the provision of an onsite equipment staging area and the physical dimensions of the equipment anticipated – a bobcat, mini-excavator, and drilling rig –would not completely block the full roadbed of Grand View Drive as depicted in Figures 10(a) and 10 (b) of the comment letter. Based on the description of the construction equipment provided by Rigo's Construction, the architect expects a worst-case partial blockage of Grand View to be five feet maximum, which would still allow cars to pass

Comment 2-28

As noted in response to comment 2-3, the MND adequately describes the existing conditions of the environmental setting to allow for an evaluation of project impacts on the environment. Topic VI. Geology and Soils, addresses steep slopes and Subsection 3.4, Surrounding Land Uses, of the Project Description characterizes surrounding land uses consisting of "vacant residential lots and existing single–family residences along winding hillside roads." Figure 1, Regional Map, Figure 2, Project Location Map, and the accompanying text describe the environmental setting. The

existing steep topography in the Hollywood Hills is not an unusual circumstance, particularly in the context of existing, permitted houses on developed hillside lots surrounding the project site.

Comment 2-29

As described in the Construction Management Schedule provided in Exhibit C, construction equipment would be offloaded into the equipment staging area and construction equipment would not need to make a sharp right turn onto the proposed extension of Crisler Way. Once the on-site equipment staging area is available, haul trucks could back into the staging area to avoid the sharp right-hand turn onto the extension of Crisler Way. Haul trucks would not need to access the site before the staging area is built.

Comment 2-30

The Construction Management Schedule prepared by Rigo's Construction Inc., included in Exhibit C, provides a detailed description of the specific construction equipment needed including sizes and types, noting that a drilling rig with a separate boom would be provided and a separate crane would not be needed. In terms of equipment weight, Grand View Drive is an unrestricted street.

Comment 2-31

As described in the MND, given local roadway constraints and the potential for partial lane closures to limit emergency and residential vehicle access, the project provides mitigation measure HAZ-1 for a project-specific Hillside Construction Staging and Parking Plan and HAZ-2 for an Emergency Evacuation Plan to minimize these impacts.

Comment 2-32

Regarding the additional related projects identified:

- 1840 Blue Heights is not located along the construction access route of the proposed project
- 1860 Blue Heights is not located along the construction access route of the proposed project
- 8484 Grand View Drive is located along the construction access route of the proposed project

Although each related project is at a different stage in the application process, and therefore highly unlikely to be constructed simultaneously, with only one related project on the proposed construction access route – route B – the impact of cumulative project construction would remain less than significant with mitigation incorporated in a worst-case scenario when the related projects would be constructed simultaneously.

Comment 2-33

The MND analyzes the proposed extension of Crisler Way in sufficient detail to reach a conclusion regarding the significance of environmental impacts under CEQA. As noted, the MND describes the proposed sewer, storm drain, and fire hydrant under their respective topics. As noted under topic XVIII, Utilities and Service Systems, based on the configuration of sewer lines serving the project site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325). Project sewer flows would then connect to the existing lines under Marmont Ave. These proposed sewer infrastructure improvements to update or expand the sewer lines in the Project vicinity would be limited to trenching, excavating and backfilling the sewer lines beneath the public right of way. The proposed sewer line would be eight inches in diameter and the soil generated by trenching would be used as backfill. The MND considered these features in the analysis of project impacts.

Comment 2-34

The project proposes the extension of a planned roadway and associated infrastructure limited to serving the four proposed residences and would not result in growth-inducing effects beyond the development proposed. Future projects along the paper road alignment of Crisler Way would be responsible for improvements to the street frontage along their lot line.

The commenter asserts, with little substantiation, that the MND failed to discuss potential growth inducing impacts because the project will extend a roadway (Crisler Way) and infrastructure such as sewer lines and storm drains into an undeveloped area. CLG's assertion, however, is contrary to the CEQA Guidelines and case law.

To begin with, CLG cites case law (at p. 24 of its letter) that relies on CEQA Guideline 15126.2(d). However, that Guideline only applies to Environmental Impact Reports. (Refer to article 9 of the CEQA Guidelines.) Moreover, that Guideline, when discussing potential growth inducing impacts, only cites to a "major expansion of a wastewater treatment plant which might, for example, allow for more construction in service areas" as an example of a growth inducing project that would remove obstacles to population growth. Here, the Project's extension of infrastructure to serve four homes is by no means a major expansion of infrastructure that could induce growth in the manner contemplated by Guideline 15126.2(d).

Further, in case law decided subsequent to the one case cited by CLG, the courts have made clear that the type of infrastructure extension proposed for the Project would not lead to significant growth inducing impacts within the meaning of CEQA. In *Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal. App. 4th 200, the Court held that a project that would install new sewer lines at a capacity more than needed for the proposed project would still not cause a significant growth inducing impact. The Court based that decision on a number of factors. First, "the purpose and nature of this project was not to facilitate additional development after the project is completed." (197 Cal. App. 4$^{th}$ at 227.) Second, the Court recognized that any future development that may occur would undergo its own CEQA analysis. (197 Cal. App. 4th at 228.) Both of those

factors are present in the instant case, and the Project will not build infrastructure that is oversized for the Project. In fact, CLG (at p. 24 of its letter) can only speculate about any future development or extension of roadways in this area (the Project "may encourage future completion of the remaining Crisler Way gap and development along Marmont Way"). Under CEQA Guideline 15384(a), such speculation does not constitute substantial evidence that can invalidate any CEQA document.

Finally, the only item in the CEQA checklist used for preparation of MNDs arguably related to this issue concerns the question at Section XIII(a) of the checklist. That question asks whether the project would induce *substantial* population growth in the area. Development of four homes with associated infrastructure clearly would not induce *substantial* population growth in the area.

Comment 2-35

Commenter states that unlike the existing residential neighborhood along Grand View Drive, the proposed project would be constructed on the side of the undeveloped hillside; however, the existing residence at 8334 Grand View Drive, approximately 150 feet east of the project area, is constructed on the side of the hillside with a swimming pool at the lowest level similar to proposed project. The comment letter does not identify the vantage point of the claimed scenic vista which would be affected by the project. However, based on Figure 3 in the comment letter, one can infer the vantage point for the claimed scenic vista is the terminus of Marmont Avenue. As noted on page 17 of the MND, the Hollywood Community Plan does not identify scenic vistas from the Project area. The view provided in Figure 3 of the comment letter is a focal view from the terminus of a local street which is not designated as a scenic vista in adopted plans, namely, the Hollywood Community Plan or General Plan. As a project similar in scale and appearance to existing single-family residences in the vicinity, the project would not substantially degrade the existing visual character of the site and surroundings as concluded in the MND. The MND disclosed and analyzed the impact of light and glare under topic I. Aesthetics, concluding light and glare impacts would be less than significant through compliance with regulatory requirements.

Comment 2-36

The comment letter provides, Figure 12 - Exterior Elevation 1800 Crisler Way, Figure 13 - Elevation of 1806 Crisler Way, Figure 14 – Elevation of 1812 Crisler Way, and Figure 15 - Elevation 1818 Crisler Way. These figures provide the elevations based on architectural plan sheets with the elevation information available in the project case file. In terms of visual simulations, as noted in CEQA Guidelines Section 15063(a)(3), "an initial study is neither intended nor required to include the level of detail included in an EIR." CEQA does not require the MND to include visual simulations, rather, sufficient information to make a determination of the level of significance of project impacts. The MND provides substantial evidence which references the elevations of the proposed residences relative to the existing residences to reach conclusions regarding the aesthetic impact of the project. Project elevation sheets are provided reference in Exhibit F. As noted on page 17 of the MND, the roof levels of the proposed residences would not have a substantial adverse effect on southerly directed views from existing

residences along Grand View Drive because the highest roof levels would be below the base elevations of existing residences directly to the north. As noted on page 19 of the MND, although the Project may be visible from private viewpoints within nearby residences in the surrounding area, private views are not protected by viewshed protection ordinances and the alteration of private views would not constitute a significant impact.

Comment 2-37

Building heights are in conformance with LAMC Section 12.21.C.10(d). Building Heights for the proposed Project(s) are correctly based on LAMC Section 12.21.C.10(d) (Ordinance 181,624 and 182,110) that were in effect at the time that the complete entitlement applications were filed and fees paid.

The Maximum Building Height for lots within the R1-1 Zone is 33 FT. Pursuant to LAMC Section 12.21.C.10(d)(1)(i) the maximum building envelope height (otherwise known as vertical height or plumb line height) is the vertical distance from grade of the site to a project plane at the roof structure or parapet wall located directly above and parallel to the grade. Additionally, LAMC Section 12.21.C.10(d)(1)(i)(7) permits roof structures above the specified height limit as specified in Table 12.21 C.10-5. Chimneys, exhaust ducts/ventilation shafts are permitted to project no more than 5 feet above the height limit.

As shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with Building Height Envelope and allowable roof structure projections in effect at the time the application was filed.

Lot 98 has a maximum height of 33 feet as seen on the West Elevation (Exhibit F, Sheet A-5). The chimney does not exceed the 33FT Building Envelope line as indicated on Sheet A-4.

Lot 97 has a maximum height of 33 feet as seen on the East Elevation (Exhibit F, Sheet A-4). The chimney projects 3'-6" above the building envelope as indicated on Sheet A-4.

Lot 96 has a maximum height 33 feet as seen on the West Elevation (Exhibit F, Sheet A-5). The chimney projects 2'-6" above the building envelope as indicated on Sheet A-4.

Lot 95 has a maximum height 33 feet as seen on the East Elevation (Exhibit F, Sheet A-4). The chimney projects 5'-0" above the building envelope as indicated on Sheet A-4.

Comment 2-38

This comment does not identify a specific deficiency of the MND or provide substantive information related to the project's impacts. As noted under topic IV. Biological Resources, the MND stated the site is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map in the Santa Monica Mountains Zone, as shown on the Eastern Santa Monica Mountains Habitat Linkage Planning Map adopted by the Santa Monica Mountains Conservancy dated May 2017.

Comment 2-39

The commenter states that the MND dismisses the project's potential impacts to the habitat block and wildlife corridor during project construction and operation. As referenced by the commenter, the MND at page 38 states the following:

> "… because the Project site is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map (SMMC 2017), the linkage could be affected by Project construction and operation (e.g., night time lighting and noise). Project construction and operation activities would primarily occur during the daytime hours as specified in the LAMC, limiting the potential noise and lighting impacts during the nighttime hours when most wildlife species likely to traverse the area would be active. As such, significant direct and/or indirect impacts to wildlife corridors and habitat connectivity are not anticipated. Thus, the construction and operation of the proposed residences and extension of Crisler Way would not substantially interfere with migratory corridors or impede wildlife movement and impacts to wildlife corridors…"

As such, the MND did assess direct and indirect impacts to Habitat Block No. 57. As noted on page 32 of the MND, the impact analysis was based on the results of a biological resources survey of the study area conducted by Envicom Corporation Biologist Mr. Tyler Barns on October 13, 2016. Since the release of the *Eastern Santa Monica Mountains Habitat Linkage Planning Map* in May 2017, Mr. Barns evaluated the impact of the project on Habitat Block No. 57 finding that the area likely provides limited vegetative coverage/foraging areas for local wildlife that transit through the area. The project site, however, is not within an area that has been identified a wildlife movement corridor, as shown in Figure 1, Habitat Linkages Map. Although the project site provides vegetative cover and native habitats suitable for the movement of a diversity of species, it is not of particular importance to wildlife for movement. For example, the site is not within a bottleneck of habitat between larger areas of core suitable habitat and it is not necessary for wildlife to pass through the site to access essential resources for water, foraging, breeding, or cover. The project site is situated near the edge of existing residential development and, therefore, development of the site would not fragment natural habitats. There are undeveloped natural habitats to the east, south, and west of the site which provide habitat for wildlife and opportunities for wildlife movement through the area. The nearest designated wildlife corridor is located northwest of the project site and connects Habitat Block 58 to Blocks 54 and 62 (SMMC 2017). As shown in Figure 1, Habitat Linkages Map, there is no direct wildlife corridor from Habitat Block No. 57 to another Habitat Block. In addition, as illustrated on Figure 2 of the MND, development has been clustered to the northernmost portion of the subject property, immediately adjacent to the proposed extension of Crisler Way. As such, the proposed project would not sever wildlife movement, as the southern portion of the subject lots would be left undeveloped. Thus, east-west wildlife movement would continue to be available in the area.

In addition, development has been clustered to the northern portion of the subject property. As such, the proposed project would not sever wildlife movement, southern portion of each lot would be left undeveloped. Nevertheless, project construction (particularly site clearing and grading operations) would have the potential to impact surrounding areas including adjacent plant

communities and plant and animal species. Construction-related activities (e.g., noise and light) could have adverse effects on plant and wildlife habitat, and together, could result in a potentially significant impact. As concluded on page 35 of the MND, after implementation of mitigation measure BIO-1, which lists general conditions to protect habitats, construction impacts to potentially-occurring special-status species would be less-than-significant.

In addition to construction-related impacts, project operation could have direct and indirect impacts on local wildlife that transit through the project area, including but not limited to noise, lighting, and indirect poisoning. For example, the use of pesticides or rodenticides could affect native fauna given the proximity of wildlife to urban areas. The risk of exposure to pesticides and rodenticides, currently exists within Habitat Block 57 as well as a majority of the Habitat Blocks indicated by the MRCA in their Eastern Santa Monica Mountains Habitat Linkages Planning Map. As such, the proposed project's contribution would not significantly increase exposure of native wildlife to these threats. Future residents would be required to comply with State, Federal, and local laws pertaining to the use of hazardous materials (e.g., poison). Use of rodenticides, pesticides, and herbicides in project areas will be restricted. This is necessary to prevent primary or secondary poisoning of native fauna and the depletion of prey populations on which they depend. All uses of such compounds will observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation. Lastly, the extent of the vertical "drop" from the back yard to the lowermost slope – approximately 20 feet – as a design feature would preclude the intrusion of domesticated animals into natural habitat south of the limits of disturbance. Design features and compliance with light and noise regulations enforced through City ordinances and the LAMC (Chapter XI – Noise Regulation and Chapter IX Building Regulations, Article 3 Electrical Code Section 93.0117 Outdoor Lighting Affecting Residential Property), would reduce direct and indirect impact operational impacts on Habitat Block No. 57 to less than significant.

Nevertheless, mitigation related to chemical use has been recommended to reduce the potential to adversely affect native fauna that utilize the habitat linkage during project operation. In addition, nighttime lighting and noise are restricted by local regulations and ordinances and it is the responsibility of the future residents to abide by these requirements. Therefore, direct and indirect impacts to the habitat linkage are considered less than significant.

The commenter states the MND failed to discuss cumulative impacts on the wildlife corridor. As stated on page 39 of the MND, "…if the proposed Project and the eight (8) related projects were to undergo construction simultaneously, then there could be impacts (i.e., noise and lighting impacts) to wildlife movement in the general area…" Similar to the proposed project, cumulative projects are anticipated to include measures addressing impacts on sensitive species and sensitive habitats (e.g., wildlife corridor). Such measures include avoidance measures as well as disturbance measures to reduce potential impacts from equipment operation and maintenance, dust, trash and construction debris, erosion, and unnecessary disturbance of habitat. Given the required compliance with state, federal, and local regulations, codes, and ordinances as well as MM BIO-1, the project would not significantly threaten the integrity or the effectiveness of designated wildlife corridor. The remainder of the comment does not identify a specific deficiency of the Draft MND or provide substantive information related to the project's impacts.

Comment 2-40

As noted in response to comment 2-39, the nearest designated wildlife corridor is located northwest of the project site and connects Habitat Block 58 to Blocks 54 and 62 (SMMC 2017). As shown in the Eastern Santa Monica Mountains Habitat Linkage Planning Map of the Santa Monica Mountains Conservancy, May 2017, there is no direct corridor from Habitat Block 57 to another Habitat Block. The MND does not diminish the project impact on the wildlife corridor northwest of the project site based on the significance threshold from the City's LA CEQA Thresholds Guide because the MND contains the significance threshold from the state CEQA Guidelines Initial Study Checklist immediately above the text on page 37 which the comment letter references. Therefore, the MND analyzed the impact of the project on wildlife corridors under both the state CEQA Guidelines Initial Study Checklist significance threshold and the City's CEQA Threshold Guide, a refinement of the State Guidelines for projects within the City. Even through the publication of the LA CEQA Thresholds Guide in 2006 predates the adoption of the Eastern Santa Monica Mountains Habitat Linkage Planning Map in 2017, the MND analyzed impacts to the Habitat Block under both the LA CEQA Thresholds Guide and the state CEQA Guidelines Initial Study Checklist.

Comment 2-41

The Project Geology and Soils Reports listed in Table 4.6-1 provide additional detail on remedial grading, retaining wall, and file foundation details. The Project Geology and Soils Reports listed in Table 4.6-1 addressed project as a whole including the extension of Crisler Way. In particular, the Response to City of Los Angeles Geology and Soils Report Correction Letter prepared by C.Y. Geotech dated November 26, 2014, provides a Street Plan and Profile prepared by Hovell and Pilarski on April 12, 2004, and approved as to structural requirements by the Structural Engineering Division on April 30, 2004. The Street Plan and Profile was available in the project case file maintained by the DCP, DBS, or DPW and is included in **Exhibit I**.

Comment 2-42

The MND does not indicate whether any changes have been made to the proposed project because no changes have been made to the project. The approved June 8, 2015, plan set is the current entitlement set. The Response to City of Los Angeles Geology and Soils Report Correction Letter by C.Y. Geotech, Inc., dated November 26, 2014, addressed both the extension of Crisler Way and the four proposed residences, and the Street Plan and Profile plans prepared by Hovell & Pilarski Engineering Inc., appended thereto, dated April 12, 2004, clearly show the proposed Crisler Way extension and residential development proposed on Lots 95, 96, 97, and 98 of Tract 865. The Street Plan and Profile was available in the project case file for review.

Comment 2-43

The proposed project is in conformance with the regulations in effect at the time the applications were filed. The City issued building permits for the residences on October 24, 2013, and provided a permit extension approved on June 5, 2015, due to "street improvement" approval. As

addressed under topic VI. Geology and Soils, impacts related to the loss of topsoil would be reduced to less than significant through erosion controls imposed by the City through conditions of approval on standard grading and building permits the installation of a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope.

Comment 2-44

The MND address fire hazards under topic VIII, Hazards and Hazardous Materials. The past incidence of the Kirkwood Bowl/Laurel Canyon Fire is addressed in response to Comment 2-13. To reduce the impact project construction and operations would have on vehicular access and circulation, including fire apparatus under topic XIV, Public Services, "a" Fire Protection, the project includes a temporary parking and equipment staging area on Lot 95 that would transition to the extension of Crisler Way to avoid restricting access on Grand View Drive. Once operational, the extension of Crisler Way would provide a turnout from Grand View Drive for fire apparatus. The MND also includes mitigation measure HAZ-2 requiring the applicant to develop an emergency response and evacuation plan in consultation with the Fire Department to facilitate vehicle ingress and egress in an emergency.

Comment 2-45

Once the on-site equipment staging area is available, trucks could back into the staging area to avoid the sharp right-hand turn onto the extension of Crisler Way. In addition, equipment would be offloaded into the construction staging area as described in the Construction Management Schedule provided in Exhibit C. As noted in the MND, construction vehicles would follow Access Route B, as recommended in the project Traffic Report to avoid the narrow width and sharp turns on Yucca Trail.

Comment 2-46

The Construction Management Schedule prepared by Rigo's Construction Inc., provided in Exhibit C, provides detailed descriptions of the timeframes during the first four weeks of construction, specifying where construction staging will take place, how the staging area on Lot 95 would be created, and timeframes which show construction equipment would be completely off Grand View Drive within week four of construction.

Comment 2-47

The project design features described on page 94 of the MND were not included in MM HAZ-1 because they are commitments already which are a part of the project as proposed.

Comment 2-48

Pages 39 through 40 of the comment letter repeat mitigation measures HAZ-1 and HAZ-2 from the MND. Among the restrictions imposed on the project by MM HAZ-1, this mitigation measure prohibits construction equipment and materials from being stored in the public right-of-way. Prohibiting the use of the public-right-of-way entirely would preclude the construction equipment

and vehicle access necessary to build the project in the first place. In preparing measures to reduce impacts, the language must be sufficiently feasible to avoid or minimize potential impacts. As described in the MND for Access Route B, construction vehicle access on Grand View Drive is a practical reality for construction vehicles to reach the project site. Mitigation measures HAZ-1 and HAZ-2 impose restrictions such as limiting truck traffic to off-peak hours, prohibiting truck deliveries on weekends or City Holidays, and requiring an on-site radio operator to coordinate the movement of material and personnel to keep the roads open for emergency vehicles, apparatus, and neighbors. As concluded in the MND, the imposition of these mitigation measures on the project would reduce emergency vehicle access and fire-related impacts to less than significant.

Comment 2-49

The MND recognizes and addresses the hazards posed to nearby properties from project construction. Mitigation Measure TRA-2, provided under topic XVI, Transportation and Traffic, states,

> to minimize construction traffic and roadway hazards along the access route, the project proponent shall prepare a construction traffic control plan conforming to City of Los Angeles requirements. The Traffic Control Plan must detail the placement of warning signs, traffic control personnel needed, and assurance the size of trucks anticipated can adequately maneuver along the designated access route. The Traffic Control Plan must also provide for the use of flagmen along Grand View Drive to facilitate deliveries as necessary.

The language of Mitigation Measure TRA-2 expressly states the Traffic Control Plan must provide "assurance the size of trucks anticipated can adequately maneuver along the designated access route." Therefore, the imposition of TRA-2 would reduce the impact related to potential property damage along the access route to less than significant.

Comment 2-50

The MND recognized the hazards posed by construction on steep slopes by including the installation of "primary and secondary protection debris walls at bottom of all four lots" as the first stage in the project construction schedule in Table 3-5 of the MND. The installation of the debris walls was not included as a mitigation measure because these were already design features of the proposed project. The "temporary debris fence" to be installed at the bottom of the lots was not made a requirement of the project because the applicant had already made this a design feature of the project as indicated on pages 10 and 46 of the MND. The protective debris walls would consist of an upper debris wall with #10 rebar at 4' on center with 3/4" plywood and a lower debris wall that would go over the new property line fence #10 rebar to reinforce the centers and 3/4" plywood over that. As shown in the MND, project design features to increase site safety, compliance with regulatory requirements, and the imposition of mitigation measures would reduce impacts to less than significant.

Comment 2-51

As noted in the cumulative impact analysis provided under Topic XVI, Traffic/Circulation, the Traffic Report added project generated construction trips to the existing neighborhood intersections and concluded the neighborhood streets would continue to operate at Level of Service (LOS) A, indicating the adjacent local roads operate at relatively free flow conditions. Furthermore, the City Department of Transportation indicated a cumulative analysis of traffic impacts is not required as noted on page 99 of the MND.[3] Although the commenter states it is "highly likely that more than one project would be undergoing construction at the same time," of the eight related projects considered in Table 3-8 of the MND, seven of the projects had a status of "pending," only one was "approved" based on the Hollywood Hills project list the City generated on August 10, 2017. The status of the one approved project, a remodel of the existing residence at 8446 Kirkwood Drive, is currently on hold as the owner is selling the project.[4] Therefore, it is not reasonably foreseeable that these related projects will be constructed simultaneously with the proposed project, and therefore, the proposed project will not, in conjunction with reasonable foreseeable probable future projects, cause a significant cumulative impact.

Comment 2-52

As noted in response to comment 2-37, building heights are in conformance with LAMC Section 12.21.C.10(d). Building Heights for the proposed Project(s) are correctly based on LAMC Section 12.21.C.10(d) (Ordinance 181,624 and 182,110) that were in effect at the time that the complete entitlement applications were filed and fees paid.

The Maximum Building Height for lots within the R1-1 Zone is 33 FT. Pursuant to LAMC Section 12.21.C.10(d)(1)(i) the maximum building envelope height (otherwise known as vertical height or plumb line height) shall be the vertical distance from grade of the site to a project plane at the roof structure or parapet wall located directly above and parallel to the grade. Additionally, LAMC Section 12.21.C.10(d)(1)(i)(7) permits roof structures above the specified height limit as specified in Table 12.21 C.10-5. Chimneys, exhaust ducts/ventilation shafts are permitted to project no more than 5 feet above the height limit.

As shown on the plans submitted with the entitlement application on November 12, 2015, the proposed Project is in conformance with Building Height Envelope and allowable roof structure projections in effect at the time the application was filed.

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[3] Email Communication with Mr. Jason Hernández, Central Project Planning Division, Department of City Planning, City of Los Angeles, September 18, 2017.

[4] Dave Thompkins, Email Communication with Envicom Corporation, June 15, 2018.

Comment 2-53

The Project Description in Section 3.0 of the MND includes improvements to Crisler Way, a Substandard Hillside Limited Street that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Areas required by Los Angeles Municipal Code Section 12.21C10(i)(2) and (3). The MND consistently describes the width of the Crisler Way extension as 20 feet consistent with LAMC requirements for a hillside area. The proposed extension of Crisler Way would be a "Hillside Limited" street as classified by the LADOT Complete Streets Manual or "Complete Streets Design Guide" which provides for a roadway width of 20 feet minimum.[5]

Comment 2-54

The Applicant has sought retaining wall permits for each of the four lots. Each lot would have a total of two retaining walls as permitted by LAMC Section 12.21.C.8. The walls will not exceed 10 feet and are a minimum of 3 feet apart. Retaining walls associated with the construction of the Crisler Way right-of-way are part of the roadway improvement plans and are separate from the retaining walls necessary for the construction of the single-family homes.

Comment 2-55

Driveways to required parking spaces for single-family dwellings on down sloped lots are not subject to the 3 1/2 foot height limit within the required front yard pursuant to Zoning Administrator's Interpretation ZA-2005-5630-ZAI, provided in **Exhibit H**. The proposed driveways are in conformance with this determination and do not require an additional discretionary request.

Comment 2-56

The Noise Impact Analysis prepared by Giroux and Associates dated March 9, 2017, provided in Appendix E of the MND, made a reasonable assumption for attenuating construction noise based on potentially impacted residences having dual paned windows due to compliance with standard building code requirements. Title 24 of the California Code of Regulations (known as the California Building Standards Code), Part 6 (2016 Building Energy Efficiency Standards) requires most windows in various California climate zones to meet U-Value and Solar Heat Gain Coefficient standards which are heat loss and heat gain standards. The minimum compliance is achieved with dual-paned or very thick plate glass windows. Most typically, they are made with Low-E glass. The improved sound insulation results from the greater mass of glass and also from requirements on better window fit and frame materials.[6]

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[5] City of Los Angeles, Complete Streets Design Guide, Chapter 2, Street Classifications, pg. 26.
[6] Hans Giroux, Giroux and Associates, Email communication with Envicom Corporation, June 18, 2018.

Comment 2-57

The Noise Impact Analysis prepared by Giroux and Associates dated March 9, 2017, provided in Appendix E of the MND, concluded compliance with LAMC Section 112.05 is technically infeasible because hillsides are too steep and variable for temporary sounds walls or curtains to be implemented.

As stated in City Municipal Code section 112.05, "technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment." In terms of mufflers, construction equipment is required to have mufflers installed in accordance with manufacturer specifications. In terms of shields or sound barriers, as noted on page 74 of the MND, due to the hillside topography and higher elevation of existing adjacent residences, "there is no reasonable and feasible means to reduce construction noise (e.g. curtains, fences, or temporary noise barriers) to levels less than this threshold." As the construction noise impacts could not be completely avoided, the MND provided other noise reduction devices or techniques consistent with LAMC Section 112.05 in mitigation measures NOI-1 and NOI-2 that will minimize e construction noise levels to the maximum extent feasible by limiting the use of certain equipment, restricting construction times, and avoiding conflicts with noise sensitive land uses through scheduling, points of access, and establishing a construction staging area. As stated in LAMC section 112.05, "said noise limitations shall not apply where compliance therewith is technically infeasible."

Comment 2-58

Pages 79 through 81 of the MND address the potential cumulative noise impact that could result from simultaneous construction of the project and related projects on a theoretical Maximally Exposed Individual (MEI) immediately adjacent to the Crisler Way site boundary. Table 4.-12-5 of the MND shows due to distance attenuation and intervening structures, residual construction noise at the Crisler Way project MEI could range from 41-51 dB. Therefore, the cumulative analysis concluded the addition of all the residual noise levels from the eight (8) related projects to the 81 dB Leq predicted at the Crisler Way MEI would result in no meaningful impact. As explained in the MND, due to the logarithmic nature of decibels, the addition of the residual noise levels from all related project sites is only 81.1 dB. In a worst-case scenario, the simultaneous construction of the proposed project and the related projects, the noise impact would increase from 81 dB Leq to 81.1 dB Leq. Therefore, the simultaneous construction of the proposed and related projects would not make a cumulatively considerable contribution to a cumulative impact.

Using a worst-case assumption that all homes undergo simultaneous grading and hauling for 2 weeks, creating 67 haul truck trips per day, the MND also analyzed the cumulative noise impact of truck haul noise that could affect a single receptor located along the common haul route. As stated on page 80 of the MND, if all trucks passed by a single receptor there would be an increase in noise. Assuming trucks travel at a 35-mph speed limit, this would equate to a CNEL of 53.7 dB assuming hauling occurs during daytime. The Cumulative Noise Analysis considers noise exposures up to 65 dB CNEL for residential uses acceptable. Because a CNEL is a 24-hour

average, a few seconds of truck travel would be diluted by the remaining 24-hours of no truck haul noise. Therefore, the cumulative noise impact of truck haul trips on receptors located along the common haul route would be less than significant.

Comment 2-59

As described in mitigation measure HAZ-2 on page 59, the MND requires the preparation of an Emergency Evacuation Plan in consultation with the Fire Department for emergency exits and evacuation routes. The MND also provides project-specific mitigation measures to reduce temporary construction traffic impacts. Implementation of HAZ-2 and TRA-1 through TRA-5 reduce impacts related to interference with emergency access to less than significant. Although the project site burned in a past fire, this is an existing condition that existed before the proposed project and the purpose of the CEQA document is to evaluate the effects of the proposed project on the existing environment. The MND analyzed the potential impacts of the project on public services such as sewer and water under Topic XVIII, Utilities and Service Systems, subtopics b – water and wastewater treatment facilities (sewers), c – storm water drainage, d – water supply sufficiency, and e – wastewater treatment capacity. The MND discloses the construction of sewer lines, connections, and a new fire hydrant sufficient detail to evaluate and mitigate impacts pursuant to CEQA. Subtopic b - water and wastewater treatment facilities – in particular addresses the impact of the project on the available capacity at the Hyperion Water Reclamation Plant. Page 85 of the MND discloses the installation of a new fire hydrant as a feature of the project. The installation of a single fire hydrant in the context of an existing urban environment would not result in a significant impact on the existing hydrant system.

Comment 2-60

To address potential impacts caused by construction vehicles on the existing narrow roadways, the MND includes mitigation measure TRA-5 which requires the applicant to periodically inspect and reasonably maintain the roadway along the construction access route to address roadway deterioration due to construction traffic during construction. The provision of mitigation measure TRA-5, portions of which were quoted on page 47 of the comment letter, shows the MND indeed acknowledges potential impacts to the pavement in the project area and provides mitigation should infrastructure be damaged or fail as a result of project construction.

Comment 2-61

The MND addresses potential fire service/emergency service impacts of the eight related projects under topic XIV., Public Services, which states, under the cumulative impacts subheading, “The LAFD would review each related project during plan check to ensure adequate fire flow capabilities and adequate emergency access.” As noted earlier, of the eight related projects identified for a cumulative analysis, seven showed a status of “pending” meaning they could begin construction in an unknown period of time. Even as a worst-case scenario, simultaneous construction of those projects with the proposed project is not reasonably foreseeable and a significant cumulative impact is speculative.. Page 86 of the MND provided the average response time from the Hollywood Community Police Station. Topic VIII., Hazards and Hazardous

Materials states "The transport, storage, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations" which implies crew members would be required to use potentially hazardous materials, such as flammable material, in accordance with regulatory requirements for safe handling.

As noted in response to comment 2-13, the LAFD signed the architectural plans on October 28, 2013. As disclosed on page 85 of the MND, the LAFD would continue to monitor population growth and land development throughout the City and identify additional resource needs and station expansions or new station construction that may become necessary to achieve the desired level of service. As disclosed on page 86 of the MND, the LAPD would continue to monitor population growth and land development throughout the City and identify additional resource needs, including staffing, equipment, vehicles, and potential station expansions or new station construction that may become necessary to achieve the desired level of service. In summary, the LAFD and LAPD based the need for additional facilities on actual service demands at existing facilities.

The cumulative impacts of heavy vehicles on the roadway and infrastructure is addressed under topic XVI., Transportation and Circulation. As noted in response to comment 2-10, Grand View Drive is an unrestricted street.

Comment 2-62

The MND does not contain a mitigation measure requiring the applicant to shuttle workers to the site because this is a commitment the applicant made as a project design feature described in page 12 of the MND.

Comment 2-63

The Construction Management Schedule prepared by Rigo's Construction Inc., included in Exhibit C, provides detailed descriptions of the timeframes during the first four weeks of construction, specifying where construction staging will take place, how the staging area on Lot 95 would be created, and timeframes which show construction equipment would be completely off Grand View Drive within week four of construction.

The Construction Management Schedule provided in Exhibit C, provides the spatial dimensions of the anticipated construction equipment and evidence that the construction staging area is adequately sized to meet project needs.

Comment 2-64

The MND does not provide a mitigation measure requiring the use of construction access route B because this is a project design feature the applicant committed to as described on page 94 of the MND. The MND addresses the safety hazards associated with access route B on page 97 which states:

> As recommended, Project construction traffic would follow Access Route B to avoid narrow roadway widths and sharp curves on Yucca Trail. Nevertheless, the introduction of construction vehicles and equipment on narrow roadways with sharp curves along Access Route B could create temporary hazardous roadway conductions. Therefore, Mitigation Measures MM TRA-1 through TRA-5 would require notification of residents affected by construction, preparation of a traffic control plan, scheduling material deliveries to avoid peak commuter periods, prohibiting construction vehicle parking on roadways once the on-site staging area is operational, and inspections of roadway and curb conditions before and after project construction.

This and other portions of the MND address potential safety hazards associated with Access Route B. The Traffic Report and Figure 4 of the Traffic Report did not show the turn onto Crisler Way in more detail because equipment would be delivered and offloaded into the onsite construction staging area.

Construction within the equipment staging area would generally proceed from the inside out, meaning contractors would widen Crisler Way from the temporary 10 ft width as Crisler intersects with Grandview at the edge of lot 95 where the temporary staging area would be located. Upon completion of the roadway to the end on Lot 96, and the foundations for House 96, contactors would backtrack to Lot 95 and build the foundations for House 95. This approach would allow work crews to approach the transition from Crisler to Grandview from the inside and not from Grandview itself, therefore minimizing impacts to access by avoiding work within the Grand View roadway.

Based on project-specific mitigation measured prepared by the traffic engineer, TRA-1 through TRA-5, construction traffic impacts would be reduced to less than significant relative to the applicable thresholds of significance listed under XVI., Transportation/Circulation and HAZ-1 through HAZ-2. The architect has provided additional details in the Construction Management Plan prepared by Rigo's Construction Inc., included in Exhibit C.

Comment 2-65

Mitigation Measure TRA-1, in isolation, is not the only mitigation measure provided in the MND to reduce the impact of temporary construction traffic on local roads. Mitigation measures TRA-2 through TRA-5 reduce the temporary impact of construction traffic on local roads.

Comment 2-66

Mitigation measure TRA-2 adequately reduces construction traffic by requiring the Traffic Control Plan to insure the size of trucks anticipated can adequately maneuver along the designated access route. The Construction Management Schedule provided in Exhibit C provides the dimensions of anticipated construction equipment which would be scaled for the size of the project and roadway widths for project site access.

Comment 2-67

The applicant committed to prohibiting crews from working on Thursdays until the on-site construction staging area on Lot #95 is created as a project design feature. Nonetheless, it is recommended the City make this commitment a Condition of Approval of the project. As noted in response to comment 2-10, Grand View Drive is an unrestricted street.

Comment 2-68

As described in the Construction Management Schedule prepared by Rigo's Construction Inc., included in Exhibit C, the staging area on Lot 95 would be created allowing for timeframes which show construction equipment would be completely off Grand View Drive within week four of construction.

Comment 2-69

Mitigation measure adequately addresses the project impact on potential roadway deterioration due to project construction by requiring the applicant to periodically inspect and, reasonably maintain, the roadway along the construction access route. Upon completion of construction, mitigation measure TRA-5 requires the applicant repair potential physical damage to the roadways along the construction access route caused by project-related construction traffic. This letter recommends the City modify the language of mitigation measure TRA-5 to require the applicant to pay for damage to the access route caused by project construction vehicles at the applicant's expense.

Comment 2-70

Mitigation measures TRA-1 through TRA-5, as well as HAZ-1 through HAZ-2, insure access impacts would be reduced to less than significant, with TRA-5 specifically requiring repairs to local infrastructure caused by construction vehicle traffic.

Comment 2-71

The MND provides mitigation measures HAZ-1 and HAZ-2 on pages 58 and 59 in ensure adequate emergency access during project-construction.

Comment 2-72

The Traffic Report added Project generated construction trips to the existing neighborhood intersections and concluded the neighborhood streets would continue to operate at LOS A, indicating the adjacent local roads operate at relatively free flow conditions. As noted on page 99 of the MND, the City Department of Transportation indicated that a cumulative analysis of traffic impacts is not required.

Comment 2-73

As explained on page 106 of the MND, through existing regulations established in the City Sewer Allocation Ordinance (No. 166060), LA Sanitation does not make a determination of sewer capacity until the Los Angeles Department of Building and Safety has established that the proposed Project's plans and specifications are acceptable for plan check. This process ensures that the system can accept the anticipated wastewater flows from the Project at the time of connection, as opposed to prematurely committing to projects that are in the environmental review or entitlement process. At the time of connection, the Bureau of Sanitation will check the gauging of the sewer lines and make the appropriate decisions on how best to connect to the local sewer lines at the time of construction.

As shown in the MND under section XVIII., Utilities and Service Systems, the Hyperion Water Reclamation Plant has sufficient capacity to treat the wastewater generated by the project; therefore, the project would not require the construction of new a new sewer.

Comment 2-74

The project would require the installation of new connections to existing wastewater pipelines which were included in the analysis of air quality, noise, and traffic impacts in the MND.

Comment 2-75

As noted in response to comment 2-18, stormwater would enter drainage inlets located immediately south of the roadbed between the houses and flow to the infiltration planter at the lower end of the properties and from there to the storm drains to Marmont.[7] For ease of reference, the Stormwater Drainage Plan is provided in Exhibit D.

As an environmental review document, the MND does not need to specify plans at a level of technical precision such as the capacity of existing storm drain facilities which serve existing single-family residences in the vicinity. The Department of Public Works reviews project plans the ensure compliance with applicable standards pertaining to stormwater drainage during the plan check process.

Comment 2-76

Mitigation measure 5 requires the applicant to repair damages to the roadway caused by project construction. As noted in response to comment 2-10, Grand View Drive is an unrestricted street.

[7] Robert Anderson, Email communication with Envicom Corporation, June 16, 2018.

Comment 2-77

The published MND and responses to comments provided herein show the project-related and cumulative impacts can be reduced to less than significant with implementation of the project design features, compliance with regulatory requirements, and the mitigation measures. Given potentially significant impacts can be reduced to less than significant, an MND satisfies CEQA requirements.

Comment 2-78

Given that potentially significant impacts can be reduced to less than significant through design features, compliance with regulatory requirements, or mitigation measures, an MND satisfies CEQA requirements.

Comment 2-79

As discussed under section XII, Noise, the threshold of significance in LAMC 112.05, by which construction noise impacts could be determined to be potentially significant, does not apply where compliance would be technically infeasible. As stated on page 75 of the MND, due to the steep site topography and the higher elevation of adjacent existing residences, the Noise Impact Analysis found that the use of sound barriers or shields would be technically infeasible. Even though the significance threshold does not apply, the MND provides mitigation measures to mitigate the effects of construction noise.

Comment 2-80

All mitigation measures listed in the MND would be made conditions of approval in accordance with the requirements of CEQA. All conditions of approval are enforceable by the City, which enforcement can include cessation of work on the project. Notices and postings will be provided so any resident can call the City to raise an issue of alleged non-compliance with the conditions of approval.

Comment 2-81

The MND provides a cumulative impact analysis following the project impact analysis for each of the environmental topics considered under the CEQA Initial Study Checklist questions including construction traffic and emergency access. For further discussion of cumulative impacts, refer to Responses 2-61, 2-72, or 2-77.

Comment 2-82

Commenter questions the City's practice of permitting construction in the area on steep hillsides in a high fire hazard area. Similar to the existing single-family residences built on steep hillsides in a fire hazard severity zone surrounding the project site, single-family residential development

is the land use designated for the legal lots by the Hollywood Community Plan and zoning applicable to the area.

Comment 2-83

The MND and responses to comments herein provide substantial evidence in the record that potentially significant project and cumulative impacts can be reduced to less than significant with mitigation incorporated. Therefore, the MND satisfies project requirements under CEQA.

Comment 2-84

The MND and responses to comments in this response letter provide substantial evidence in the record that potentially significant project and cumulative impacts can be reduced to less than significant with mitigation incorporated. Therefore, the MND satisfies project requirements under CEQA.

**COMMENT LETTER 3 – MRCA DATED MAY 23, 2018**

Comment 3-1

As noted under IV, Biological Resources, the site is not located within a designated wildlife corridor or habitat linkages identified in the South Coast Missing Linkages analysis conducted by South Coast Wildlands (2008) but is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map (SMMC 2017).

Comment 3-2

The MND addresses the potential growth-inducing impacts of the improvement of the paper-street Crisler Way extension under topic XIII. Population and Housing. The project proposes the extension of a planned roadway and associated infrastructure limited to serving the four proposed residences and would not result in growth-inducing effects beyond the proposed development because future projects along the planned Crisler Way "paper road" alignment would be responsible for improvements to the street frontage along their lot line.

Page 38 of the MND addresses the impact of the project on the habitat block by stating:

> "… because the Project site is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map (SMMC 2017), the linkage could be affected by Project construction and operation (e.g., night time lighting and noise). Project construction and operation activities would primarily occur during the daytime hours as specified in the LAMC, limiting the potential noise and lighting impacts during the nighttime hours when most wildlife species likely to traverse the area would be active. As such, significant direct and/or indirect impacts to wildlife corridors and habitat connectivity are not anticipated. Thus, the construction and operation of the proposed residences and extension of Crisler Way would not substantially interfere with migratory corridors or impede wildlife movement and impacts to wildlife corridors…"

As such, the MND assessed direct and indirect impacts to the habitat block. Operational impacts due to light and noise would be reduced through compliance with regulations in City ordinances and the LAMC (Chapter XI – Noise Regulation and Chapter IX Building Regulations, Article 3 Electrical Code Section 93.0117 Outdoor Lighting Affecting Residential Property). The proposed project would not sever wildlife movement, as the southern portion of the subject lots would be left undeveloped. Thus, east-west wildlife movement would continue to be available in the area through the southern portion of the lots.

Comment 3-3

As designed, the southern portion of the subject lots would be left undeveloped. Thus, east-west wildlife movement would continue to be available in the area. Although not legally required, the applicant has indicated a willingness to contact the SMMC to discuss a potential easement dedication.

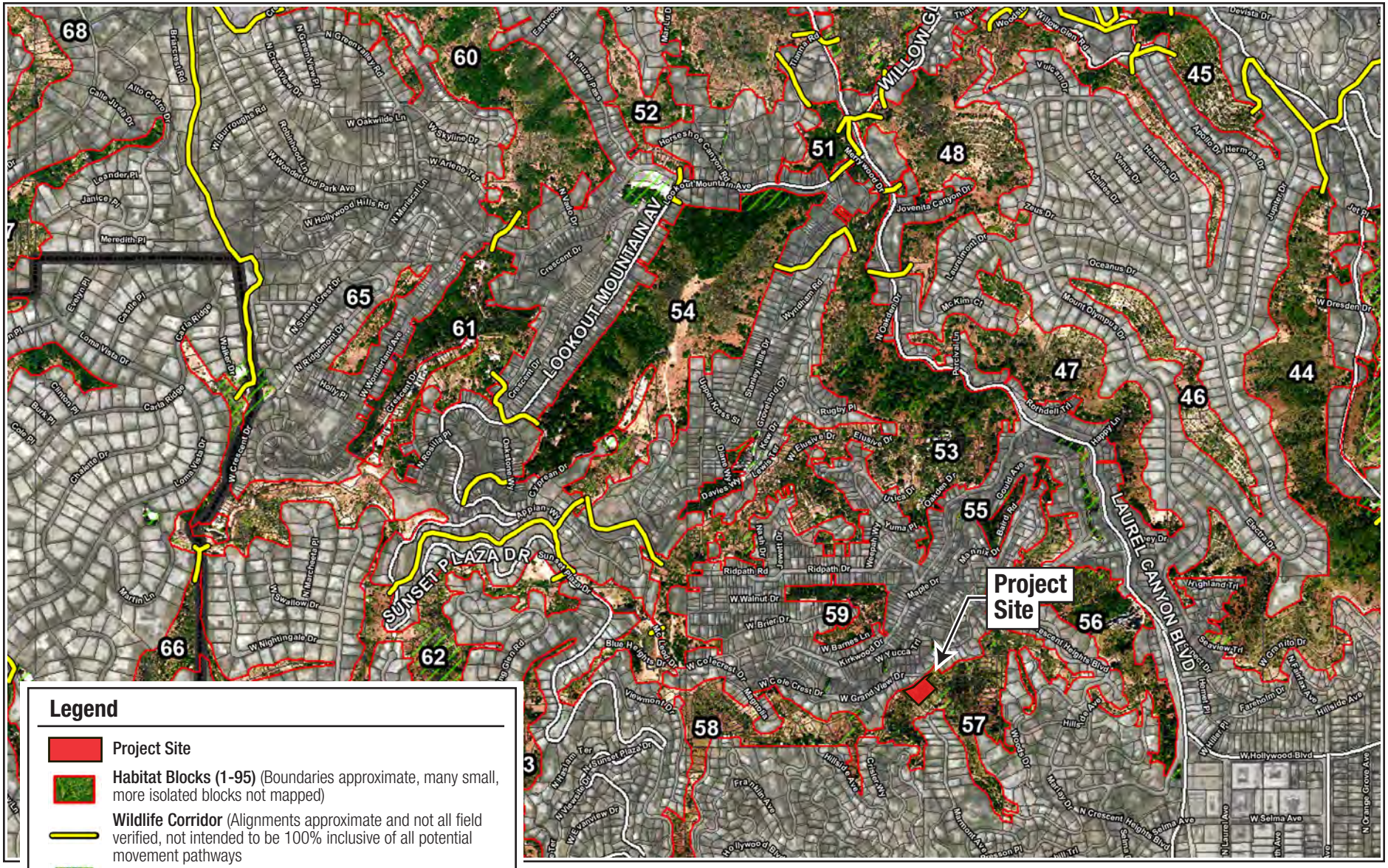
Comment 3-4

Commenter states MRCA staff support the comments made in the comment letter from Jamie T. Hall, responses to which are provided under comment 2-1 through 2-84.

Sincerely,

Primo Tapia
Vice President

**Attachments:**
Figure 1 – Habitat Linkages Map
Comment Letter 1 – JMBM
Comment Letter 2 – Channel Law Group
Comment Letter 3 – SMMC
Exhibit A – Slope Band Analysis
Exhibit B – Geology and Soils Reports
Exhibit C – Construction Management Schedule
Exhibit D – Storm Drain Plan
Exhibit E – Sewer Plan and Profile
Exhibit F – Evaluation Sheets
Exhibit G – Grading Calculations
Exhibit H – Zoning Administrator's Interpretation
Exhibit I – Street Plan and Profile




Source: Santa Monica Mountains Conservancy, State of California, May 2017.



envicom

# Habitat Linkages Map

FEET 0 1,000 2,000

FIGURE 1

1

JMBM Jeffer Mangels Butler & Mitchell LLP

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75529-1

May 11, 2018

**VIA E-MAIL (Jack.Chiang@lacity.org)**

Mr. Jack Chiang
Associate Zoning Administrator
City of Los Angeles, Department of City Planning
200 N. Spring Street, Room 1020
Los Angeles, CA 90012

Re: **1800, 1806, 1812 and 1818 Crisler Way**
Case No(s): ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD & ZA-2015-4149-ZAD
ENV Case No. ENV-2015-4131-MND (A-F)
**Hearing Date:** May 22, 2018

Dear Mr. Chiang:

1-1 CEQA → SLOPES

This office represents the homeowners of 1698 and 1694 Marmont Avenue, two single-family homes located at the terminus of Marmont Avenue, and immediately below the very steep hillside lots that the applicant in the above referenced case numbers proposes to develop. Our clients are extremely concerned over this application, which requests City approval to construct four large single-family homes and a new street cantilevered over steep hillside lots (the "Project"). These lots are incredibly steep; so steep, that the Project's slope band analysis ("SBA") reveals that more than 80% of each individual lot has a slope of 60% or more. In fact, much of these lots are comprised of unbuildable sheer walls with slopes of 100% or more. For these reasons, our clients not only fear for their privacy and quality of life, but also for their safety. Given the uniqueness of this site, as well as the indisputable health and safety hazards this Project will generate, we strongly oppose the Project and urge the City to deny this application.

1-2 LAMC LAND USE → BHO

While we have several significant concerns with the Project that will be further detailed in future correspondence, an objection that requires the City's immediate attention relates to the Project's blatant failure to comply with the Los Angeles Municipal Code ("LAMC"). On May 8, 2018, our office reviewed the Project plans on file with the Department of City Planning. In our review, we found that the Project plans fail to comply with many of the Baseline Hillside Ordinance's ("BHO") most important limitations, including height, floor area, and retaining wall requirements. Accordingly, this application cannot be considered, or at

minimum, must be continued until the Project plans are brought into substantial conformance with City codes and the environmental documents are amended to reflect these changes.

1-3 Land Use → LAMC - RFA HEIGHT RETAINING WALLS

The Project's inconsistencies with the LAMC are not minor in nature. For example, the SBA prepared for each home – which is used to determine the maximum permitted Residential Floor Area ("RFA") allowed on a lot pursuant to LAMC 12.21.1(A).1 - was prepared incorrectly in reliance on older, now inapplicable LAMC section. In this regard, the approved SBAs use incorrect Floor Area Ratio zone calculations, resulting in inaccurate RFA calculations for each lot. **Figure 1** below illustrates the inaccuracies contained in the Project's SBA. As each home was designed in reliance on these inaccurate RFA calculations, there are all designed in violation of the LAMC. The same is true with respect to the Project's height. LAMC 12.21.C.10-4 provides that the maximum height for hillside single-family home developments in this zone is 33 feet. Several portions of the Proposed building exceed the 33 ft threshold, including sizable portions of the roof structure and chimney. **Figure 2** below illustrates the portions of the proposed homes that violate the City's height restrictions. LAMC Section 12.21(C).10 is unambiguous in stating that "[a]t no point shall any given section of any part of the proposed Building or Structure exceed the maximum envelope height." Additionally, by designing each home in reliance on the retaining walls constructed as a part Crisler roadway, each home contains more retaining walls than allowed under LAMC 12.21(C).8. The Project cannot design around the BHO's retaining wall limitations for single-family homes by building structurally necessary retaining walls in the street instead of on the residential lot it is supporting. It is apparent, therefore, that the Project as proposed in connection with this Zoning Administrator's Determination ("ZAD") request fails to comply with the LAMC and the BHO.

1-4 Legal → VESTING CASE LAW

Moreover, the Project applicant cannot claim that the Project was vested in reliance on older LAMC provisions in effect at the time the building permit applications were filed or issued. Pursuant to California law, courts have consistently held that a developer's right to complete a project as proposed does not vest until (1) a valid building permit, or its functional equivalent, has been issued, and (2) the developer has performed substantial work and incurred substantial liabilities in good faith reliance on the permit. *Avco Community Developers, Inc. v South Coast Reg'l Comm'n* (1976) 17 C3d 785, 791; *Toigo v Town of Ross* (1998) 70 CA4th 309. This Project cannot establish either prong. First, the building permits at issue are invalid and were subject to a September 15, 2015, Notice of Intent to Revoke issued by the Department of Building and Safety. An invalid building permit vests no rights, even if expenditures have been incurred in good faith reliance on the permit. *Pettitt v City of Fresno* (1973) 34 CA3d 813.[1] Second, the developer must have initiated substantial construction work, which was not done here. Soft costs, such as the costs associated with processing permits or zoning approvals, will not result in vested rights. As the court in *Avco* explained, "work undertaken pursuant to governmental approvals preparatory to construction of buildings can form the basis of a vested right to build a structure that does not comply with the laws applicable at the time a building permit is issued." *Avco*, 17 C3d 785, 793

[1] A developer has no vested right based on a permit that he had reason to know might have expired. *Strong v County of Santa Cruz* (1975) 15 C3d 720. A developer has no vested rights to a use that was not allowed under the zoning code. *City of Monterey v Carrnshimba* (2013) 215 CA4th 1068, 1097.

I-5 LAND USE ⇒ VESTINGS PER LAMC

The Project also cannot claim to be vested under LAMC Section 12.26, which only provides vesting protections to "valid building permit applications." Here, the Project's building permit applications did not comply with the LAMC at the time the building permits were issued, which is why they were subject to the above referenced Notice of Intent to Revoke. Thus they were not "valid applications" and cannot receive vesting protections. Moreover, even if these applications were "valid" and properly accepted by DBS, any vested rights predicated on the permit applications have long since expired. The LAMC provides that any vesting protections provided under LAMC 12.26.A.3 expire "18 months after the plan check fee is paid, or if a permit is issued during that time, when the building permit terminates pursuant to Section 98.0602." LAMC Section 98.0602 provides as follows:

> Every permit issued shall be valid for a period of two years from the date thereof, provided that any permit shall expire on the one hundred and eightieth (180) day from date of issuance if the work permitted thereunder has not been commenced; or shall expire whenever the Department determines the work authorized by any permit has been suspended, discontinued or abandoned for a continuous period of 180 days.

Here, vesting protections have been extinguished in every respect. First, the 18 month period provided for plan check expired long ago. Second, the permits are no longer valid because the Project did not commence within 180 days of permit issuance. Third, it has been more than two years since the building permits were issued. Accordingly, this Project must be brought into compliance with current LAMC requirements before this ZAD may be considered.

While we have several other objections to the Project and its environmental documents, we do not believe it is appropriate for the City to require our client and other project opponents to bear the expense of opposing a Project that cannot be permitted in the first instance. Accordingly, we request that the hearing scheduled for May 22nd be continued or taken off calendar until the Project comes into compliance with the LAMC.

Sincerely,

BENJAMIN M. REZNIK and
DANIEL FREEDMAN of
Jeffer Mangels Butler & Mitchell LLP

cc: Emma Howard, Senior Planning Deputy, Council District 4.
Victor Cuevas, Assistant Chief, Permit and Engineering Bureau, LADBS
Terry Kaufmann-Macias, Esq., Supervising City Attorney, Office of the City Attorney
Aidan O'Brien MD, President, Concerned Citizens of Kirkwood Bowl Foundation
Jamie Hall, Esq., Channel Law Group
Robin Greenberg, President, Bel Air-Beverly Crest Neighborhood Council

[2]

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JULIAN K. QUATTLEBAUM, III
JAMIE T. HALL **
CHARLES J. McLURKIN

*ALSO Admitted in Colorado
**ALSO Admitted in Texas

May 21, 2018

**VIA ELECTRONIC MAIL**

Darlene Navarrete, Senior Administrative Clerk
Mr. Jack Chiang, Zoning Administrator
Mr. Jason Hernandez, Planning Assistant
City of Los Angeles Department of City Planning
200 North Spring Street
Los Angeles, CA 90012
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darlene.navarrete@lacity.org

**RE: ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ENV-2015-4131-MND**

Dear Mr. Chiang and Mr. Hernandez:

2-1
CEQA → UTILITY INFRASTRUCTURE SEWER LINES

According the page 3 of the Mitigated Negative Declaration (MND) for the proposed project:

> The proposed Project consists of the construction, use, and maintenance of four (4) single-family residences, retaining walls, and swimming pools on four (4) contiguous vacant lots numbered 95 through 98 fronting a Substandard Hillside Limited Street, Crisler Way, that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area. Therefore, the Project would provide a 185-linear foot extension of Crisler Way off of the existing Grand View Drive for access to the residences.

The lots for the four single-family homes do not have current sewer connections, and according to page 106 of the MND, "(b)ased on the configuration of sewer lines serving the project site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118

(#201501511325)" as indicated on the Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015 for the project, prepared by Robert Anderson, Architect. "Project sewer flows would then connect to the existing lines under Marmont Avenue." The project thus requires offsite improvements in the form of the Crisler Way extension and infrastructure improvements such as a new sewer line. The four single-family homes, the extension of Crisler Way and the required infrastructure improvements are connected actions that must be fully addressed in the same environmental document, as required by California Environmental Quality Act (CEQA) Guidelines 15003(h). As demonstrated in this comment letter, the City has not fully complied with this requirement.

2-1

Furthermore, as detailed in this comment letter, the City is improperly processing the proposed project using an MND. This letter demonstrates that the proposed project is not eligible for an MND and that an Environmental Impact Report (EIR) must be prepared for the project, in conformance with the requirements of the CEQA. Given the potential for significant impacts, which are not mitigated and may not be mitigatible, as well as the potential for cumulative impacts, an EIR is required for the project. The standard for when an EIR is required is articulated in CEQA Guidelines Section 15064(f)(1), which states:

2-2
CEQA → REFER TO EXISTING SUBSTANTIAL EVIDENCE PRESENTED IN MND TOPIC AREAS

> . . . if a lead agency is presented with a fair argument that a project **may** have a significant effect on the environment, the lead agency **shall** prepare an EIR **even though** it may also be presented with other substantial evidence that the project will not have a significant effect.

This letter, along with other comment letters being provided by residents and upcoming hearing testimony, will provide the City with a fair argument supported by substantial evidence that the project may result in significant adverse impacts, triggering the need for an EIR.

Defects in the existing MND, the substantial evidence supporting a fair argument that the proposed project will have a significant impact and that an EIR is required for the project, and the numerous ways that the City has not complied with the requirements of CEQ are detailed below.

## I. Violation Of CEQA Guidelines Section 15063(d)(2) – Inadequate Description Of The Environmental Setting

2-3
CEQA DESCRIPTION OF CRISLER

There are a number of unusual circumstances in the project vicinity that increase the potential for the proposed project to result in significant impacts. These existing conditions, which are part of the environmental setting, are not adequately described or considered when evaluating the potential of the project as proposed to result in significant impacts.

*I.a.* *Inadequate Description of Existing Crisler Way*

Page 6 of the MND explains that:

> The project site is located along a to-be constructed extension of Crisler Way south of existing residences on the south side of Grand View Drive. The Project includes a 185-linear foot extension of Crisler Way, a Substandard Hillside Limited Street that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area as required by the LAMC.

However, the MND fails to describe the existing condition of Crisler Way. It is unclear from the description in the MND whether or not Crisler Way currently exists in a substandard form or unpaved form, and its existing roadway width. The potential for impacts is very different if the project merely requires a limited widening of Crisler Way, or if it requires construction of a street that currently does not exist.

In addition, the MND fails to adequate describe existing conditions along the proposed Crisler Way alignment. The environmental document for the project needs to identify both the improved and unimproved portions of Crisler Way in the project vicinity. The environmental document needs to make clear that Crisler Way in the project vicinity is currently a paper road, meaning that it exists only on paper, as shown in **Figure 1a and 1b**. The existing roadway terminates at approximately 1746 Crisler Way. The environmental document needs to explain not only the length of the Crisler Way extension included as part of the project, but to explain what the full length is, of the unimproved portion of Crisler Way from approximately 1746 Crisler Way to the proposed connection with Grand View Drive (Grand View) at approximately 8350 Grand View, and the number of lots along the unimproved alignment. This is important to an understanding of the potential growth-inducing impacts of the proposed project.

The environmental document also needs to indicate that Crisler Way would be constructed on a steep undeveloped hillside, and provide information on the nature of existing slopes and soils along the proposed Crisler Way alignment. As shown in **Figure 1b** and **Figure 2a and 2b** and **Figure 3**, the Crisler Way extension would be constructed on the side of a steep hill and would connect to Grand View Drive at 8350 Grand View, just east of the home at 8354 Grand View Drive. The MND fails to provide existing slope information along the proposed Crisler Way alignment or to provide the reader with a clear sense of the geography and topography of the area.

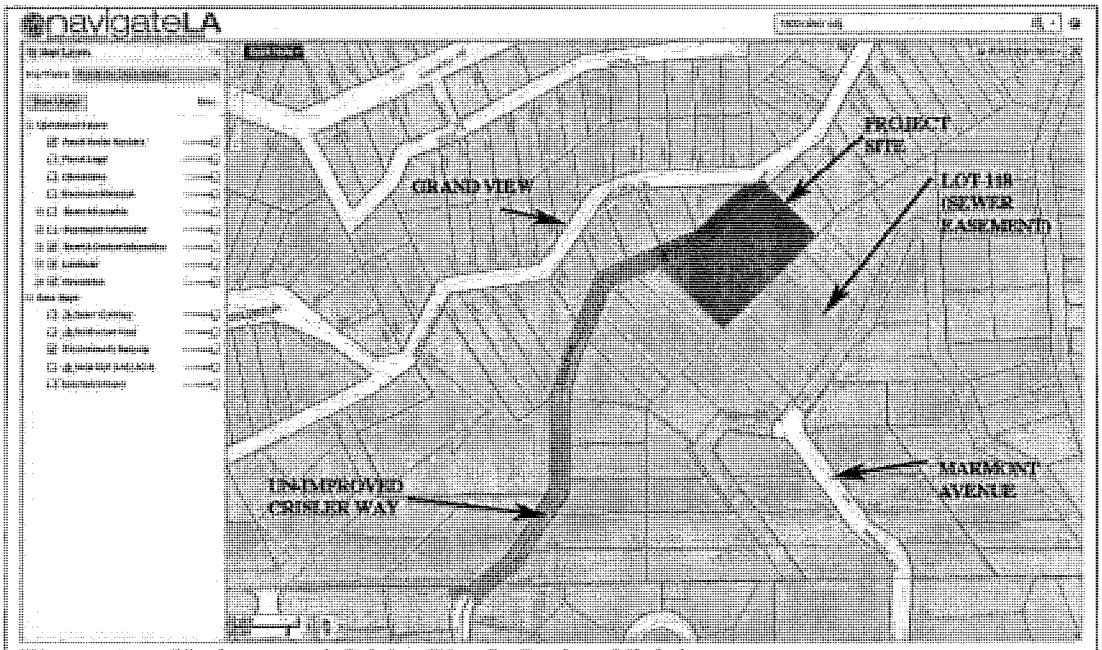



**Figure 1a** – Un-improved Crisler Way In Project Vicinity

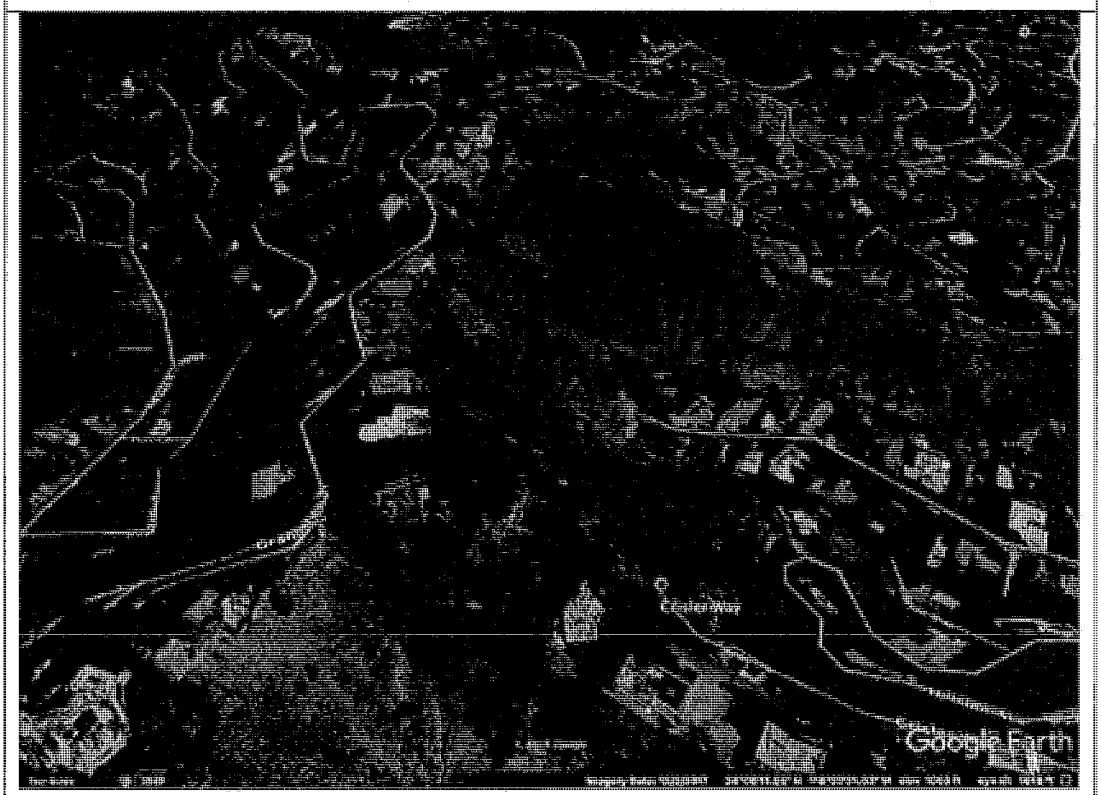



**Figure 1b** – Steep Slope From Crisler Way terminus to Grand View Drive at Crest of Hill

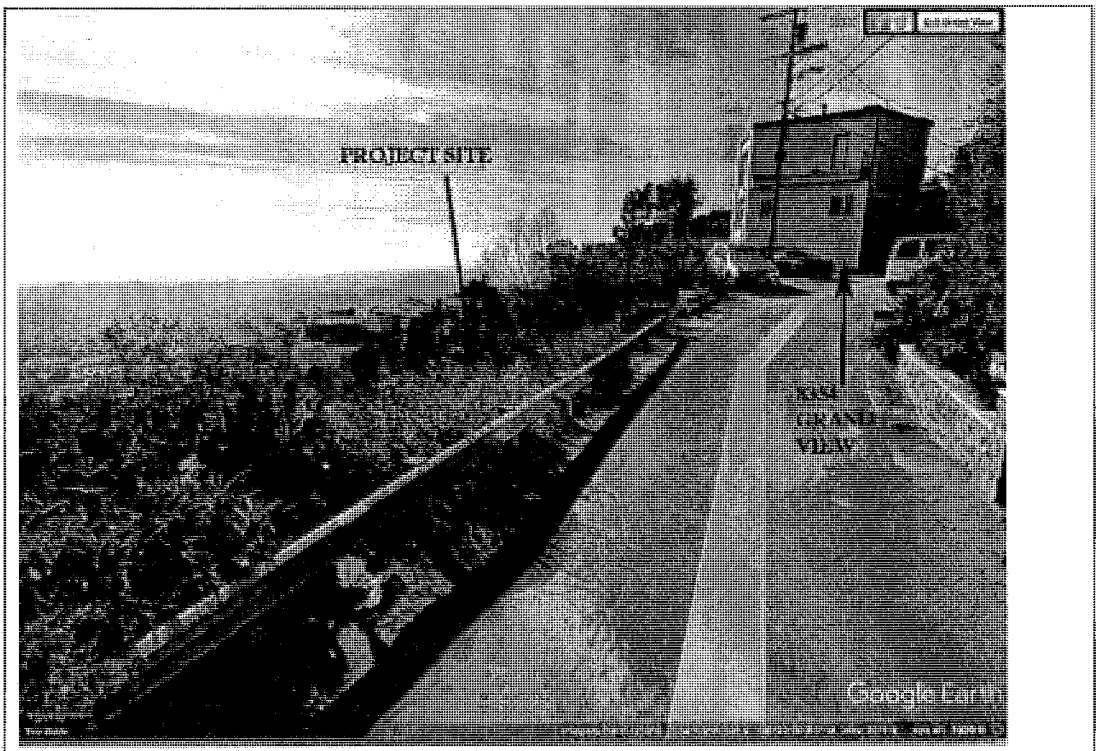



Figure 2a – Project Site Looking West on Grand View Drive

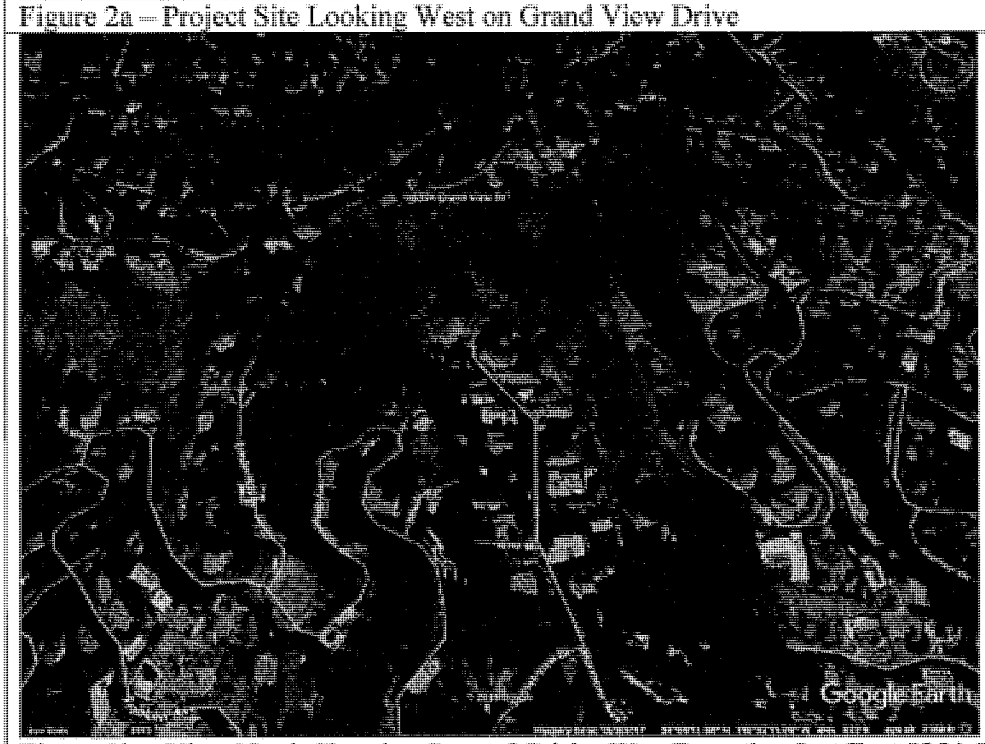



Figure 2b – View North Showing Start of Crisler Way Extention Just East 8354 Grand View, Grand View Drive, Marmont Avenue and Existing Terminus of Crisler Way

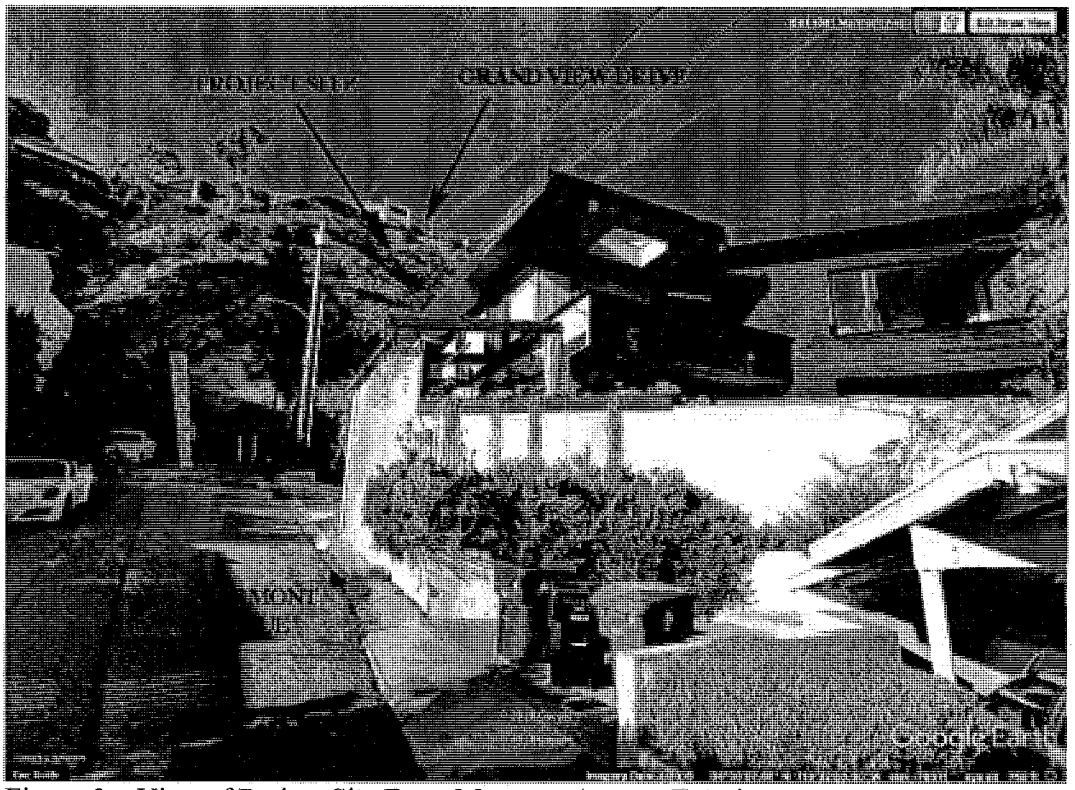


Figure 3 – View of Project Site From Marmont Avenue Terminus

2-6
CEQA
MARMONT
DESCRIPTION

*I.b.* *Inadequate Description of Marmont Avenue Conditions and Existing Sewer Infrastructure*

The proposed project would extend sewer lines to connect to the existing line (green) in Marmount Avenue via Lot 118. The environmental document for the project needs to fully describe conditions on Marmont Avenue, including the location and capacity of sewer lines and wyes, and the fact that Lot 118 is located on a paper street, as shown in **Figure 4**. The environmental document needs to include a figure, like **Figure 4**, showing the location of the project in relation to Lot 118 and existing sewer infrastructure. This information is necessary to an understanding of likely impacts associated with sewer line construction and connection and the number of connections the project may be required to provide, which should also be explained in the environmental document for the proposed project.

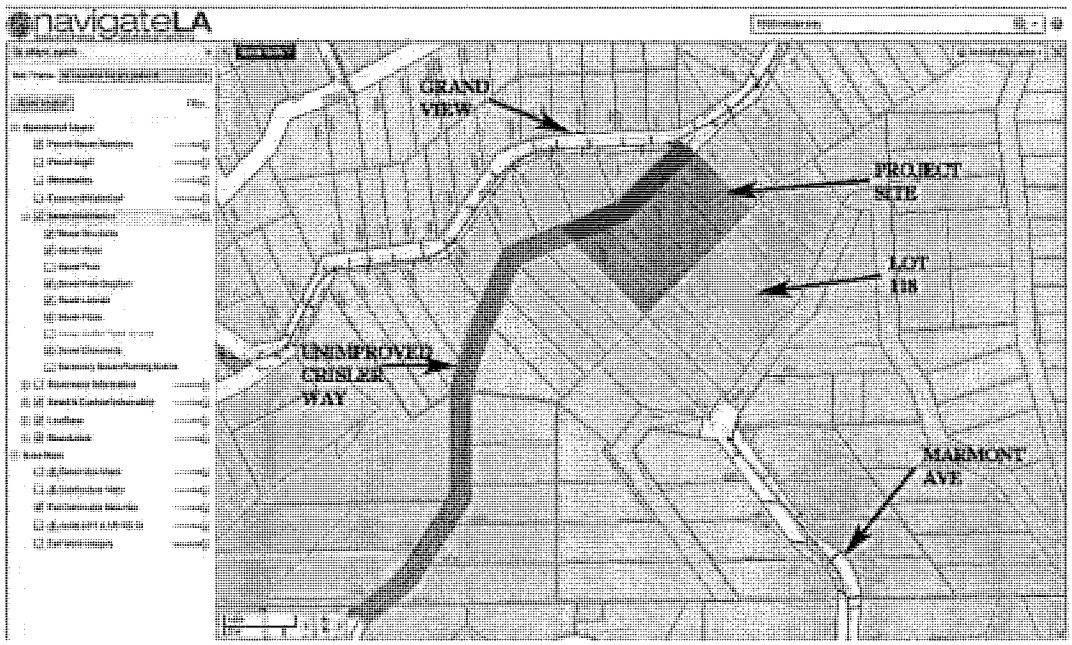


Figure 4: Project Site In Relation To Marmont Avenue and Existing Sewer Infrastructure

2-7
CEQA
GRAND VIEW DRIVE DESCRIPTION

*I.c.* *Inadequate Description of Grand View Drive Access, A Substandard Street With Existing Condition Issues*

Page 8 of the MND provides a discussion of "site access and street improvements." The discussion notes that Grand View Drive is a Substandard Hillside Limited Street, but fails to provide any information on the actual width of Grand View Drive in the project vicinity. This information should be included to provide a reader with a fuller understanding of roadway safety issues. The environmental document should explain not only that Grand View Drive is identified by the City as a Substandard Roadway, but also should explain that existing roadway widths are between 10-14 feet.

2-8
CEQA → EXISTING ROADWAY FAILURES

In addition, the environmental document should address the location and number of roadway failures along potential access roads to the project site, including Grand View Drive. Not only is Grand View Drive narrow, it has existing condition issues. As explained in a report prepared by LandPhases Inc., Consulting Engineering Geologists (12/2/16), entitled *Engineering Geologic Memorandum, Recommended Mitigation Of The Existing Wood Retaining Wall Supporting The Downslope Side Of The City Street At The Subject Property, 8301 Grand View Drive, Hollywood Area, City Of Los Angeles, California*:

> As discussed in the referenced engineering geologic report by LP, dated August 22, 2016, a wood retaining wall is present along the western margin of Grand View Drive located immediately to the east and upslope of the subject property. The wood retaining wall is approximately 4 to 5 feet high, consists of vertical wood posts with horizontal lagging, and is providing lateral support of the downslope (west) edge of the street. Based on our recent site

observations, the existing wood retaining wall shows signs of deflection and undermining. There is also visible evidence of settlement of the portion of the City street located adjacent to the wall, as well as evidence of past attempts (most likely by Public Works) to mitigate the undermining and settlement by the infilling of ground cracks and undermining voids with cement and asphalt. Furthermore, it should be noted that the use of a wood retaining wall in the City of Los Angeles is considered a "non-conforming" condition as these types of retaining walls are subject to weathering, insect infestation, decay, pre-mature failure, and often lack proper engineering and foundation support.

Based on the findings of our engineering geologic study, the existing wood retaining wall is not performing adequately, is considered non-conforming, and constitutes a stability hazard to the City street and subject property.

This is not the only portion of Grand View Drive with condition issues. Grand View Drive has experienced a failure at 8461 Grand View Drive as a result of rain-related erosion, as shown in **Figure 5**.

Furthermore, as shown in **Figure 6**, there have been a number of roadway failures in the project area. The generation of possible project construction traffic on a roadway with these types of condition issues is an unusual circumstance with the potential to result in significant roadway and other infrastructure impacts.

I.d. *Failure to Describe Project's Location in an Area That Has Experienced Infrastructure Failures*

As shown in **Figure 6**, the project site is located in an area that has experienced an unusual amount of infrastructure failure in the form of street collapses (3), water main breaks (24), and gas line breaks (7). For example, there was a roadway failure at 8461 Grand View Drive (resulting from a microburst in approximately 2014). The project area has experienced a number of hydrant and pipeline failures. See, for example, the hydrant failure described in **Attachment A**. There is reason to suspect that these failures are due to both heavy equipment vehicles from construction activity and the area's geological conditions. As a result of damage to the roadway and underlying utilities, the City has had to incur substantial repair costs (see **Attachment B**). This is an unusual circumstance. As a result, project construction methods and vehicles have the potential to contribute to additional infrastructure failures, which is a potentially significant impact of the proposed project that is not addressed in the MND.

Figure 5: Photos Showing Grand View Drive Failure At 8461 Grand View Drive

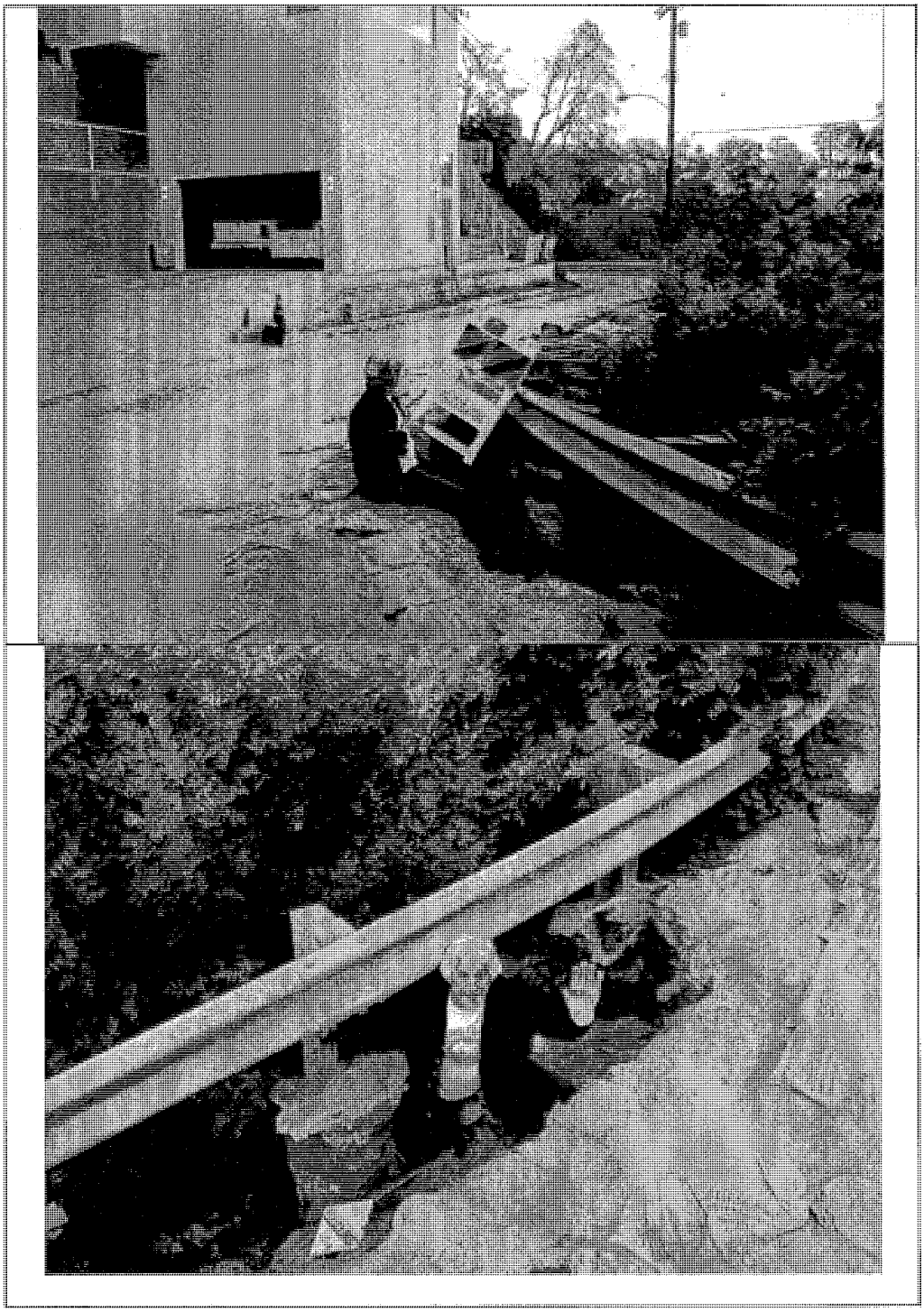
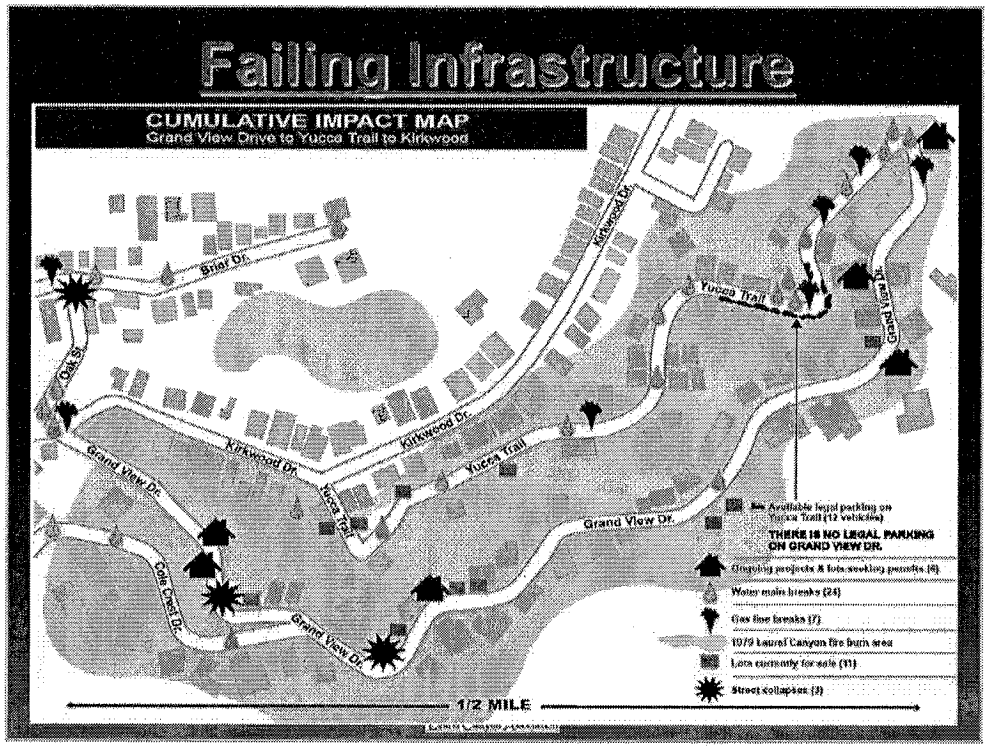
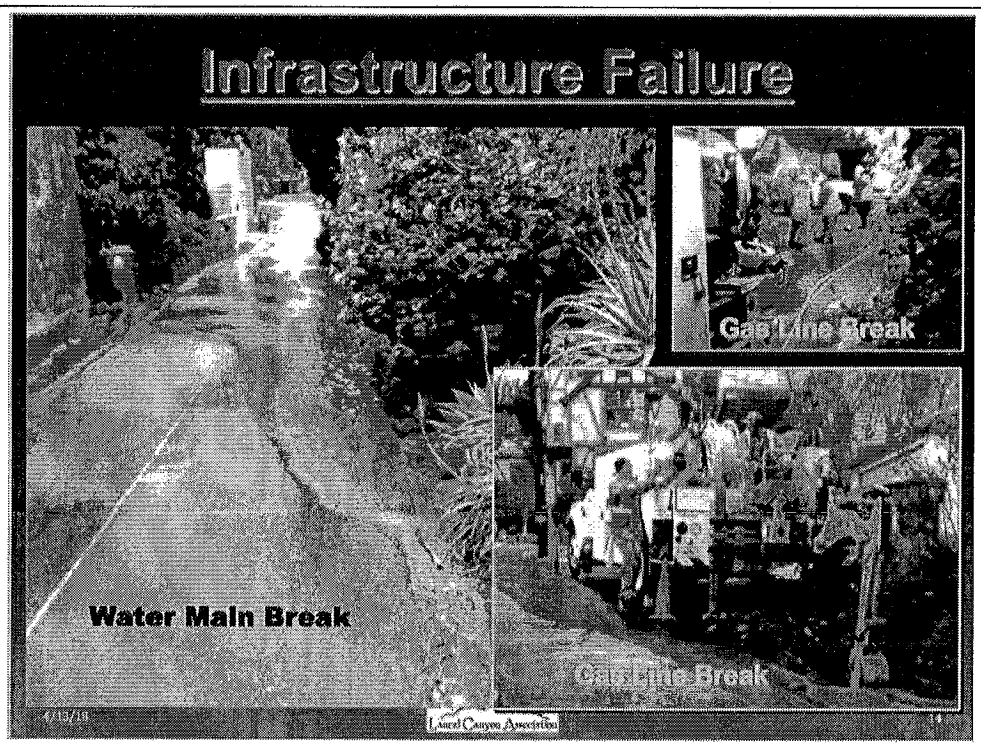


Figure 6: Infrastructure Failures In Project Area



I.e. *Failure to Describe Roadway Weight Restrictions In Project Area*

2-10 CEQA- WEIGHT RESTRICTIONS

Grand View Drive and Yucca Trail currently have a weight restriction of 6,000 pounds. This is not mentioned in the MND for the project or in the Traffic Analysis for the Construction Phase included in Appendix F. This restriction is intended to limit damage to these substandard roadways. Weight restrictions on likely access routes are an unusual circumstance and indicative of the potential for project construction traffic to result in significant project impacts in the form of increased roadway and infrastructure failures.

Normal concrete weights about 4,000 lb. per cubic yard. Lightweight concrete weighs about 3000 lb. per cubic yard. If a truck is carrying 10 cubic yards of normal concrete, then the weight of the concrete is approximately 40,000 lb. The truck will weigh approximately 26,000 lb. for a total of 66,000 lb.[1] This is substantially more than the 6,000 pound weight restriction. Project construction vehicles often weigh substantially more than 6,000 pounds (see **Attachment C**). So, restricting the weight of construction vehicles is likely infeasible, and there is therefore the potential for unmitigated impacts to local roadways resulting from construction vehicles. In the absence of mitigation requiring the applicant to post a Construction Damage Bond for any damage incurred along the roadways accessed by project construction and delivery vehicles, the potential for costly impacts remains. (See **Attachment B** for bids to repair recent damage to Grand View Drive).

I.f. Inadequate Description of Site Access Limitations

2-11 CEQA- ACCESS Limited local

As shown in the following figures, access to the proposed Crisler Way spur roadway is limited, and is taken off of Laurel Canyon. As shown in **Figure 7(a)** the proposed project is in essence located along a narrow loop road. The Grand View area is essentially a cul-de-sac within a cul-de-sac, as shown in **Figure 7(b)**. The limited entry and exit routes to the project site and Kirkwood Bowl area and the narrow streets result in the potential for project traffic to interfere with residential and emergency access to the area. Construction vehicle access routes are likely to be limited by sharp turns, narrow widths, and hillside grades affecting the choice of routes. **Figure 7(a)** shows the route to the site recommended in the Traffic Analysis in MND Appendix F. As can be seen from **Figure 7(a)** construction vehicles would need to make a sharp right hand turn from narrow Grand View Drive to turn onto Crisler Way, to access the project site, which may not be feasible for trucks and large equipment. The need for a sharp turn into and out of the project site area is not described in the Traffic Analysis contained in **Attachment F** to the MND. An understanding of the roadway configuration and proximity to neighboring uses is important to assessing the potential for construction-related impacts of the project. Although the MND and MND Appendix F did acknowledge that roadways serving the project site are narrow in width and have sharp curves in places, the environmental

[1] www.tx-taca.org/members/files/2011/07/Concrete-and-cement-faq.pdf

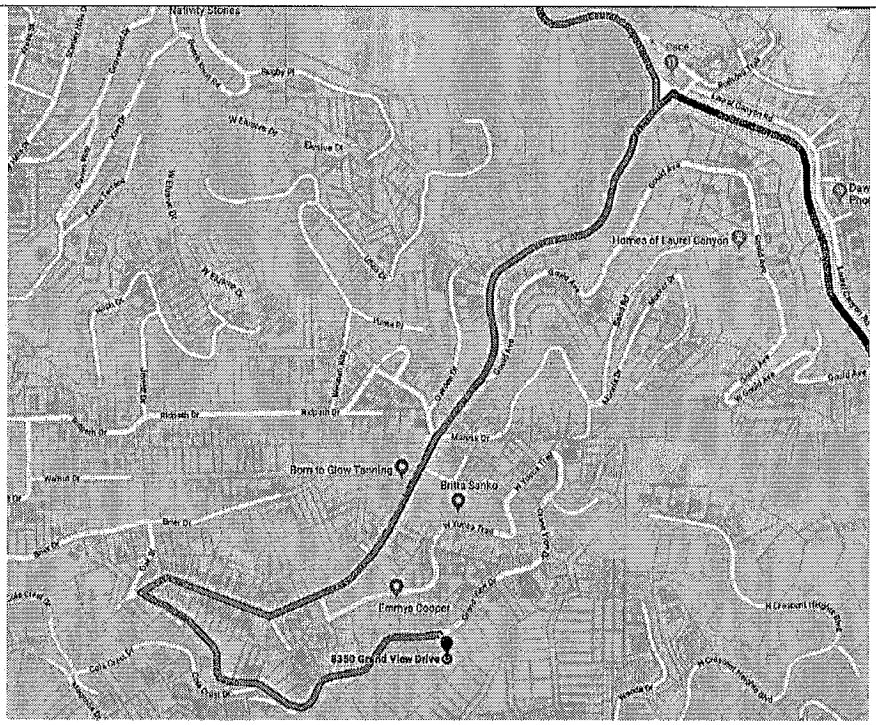



Figure 7a – Route to Project Site From Laurel Canyon Via Traffic Route B - Kirkwood Drive and Grand View Drive – Note Need For Sharp Right Hand Turn to Access Site

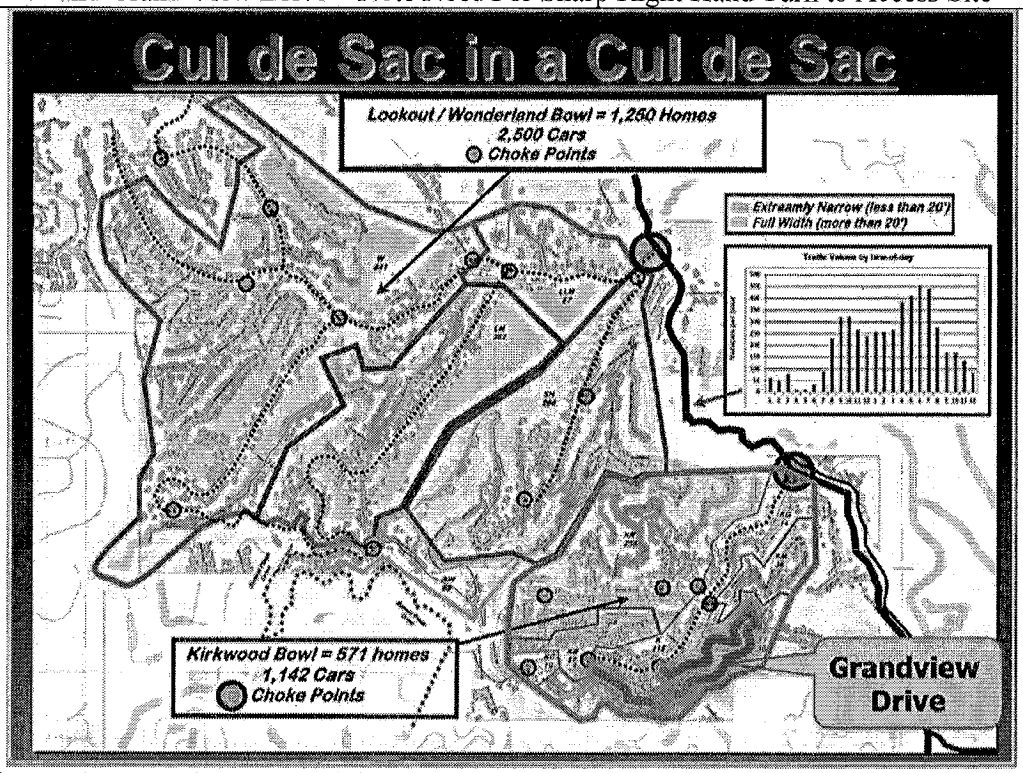



Figure 7b – Location In A Cul de Sac

document fails to provide sufficient information regarding roadway conditions and access issues, or provide a map showing the recommended routing showing the Crisler Way turn. As a result the analysis of the potential for traffic impacts is underestimated and the potential for impacts remains, as detailed in Section V of this comment letter.

*I.g.* *Inadequate Description of Existing Slope Conditions*

2-12 CEQA CRISLER SLOPE DESCRIPTION

As shown in **Figures 2 and 3**, the project site is located on a steep slope. The MND does indicate, on page 43, that as: "noted in the LADBS Approval Letter, the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope." This is the only substantive description of existing slope conditions in the area and is very non-specific as to the location of slopes, particularly slopes of 1:1. The environmental document for the project needs to include a copy of the slope analysis. In addition, the quoted language from the MND does not identify slopes along the proposed extension of Crisler Way; the description is only of the area "below the proposed extension of Crisler Way." The MND is deficient in its description of geotechnical conditions for the whole site (Crisler Way extension and single-family lots). This is evidence of the MND's failure to analyze the whole of the action.

I.h. *Inadequate Description of Very High Fire Severity Zone Conditions in Project Area and Fire History*

2-13 CEQA- FIRE HAZARD

The property has been officially mapped in a "Very High Fire Hazard Severity Zone" due to its location in a fire-prone hillside area of the City. It is identified as such in the City's ZIMAS system and on the Parcel Profile Reports for the project site. The City has defined the "Very High Fire Hazard Severity Zone" as follows:

> "Any area within the City of Los Angeles that poses a <u>significant threat</u> of fire from adjoining natural brush hillside areas and which is determined by the following factors: topography, infrastructure, fire protection, population density, types of construction, weather, existing fire codes and ordinances, and fire history." LAMC Section 57.202.

The City's Zone Information and Map Access System ("ZIMAS") describes the Very High Fire Hazard Severity Zone as follows:

> "Lands designated by the City of Los Angeles Fire Department pursuant to Government Code 51178 that were identified and recommended to local agencies by the Director of Forestry and Fire Protection based on criteria that includes fuel loading, slope, fire weather, and other relevant factors. These areas must comply with the Brush Clearance Requirements of the Fire Code. The Very High Fire Hazard Severity Zone (VHFHSZ) was first established in the City of Los Angeles in 1999 and replaced the older 'Mountain Fire District' and 'Buffer Zone.'"

While the MND recognizes that the project is located in a Very High Fire Severity Zone, it fails to note that the project is located in the general area burned by the 1979 Kirkland Bowl Fire, as shown in **Figure 8** which is developed from the information contained in **Attachment D**. This figure shows the locations of the houses that burned in the Kirkland Fire (red), the project (yellow) and other cumulative project in the Kirkland Bowl area (blue). In fact the home at 8350, the approximate address of the proposed turnoff from Grand View Drive to the Crisler Way extension burned in the Kirkland Bowl Fire which is why there is not a home at this location. The MND needs to not only identify that the project is in a Very High Fire Severity Zone, but also should disclose that the project site burned in the Kirkland Bowl fire and discuss the conditions that exacerbated fire damage in the area. Failure to adequately discuss fire risks in the project area has resulted in a failure to adequately identify emergency access and response impacts of the proposed project.

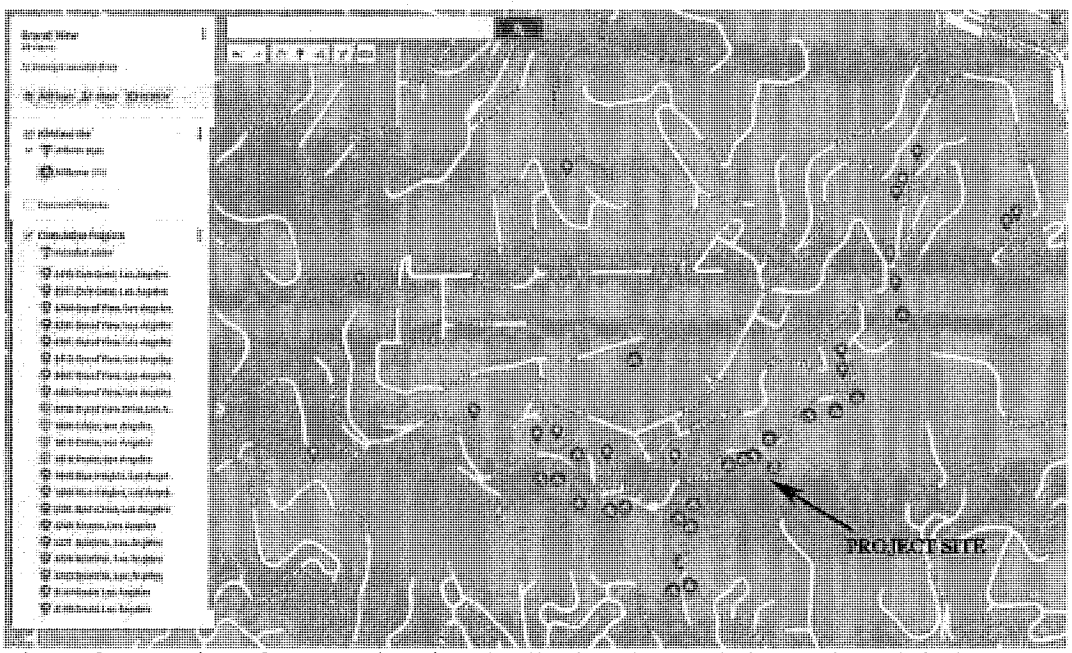



Figure 8: Location of Proposed Project (Yellow) and Cumulative Projects (Blue) In Relation To Homes That Burned In Kirkland Fire (Red)

## II. Violation of Public Resources Code 21167.2(c) and/or CEQA Guidelines Section 15150 – Failure to Make All Cited Documents Readily Accessible to the Public

Because important technical studies and projects plans were not included in the MND, we were forced to have someone go downtown and go through the project files. However, not all of the information sought was available in the project files, which lacked, for example, the geotechnical studies, storm water drainage plan, sewer plans, and Crisler Way plans and associated documents. See **Attachment E**, which contains emails with planning staff in which we were directed to chase around City Hall to different departments to obtain the requested studies. As a result, our ability to review

2-14 CEQA AVAILABILITY OF CITED DOCUMENTS

the MND and project has been compromised. The fact that information about the project as a whole was not in the project file is demonstrative of the fact that the MND fails to analyze the whole of the action. Concerned citizens should not be forced to take time off work to go downtown to review the project file in order to obtain the information necessary to understand the proposed project.

## III. Violation Of CEQA Guidelines Sections 15063(D)(1) And 15071 – Inadequate, Incomplete And/Or Inaccurate Project Description

### *III.a. Inadequate Description of Required Permits*

Page 1 of the MND indicates that:

> The Applicant is requesting approvals and permits from LADBS and other municipal agencies for construction activities including, but not limited to, grading and construction of the single-family residences and improvements to Crisler Way in accordance with the LAMC.

The MND fails to identify the specific permits required/sought and the other municipal agencies required to grant such permits. The MND permit discussion fails to identify the permits and agreements required for off-site services and utilities and the required timing of such permits relative to project approval.

### III.b. *Inadequate Description of Crisler Way Extension*

The MND fails to provide an adequate description of the Crisler Way extension and the nature and type of construction required. In 2015 the Department of Public Works inappropriately issued a B Permit for this roadway extension, without first conducting required CEQA review. An appeal of the B-permit issuance was filed, which the City never heard, and the B-permit expired on January 12, 2018, as shown in **Attachment F**.[2] As shown in **Attachment F**, the roadway extension includes storm drains, which are not addressed or described in the MND. As explained in **Attachment G** – Appeal to Board of Public Works of CEQA Determination for B Permit No. BR402571 (Public Resources Code Section 21151(c)), dated July 2, 2015 from Channel Law, the plans submitted as part of the B Permit application show that the Crisler Way extension would require up to 30 caissons and two large retaining walls. A marked up screenshot of the plans is provided in **Figure 9**.

[2] Available at: https://engpermits.lacity.org/bpermits/common/final_permit.cfm?ref_no=8910

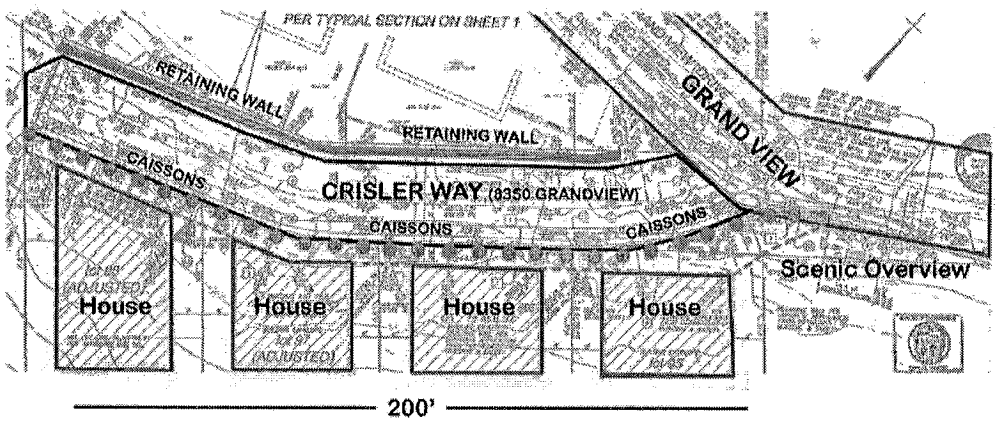



Figure 9: Crisler Way Extension

2-16

The MND project description fails to provide a description of the design of the proposed Crisler Way extension, and the nature of included/required public services and utilities. The environmental document for the project must disclose the location of all storm drain facilities included for Crisler Way and indicate the location of the connection to the greater storm drain system. The MND also fails to indicate whether the Crisler Way extension will be a public or private street. As a result of the lack of adequate project description, the MND analysis of potential project impacts is fatally flawed, since the air quality, noise and other technical studies fail to fully address potential impacts associated with the design and construction of this roadway.

III.c. *Inadequate Description of Proposed Sewer Connection*

2-17 CEQA SEWER CONNECTION DESCRIPTION

The MND indicates that Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325)" as indicated on the Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015 for the project, prepared by Robert Anderson, Architect. "Project sewer flows would then connect to the existing lines under Marmont Avenue." (See **Figure 4** for an understanding of the location of Lot 118 in relation to the project site). However, the MND fails to adequately identify all of the required easements for the project and the location and number of sewer wyes required for the project. In addition, the environmental document for the project must identify if the installation of the new sewer line results in requirement to provide wyes or other sewer facilities to adjacent unserved parcels. Furthermore, the MND should identify the routing of the sewer lines from each of the single-family homes, and the depth and length of trenching required for installation and connection to existing facilities. In the absence of this information, the analysis of potential project impacts is fatally flawed, since the air quality, noise and other technical studies fail to fully address potential impacts associated with the design and construction of required sewer facilities.

2-18 CEQA CRISLER INFRASTRUCTURE

III.d. *Inadequate Description of Required Infrastructure*

Page 85 of the MND indicates, as part of the discussion of fire protection impacts, that: "the Project design features the installation of a new fire hydrant at the intersection of Crisler Way and Grand View Drive so the proposed residences would be located within 300 feet of a fire hydrant, and entrances to the residences would be within 150 feet of an improved edge or approved fire lane to reduce potential fire hazards." However, this is not included in the project description and the MND provides no information on existing water lines, their capacity and the construction activity required to install the new hydrant. As a result there are the potential for air quality, noise, and emergency and residential access impacts that are not addressed in the MND.

The MND fails to disclose that the Crisler Way extension is required to include storm drains (see **Attachment F**). In addition, the MND fails to explain how and where the storm drains will be connected to existing storm drain facilities and the capacity of such facilities. As a result, the discussion of potential infrastructure impacts in the MND is fatally flawed.

2-19 LAND USE HILLSIDE DEVELOPMENT STANDARDS

III.e. *Inadequate Description of Los Angeles Municipal Code Requirements*

Page 9 of the MND indicates that the project is located in a hillside area, but fails to note that the project is subject to the City's Hillside Development Standards or to describe applicable standards and analyze the project's consistency with those standards.

2-20 CEQA PLAN DETAILS

III.f. *Inadequate Description of Proposed Single-Family Homes*

The MND includes Figure 3, which shows the footprint of the four proposed single-family dwellings, but the MND lacks figures showing project elevations, or other typical project plan sheets. The environmental document for the project should include a full set of project plans as well as visual simulations for the project. This information is necessary in order to more fully understand the project in relation to existing topography, the nature of project grading and construction, and to allow members of the public to verify the project's consistency with Los Angeles Municipal Code (LAMC) requirements. Given the missing information in the MND, we were forced to have someone go downtown and go through the project files. Based on the plan information obtained, it does not appear that the project is consistent with the requirements of the Baseline Hillside Ordinance, as discussed more fully in Section V of this comment letter. Concerned citizens should not be forced to take time off work to go downtown to review the project file in order to obtain the information necessary to understand the proposed project.

2-21 CEQA RETAINING WALLS

III.g. *Failure to Describe Required Retaining Walls*

The MND makes reference in a number of places to the fact that the proposed project requires the construction of retaining walls, but never provides information on the number, location and heights of such retaining walls. This information is necessary in order to assess whether the project complies with the City's Hillside Development

Standards/Baseline Hillside Ordinance. According to the September 19, 2012 Geotechnical Report for the project at page 5, the project includes:

> Retaining walls to 6 to 21 feet high are proposed along the *uphill* side of the proposed private street. Pile-supported retaining walls from 5 to 7-1/2 feet high are proposed along the downslope side of the proposed street. The new proposed construction plans provide specific information concerning the construction of four hillside residences and swimming pools on the subject property. Retaining walls associated with the construction of the individual residences are proposed up to 22 feet high. Retaining walls used to create the level rear yard areas are proposed up to 12 feet high.

III.h. *Inadequate and Inaccurate Grading Summary*

The MND on page 8 indicates that total grading for Crisler Way amounts to 789 cubic yards (cy) of fill obtained from cuts for construction of the four houses, and that the amount of cut and fill precisely balances. The following back-of-the-envelope calculation of likely earth movement for roadway construction is based on the limited project information for the Crisler Way portion of the project obtain from the Bureau of Engineering. Based on this calculation, it is unlikely that the grading information in the MND is correct and that cut and fill amounts will precisely balance. The MND should include the grading plan for the project as a whole, including roadway construction and the trenching required for sewer, storm drain and fire hydrant installation.

| Road | | | |
|---|---|---|---|
| ( 29 ) 3' dia piles @ 36' | 189 | cy | |
| 10" pocket wall between 3' piles | 84 | cy | |
| road slope cut 25' x 16' h( foot& wall up | 1556 | cy | |
| road pavement & recomp bottom | 486 | cy | part dirt comes back |
| Dirt volume front set back 5'x22'x210' | 855 | cy | dirt comes back |
| | | | |
| total road | 3170 | | |

In addition, the MND fails to include a grading staging plan to demonstrate that earth volumes removed from the residential parcels will be immediately used for roadway construction. Given the steep slopes in the area, and the lack of places to store earth, it is likely that earth may need to be stored off-site, pending use as fill. The MND fails to account for this, or to provide the information necessary for an independent verification of cut and fill balancing claims. The MND does indicate that a staging area will be created on lot 95, but fails to indicate if the associated grading/pad configuration is temporary or permanent and sufficient for both parking, staging and dirt. From the information available, it appears that that the MND understates project cut and fill requirements. Associated impacts (air quality, traffic) are also likely understated.

*III.i. Inadequate Description of Site Preparation and Grading*

Table 3-5 in the MND provides an estimate of the duration of various construction activities. The Table fails to note, with the exception of Stage 4 – creation of temp. 10 ft. wide road on Crisler Way, install security fence – whether the cited activity is associated with roadway or single-family home construction.

III.j. *Inadequate Description of Construction Parking and Equipment Staging*

Page 10 of the MND states that complete on-site parking will be available within two month of construction following the creation of a staging area on Lot 95. However, the MND fails to indicate how parking and equipment staging will be handled during the first two months. Similarly, page 11 of the MND indicates:

> The Applicant expects to be able to achieve "off Grandview Parking" within two months of starting construction by providing an on-site location for construction parking and equipment staging on lot #95, the first lot adjacent to Grand View Drive. Lot #95 contains an unused building foundation from a prior structure that will provide flat surface area for temporary construction parking and staging. During construction, crews will use the extension of Crisler Way as a temporary parking and equipment staging area to avoid parking and staging on Grand View Drive.

This implies that on Grand View parking will occur during the first two month of project construction. This would result in significant residential and emergency access impacts, given the narrow width of Grand View Drive in the project vicinity.

Given the roadway width and likely construction methods, it is unclear whether project construction can be accomplished without any staging on Grand View Drive. As detailed in **Attachment G**, residents in the area experienced very real impacts as a result of the way construction was conducted at 8401 Grand View Drive and the need for construction equipment to be staged from the street, as shown in **Figures 10(a) and 10(b)**, which depict the type of equipment used during pile drilling and installation.

As can be seen from these photos, and given that the project similarly may require drilled pile foundations and currently has no land for construction staging in the first few months of construction activity (see **Figures 2 and 3**), it is likely that construction equipment will be used which can not quickly be moved in the event of an emergency, or to allow residents to access their homes and that for some portion of project construction activity will occur from Grand View Drive. The extreme slope of the parcels, combined with the narrow width of the existing streets, and the possible lack of existing staging area on the project site are unusual circumstance with the potential to result in construction-traffic related impacts if not properly mitigated.

**Figures 10(a) and 10(b)** also illustrate the problem construction equipment may have making a sharp right turn from Grand View Drive onto Crisler Way. A sharp right

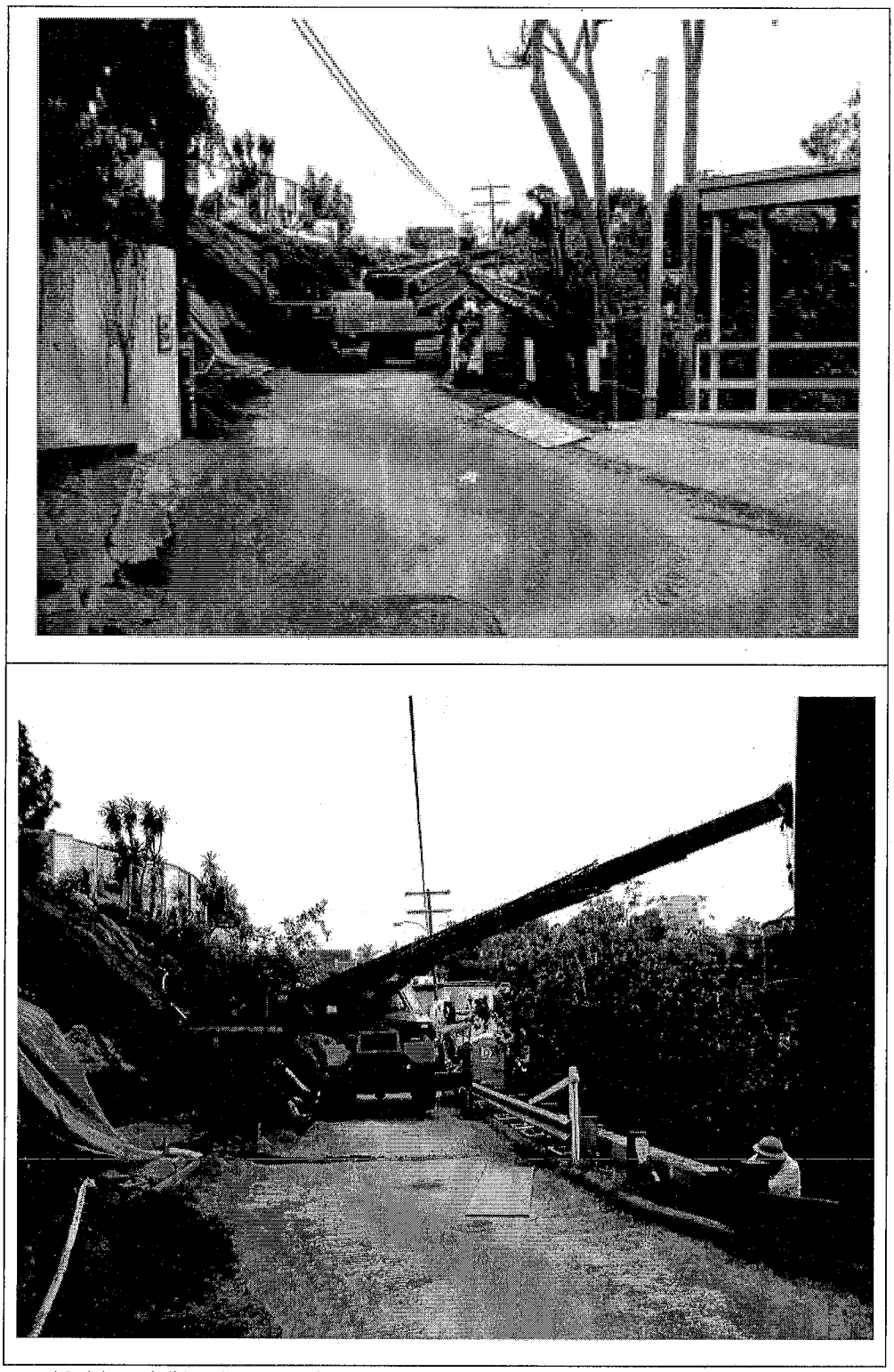


Figure 10 (a) and (b): Construction at 8401 Grand View Drive Blocking Roadway

hand turn would be required if project traffic is to avoid Yucca Trail, as shown in **Figure 7(a).** The narrow roadway, combined with the need for a sharp turn to access the project site is an unusual circumstance with the potential to increase the likelihood of accidents and roadway blockages which would be significant impacts of project construction.

III.k. *Inadequate Description of Project Equipment*

2-30 CEQA - Construction Equipment

Table 3-7 lists the assumed equipment fleet for project construction, which includes during site preparation, 1 bobcat, 1 grader, 1 tractor/loader/backhoe and during construction 1 rough terrain fork lift, 1 forklift, 1 bobcat, 1 tractor/loader/backhoe. However, project construction required the drilling of 36" solider piles and installation of steel cages and concrete piles. This typically involves drilling rigs and cranes (See **Figure 10**). However, this type of equipment is not included in Table 3-7 or assumed in the noise analysis for the project. In addition, construction will require cement trucks and other haul vehicles which need to been included in the construction fleet. Given roadway constraints in the area, the environmental document needs to provide information on the size and weight (loaded and unloaded) of vehicles and equipment used for construction that must be transported to the site. This information if necessary to demonstrate that the use of lighter, smaller construction vehicles is actually feasible, as assumed in the analysis of construction impacts to local roadways, and that such vehicles will comply with weight restrictions along the project route, or the potential for impacts remains.

III.l. *Inadequate Description of Temporary Street Closures*

2-31 CEQA Street Closure Description

As detailed on page 12 of the MND, it is anticipated that construction activities may necessitate temporary lane closures on streets adjacent to the project site on an intermittent basis. Given roadway constraints in the project area, any lane or street closures would have the potential to result in significant emergency and residential access impacts.

III.m. *Inadequate Cumulative Projects List*

2-32 CEQA - Cumulative Projects List

The cumulative projects list includes only eight projects, however, there are additional cumulative projects in the vicinity which need to be addressed in the analysis, as shown on **Figure 11**, and listed in recent MND's from the City, including those for 8301 Grand View Drive, 8495 Cole Crest and 8551 Cole Crest, including:

- 1840 Blue Heights
- 1860 Blue Heights
- 8484 Grand View Drive

The MND analysis thus underestimates the potential for cumulative impacts, including traffic, emergency access, air quality, and noise impacts.

Figure 11 – Cumulative Projects In The Area

## IV. Violation of CEQA Guideline Section 15003(h) – Failure to Consider The Whole Of The Action

2-33
CEQA - WHOLE ACTION

Although the MND recognizes that the Crisler Way extension is part of the project, the MND fails to adequately describe the Crisler Way extension, or to adequately analyze the potential impacts of Crisler Way construction. Similarly, the MND fails to adequately describe required sewer, storm drain, fire hydrant, drainage, and other required improvements, or to adequately analyze the potential impacts of such improvements. For example, it does not appear that the grading figures provided in the MND include the trenching required for sewer infrastructure installation on and off-site, and the MND fails to address storm drains and associated drainage for Crisler Way.

## V. Violation of CEQA Guidelines Section 15358 – Failure to Address Growth-Inducing Effects

2-34
LEGAL
GROWTH-INDUCING EFFECTS

A key purpose of CEQA is to identify the environmental effects, or impacts of a proposed project, as explained in CEQA Guidelines Section 15002. As explained in CEQA Guidelines Section 15358, impacts include the potential growth inducing effects of a project:

**15002. GENERAL CONCEPTS**

(a) Basic Purposes of CEQA. The basic purposes of CEQA are to:
(1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify the ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

**15358. EFFECTS**

"Effects" and "impacts" as used in these Guidelines are synonymous.
(a) Effects include:
(1) Direct or primary effects which are caused by the project and occur at the same time and place.
(2) Indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Growth-inducing effects occur when a project extends infrastructure to an undeveloped area removing a barrier to future development. For example, in *City of Antioch v. City Council of the City of Pittsburg* (1st Dist. 1986) 187 Cal.App.3d 1325, the court explained that "[c]onstruction of the road way and utilities cannot be considered in isolation from the development it presages." (Id. At p. 1335). This project will extend both a roadway and infrastructure such as sewer lines and storm drains into an area that is not developed, and may thus encourage future completion of the remaining Crisler Way gap, and development along Marmont Way. The City needs to address the potential for growth-inducing impacts to result from the proposed project in the environmental document for the project.

**VI. Violation Of CEQA Guidelines Section 15063, 15064 And 15070(A) – Lack Of Substantial Evidence Supporting Impact Judgments In The Initial Study and Violation of CEQA Guidelines Section 15063(C)(3)(A) – Failure to Identify Significant Impacts of the Project**

*VI.a. Aesthetics*

| I AESTHETICS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☒ | ☐ | ☐ | ☐ |
| b) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☒ | ☐ | ☐ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As noted on page 17 of the MND: "Scenic vistas are generally described in two ways: panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, or feature of interest)." "Views of the project site are available from neighboring residential properties along Grand View Drive, Crisler Way, Hillside Avenue, Hillside Way, Marmont Ave and from distant mid-city locations." Currently residences are located on the ridgeline of the hillside on Grand View Drive. Unlike the existing residential neighborhood along Grand View Drive, the proposed project would be constructed on the side of the undeveloped hillside, as shown in **Figures 2b and 3**. The proposed project therefore has the potential to affect a scenic vista, and degrade the existing natural character of the site. In addition, the proposed project would introduce a new light source on a prominent and visible slope. The potential for light and glare impacts therefore exists.

2-36
CEQA AESTHETICS EXCEEDANCES

The MND fails to provide project elevations or visual simulations to show that aesthetic impacts would be less than significant. Given that the proposed project would introduce new roadway and residential uses on an undeveloped hillside slope, there is the potential for significant aesthetic impacts. The MND does not provide substantial evidence to the contrary.

2-37
LAND USE LAMC BUILDING HEIGHTS

On page 18 the MND argues that the project's impact on the existing visual character of the area would be less than significant, in part because: "The proposed building heights would not conflict with LAMC height restrictions." This is not true. Based on the project plans contained in the project file at City Hall, the height of 1800 Crisler would be 46 feet (high point 1004.5', low point 958.5'), 1806 Crisler would be 45 feet, 1812 Crisler would be 55 feet in height (high point 1020', low point 965') and 1818 Crisler Way would be 46 feet in height (high point 1020', low point 974'). See **Figures 12, 13, 14 and 15**.

According to page 14-15 of the 2011 *Baseline Hillside Ordinance A Comprehensive Guide to the New Hillside Regulations,* Section 4. Height Limits, the following maximum height limits apply:

Table 5
Maximum Height of Structures (in feet)

| Height Districts | R1 | RS | RE9 | RE11 | RE15 | RE20 | RE40 | RA |
|---|---|---|---|---|---|---|---|---|
| When the roof of the uppermost story of a building or structure or portion thereof has a slope of 25% or greater, the maximum height for said portion of building or structure thereof shall be as follows: | | | | | | | | |
| 1, 1L, & 1VL | 33 | 33 | 33 | 36 | 36 | 36 | 36 | 36 |
| 1XL | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 1SS | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| When the roof of the uppermost story of a building or structure or portion thereof has a slope of less than 25%, the maximum height for said portion of building or structure thereof shall be as follows: | | | | | | | | |
| 1, 1L, & 1VL | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 30 |
| 1XL | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 30 |
| 1SS | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |

The residential lots included in the proposed project are zoned R1-1, which would allow for a maximum height of 33 feet with a roof slope of 25% of greater. The proposed single-family homes included in the proposed project exceed these heights. Section 4b of the *Comprehensive Guide* does allow the zoning administrator to allow structure of up to 45 feet:

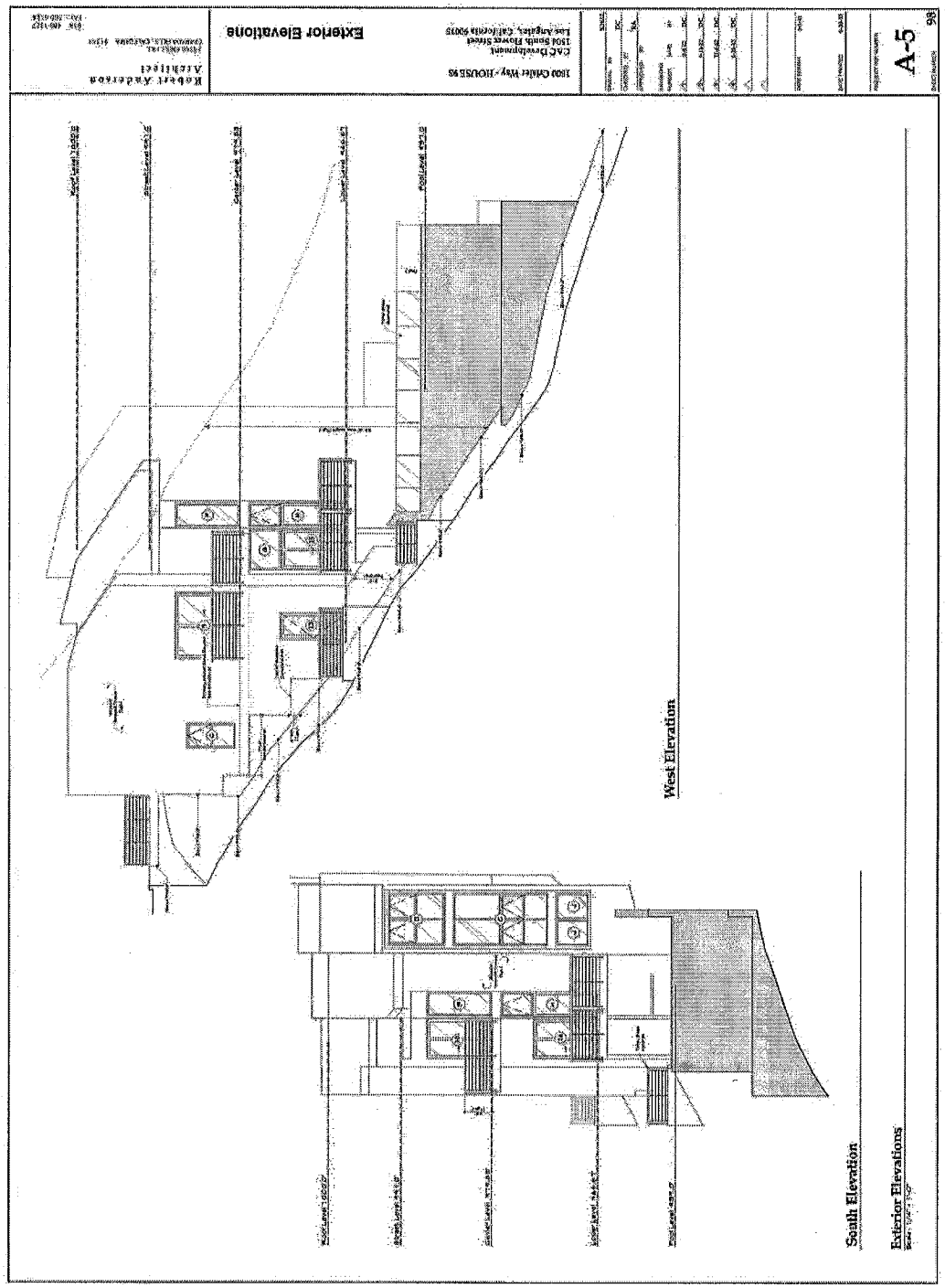



Figure 12 – Exterior Elevation 1800 Crisler Way

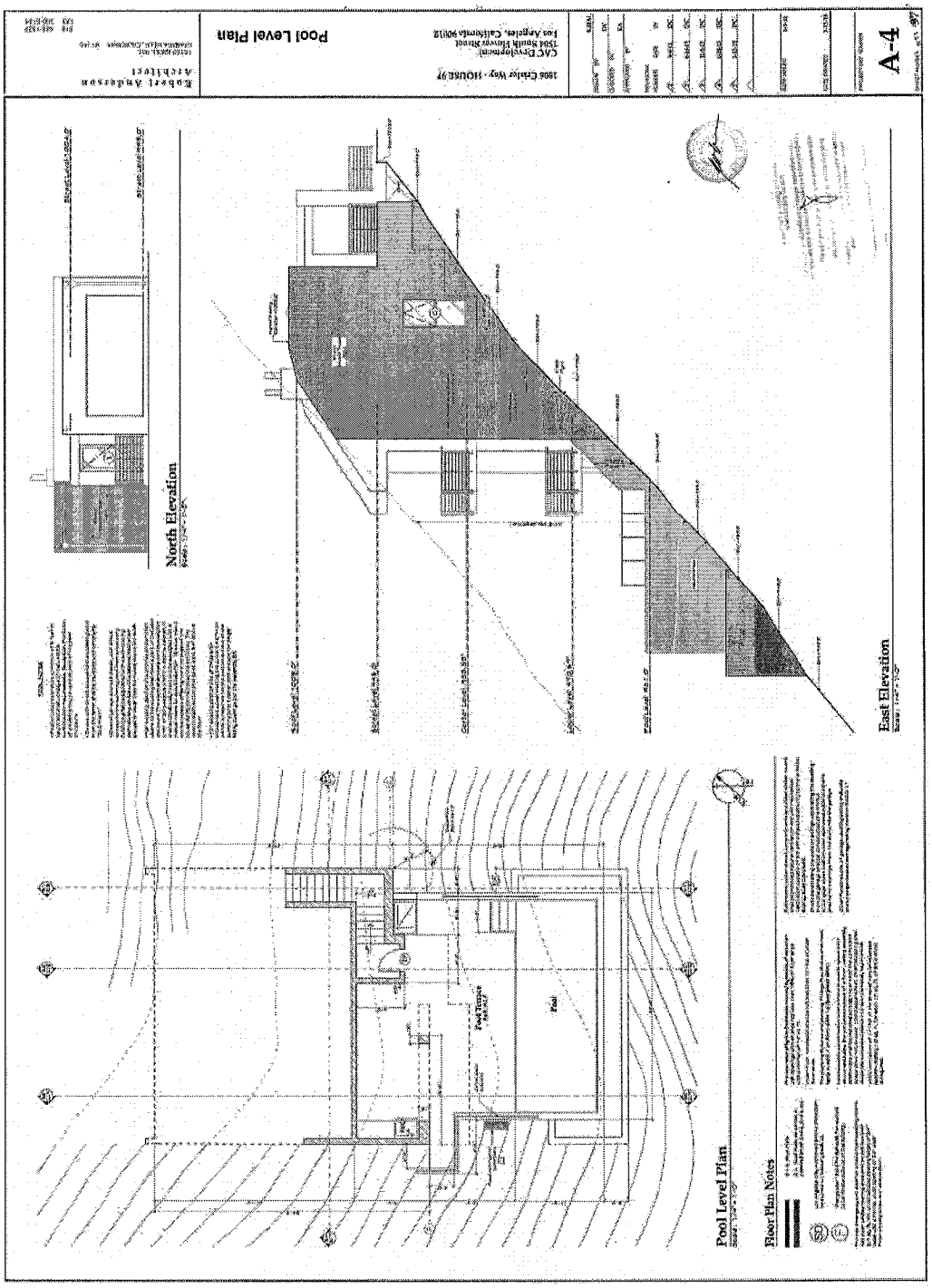



Figure 13 – Elevation 1806 Crisler Way

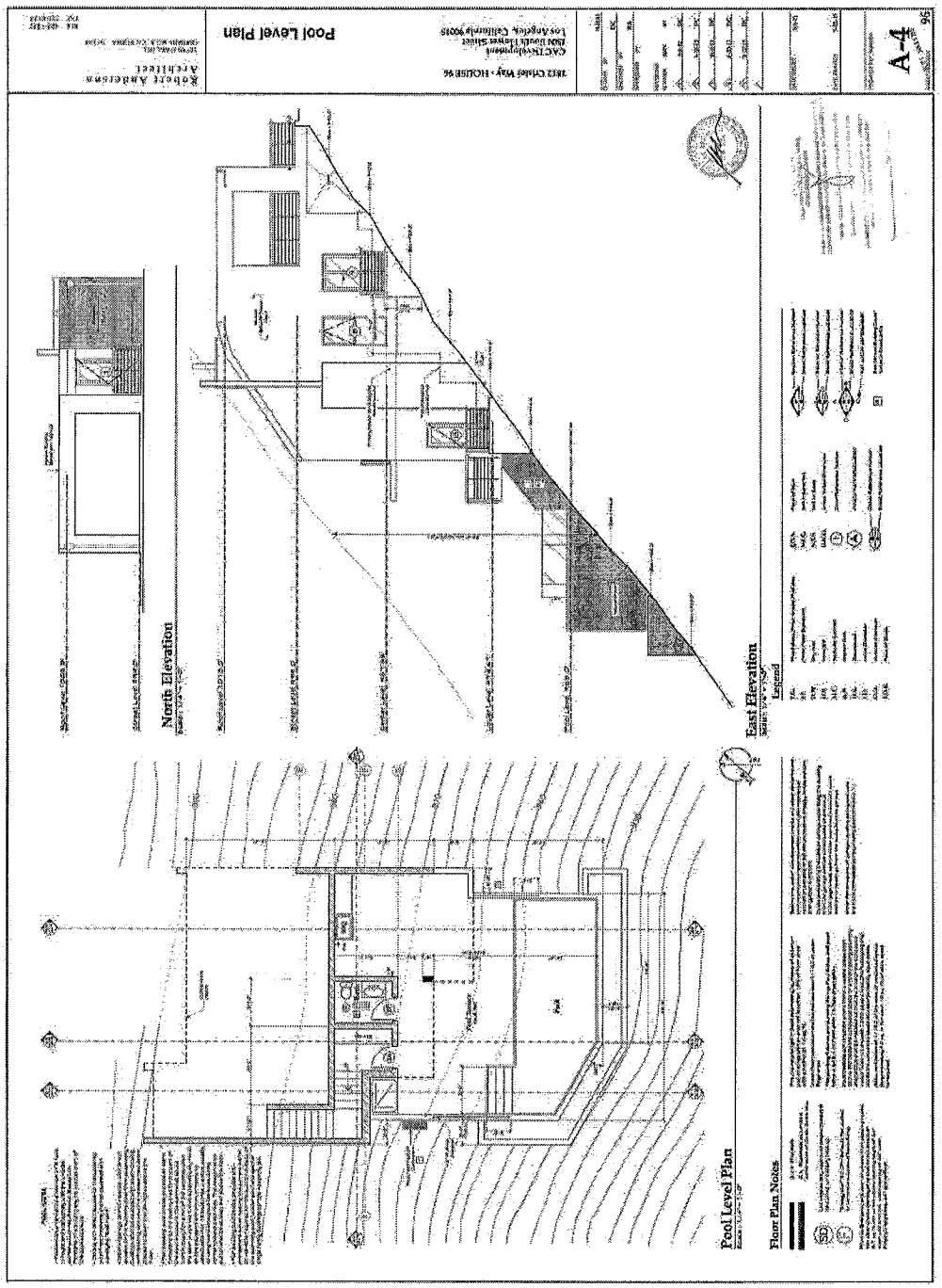



Figure 14 – Elevation 1812 Crisler Way

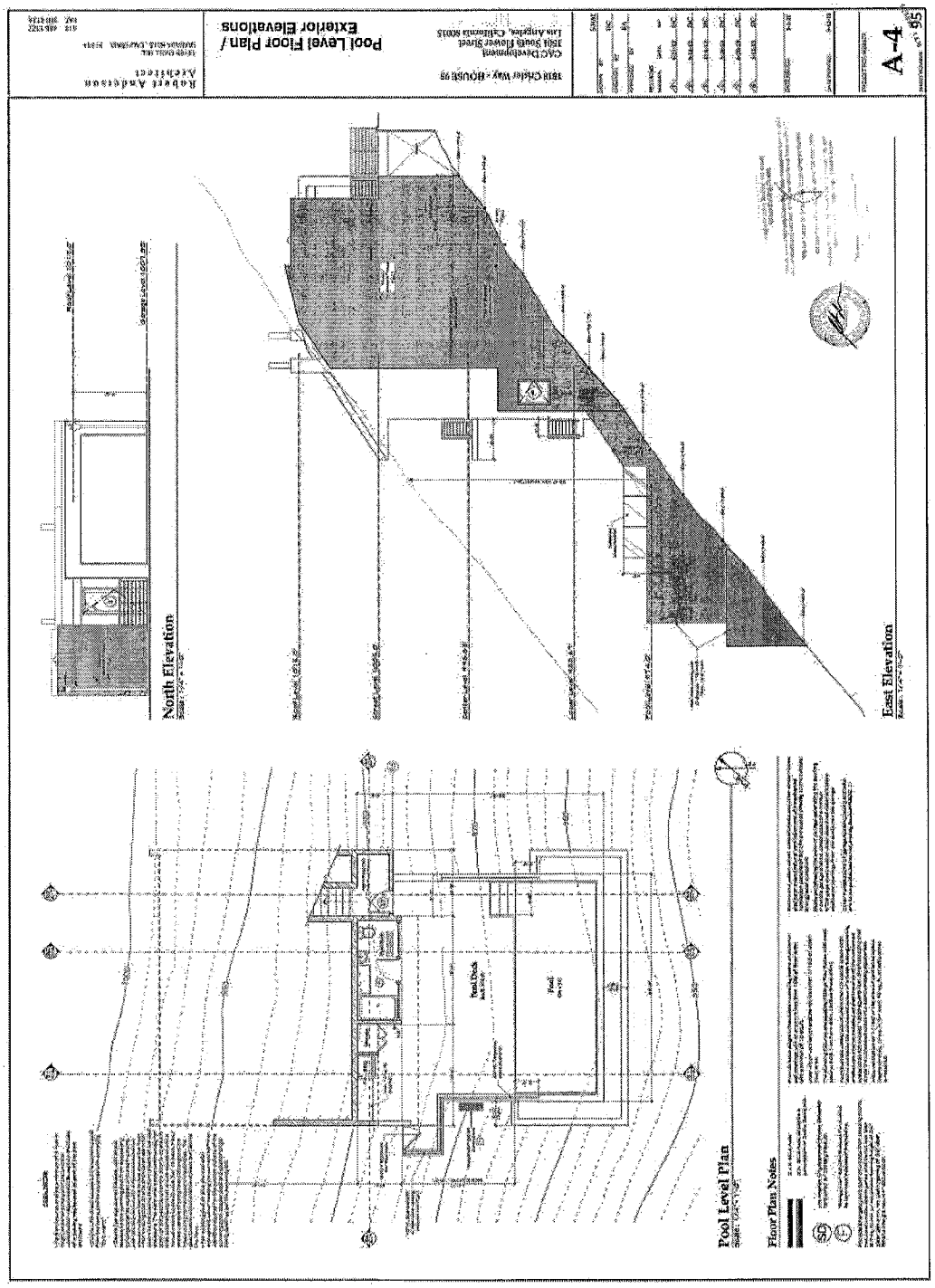
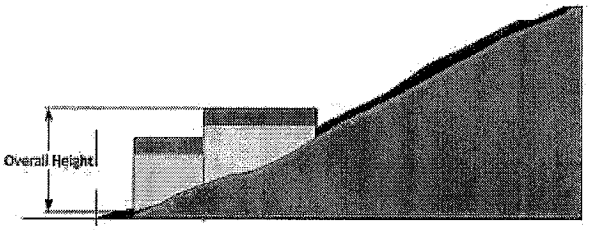



Figure 15 – Elevation 1818 Crisler Way

**b. *Zoning Administrator's Authority. [§ 12.21 C.10.(d)(2) of the LAMC]***

A Zoning Administrator may allow Structures which exceed the maximum envelope height requirements of Table 5 – Maximum Height of Structures; however, the increase in height may not result in a Building or Structure which exceeds an overall height of 45 feet, pursuant to the authority and procedures established in Section 12.24 X.28 of the LAMC.

The overall height shall be measured from the lowest Elevation point within 5 horizontal feet of the exterior walls of a Building or Structure to the highest Elevation point of the roof Structure or parapet wall.




However, at least three of the proposed single-family homes exceed the allowable height limits, in violation of the Baseline Hillside Ordinance that was adopted in response to the proliferation of out-of-scale development in hillside areas and to protect the hillsides. The excessive height of the proposed single-family homes and the violation of the Baseline Hillside Ordinance standards further supports the project's potential to result in significant aesthetic impacts.

*VI.b. Biological Resources – Wildlife Corridor*

| IV BIOLOGICAL RESOURCES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☒ | ☐ | ☐ | ☐ |
| b) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☒ | ☐ | ☐ | ☐ |
| c) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

The Santa Monica Mountains Conservancy (Conservancy) was established by the California State Legislature in 1980 via the Santa Monica Mountains Conservancy Act. The proposed project is located within the Santa Monica Mountains Zone. The Zone was also established by the Legislature via the Santa Monica Mountains Conservancy Act, which is codified at Section 33001 et. seq. of the Public Resources Code (PRC). PRC Section 33001 states as follows:

> The Legislature hereby finds and declares that the Santa Monica Mountains Zone, as defined in Section 33105 , is a unique and valuable economic, environmental, agricultural, scientific, educational, and recreational resource that should be held in trust for present and future

generations; that, as the last large undeveloped area contiguous to the shoreline within the greater Los Angeles metropolitan region, comprised of Los Angeles and Ventura Counties, it provides essential relief from the urban environment; that it exists as a single ecosystem in which changes that affect one part may also affect all other parts; and that the preservation and protection of this resource is in the public interest.

2-58 cont.

CEQA-Bio-

So, the Legislature itself declared that the Santa Monica Mountains Zone is a *unique* and *valuable* environmental resource that provides essential relief from the urban environment and noted the importance of the connectivity of the system. The Santa Monica Mountains Conservancy Act goes on to say the following:

> . . .in the absence of a governmental mechanism to perform such evaluations, piecemeal development projects were occurring within the zone which resulted in the irreplaceable loss of open space and recreational resources, in the physical and biological deterioration of air, land, and water systems within the zone, and adversely affected regional life-support systems, including fish and wildlife, therefore being harmful to the needs of the present and future population of the region.

The Legislature further declared in PRC Section 33008 that:

> (a) The Legislature finds and declares that there are existing problems of substandard lots, incompatible land uses, conflicts with recreational use, and inadequate resource protection which, in some cases, cannot be addressed in a feasible manner by local government exercise of the police power or federal land acquisition as part of the Santa Monica Mountains National Recreation Area, and that it is necessary to enact the provisions of this division as a complement to the full exercise of the police power by local governments and the acquisition of lands by the federal government for the Santa Monica Mountains National Recreation Area.
> (b) The Legislature further finds and declares that the people of the State of California have an interest in the protection of resources and the use of lands acquired or managed by the conservancy pursuant to this division, and that the conservancy in carrying out its duties pursuant to this division acts on behalf of the State of California.

The Conservancy is thus the chief State planning agency for the Santa Monica Mountains. As noted in the MND, the proposed project is located within a designated wildlife corridor on the Santa Monica Mountains Conservancy's Eastern Santa Monica Mountain Habitat Linkage Planning Map (2017) adopted via Resolution No. 17-01 on January 23, 2017 by the Conservancy. Resolution No. 17-01 states in part:

> WHEREAS, the eastern Santa Monica Mountains habitat linkage between the San Diego (405) freeway and Griffith Park is of regional scientific significance; and

WHEREAS, the subject habitat linkage system and the Mulholland Drive Scenic Corridor are a cultural treasure for the City of Los Angeles; and

WHEREAS, the efficacy of the subject habitat linkage system could be severed by new fencing on just one or two residential parcels; and

WHEREAS, the subject habitat linkage system has never been comprehensively mapped and such mapping is essential to adequately assess the impacts of proposed development projects; and

WHEREAS, a Habitat Linkage Planning Map for the Eastern Santa Monica Mountains adopted by the Santa Monica Mountains Conservancy as the principal State planning agency for the area is beneficial to the City of Los Angeles Department of Planning's efforts to maintain habitat connectivity; and

2-38 CONTINUED Bio

GENERAL LOCATION IN SMM ZONE

WHEREAS, the Los Angeles City Council (Koretz) adopted a motion to designate the subject area as a Regional Wildlife Habitat Linkage Zone in the Municipal Code and for the Planning Department to work in consultation with the Santa Monica Mountains Conservancy, the Mulholland Design Review Board, and Citizens for Los Angeles Wildlife (CLAW) to prepare an ordinance to create a Wildlife Corridor in the eastern area of the Santa Monica Mountains; and

WHEREAS, the proposed Eastern Santa Monica Mountains Habitat Linkage Planning Map represents an initial comprehensive step to delineate the majority of habitat blocks and connecting wildlife corridors between the 405 and 101 freeways for planning, conservation, and environmental impact analysis purposes;

*Therefore Be It Resolved,* That the Santa Monica Mountains Conservancy hereby:

1. FINDS that the proposed action is consistent with the *Santa Monica Mountains Comprehensive Plan.*
2. ADOPTS the proposed Eastern Santa Monica Mountains Habitat Linkage Planning Map (Version January 2017).

2-39 AREA-BIO HABITAT LINKAGE

As noted on page 38 of the MND, the proposed project is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map adopted by the Santa Monica Mountains Conservancy, and that "the linkage could be affected by Project construction and operation (e.g., night time lighting and noise)." However, the MND dismisses the project's potential to result in significant impacts to the wildlife corridor because:

Project construction and operation activities would primarily occur during the daytime hours as specified in the LAMC, limiting the potential noise

> and lighting impacts during the nighttime hours when most wildlife species likely to traverse the area would be active. As such, significant direct and/or indirect impacts to wildlife corridors and habitat connectivity are not anticipated. Thus, the construction and operation of the proposed residences and extension of Crisler Way would not substantially interfere with migratory corridors or impede wildlife movement and impacts to wildlife corridors and habitat linkages would be less-than-significant, no avoidance or mitigation measures are recommended.

The MND thus ignores the impact on the wildlife corridor and habitat linkage block of replacement of open space and habitat on the project site with four single-family residences, a roadway and associated infrastructure. The MND also ignores potential growth-inducing and cumulative impacts of the project on the wildlife corridor and habitat linkage acreage. **Figure 16** illustrates the amount of open space potential removed from the wildlife corridor and habitat linkage block as a result of the proposed project. In the absence of a restrictive covenant on a portion of the project site for wildlife movement purposes the potential for impacts to an important habitat linkage/wildlife corridor in the Santa Monica Mountains remains.

The MND also attempts to diminish the project's potential impacts to the wildlife corridor by making use of the significance threshold on page C-6 of the City's 2006 L.A. CEQA Thresholds Guide, as stated on page 37 of the MND:

2-40

LA CEQA THRESHOLDS GUIDE

> Based on the criteria established in the L.A. CEQA Thresholds Guide, a project would normally have a significant impact on biological resources if it could result in the interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species.

However, the City's CEQA Thresholds were not formally adopted by the City per CEQA Guidelines 15064.7(b), and since the threshold in question is less protective of the environment than the language in the CEQA Guidelines Initial Study Checklist provided above, the more protective language should prevail. Furthermore this threshold guide, which was published in 2006, predates the SMMC map, and fails to recognize the larger connectivity needs of Santa Monica Mountain habitat as articulated by the State of California in the Santa Monica Mountains Conservancy Act. Project impacts remain significant and unmitigated.

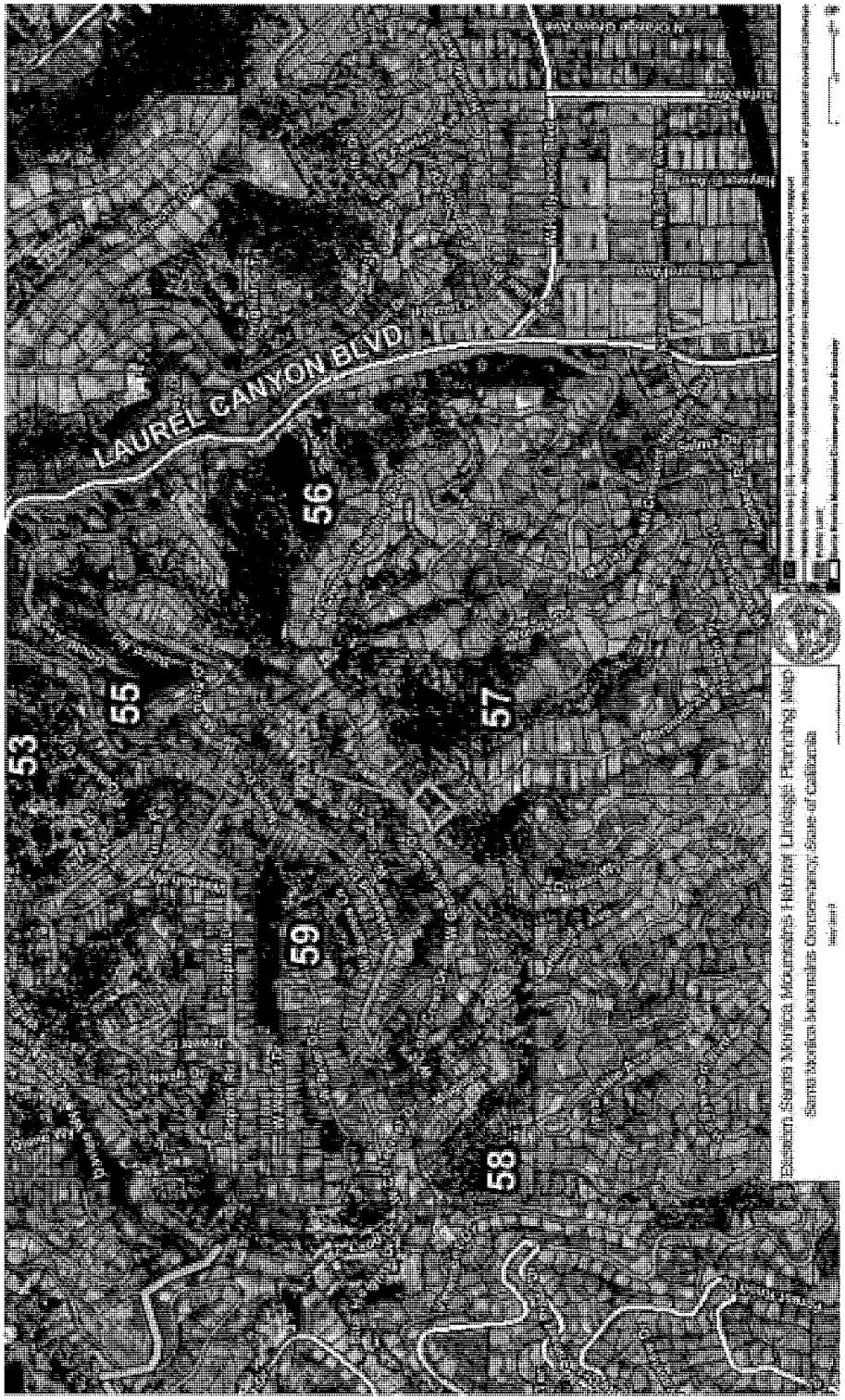



Figure 16 – Location of Project Within SMMC Habitat Linkage Area

*VI.c. Geology and Soils*

| VI GEOLOGY AND SOILS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| iv) Landslides? | ☒ | ☐ | ☐ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgements:**

According to ZIMAS and page 45 of the MND: "The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides." We have not been able to review the current geotechnical reports for the project as a whole, since the geotechnical reports for the project are not in the project file (see **Appendix E**). We were only able to obtain a copy of the September 19, 2012 Soils and Geology Report (PG1091) and associated Correction Letter. We are therefore unable to verify that impacts would be reduced to a level considered less than significant.

According to page 46 of the MND:

> The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced with the following Regulatory Compliance Measure (RCM) RC-GEO- 3 which, requires the Applicant to submit a Geology and Soils Report to the Department of Building and Safety for review. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development.

The MND is deficient because is fails to provide information on the remedial grading, retaining walls, and conventional and/or drilled-pile foundations required for the project or to identify the required conditions/mitigations specified in the report. In addition, it is unclear whether the 2015 geotechnical report for the project addressed the project as a whole, since it appears that the B-permit for Crisler Way and the permits for the four single-family dwellings, which were issued June 8, 2015, were processed separately. As noted on page i of the MND:

2-42 CEQA - GEO PROJECT CHANGES SINCE PERMITS ISSUED

> The proposed residences were previously permitted by the Los Angeles Department of Building and Safety (LADBS); however, subsequent to the issuance of the building permits, LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the building permits because the project site fronts a Substandard Hillside Limited Street that is not fully improved and the Applicant had not obtained the requisite approvals as required by Los Angeles Municipal Code (LAMC) Sections 12.24 X.28(a)(7)(i) and (ii).

The MND fails to indicate whether any changes have been made to the proposed project, from the project that the City mistakenly issued permits for in 2015, and thus it is unclear whether the 2015 geotechnical report and the 2015 Geology and Soils Report Approval Letter address the project as currently proposed. According to page 46 of the MND:

2-43 CEQA GEO 2017 BUILDING CODE

> Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the **2014 City of Los Angeles Building Code**. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than significant. (Emphasis added).

Although the project applications for each of the four single-family homes were filed in November of 2015, they were not accepted for review until March of 2017, as shown in **Attachment H**. Projects submitted after January of 2017 are subject to the

2017 Building Code. Since the applications were not accepted for review until March of 2017, the projects should arguably be subject to the 2017 building code and the approval letter may not be accurate. In the absence of a clear and complete project description, public access to the geotechnical, soils and grading reports, and a determination of whether the project is subject to the 2017 building code, the potential for soil stability impacts remains. In addition, as noted in MND Appendix D: "The subject lots are located below the proposed Crisler Way at the top of an approximately 200 foot high average slope gradient of about 40 degrees with localized areas steeper than 1: 1. The earth materials at the subsurface exploration locations consist of up to 2 feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock." Therefore the potential for grading and construction to result in the loss of topsoil also remains potentially significant.

*VI.d. Hazards and Hazardous Materials*

2-44 CEQA

FIRE HAZARD

| VIII HAZARDS AND HAZARDOUSMATERIALS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☒ | ☐ | ☐ | ☐ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As discussed earlier in this comment letter, the proposed project is located in a High Fire Severity area on a site that previously burned in the Kirkwood Bowl Fire (see **Figure 8**) in an area is characterized by very narrow roadways. Maintenance of roadway and emergency access is a very important issue for residents along these narrow streets. Both Yucca Trail and Grand View Drive are substandard streets of limited width. (See MND Appendix F).

As noted in the City of Los Angeles's analysis of the Kirkwood Bowl/Laurel Canyon fire (see **Attachment D**) which destroyed 23 homes, including 14 on Grand View Drive and three on Crisler Way, partially ruined another five structures, and caused an estimated $4 million in damages in 1979:[3]

> The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

[3] City of Los Angeles Department of Fire, Analysis of Greater Alarm Operations, 9-16-79, page 1-2.

> The primary reasons for the structure losses were high temperatures for the previous two weeks, low humidity, wind from the south-southwest, 10 to 12 knots, delayed alarm, wood siding, structures built on ridges, with minimal brush clearance, and the fire starting at the base of a very steep slope (approximately 70 degrees), covered with dense brush. With all of these conditions combined, the fire swept up the slope, exposing the houses on three ridges, where the houses sustained almost total destruction.

As further explained by the Los Angeles Fire Department, factors that contributed to the magnitude of the fire damage and inhibiting the emergency response included:[4]

> Narrow streets, some practically inaccessible to fire apparatus, coupled with hordes of sightseers, residents and numerous teams from the news media, clogged the streets with autos and foot traffic. This condition prevailed throughout the height of the incident and hampered our operations severely.

The City is thus in the process of cumulative recreating the factors that interfered with the emergency response and evacuation.

2-45 CEQA ACCESS FEASIBILITY

Access to the project site via the recommended route (Route B) will require construction equipment to make a sharp right-hand turn from Grand View Drive onto Crisler Way, and a sharp left-hand turn when leaving the site, as shown in **Figure 17**. It is unclear whether this routing is even feasible. The alternate route would require the use of Yucca Drive, described in MND Appendix F as a narrow roadway which varies in width between 10 and 15 feet with a narrow sharp turn (more than 90 degrees) where Yucca Trail transitions to Grand View Drive.

2-46 EMERGENCY ACCESS DURING CONSTRUCTION

The MND acknowledges that project construction will result in temporary or partial street closures due to construction activity (MND page 58). As shown in **Figure 7**, site access in the area is limited. As discussed earlier in this comment letter, the MND fails to indicate where construction staging will take place during the first two months of the project, and during the drilling of roadway caisson. It is therefore likely that large construction equipment may block Grand View Drive during at least several months of project construction and that the MND has not adequately described significant street closure and emergency access impacts of the project.

[4] City of Los Angeles Fire Department, Activities During the Laurel Canyon Bush Fire, page 2.

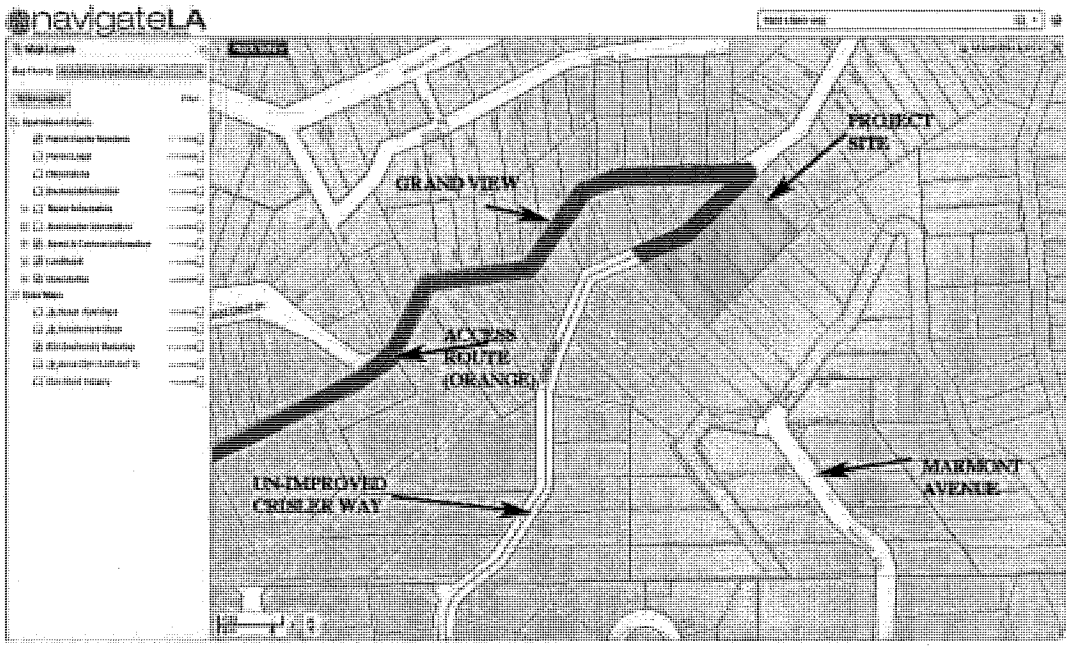



Figure 17 – MND Recommended Access Route B

2-47
CEQA
EMERGENCY ACCESS DURING CONSTRUCTION MITIGATION

The MND includes two mitigation measures to address emergency access impacts that are identified in the MND as potentially significant:

**MM HAZ-1 Hillside Construction Staging and Parking Plan**

The Construction Staging Plan shall include, but not be limited to: identifying where all construction materials, equipment, machinery, and vehicles will be stored on-site and/or out of the public right-of-way of Crisler Way through the grading and construction phases of the project; and identifying the proposed locations of all on-site and off-site staging areas for construction delivery vehicles. This plan shall also include the following:

- No construction equipment or material shall be permitted to be **stored** within the public right-of-way.
- Delivery drivers for construction materials shall be required to follow the designated travel plan.
- Truck traffic directed to the project site for the purpose of delivering materials, construction-machinery, or removal of graded soil shall be limited to off-peak traffic hours, **Monday through Friday** only. No truck deliveries shall be permitted on Saturdays, Sundays, or City Holidays.

2-41
CEQA

- All deliveries during construction shall be coordinated so that only one vendor/delivery vehicle is at the site at one time, and that a construction supervisor is present at such time.
- A radio operator shall be on-site to coordinate the movement of material and personnel, in order to keep the roads open for emergency vehicles, their apparatus, and neighbors.
- A minimum of two flag persons are required. One flag person is required at the entrance to the project site and one flag person at the next intersection along Grand View Drive.
- Truck crossing signs are required within 300 feet of the exit of the project site in each direction.
- The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by grading, and at all times shall provide reasonable control of dust caused by wind.
- No person shall perform grading within areas designated "hillside" unless a copy of the permit is in the possession of a responsible person and available at the site for display upon request.
- The applicant shall identify a construction manager and provide a telephone number for any inquiries or complaints from residents regarding construction activities. The telephone number shall be posted at the site readily visible to any interested party during site preparation, grading and construction.
- The Construction Parking Plan shall identify where all contractor, subcontractor, and laborers will park their vehicles so as to prevent blockage of two-way traffic on streets in the vicinity of the construction site.
- During all phases of site development, all construction vehicle parking and queuing related to the project shall be in substantial compliance with the approved Construction Staging and Parking Plans, to the satisfaction of the Department of Building and Safety and the Department of Transportation.

**MM HAZ-2 Emergency Evacuation Plan**

Prior to the issuance of a building permit, the applicant shall develop an emergency response plan in consultation with the Fire Department. The emergency response plan shall include but not be limited to the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments.

Mitigation Measure MM HAZ-1 would allow delivery and soil removal activity Monday through Friday. On page 94 of the MND it states that:

The Applicant has also committed to the following design features to avoid or minimize potential traffic impacts on the surrounding neighborhood.

- Construction crews will not work on Saturdays.

2-47 CEQA RECIRCULATION

- The contractor will shuttle workers to the project site in a van to avoid construction traffic and parking on Grand View Drive.
- Until the on-site construction staging area on Lot #95 is created, construction crews will not work on Thursdays, trash collection days.

Why are these measures not included in MM HAZ-1 to ensure that they are requirements?

2-48 CEQA RIGHT-OF-WAY PROHIBITIONS

Mitigation Measure MM HAZ-1 only prohibits construction equipment and materials from being stored in the public right-of-way. It does not prohibit use of the equipment from the public right-of-way or prohibit street closures that would impede emergency access. Mitigation Measure MM HAZ-2: emergency Evacuation Plan is meaningless if heavy equipment is blocking Grand View Drive. None of the Mitigation Measures prohibit construction staging or equipment use from Grand View Drive. The potential for significant emergency access and fire-related impacts remains.

2-49 CONSTRUCTION HAZARDS TO NEARBY PROPERTIES

In addition, the MND fails to recognize and address the hazards posed to nearby properties from project construction. As detailed in the letter by Aidan O'Brien, M.D., contained in **Attachment I**, Dr. O'Brien's property was extensively damaged during construction of 8401 Grand View including damage from machines crashing into the house. The property at the junction of Kirkwood and Grand View was damaged when a mobile crane crashed into it. Construction resulted in street damage from Kirkwood to that site that has never been properly repaired. In addition, residents suffered numerous lengthy street closures.

2-50 CEQA HAZARDS FALLING OBJECTS

Not only did residents suffer these impacts, but there were multiple episodes of objects on the steep project site falling on downslope properties. This resulted in one resident, Hanna Melzer, moving away due to safety fears. As described by Ms. Melzer in an email to the City dated July 1, 2006 and included in **Attachment I**:

> I can't stay in my back yard or open my doors and windows because stones and pieces of asphalt will be rolling down from the road deterioration. The wire fences that Mr. Smith put up "for protection" will not protect my family and my house since he is storing metal pieces and debris not even on his property but in-between his property and 8383 Grandview. I do have experience of stones rolling down from Mr. Smith's area down to my property, hitting my house and my deck where minutes before my children were playing basketball with their playdate.

The MND for the proposed project fails to recognize the hazards posed by construction on steep slopes. As shown in **Figures 12-15**, the project site contains extreme slopes. The environmental document for the proposed Project fails to recognize these potential construction-related hazards or to provide mitigation to reduce impacts to a level considered less than significant. There is no mitigation requiring a compensation fund be established for repairs and injuries suffered by residents as a result of project construction. There are no mitigations that would insure the safe storage of construction materials on site, or safe use of construction vehicles. The MND on page 46 states that the project "would also install a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope," but this has not been made a requirement of the project, and the required design and strength of the fencing needed to

catch heavy rolling objects has not been analyzed or addressed in the MND. The potential for construction hazards remains Potentially Significant.

**Cumulative Impacts** – The MND provides no mitigation for cumulative access impacts associated with the construction of the proposed project and the cumulative projects listed in the MND and this comment letter. The MND indicates that site preparation and grading will take approximately 50 weeks and 15 months for home construction for a total construction time of almost 2¼ years. Given the volume of cumulative projects and time required for construction, given site challenges in this area, it is highly likely that more than one project would be undergoing construction at the same time. There are no provisions for ensuring that no concurrent development occurs, or for addressing the combined access impacts of multiple construction projects occurring at the same time along these very narrow roadways. The potential for cumulative access impacts remains.

*VI.e. Land Use and Planning - Violation Of CEQA Guidelines Section 15063(D)(5) – Failure To Include A Discussion Of Project's Consistency With Applicable Land Use Controls*

| X | **LAND USE AND PLANNING** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *Would the project:* | | | | | |
| a) | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

The MND lacks any real discussion of the project's consistency with existing zoning, and the City's the Baseline Hillside Ordinance. LAMC 12.21.C.10-4 provides that the maximum height for hillside single-family home developments in this zone is 33 feet. As detailed in Section VI.a. of this comment letter, the proposed single-family homes appear to exceed the height limitations for projects subject to the Baseline Hillside Ordinance.

As noted on page 69 of the MND: "Per LAMC requirements, the Project is required to improve Crisler Way to a roadway width of 20 feet to provide a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area." However, the Project is requesting a Zoning Administrator's Determination to allow the construction, use, and maintenance of a new three-story single family residence on a lot which does not have vehicular access from a 20-foot wide continuous paved roadway from the driveway apron to the boundary of the hillside area as otherwise required by LAMC Section 12.21 C.10(i)(3)." In addition, the project and MND fail to address whether the project provides the required right-of-way width, in addition to the roadway width of 20 feet, and thus whether proposed Crisler

Way is consistent with the LADOT Complete Streets Manual which is Chapter Nine of the Los Angeles Mobility Plan.

As noted in Section III.g. of this comment letter, according to the September 19, 2012 Geotechnical Report for the project at page 5, the project includes:

> Retaining walls to 6 to 21 feet high are proposed along the *uphill* side of the proposed private street. Pile-supported retaining walls from 5 to 7-1/2 feet high are proposed along the downslope side of the proposed street. The new proposed construction plans provide specific information concerning the construction of four hillside residences and swimming pools on the subject property. Retaining walls associated with the construction of the individual residences are proposed up to 22 feet high. Retaining walls used to create the level rear yard areas are proposed up to 12 feet high.

2-54 CEQA RETAINING WALL HEIGHT

The number and height of retaining walls appear to exceed what is allowed by the City's Retaining Walls In Hillside Areas, Ordinance No 176,445 LAMC 12.21(C)8, which specifies that:

> Retaining walls are subject to the following restrictions:
>
> (a) A maximum of one free standing vertical or approximately vertical retaining wall may be built on any lot with a maximum height of 12 feet as measured from the top of the wall to the lower side of the adjacent ground elevation. However, as shown in the diagram below, a maximum of two vertical or approximately vertical walls or portions of a wall can be built if they comply with the following:
>
> (i) The minimum horizontal distance between the two walls is three feet,
>
> (ii) Neither of the two walls exceed a height of 10 feet measured from the top of each wall to the lower side of the adjacent ground elevation at each wall, and
>
> (iii) In no case shall the height of a wall located in a required yard exceed the height allowed by Section 12.22 C.20.(f) of this Code.

In addition, the height of the driveway bridges appear to be higher than 3'6" in violation of LAMC 12.21A17(a)(3). There would appear to be substantial evidence in the record that the project as proposed is not consistent with existing zoning, despite the lack of adequate analysis in the MND.

2-55 CEQA DRIVEWAY BRIDGE HEIGHT

2-56
CEQA
Noise

*VI.f. Noise*

| XII NOISE | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project result in:* | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☒ | ☐ | ☐ | ☐ |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | ☒ | ☐ | ☐ | ☐ |
| c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As noted on page 8 of Appendix E of the MND for the proposed project, the Noise Impact Analysis:

- "In the absence of any shielding, noise level at the closest outdoor recreational use would exceed the City of Los Angeles suggested construction noise level of 75 dB."

- "A typical building with single pane windows can reduce noise levels by 25 dB with the windows closed (U.S. Environmental Protection Agency (EPA), 1974). However, most modern homes are constructed with dual paned windows which can afford up to a 30 dB noise reduction with closed windows. Therefore, the expected indoor noise level at the closest residence with closed windows would be approximately 59 dB during grading and approximately 52 dB during construction. For indoor noise environments, the highest noise level that permits relaxed conversation with 100 percent intelligibility throughout the room is 45 dB. Speech interference is considered to be highly intrusive when normal conversation is precluded at 3 feet, which occurs when ambient noise levels substantially exceed 60 dB. An interior noise level of 59 dB at indoor locations would maintain a barely acceptable interior noise environment with closed dual paned windows. In some cases, this noise reduction could be maintained only on a temporary basis, since it requires that windows remain closed at all times assuming homes have air conditioning."

- "Because the project is located on a hillside, noise barriers such as sound curtains would not be feasible."

- "Construction noise is maximally anticipated to be 89 dBA exterior and 59 dBA at interior of the closest residence north of the project site when roadway construction equipment operates near the closest receptor locations during grading activities. After grading the worst case noise levels would decrease to 82 dB exterior and 52 dB interior. As discussed, because of the steep slope, a sound

curtain could not be utilized for mitigation. Therefore, construction noise may occasionally be audible and the following significance thresholds could be exceeded."

The MND on page 9 concludes that the proposed project would result in the following significant noise impacts:

> Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use.
>
> - "There is a minimal separation distance between the site and the nearest residential use, construction noise levels could potentially exceed exterior noise levels by more than 10 dB. Because the project on a steep slope, there is no reasonable means to mitigate construction noise (e.g. fences or temporary barriers) to less than this threshold."
>
> Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
>
> - As noted above, even with quiet suburban background noise levels construction noise could potentially exceed ambient noise levels by 5 dB for more than 10 days in a three month period. Again, reasonable means of construction noise mitigation such as a temporary fence would not be feasible because the adjacent sensitive uses are at a higher elevation than the project site.

The Noise Analysis for the proposed project thus identifies significant noise impacts resulting from project construction activities. The estimate of the magnitude of construction noise impact in the Noise Analysis may be understated because it assumes that existing homes in the project vicinity have dual paned window. No evidence is provided in the MND that potentially impacted homes have dual paned windows. Impacts would be 5dB greater for homes without dual paned windows.

On page 75, the MND concludes that through "compliance with regulatory requirements limiting construction noise, including the limitations specified in LAMC Chapter XI, Noise Regulation (Section 112.05) and Chapter IV, Public Welfare (Section 41.40), and the implementation of MM NOI-1 and MM NOI-2, construction noise impacts would be reduced to less-than significant." However, as noted on page 12 of the Noise Study in MND Appendix E:

> The noise limitation of the Los Angeles Municipal Code **does not apply where compliance is technically infeasible**. Technically infeasible means that the noise standard cannot be met despite shields, sound barriers and/or other noise reduction devices or technique during the operation of equipment. For this project, because of terrain constraints, it would not be

feasible to construct a temporary soundwall that would block noise to homes at a higher elevation.

There has been no showing in the MND that compliance with Municipal Code requirements is technically feasible. Similar to the City's Municipal Code, the two mitigation measures for significant noise impacts included in the MND also contain an infeasibility out:

> **MM NOI-1** The use of powered construction equipment or powered hand tools that produce a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction machinery is prohibited **to the extent feasible**.
>
> **MM NOI-2 Increased Noise Levels (Grading and Construction Activities)**
>
> To reduce the impact of temporary construction noise on adjacent residences, the Project shall comply the following measures:
> - Construction activities shall be limited to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. Construction is not permitted on any national holiday or on any Sunday.
> - Construction equipment and supply haul routes shall avoid conflicts with noise sensitive land uses **to the extent feasible** through scheduling and points of access.
> - Construction staging areas shall be established to minimize impacts to adjacent residences **where feasible**.

Existing regulatory requirements and the noise mitigation measures contained in the MND have not been shown to require compliance with noise standards or to be feasible. The potential for significant noise impacts therefore remains.

**Cumulative Impacts** – The MND fails to adequately address the potential cumulative noise impacts that could result from simultaneous construction of the project and one or more of the cumulative projects. The MND indicates that site preparation and grading will take approximately 50 weeks and 15 months for home construction for a total construction time of almost 2¼ years. Given the length of project construction and proximity of cumulative projects in the areas, the potential for a significant unmitigated cumulative noise impact during construction remains.

2-58
CEQA NOISE
CUMULATIVE NOISE IMPACTS

*VI.g. Public Services*

| XIV PUBLIC SERVICES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services? | | | | |
| a) Fire protection? | ☒ | ☐ | ☐ | ☐ |
| b) Other public facilities? | ☒ | ☐ | ☐ | ☐ |

As detailed in Section VI.d. of this comment letter, the propose project has the potential to interfere with emergency access which may result in a significant unmitigated impact on fire protection during project construction. The proposed project would also introduce new residential uses on a parcel that has already burned. The potential for fire protection impacts remains.

The MND fails to analyze the project's potential impacts on other public services such as sewer and water. The proposed project will result in the construction of sewer lines and connections, and a new fire hydrant. The MND fails to analyze the potential impacts of these components of the project on existing capacity. In addition, the MND fails to analyze the potential impacts of the installation of a new fire hydrant on the hydrant system in the project vicinity, which has experienced a number of failures. In the absence of such an analysis, the potential for impacts remains.

As detailed in Section I.d. of this comment letter, the project area has been experiencing a number of infrastructure failures, due in part to existing geotechnical conditions and the use of local roadways for transport of heavy construction equipment and materials. The Traffic Analysis for the proposed project included as Appendix F to the MND on page 8 tacitly acknowledges the potential for project construction vehicles to damage local roadways by suggesting the following mitigation measures:

5. Smaller capacity concrete trucks (less than 10-yard capacity) should be used for transporting foundation materials to the Project site.

9. Require the applicant to repair any damage to the pavement structure and curbs along the construction route between Laurel Canyon Boulevard and the Project site. Inspection and video of the roadway should be completed prior to the construction project in order to document existing conditions. Upon completion of the construction project, the roadway should then be inspected to document any damage to the roadway.

10. Given the length of the construction period (24 months), periodic inspection and maintenance should be performed along the access

route to the site to address any roadway deterioration due to construction traffic.

Given the project's potential to damage the pavement structure in the project area, the project also has the potential to increase other infrastructure failures in the area. The MND fails to acknowledge these potential impacts or to provide mitigation for such infrastructure failure impacts should they occur as the result of the project or the project's contribution to cumulative development in the area.

**Cumulative Impacts** – The MND does not adequately address the potential fire service/emergency service impacts of simultaneous construction of more than one project along Yucca Trail and Grand View Drive, and the likely impacts on emergency response times (including police) during construction. In addition, the potential for construction work to spark a fire has not been adequately analyzed. The MND does not address the question of at what point additional hillside development in the Kirkwood Bowl area will necessitate the addition of police or fire facilities in order to maintain response time standards.

The MND does not adequately address the potential cumulative impacts of heavy vehicles on both the roadway and other infrastructure. The potential for cumulative infrastructure impacts remains.

*VI.h. Transportation and Traffic*

| XVI TRANSPORTATION/TRAFFIC | | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *Would the project:* | | | | | |
| a) | Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, | ☒ | ☐ | ☐ | ☐ |
| d) | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☒ | ☐ | ☐ | ☐ |
| e) | Result in inadequate emergency access? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

MND page 93 states that:

Project construction would require crew worker vehicles and trucks during site preparation. The addition of these vehicles into the neighborhood street system could contribute to temporary traffic increases in the Project vicinity for the approximate 24-month duration of construction. However, to reduce the temporary impact of construction traffic in the neighborhood, the construction contractor has **voluntarily** agreed to

shuttle work crew members to the site in a van to avoid parking on the adjacent street."

WORKER SHUTTLE

However, the MND does not include a mitigation measure requiring the applicant to shuttle workers to the site and there is therefore no guarantee that this voluntary measure will be implemented. The potential for worker-related construction traffic remains.

2-63 CONST STAGING AREA

Page 95 of the MND states that the project would: "establish an on-site construction parking and equipment staging area on Lot #95 to allow for no parking on Grand View Drive **within two months** after beginning construction." In addition, use of Grand View Drive for construction vehicle parking until the staging area on Lot #95 is operational is allowed by Mitigation Measure MM TRA-3. As written, this indicates use of Grand View Drive for at least the first two months of the project. Similarly MND page 94 states that by: "establishing an on-site construction staging area on Lot #95, the Project would allow for complete off Grand View Drive parking within two months following the beginning of construction." There remains the potential for significant impacts to the narrow roadway system in the area during the two months before on-site construction staging is established on Lot #95. Furthermore, no analysis is provided in the MND to demonstrate that the staging area on Lot#95 is adequate for project storage and parking needs, or that, given the narrow widths of Grand View Drive and Crisler Way, that during site preparation and grading construction vehicles will have adequate access and turning capacity. Table 3-5 indicates that a 10 ft. wide road will be created on Crisler Way starting in week 7 of site preparation and grading, but does not indicate when the roadway will be expanded to 20 feet in width. The potential for operational impacts during construction remains. (See also discussion in Section VI.d.) Therefore, the contention in the MND that construction traffic impacts would be less-than-significant is invalid. The potential for significant access impacts on Grand View Drive remains.

MND page 94, under Temporary Street Closures indicates that:

> Construction activities may necessitate temporary lane closures on streets adjacent to the project site on an intermittent basis for utility relocations/hook-ups, delivery of materials, and other construction activities as required. However, equipment and material staging would be organized to **remain on site to the maximum extent possible** and deliveries and material pick up would be organized **in the most efficient manner possible** to reduce temporary construction traffic impacts on the neighborhood and surrounding community.

However, the MND fails to characterize the degree to which equipment and material staging would remain on-site, verse occur from Grand View Drive, other than to say this would occur **to the maximum extent feasible**, or to explain how deliveries and material pick up would be organized **in the most efficient manner**. The potential for significant access impacts on Grand View Drive remains.

2-64

As acknowledged on page 97 of the MND:

ACCESS ROUTE B

> The Traffic Report found that construction traffic between Laurel Canyon Boulevard and the project site has the potential to affect safety and access for roadway users given the roadway widths and curvatures. As recommended, Project construction traffic would follow Access Route B to avoid narrow roadway widths and sharp curves on Yucca Trail. Nevertheless, the introduction of construction vehicles and equipment on narrow roadways with sharp curves along Access Route B could create temporary hazardous roadway conductions. (sic)

No mitigation measure is provided in the MND requiring the use of Access Route B. The MND and Traffic Study for the project contained in MND Appendix F document the potential safety hazards associated with Access Route A, which uses Kirkwood Drive to Yucca Trail to Grand View Drive to Crisler Way. The potential safety hazards associated with the recommended access route, Access Route B are not fully addressed in the MND. Access Route B would use Kirkwood Drive to Grand View Drive to Crisler Way. The need for a sharp turn into and out of the project site area (see **Figures 7 and 17** in this comment letter) is not described in the Traffic Analysis contained in Attachment F to the MND or shown on MND Appendix F Figure 4. The potential for the configuration of the intersection of Crisler Way and Grand View Drive to result in the potential for safety hazards both during construction when vehicles, are making a sharp turn onto and off of Grand View Drive at this location, and during operation, has not been properly analyzed, given the MND's and Traffic Study's recommendation of this routing for project traffic. There is potential for significant hazards associated with this design feature, which has not been addressed in the MND. This is a potentially significant impact of the proposed project.

2-65
CEQA
ADEQUACY
OF
MITIGATION
MEASURE
TRA-1

The following inadequate mitigation measures are provided in the MND to address potentially significant project traffic and traffic safety impacts:

> **MM TRA-1** To minimize construction traffic and roadway hazards associated with the construction access route, which include sharp curves and narrow roadway widths, the project proponent shall provide a mechanism to inform area residents potentially affected by construction traffic prior to the commencement of construction activities. Relevant project information must include, but would not be limited to, the expected duration of the construction project, the weekdays during which construction is expected, hours of construction, and the amount of construction traffic expected. The project proponent must also post temporary signage along the construction access route and at the project site with a hotline number for residents affected to voice problems associated with construction traffic.

Mitigation MM TRA-1 merely requires the applicant to inform residents about construction traffic, but does nothing to prevent the impacts of such traffic. In addition, as written, the mitigation measure merely requires the provision of a hotline number for

residents to voice problems. However, the measure in no way requires the project applicant to address those problems.

2-66 CEQA ADEQUACY OF MM TRA-2

**MM TRA-2** To minimize construction traffic and roadway hazards along the access route, the project proponent shall prepare a construction traffic control plan conforming to City of Los Angeles requirements. The Traffic Control Plan must detail the placement of warning signs, traffic control personnel needed, and assurance the size of trucks anticipated can adequately maneuver along the designated access route. The Traffic Control Plan must also provide for the use of flagmen along Grand View Drive to facilitate deliveries as necessary.

Mitigation Measure MM TRA-2 fails to state what will happen if it can not be shown that project trucks can adequately maneuver along the designated access route, or to require the analysis to consider the turn from Grand View Drive to Crisler Way. The mitigation measure must be written to show that construction permits will not be granted if the truck sizes are too large for safe maneuvering of the designated access route, to require the truck fleet in the Traffic Control Plan is actually is used, and to provide penalties for use of vehicles larger than specified in the Traffic Control Plan. The measure should also provide for review and comment on the Traffic Control Plan by local residents, prior to Plan approval.

2-67 CEQA ADEQUACY OF MM TRA-3

**MM TRA-3** To minimize construction traffic and roadway hazards along the access route, the project proponent must, **to the extent feasible**, schedule trucks transporting construction materials and equipment to and from the construction site to arrive or depart outside of the morning and afternoon peak commuter periods. Morning peak commuter periods are defined as 7:00 A.M. to 9:00 A.M. and afternoon peak commuter periods are defined as 4:00 P.M. to 6:00 P.M. **To the extent feasible**, the project proponent shall use smaller capacity concrete trucks with equal to or less than 10 cubic yards for transporting foundation materials to and from the site.

Measure MM TRA-3 is meaningless since it includes the language "to the extent feasible" thus providing no real restriction. The measure must be re-written to remove the "to the extent feasible" language and to make the voluntary prohibition on construction work on Thursday (trash day) prior to provision of adequate off-site parking and storage area, mandatory. In addition, the mitigation measure must prohibit the use of any type of truck weighing more than the existing weight restrictions for Grand View Drive and Yucca Trail.

2-68 CEQA ADEQUACY OF MM TRA-4

**MM TRA-4** To minimize construction traffic and roadway hazards along the access route, the project proponent shall prohibit construction vehicle parking on neighborhood roads once the vehicle and equipment staging area on Lot 95 is operational.

Measure MM TRA-4 would thus allow for parking of construction vehicles on neighborhood roads prior to Lot 95 being operational, thereby allowing for potentially significant access impacts during this period.

> **MM TRA-5** To repair potential physical damage to the roadways along the construction access route, the project proponent shall inspect and video record the existing condition of the pavement and curbs along the construction route between Laurel Canyon Boulevard and the project site prior to construction. To address roadway deterioration due to construction traffic during construction, the project proponent shall periodically inspect and **reasonably maintain** the roadway along the construction access route. Upon completion of construction, the project proponent shall inspect and document damage to the construction access route.

2-69 CEQA INADEQUACY OF MM TRA-5

MM TRA-5 is written as if it is almost a voluntary measure. There is no requirement to submit the video record of pre and post-project roadway conditions to the City for review, and no mechanism for the City to mandate specific repairs. The measure calls for the applicant to reasonably maintain the roadway, but provides no standards for what constitutes reasonable maintenance. The measure requires upon completion of the project that the applicant inspects and documents damage to the construction access route, but not that the report be submitted to the City or the damage repaired. In addition, the measure fails to require the applicant post bond to ensure funding for the repair of all damage to any infrastructure or property.

2-70 CEQA TRAFFIC MITIGATION

The mitigation measures provided fails to insure that access impacts will be less than significant. The potential for access impacts remains. The mitigation measures provided fail to ensure that damage to local infrastructure will be mitigated to a level that is less than significant.

2-71 CEQA EMERGENCY ACCESS

The potential for the proposed project to result in inadequate emergency access has also been documented in Section VI.d. and VI.g. of this comment letter.

2-72 CUMULATIVE TRAFFIC

**Cumulative Impacts** – The MND fails to address the ability of the existing roadways to handle the impact on traffic generation from cumulative development both during construction and operation. While these trip generation numbers are small, so too is the capacity of the existing street system. The potential for cumulative impacts to both access and infrastructure remains.

*VI.i. Utilities and Service Systems*

CEQA UTILITIES

2-73 SEWER LINES CONSTRUCTION AND CAPACITY

| XVIII UTILITIES AND SERVICE SYSTEMS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |

| XVIII UTILITIES AND SERVICE SYSTEMS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

2-73 CONTINUED

As shown in **Figure 4**, the project site is not currently served by existing sewer facilities and will be required to construct new sewer lines and wyes. Based on the need for a sewer line/storm drain easement on Lot 118, the applicant may be required to provide wyes for lots along the new sewer line. The MND fails to address or describe this issue.

According to page 106 of the MND:

The Project area is served by a network of sewer lines located beneath major streets that convey sewage from the Site and surrounding residences to Hyperion. As part of pre-construction, detailed gauging and evaluation will be needed as part of the permitting process to identify a specific sewer connection point for the project site. Though existing regulations established in the City of Los Angeles Sewer Allocation Ordinance (No. 166060), LA Sanitation does not make a determination of sewer capacity until the Los Angeles Department of Building and Safety has established that the proposed Project's plans and specifications are acceptable for plan check. . .

The Applicant will be required to submit a Sewer Capacity Availability Request (SCAR) to verify the anticipated sewer flows and points of connection and to assess the condition and capacity of the sewer lines receiving additional sewer flows from the proposed Project. If the Bureau of Sanitation determines the sewer system has insufficient capacity to serve the proposed Project, the developer may be required to replace or build new sewer lines to a point in the sewer system with sufficient capacity to accommodate the proposed Project's increased flows. Based on the configuration of sewer lines serving the project site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325). Project sewer flows would then connect58 to the existing lines under Marmont Ave. . .

These proposed sewer infrastructure improvements to update or expand the sewer lines in the Project vicinity would be limited to trenching, excavating and backfilling the sewer lines beneath the public right-of-way. Such construction activities would be localized in nature and would

generally involve temporary partial lane closures of short duration typically lasting a few days to a few weeks.

Given that LA Sanitation has apparently not made a determination of sewer capacity and the applicant has apparently not submitted a Sewer Capacity Availability Request, and the MND fails to demonstrate the existence of adequate sewer capacity, the potential for sewer-related impacts thus remains. In addition, it is unclear that the project's analysis of air quality, noise and traffic impacts have addressed impacts associated with sewer construction, in the required analysis of the project as a whole.

2-74 SEWER CONSTRUCTION

The MND fails to address the construction and operation of the storm drains included in the design of the Crisler Way extension. The MND fails to explain where and how these storm drains will be connected to the larger storm drain system and if that system has adequate capacity to handle the flows from the new storm drains included in the roadway design. In the absence of such an analysis, the potential for impacts remains.

2-75 STORM DRAINS

The MND fails to address the potential for project and cumulative construction traffic to increase the incidences of infrastructure failure along the project access routes. Given the number of infrastructure failures in the area (see Section I.d. of this comment letter), and the substandard roadways in the area, there is the potential for project construction traffic to result in significant infrastructure impacts and the project to contribute to significant cumulative infrastructure impacts in the form of damage to the systems. Measure TRA-5 does not address impacts to infrastructure other than the roadway. The potential for significant project and cumulative impacts to infrastructure systems in the area remains.

2-76 INFRASTRUCTURE FAILURE

VI.j. *Mandatory Findings of Significance*

2-77 CEQA MANDATORY

| XVIV MANDATORY FINDINGS OF SIGNIFICANCE | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Does the project:* | | | | |
| a) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☒ | ☐ | ☐ | ☐ |
| b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

Cumulative development has the potential to result in significant emergency access, transportation impacts, and utility impacts as detail above. Issue XVIV.b., therefore, remains Potentially Significant. An EIR is therefore required for the project.

Project and cumulative development has the potential to result in significant emergency access, transportation impacts, and public service and utility impacts as detailed above, which will adversely effect human beings either directly or indirectly. Issue XVIV.c., therefore, remains Potentially Significant. An EIR is therefore required for the project.

2-78 CEQA Mitigation Effectiveness

**VII. Violation Of CEQA Guidelines Section 15070(B)(1) – Lack Of Evidence Mitigation Measures Would Avoid The Effects Or Mitigate Effects To The Point Where Clearly No Significant Effects Would Occur**

As detailed in Section VI of this letter, the MND lacks any real demonstration that project mitigations would reduce impacts to a level considered less than significant. It is impossible to judge whether impacts are mitigated to the point where "clearly no significant effects would occur." In addition, as detailed in this comment letter, a number of the mitigation measures are infeasible or ineffective as written and the potential for impacts thus remains.

2-79 CEQA Mitigation Infeasibility

**VIII. Violation Of CEQA Guidelines Section 15070(B)(1) - Infeasible Mitigation Measures**

Potentially infeasible mitigation measures and mitigation measure which will not reduce impacts to a level which is less than significant are included in the MND, as detailed above in Section VI of this comment letter. Given the presence of infeasible and ineffective mitigations, the potential for significant unmitigated impacts remains.

2-80 Mitigation Enforcement + MMP

**IX. Violation Of CEQA Guidelines Section 15074(D) – Legitimate Concerns Regarding Enforcement Of Mitigation Measures**

The City has received numerous comments throughout the project review process for various projects in hillside areas regarding the City's inadequate enforcement of mitigation measures. The City's ability to enforce mitigation measures and standard conditions of approval has been shown to be problematic for other projects on substandard streets in hillside areas. See for example the hearing audio transcript from the Central Area Planning Commission Regular Meeting of Tuesday, September 8, 2015, 4:30 P.M. regarding a project on Stanley Hills Drive. Issues of enforcement are repeatedly discusses on Track 3 of the tape of the hearing. (See **Attachment J** for links to the audio). In particular, Planning Department indicates on Track 3 at minute 46:00-49:30 that they are not responsibility for mitigation monitoring.

The wording of MND mitigations evidences no progress on this issue. To address Citizen concerns we would suggest that the following elements be included in each mitigation measure:

- Required action
- Timing of Required Action
- Party responsible for implementation of the required action (with a phone list of all parties for all mitigation measures to be provided to residents prior to issuance of first permits)

- Party responsible for monitoring compliance with the required action (with a phone list of all parties for all mitigation measures to be provided to residents prior to issuance of first permits)
- The specification that future permits will not be issued if compliance with the measure is not met (for example a statement that: the occupancy permit for the project shall not be issued until compliance is demonstrated to the satisfaction of (the applicable City Department head)
- A specified fine for failure to comply with the specified timing
- A specified fine for per day or per occurrence violations documented by the public, the City Department head's contact information for submission of violation documentation, and the nature of documentation required for per day and per occurrence violation events.
- A requirement that the applicant pays for police or fire presence during key construction activities that might result in temporary street blockage.

Residents on Grand View Drive have already experienced inadequate City enforcement of mitigations applied to past projects on the street, as detailed in **Attachments I and J**.[5] In the case of construction of 8401 Grand View Drive, not only did the City provide inadequate mitigation enforcement, but on "April 2, 2012, the Department of Building and Safety (("LADBS") issued a notice to the property owner to immediately stop all work in progress after it was found that the Department of City Planning erred in signing-off on the building permits for the addition and the swimming pool, as detailed in the ZAD for Case No. ZA-2012-1026(ZAA)(ZAD)." Given the City's failure to follow up on violations during the construction of 8401 Grand View Drive and the City's improper issuance of building permits on Grand View Drive, residents have very real concerns about the ability of the City to ensure that mitigations intended to reduce impacts will be enforced.

This concern is exacerbated by the fact that the City has not provided a Mitigation Monitoring Plan for the project for public review.

2-81
CEQA
ADEQUACY OF CUMULATIVE IMPACT ANALYSIS

## X. Violation Of CEQA Guidelines Section 15064(H) Failure to Adequately Address Cumulative Impacts

As detailed in Section VI, the MND fails to adequately address the potential for the project to contribute to significant cumulative impacts in the project area. Not only does the City need to prepare an EIR to address the potentially significant impacts of the project, the City needs to prepare an EIR to address the potential cumulative impacts of the project. As noted in the CEQA Guidelines:

[5] See also Channel 4 News video at: https://www.youtube.com/watch?v=QJXbfFJmSaw

15355. CUMULATIVE IMPACTS

"Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
(a) The individual effects may be changes resulting from a single project or a number of separate projects.
(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

15064 DETERMINING THE SIGNIFICANCE OF THE ENVIRONMENTAL EFFECTS CAUSED BY A PROJECT

(h) (1) When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The MND contains a list of projects that may potentially be constructed in this neighborhood in the near-term. Several additional projects have been identify in recent environmental documents for projects in the area, as explained in Section III.m. This represents a significant amount of construction. Given the unique street constraints of the area, it is questionable whether the area can tolerate this level of sequential or cumulative development. Cumulative projects will exacerbate the potential impacts described in Section VI of this comment letter resulting in cumulatively considerable impacts. In addition, cumulative development will contribute to ongoing traffic and emergency access and safety concerns by increasing the population in the area subject to high fire risk and by making emergency evacuations more time consuming and difficult.

2-82
LAND USE
LAND PLANNING
FIRE HAZARDS

The City's on-going practice of permitting construction and increasing the density of development along a ridgeline oo steep hillside slope in a high fire severity area on what is essentially a one-way street is both a highly questionable practice and a potential source of liability for the City. Based on the plans available for these cumulative projects, they would appear to represent exactly the type of development cited by the Los Angeles City Fire Department as contributing to the severity of the Kirkwood Bowl/Laurel Canyon Fire – i.e. structures built in close proximity to each other, on ridge

tops with very steep slopes coming right up to foundations, on very winding narrow streets, with single ingress and egress.[6]

2-83 CEQA FAIR ARGUMENT STANDARD

**XI. Violation Of CEQA Guidelines Section 15074(D) And Guidelines Section 15070(B)(2) – There Is Substantial Evidence In The Record That The Project As Revised May Have A Significant Effect On The Environment**

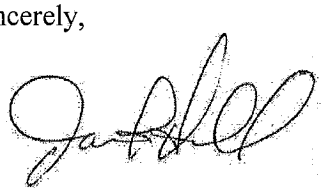
There is substantial evidence in the record that the project will result in significant project and cumulative impacts. As detailed in this letter the MND fails to provide substantial evidence that impacts can clearly be reduced to a level considered less than significant. In contrast, a fair argument supported by substantial evidence has been presented that the potential for significant impacts remains.

2-84 SUBSTANTIAL EVIDENCE

**XII. Conclusion – The City Of Los Angeles Has Violated CEQA Guidelines Section 15073.5(D) – An EIR Is Required When There Is Substantial Evidence That The Project May Have A Significant Impact.**

This comment letter demonstrates an EIR is required for the project. The lead agency has been presented with a fair argument that the project may have a significant effect on the environment, that the existing analysis and mitigation measures are inadequate, and that the project would result in a cumulatively considerable contribution to cumulative impacts. An EIR for the project is, therefore, required.

Sincerely,



Jamie T. Hall

ATTACHMENTS

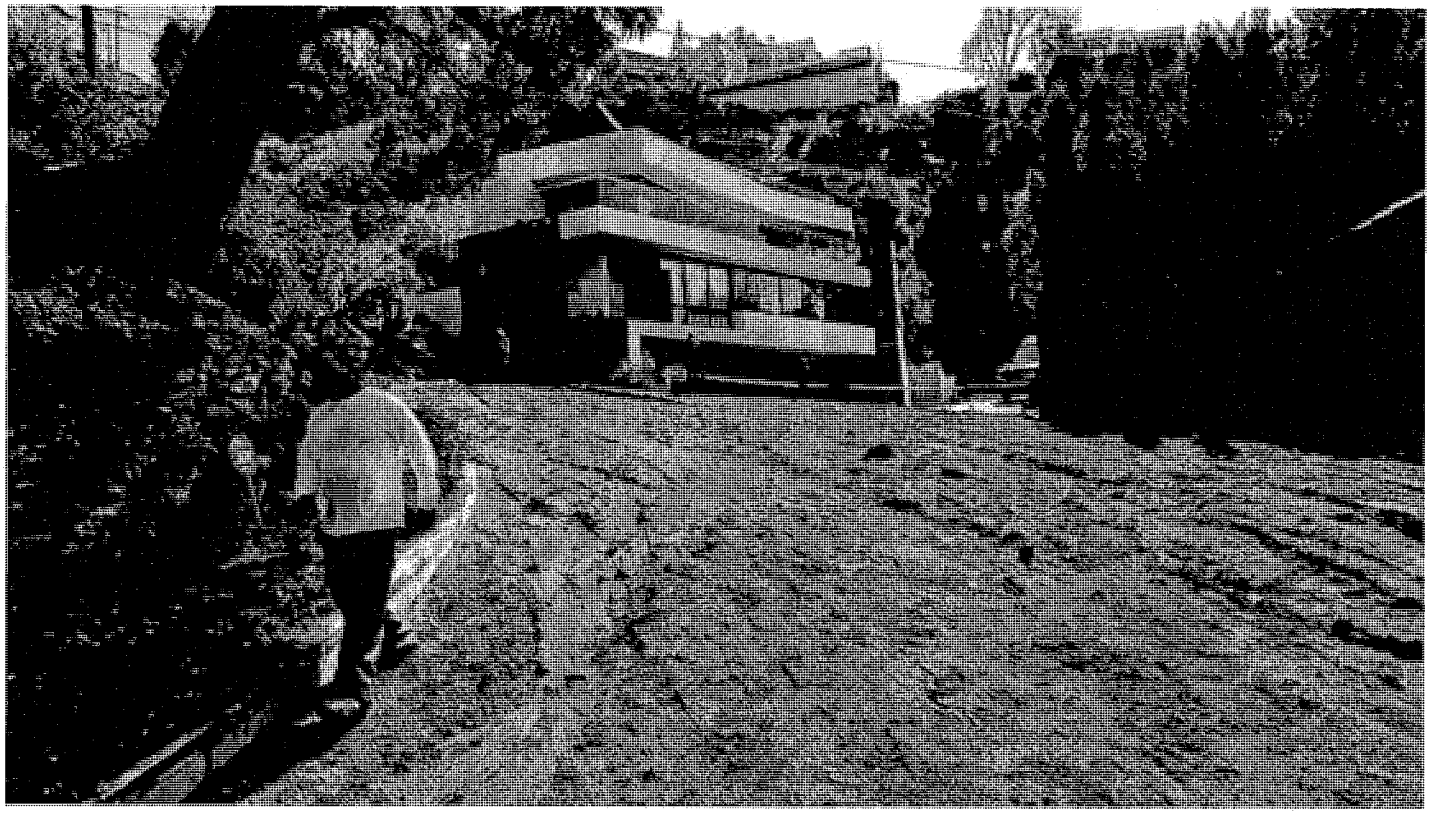
A. Hydrant Failure
B. Roadway Repair Cost Example
C. Weight of Construction Vehicles
D. Information on the Kirkland Fire
E. Emails With City Staff Documenting Information Not Included In Project File
F. Expired B-Permit
G. Letter From Channel Law – Appeal To Board of Public Works of CEQA Determination for B-Permit No BR402571 (Public Resources Code Section 21151(c)
H. Case Planning Information For the Four Single-Family Residences
I. Resident Testimony Regarding Harm From Similar Past Projects
J. Audio Links, Central Area Planning Commission Meeting, September 8, 2015

[6] See Fire analysis by Los Angeles Fire Department in Attachment D.

# Exhibit A

LOCAL / L.A. Now

# Hollywood Hills neighborhood awakens to mudslide after hydrant ruptures



Mud fills the street on Hillside Avenue in the Hollywood Hills after abroken fire hydrant sent debris and mud onto a number of streets including Hillside and Franklin avenues and Kings and Queens Roads. (Mel Melcon / Los Angeles Times)

By **Veronica Rocha** • **Contact Reporter**

MAY 18, 2016, 9:07 AM

A ruptured fire hydrant triggered a mudslide Wednesday in a Hollywood Hills neighborhood and caused delays along a stretch of Sunset Boulevard.

The fire hydrant burst about 12:30 a.m. in the 8400 block of Grand View Drive, according to Kim Hughes, spokeswoman for the Los Angeles Department of Water and Power. It is unclear whether the fire hydrant was struck or malfunctioned.

Water and debris flowed downhill into streets and buried the driveways of some homes in thick mud.

DWP crews shut off water to the hydrant to stop the leak.

**See the most-read stories this hour >>**

Crews are working with fire officials to restore water to the area and clean up the debris.

Meanwhile, the Los Angeles County Sheriff's Department has advised drivers to avoid Sunset between Kings and Queens roads in West Hollywood due to heavy traffic and ongoing cleanup efforts.

A broken hydrant also sent a flood of water and mud onto Coldwater Canyon Boulevard in Studio City on Friday. A motorist had crashed into the hydrant.

**veronica.rocha@latimes.com**

**For breaking news in California, follow VeronicaRochaLA on Twitter.**

**ALSO**

**Person on 10 Freeway in West Covina is killed by hit-and-run driver**

**Nanny fights off would-be kidnapper who tried to snatch a stroller with a baby**

**Giant space shuttle tank arrives in L.A. by sea**

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**This article is related to:** Avalanches and Landslides

# Exhibit B

## CITY ENGINEER'S ESTIMATE

**City of Los Angeles - Department of Public Works - Bureau of Engineering**
**Emergency Geotechnical/Structural Construction Services Project**
**Grand View Drive Bulkhead**
**W.O. No. E1907365**

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | JOHN S. MEEK COMPANY, INC. | | PBC CONSTRUCTION, INC. | | CALEX ENGINEERING COMPANY | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL |
| 1 | Mobilization (General Requirements, Sections 01292 and 1721) | LS | | | $11,775.00 | | $11,500.00 | | $33,400.00 | | $27,500.00 |
| 2 | **Allowance for Differing Site Conditions (General Requirements, Sections 01212 and 01253)** | **LS** | | | **$23,630.00** | | **$23,630.00** | | **$23,630.00** | | **$23,630.00** |
| 3 | **Allowance for Utility & Service Line Relocation or Permanent Support (General Requirements, Section 01212)** | **LS** | | | **$20,000.00** | | **$20,000.00** | | **$20,000.00** | | **$20,000.00** |
| 4 | Traffic Control | LS | | | $3,000.00 | | $13,000.00 | | $7,000.00 | | $1,800.00 |
| 5 | Clearing and grubbing, prior to grading slope | EA | 400 | $3.00 | $1,200.00 | $3.50 | $1,400.00 | $10.00 | $4,000.00 | $16.00 | $6,400.00 |
| 6 | Drill 8 holes ea. 36" diameter x 41 ft deep, for Soldier Beams | LF | 328 | $300.00 | $98,400.00 | $63.00 | $20,664.00 | $105.00 | $34,440.00 | $134.00 | $43,952.00 |
| 7 | Supply 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $150.50 | $49,364.00 | $106.00 | $34,768.00 | $130.00 | $42,640.00 |
| 8 | Install 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $48.50 | $15,908.00 | $32.00 | $10,496.00 | $50.00 | $16,400.00 |
| 9 | Supply, pump and place concrete for embedded portion of soldier beams | CY | 51 | $135.00 | $6,885.00 | $352.00 | $17,952.00 | $324.00 | $16,524.00 | $255.00 | $13,005.00 |
| 10 | Supply, pump and place slurry for cantilevered portion of soldier piles | CY | 20 | $135.00 | $2,700.00 | $130.00 | $2,600.00 | $190.00 | $3,800.00 | $470.00 | $9,400.00 |
| 11 | Excavation for lagging and backdrain, including sawcut and removal of AC, haul-away and dispose | CY | 40 | $85.00 | $3,400.00 | $190.00 | $7,600.00 | $200.00 | $8,000.00 | $325.00 | $13,000.00 |
| 12 | Supply 8" x 1'-6" x 8 ft long pre-cast lagging panels | EA | 30 | $450.00 | $13,500.00 | $542.00 | $16,260.00 | $770.00 | $23,100.00 | $530.00 | $15,900.00 |
| 13 | Install 8" x 1'-6" x 8 ft long precast lagging panels | EA | 30 | $175.00 | $5,250.00 | $385.00 | $11,550.00 | $407.00 | $12,210.00 | $238.00 | $7,140.00 |
| 14 | Place 24" wide drain consisting of 3/4" rock wrapped in geofabric filter, at backside of lagging, geofabric and hydroauger array, prior to backfilling | CY | 10 | $100.00 | $1,000.00 | $275.00 | $2,750.00 | $330.00 | $3,300.00 | $768.00 | $7,680.00 |
| 15 | Construct fill in lifts, certified 90% min. relative compaction | CY | 32 | $110.00 | $3,520.00 | $113.00 | $3,616.00 | $175.00 | $5,600.00 | $220.00 | $7,040.00 |
| 16 | Erosion control groundcover hydro-mulch with native seed mix per building code | SF | 700 | $3.00 | $2,100.00 | $2.40 | $1,680.00 | $5.00 | $3,500.00 | $4.40 | $3,080.00 |
| 17 | Supply and install metal-beam vehicular guardrail per Standard Plan S-462, Type 2 | LF | 82 | $120.00 | $9,840.00 | $158.50 | $12,997.00 | $141.00 | $11,562.00 | $195.00 | $15,990.00 |
| 18 | Construct AC pavement 6" - 8" thick with 12" CMB | SF | 175 | $28.00 | $4,900.00 | $22.00 | $3,850.00 | $22.00 | $3,850.00 | $50.00 | $8,750.00 |
| 19 | Construct AC Berm (curb) at edge of pavement | LF | 50 | $40.00 | $2,000.00 | $44.50 | $2,225.00 | $50.00 | $2,500.00 | $114.00 | $5,700.00 |
| **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | | **$295,100.00** | | **$238,546.00** | | **$261,680.00** | | **$289,007.00** |
| | | | | | | **{ Low }** | **-19.16%** | **{ Low }** | **-11.32%** | **{ Low }** | **-2.06%** |

## CITY ENGINEER'S ESTIMATE

**City of Los Angeles - Department of Public Works - Bureau of Engineering**
**Emergency Geotechnical/Structural Construction Services Project**
**Grand View Drive Bulkhead**
**W.O. No. E1907365**

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | CLARKE CONTRACTING CORPORATION | | BALI CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL | Unit Price | ITEM TOTAL |
| 1 | Mobilization (General Requirements, Sections 01292 and 1721) | LS | | | $11,775.00 | | $11,775.00 | | $11,775.00 |
| 2 | **Allowance for Differing Site Conditions (General Requirements, Sections 01212 and 01253)** | **LS** | | | **$23,630.00** | | **$23,630.00** | | **$23,630.00** |
| 3 | **Allowance for Utility & Service Line Relocation or Permanent Support (General Requirements, Section 01212)** | **LS** | | | **$20,000.00** | | **$20,000.00** | | **$20,000.00** |
| 4 | Traffic Control | LS | | | $3,000.00 | | $4,800.00 | | $5,090.00 |
| 5 | Clearing and grubbing, prior to grading slope | EA | 400 | $3.00 | $1,200.00 | $10.00 | $4,000.00 | $11.00 | $4,400.00 |
| 6 | Drill 8 holes ea. 36" diameter x 41 ft deep, for Soldier Beams | LF | 328 | $300.00 | $98,400.00 | $185.00 | $60,680.00 | $429.00 | $140,712.00 |
| 7 | Supply 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $174.00 | $57,072.00 | $141.00 | $46,248.00 |
| 8 | Install 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $131.00 | $42,968.00 | $207.00 | $67,896.00 |
| 9 | Supply, pump and place concrete for embedded portion of soldier beams | CY | 51 | $135.00 | $6,885.00 | $370.00 | $18,870.00 | $271.25 | $13,833.75 |
| 10 | Supply, pump and place slurry for cantilevered portion of soldier piles | CY | 20 | $135.00 | $2,700.00 | $150.00 | $3,000.00 | $212.75 | $4,255.00 |
| 11 | Excavation for lagging and backdrain, including sawcut and removal of AC, haul-away and dispose | CY | 40 | $85.00 | $3,400.00 | $240.00 | $9,600.00 | $192.75 | $7,710.00 |
| 12 | Supply 8" x 1'-6" x 8 ft long pre-cast lagging panels | EA | 30 | $450.00 | $13,500.00 | $475.00 | $14,250.00 | $901.00 | $27,030.00 |
| 13 | Install 8" x 1'-6" x 8 ft long precast lagging panels | EA | 30 | $175.00 | $5,250.00 | $315.00 | $9,450.00 | $112.00 | $3,360.00 |
| 14 | Place 24" wide drain consisting of 3/4" rock wrapped in geofabric filter, at backside of lagging, geofabric and hydroauger array, prior to backfilling | CY | 10 | $100.00 | $1,000.00 | $650.00 | $6,500.00 | $435.00 | $4,350.00 |
| 15 | Construct fill in lifts, certified 90% min. relative compaction | CY | 32 | $110.00 | $3,520.00 | $205.00 | $6,560.00 | $141.50 | $4,528.00 |
| 16 | Erosion control groundcover hydro-mulch with native seed mix per building code | SF | 700 | $3.00 | $2,100.00 | $3.00 | $2,100.00 | $1.25 | $875.00 |
| 17 | Supply and install metal-beam vehicular guardrail per Standard Plan S-462, Type 2 | LF | 82 | $120.00 | $9,840.00 | $141.00 | $11,562.00 | $138.00 | $11,316.00 |
| 18 | Construct AC pavement 6" - 8" thick with 12" CMB | SF | 175 | $28.00 | $4,900.00 | $45.00 | $7,875.00 | $59.25 | $10,368.75 |
| 19 | Construct AC Berm (curb) at edge of pavement | LF | 50 | $40.00 | $2,000.00 | $100.00 | $5,000.00 | $11.50 | $575.00 |
| | **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | **$295,100.00** | | **$319,692.00** | | **$407,952.50** |
| | | | | | | **{ High }** | **8.33%** | **{ High }** | **38.24%** |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | MIKE PRLICH AND SONS, INC. | | JOHN S. MEEK COMPANY, INC. | | CLARKE CONTRACTING COPRORATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization per THE General Requirements, Section 01292 (combined bundled projects) | LS | | | $ 28,000.00 | | $ 28,000.00 | | $ 28,000.00 | | $ 28,000.00 |
| 2 | **Allowance for Differing Site Conditions per the General Requirements, Sections 01212 and 01253 (combined bundled projects)** | **LS** | | | **$ 30,000.00** | | **$ 30,000.00** | | **$ 30,000.00** | | **$ 30,000.00** |
| 3 | Traffic control and signs (combined bundled projects) | LS | | | $ 8,000.00 | | $ 30,000.00 | | $ 11,000.00 | | $ 15,000.00 |
| 4 | Clearing and grubbing, including demo and disposal of interfering existing timber, asphalt and concrete (combined bundled projects) | LS | | | $ 7,000.00 | | $ 43,000.00 | | $ 41,800.00 | | $ 17,000.00 |
| | Grand View Drive Bulkhead (8460) | | | | | | | | | | |
| 5 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 180 | $ 70.00 | $ 12,600.00 | $ 85.00 | $ 15,300.00 | $ 41.00 | $ 7,380.00 | $ 50.00 | $ 9,000.00 |
| 6 | Drill five 36" diameter holes, 28' deep | LF | 140 | $ 140.00 | $ 19,600.00 | $ 100.00 | $ 14,000.00 | $ 212.50 | $ 29,750.00 | $ 195.00 | $ 27,300.00 |
| 7 | Supply, pump, and place concrete for 14' deep embedded portion of soldier beam | CY | 19 | $ 400.00 | $ 7,600.00 | $ 120.00 | $ 2,280.00 | $ 500.00 | $ 9,500.00 | $ 350.00 | $ 6,650.00 |
| 8 | Supply, pump, and place slurry backfill for upper 14' portion of soldier beam | CY | 19 | $ 300.00 | $ 5,700.00 | $ 90.00 | $ 1,710.00 | $ 115.00 | $ 2,185.00 | $ 100.00 | $ 1,900.00 |
| 9 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 10 | $ 300.00 | $ 3,000.00 | $ 300.00 | $ 3,000.00 | $ 257.00 | $ 2,570.00 | $ 700.00 | $ 7,000.00 |
| 10 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 180 | $ 270.00 | $ 48,600.00 | $ 90.00 | $ 16,200.00 | $ 76.70 | $ 13,806.00 | $ 80.00 | $ 14,400.00 |
| 11 | Furnish four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 170.00 | $ 19,040.00 | $ 152.00 | $ 17,024.00 | $ 95.00 | $ 10,640.00 | $ 175.00 | $ 19,600.00 |
| 12 | Install four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 100.00 | $ 11,200.00 | $ 72.00 | $ 8,064.00 | $ 87.00 | $ 9,744.00 | $ 75.00 | $ 8,400.00 |
| 13 | Furnish one Hollow Structural Section (HSS) 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 28' long | LF | 28 | $ 460.00 | $ 12,880.00 | $ 125.00 | $ 3,500.00 | $ 700.00 | $ 19,600.00 | $ 600.00 | $ 16,800.00 |
| 14 | Install one HSS 20x12x1/2" soldier beam, 28' long | LF | 28 | $ 150.00 | $ 4,200.00 | $ 36.00 | $ 1,008.00 | $ 105.00 | $ 2,940.00 | $ 90.00 | $ 2,520.00 |
| 15 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 36 | $ 750.00 | $ 27,000.00 | $ 835.00 | $ 30,060.00 | $ 675.00 | $ 24,300.00 | $ 520.00 | $ 18,720.00 |
| 16 | Reinstall existing metal beam guardrail with new Type 1 posts (Standard Plan S-462-2) | LF | 60 | $ 200.00 | $ 12,000.00 | $ 35.00 | $ 2,100.00 | $ 138.00 | $ 8,280.00 | $ 190.00 | $ 11,400.00 |
| 17 | Supply and install new metal beam guardrail with new Type 1 posts (Standard Plan. S-462-2) | LF | 30 | $ 200.00 | $ 6,000.00 | $ 100.00 | $ 3,000.00 | $ 250.00 | $ 7,500.00 | $ 200.00 | $ 6,000.00 |
| 18 | Asphalt Concrete (AC) pavement 8" thick over 12" thick CMB | SF | 500 | $ 28.00 | $ 14,000.00 | $ 28.00 | $ 14,000.00 | $ 25.00 | $ 12,500.00 | $ 49.00 | $ 24,500.00 |
| 19 | Supply and install AC berm (10" high per modified Standard Plan 412) | LF | 50 | $ 110.00 | $ 5,500.00 | $ 50.00 | $ 2,500.00 | $ 45.00 | $ 2,250.00 | $ 90.00 | $ 4,500.00 |
| 20 | Hydromulch with seed mix / vegetative plantings | SF | 1,200 | $ 4.00 | $ 4,800.00 | $ 2.50 | $ 3,000.00 | $ 3.00 | $ 3,600.00 | $ 1.25 | $ 1,500.00 |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | MIKE PRLICH AND SONS, INC. | | JOHN S. MEEK COMPANY, INC. | | CLARKE CONTRACTING COPRORATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| | Grand View Drive Bulkhead (8417) | | | | | | | | | | |
| 21 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 150 | $ 70.00 | $ 10,500.00 | $ 85.00 | $ 12,750.00 | $ 41.00 | $ 6,150.00 | $ 50.00 | $ 7,500.00 |
| 22 | Drill four 36" diameter holes, 22' deep | LF | 88 | $ 140.00 | $ 12,320.00 | $ 120.00 | $ 10,560.00 | $ 254.50 | $ 22,396.00 | $ 225.00 | $ 19,800.00 |
| 23 | Supply, pump, and place concrete for 11' deep embedded portion of soldier beam | CY | 12 | $ 400.00 | $ 4,800.00 | $ 100.00 | $ 1,200.00 | $ 500.00 | $ 6,000.00 | $ 350.00 | $ 4,200.00 |
| 24 | Supply, pump, and place slurry backfill for upper 11' portion of soldier beam | CY | 12 | $ 300.00 | $ 3,600.00 | $ 90.00 | $ 1,080.00 | $ 150.00 | $ 1,800.00 | $ 100.00 | $ 1,200.00 |
| 25 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 24 | $ 300.00 | $ 7,200.00 | $ 300.00 | $ 7,200.00 | $ 257.00 | $ 6,168.00 | $ 700.00 | $ 16,800.00 |
| 26 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 150 | $ 270.00 | $ 40,500.00 | $ 90.00 | $ 13,500.00 | $ 76.70 | $ 11,505.00 | $ 80.00 | $ 12,000.00 |
| 27 | Furnish three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 140.00 | $ 9,240.00 | $ 170.00 | $ 11,220.00 | $ 106.00 | $ 6,996.00 | $ 210.00 | $ 13,860.00 |
| 28 | Install three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 100.00 | $ 6,600.00 | $ 90.00 | $ 5,940.00 | $ 127.00 | $ 8,382.00 | $ 175.00 | $ 11,550.00 |
| 29 | Furnish one HSS 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 22' long | LF | 22 | $ 655.00 | $ 14,410.00 | $ 137.00 | $ 3,014.00 | $ 760.00 | $ 16,720.00 | $ 600.00 | $ 13,200.00 |
| 30 | Install one HSS 20x12x1/2" soldier beam, 22' long | LF | 22 | $ 150.00 | $ 3,300.00 | $ 46.00 | $ 1,012.00 | $ 110.00 | $ 2,420.00 | $ 90.00 | $ 1,980.00 |
| 31 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 28 | $ 750.00 | $ 21,000.00 | $ 900.00 | $ 25,200.00 | $ 685.00 | $ 19,180.00 | $ 520.00 | $ 14,560.00 |
| 32 | Reinstall existing metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 35 | $ 200.00 | $ 7,000.00 | $ 50.00 | $ 1,750.00 | $ 225.00 | $ 7,875.00 | $ 255.00 | $ 8,925.00 |
| 33 | Supply and install new metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 10 | $ 200.00 | $ 2,000.00 | $ 200.00 | $ 2,000.00 | $ 665.00 | $ 6,650.00 | $ 415.00 | $ 4,150.00 |
| 34 | AC pavement 8" thick over 12" thick CMB | SF | 480 | $ 28.00 | $ 13,440.00 | $ 30.00 | $ 14,400.00 | $ 25.00 | $ 12,000.00 | $ 49.00 | $ 23,520.00 |
| 35 | Supply and install AC berm (8" high per Standard Plan 412) | LF | 60 | $ 90.00 | $ 5,400.00 | $ 40.00 | $ 2,400.00 | $ 65.00 | $ 3,900.00 | $ 90.00 | $ 5,400.00 |
| 36 | Hydromulch with seed mix / vegetative plantings | SF | 840 | $ 4.00 | $ 3,360.00 | $ 2.50 | $ 2,100.00 | $ 3.00 | $ 2,520.00 | $ 1.25 | $ 1,050.00 |
| | **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | **$ 451,390.00** | | **$ 383,072.00** | | **$ 418,007.00** | | **$ 429,885.00** |
| | | | | | | { Low } | -15.14% | { Low } | -7.40% | { Low } | -4.76% |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | PPC CONSTRUCTION, INC. | | ENVIRONMENTAL CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization per THE General Requirements, Section 01292 (combined bundled projects) | LS | | | $ 28,000.00 | | $ 28,000.00 | | $ 25,000.00 |
| 2 | **Allowance for Differing Site Conditions per the General Requirements, Sections 01212 and 01253 (combined bundled projects)** | LS | | | **$ 30,000.00** | | **$ 30,000.00** | | **$ 30,000.00** |
| 3 | Traffic control and signs (combined bundled projects) | LS | | | $ 8,000.00 | | $ 15,800.00 | | $ 30,000.00 |
| 4 | Clearing and grubbing, including demo and disposal of interfering existing timber, asphalt and concrete (combined bundled projects) | LS | | | $ 7,000.00 | | $ 9,600.00 | | $ 95,000.00 |
| | Grand View Drive Bulkhead (8460) | | | | | | | | |
| 5 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 180 | $ 70.00 | $ 12,600.00 | $ 151.00 | $ 27,180.00 | $ 200.00 | $ 36,000.00 |
| 6 | Drill five 36" diameter holes, 28' deep | LF | 140 | $ 140.00 | $ 19,600.00 | $ 125.00 | $ 17,500.00 | $ 300.00 | $ 42,000.00 |
| 7 | Supply, pump, and place concrete for 14' deep embedded portion of soldier beam | CY | 19 | $ 400.00 | $ 7,600.00 | $ 345.00 | $ 6,555.00 | $ 1,200.00 | $ 22,800.00 |
| 8 | Supply, pump, and place slurry backfill for upper 14' portion of soldier beam | CY | 19 | $ 300.00 | $ 5,700.00 | $ 189.00 | $ 3,591.00 | $ 600.00 | $ 11,400.00 |
| 9 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 10 | $ 300.00 | $ 3,000.00 | $ 220.00 | $ 2,200.00 | $ 200.00 | $ 2,000.00 |
| 10 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 180 | $ 270.00 | $ 48,600.00 | $ 200.00 | $ 36,000.00 | $ 200.00 | $ 36,000.00 |
| 11 | Furnish four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 170.00 | $ 19,040.00 | $ 83.00 | $ 9,296.00 | $ 100.00 | $ 11,200.00 |
| 12 | Install four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 100.00 | $ 11,200.00 | $ 69.00 | $ 7,728.00 | $ 100.00 | $ 11,200.00 |
| 13 | Furnish one Hollow Structural Section (HSS) 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 28' long | LF | 28 | $ 460.00 | $ 12,880.00 | $ 447.00 | $ 12,516.00 | $ 200.00 | $ 5,600.00 |
| 14 | Install one HSS 20x12x1/2" soldier beam, 28' long | LF | 28 | $ 150.00 | $ 4,200.00 | $ 283.00 | $ 7,924.00 | $ 100.00 | $ 2,800.00 |
| 15 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 36 | $ 750.00 | $ 27,000.00 | $ 953.00 | $ 34,308.00 | $ 1,500.00 | $ 54,000.00 |
| 16 | Reinstall existing metal beam guardrail with new Type 1 posts (Standard Plan S-462-2) | LF | 60 | $ 200.00 | $ 12,000.00 | $ 150.00 | $ 9,000.00 | $ 100.00 | $ 6,000.00 |
| 17 | Supply and install new metal beam guardrail with new Type 1 posts (Standard Plan. S-462-2) | LF | 30 | $ 200.00 | $ 6,000.00 | $ 236.00 | $ 7,080.00 | $ 100.00 | $ 3,000.00 |
| 18 | Asphalt Concrete (AC) pavement 8" thick over 12" thick CMB | SF | 500 | $ 28.00 | $ 14,000.00 | $ 20.00 | $ 10,000.00 | $ 20.00 | $ 10,000.00 |
| 19 | Supply and install AC berm (10" high per modified Standard Plan 412) | LF | 50 | $ 110.00 | $ 5,500.00 | $ 90.00 | $ 4,500.00 | $ 50.00 | $ 2,500.00 |
| 20 | Hydromulch with seed mix / vegetative plantings | SF | 1,200 | $ 4.00 | $ 4,800.00 | $ 1.50 | $ 1,800.00 | $ 2.00 | $ 2,400.00 |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | PPC CONSTRUCTION, INC. | | ENVIRONMENTAL CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| | Grand View Drive Bulkhead (8417) | | | | | | | | |
| 21 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 150 | $ 70.00 | $ 10,500.00 | $ 151.00 | $ 22,650.00 | $ 200.00 | $ 30,000.00 |
| 22 | Drill four 36" diameter holes, 22' deep | LF | 88 | $ 140.00 | $ 12,320.00 | $ 193.00 | $ 16,984.00 | $ 450.00 | $ 39,600.00 |
| 23 | Supply, pump, and place concrete for 11' deep embedded portion of soldier beam | CY | 12 | $ 400.00 | $ 4,800.00 | $ 345.00 | $ 4,140.00 | $ 1,000.00 | $ 12,000.00 |
| 24 | Supply, pump, and place slurry backfill for upper 11' portion of soldier beam | CY | 12 | $ 300.00 | $ 3,600.00 | $ 189.00 | $ 2,268.00 | $ 600.00 | $ 7,200.00 |
| 25 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 24 | $ 300.00 | $ 7,200.00 | $ 220.00 | $ 5,280.00 | $ 200.00 | $ 4,800.00 |
| 26 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 150 | $ 270.00 | $ 40,500.00 | $ 200.00 | $ 30,000.00 | $ 200.00 | $ 30,000.00 |
| 27 | Furnish three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 140.00 | $ 9,240.00 | $ 85.00 | $ 5,610.00 | $ 100.00 | $ 6,600.00 |
| 28 | Install three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 100.00 | $ 6,600.00 | $ 94.00 | $ 6,204.00 | $ 100.00 | $ 6,600.00 |
| 29 | Furnish one HSS 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 22' long | LF | 22 | $ 655.00 | $ 14,410.00 | $ 447.00 | $ 9,834.00 | $ 100.00 | $ 2,200.00 |
| 30 | Install one HSS 20x12x1/2" soldier beam, 22' long | LF | 22 | $ 150.00 | $ 3,300.00 | $ 283.00 | $ 6,226.00 | $ 100.00 | $ 2,200.00 |
| 31 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 28 | $ 750.00 | $ 21,000.00 | $ 953.00 | $ 26,684.00 | $ 1,500.00 | $ 42,000.00 |
| 32 | Reinstall existing metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 35 | $ 200.00 | $ 7,000.00 | $ 206.00 | $ 7,210.00 | $ 100.00 | $ 3,500.00 |
| 33 | Supply and install new metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 10 | $ 200.00 | $ 2,000.00 | $ 461.00 | $ 4,610.00 | $ 100.00 | $ 1,000.00 |
| 34 | AC pavement 8" thick over 12" thick CMB | SF | 480 | $ 28.00 | $ 13,440.00 | $ 20.00 | $ 9,600.00 | $ 20.00 | $ 9,600.00 |
| 35 | Supply and install AC berm (8" high per Standard Plan 412) | LF | 60 | $ 90.00 | $ 5,400.00 | $ 80.00 | $ 4,800.00 | $ 80.00 | $ 4,800.00 |
| 36 | Hydromulch with seed mix / vegetative plantings | SF | 840 | $ 4.00 | $ 3,360.00 | $ 1.50 | $ 1,260.00 | $ 2.00 | $ 1,680.00 |
| | **TOTAL ESTIMATED CONSTRUCTION COST:** | | | **$** | **451,390.00** | **$** | **443,938.00** | **$** | **642,680.00** |
| | | | | | | **{ Low }** | **-1.65%** | **{ High }** | **42.38%** |

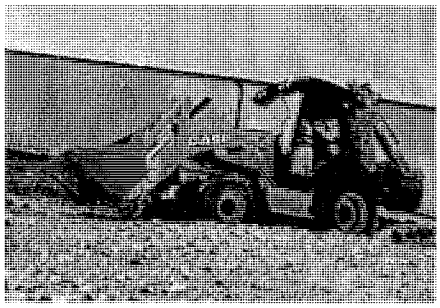
# Exhibit C

CASE CONSTRUCTION

# 580N EP

*BACKHOE LOADER*

***TIER 4 FINAL CERTIFIED***



## ENGINE

| | |
|---|---|
| Model | FPT F5HFL463D |
| Emissions Certification | Tier 4 Final |
| Type | Diesel 4-stroke, Turbocharged |
| Cylinders | 4 |
| Bore/Stroke | 3.90 x 4.33 in (99 x 110 mm) |
| Displacement | 207 in³ (3.4 L) |
| Fuel injection | Direct, high pressure common rail – HPCR |
| Fuel | Diesel |
| Engine speeds* | RPM |
| Rated speed – full load | 2200 |
| Low idle | 900 – 1000 |
| High idle – no load | 2330 – 2430 |
| Horsepower @ 2200 RPM: | |
| Gross | 74 hp (55 kW) |
| Net w/ viscous fan** | 72 hp (54 kW) |
| Net | 68 hp (51 kW) |
| Maximum torque @ 1400 RPM: | |
| Gross | 233 lb·ft (316 N·m) |
| Net w/ viscous fan | 228 lb·ft (310 N·m) |
| Net | 220 lb·ft (298 N·m) |
| Torque rise at rated speed | 35% +/- 5% |
| Radiator: | |
| Core type | Square wave |
| Core size area | 486 in² (3 145 cm²) |
| Rows of tubes | 5 |
| 39° fan: | |
| Style | 7 blade suction |
| Diameter | 19.65 in (499 mm) |
| Ratio | 1.1:1 |
| Pump operating angle ratings: | |
| Side to side | Rated 35° |
| Fore and aft | Rated 35° |
| Oil filtration | Replaceable, full flow spin on |

NOTE: *Meets federal emission regulations.
**Viscous fan available as DIA w/ High Ambient Kit.

## DRIVETRAIN

Transmission – standard:
4F-4R Power Shuttle Synchromesh Transmission manual gear shift, fully synchronized

| Gear ratios | Forward/Reverse |
|---|---|
| 1st | 5.603/4.643 |
| 2nd | 3.481/2.884 |
| 3rd | 1.584/1.313 |
| 4th | 0.793/0.657* |

| Travel speeds | Forward mph (kph) | Reverse mph (kph) |
|---|---|---|
| 1st | 3.5 (5.6) | 4.2 (6.8) |
| 2nd | 5.5 (8.9) | 6.6 (10.6) |
| 3rd | 11.8 (19.0) | 14.1 (22.7) |
| 4th | 21.3 (34.3) | 25.5 (41.0) |

| | |
|---|---|
| Torque converter ratio | 3.2 |
| Differential lock | On-the-go push-button activation |
| Front 4WD/Rear axle: | |
| Differential ratio | 2.2/2.75 |
| Planetary hub ratio | 6.0/6.4 |
| Total reduction ratio | 13.3/17.6 |

Service brakes:
Individually applied, power assisted, hydraulically actuated, maintenance-free, self-adjusting, outboard mounted, wet disc, 2 per side.
Total disc area 384 in² (0.25 m²)

| | |
|---|---|
| Parking brakes | Trans Mounted spring-applied hydraulic release – SAHR |

NOTE: Travel speeds at 2293 engine RPM specified: w/ 19.5 L x 24.0 tires. Speeds decrease w/ 17.5 L x 24.0 rear tires.

## ELECTRICAL

| | |
|---|---|
| Voltage | 12 Volts, negative ground |
| Alternator | 120 amp |
| Battery | 850 cold-cranking amps |
| Opt. batteries – 2 | 850 cold-cranking amps |
| Power plugs – 2 | 30 amps total |

## OPERATOR ENVIRONMENT

ROPS/FOPS certified protective canopy; Rear fenders extensions; Coat hook w/ garment strap; Interior rearview mirror, convex 3.54 in (90 mm) wide x 10.83 in (275 mm) high; Non-suspension seat – 180° swivel – Vinyl; 2 in (50 mm) retractable seat belt; Cup holder/storage tray mounted on left-hand fender; Right-hand storage compartment w/ lid.

Gauges:
Engine water temperature; Converter oil temperature; Fuel level; Tachometer/ hourmeter; Voltmeter.

Warning lights:
Air cleaner restriction; Alternator; A/C high pressure; Cold start; Engine oil pressure low; Hydraulic oil filter bypass; Parking brake engagement; Low fuel; Water in fuel.

Audible alarms:
Coolant temperature; Engine oil pressure; Parking brake engagement; Shuttle engagement/seat position; Backup; Converter temperature; Particulate Matter Regeneration.

| | |
|---|---|
| Horn | Dual switched front and rear |

## OPERATING WEIGHT

**Configuration 1 – SAE Transport:**
GP Loader Bucket, 2WD, Canopy, Boom Guard, Full of Fuel, SAE Carry, Tier 4 Final Engine, Extendahoe®, 4 Stick Mech BH, Standard Transmission, 17.5 L – 24 Rear Tires, 700 lb Front Counterweight.
15,795 lb (7 164 kg)

**Configuration 2 – SAE Transport:**
GP Loader Bucket, 4WD, 2 Door Cab, AC, Boom Guard, Full of Fuel, SAE Carry, 24 in HD BH Bucket, Tier 4 Final Engine, Pilot Controls, Standard Dipper, Manual Transmission, 19.5 – 24 Rear Tires.
15,810 lb (7 171 kg)

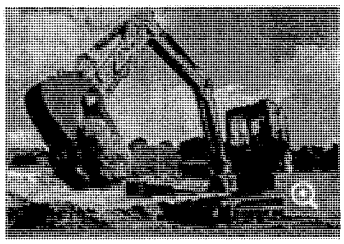
**Add-on weights:**

| | |
|---|---|
| Cab-over canopy | 309 lb (140 kg) |
| Fabricated stabilizer pads | 141 lb (64 kg) |
| Counterweights | 700 lb (318 kg) |
| Extendahoe® | 285 lb (129 kg) |
| 4WD w/ driveshaft guard | 283 lb (128 kg) |

MINI EXCAVATORS FOR ALL INDUSTRIES

BACKHOE LOADERS
COMPACT TRACK LOADERS
COMPACTION EQUIPMENT
CRAWLER DOZERS
EXCAVATORS
FORKLIFTS
MINI EXCAVATORS
MOTOR GRADERS
SKID STEER LOADERS
TRACTOR LOADERS
WHEEL LOADERS - COMPACT
WHEEL LOADERS

10



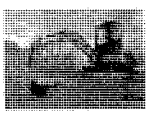
## CASE MINI EXCAVATORS

Looking for superior power, productivity and fast cycle times all in one application? That's exactly what you'll find with CASE mini excavators. Regardless of space constraints, these compact excavators are able to perform landscaping, utility, demolition, construction or industrial jobs that require strength without a giant footprint. Increase productivity and performance with the independent, center-swing boom allowing you to dig around stationary objects or alongside obstacles.

Sorted By: **OPERATING WEIGHT**

UNDER 3.5 METRIC TONS | 3.5 - 4.5 METRIC TONS | OVER 4.5 METRIC TONS

*CX31B*



**OPERATING WEIGHT**
7,672 lb | 3480 kg
**ENGINE POWER**
23.1hp | 17.2 kW

More Details

*CX55B*



**OPERATING WEIGHT**
11,312 lb | 5130 kg
**ENGINE POWER**
37.4 hp | 27.9 kW

More Details

*CX36B*



**OPERATING WEIGHT**

## FIND A DEALER

To start your search for one of our world-class construction equipment dealers, please enter the following information:

United States

Zip or City

SEARCH

8,554 lb | 3880 kg
**ENGINE POWER**
23.1 hp | 17.2 kW

More Details

NOT IN LIST?
TRY TO SEARCH FOR PRIOR MODELS: model

SEARCH

## WHY *CASE*

CASE sells and supports a full line of construction equipment around the world. Through CASE dealers, customers have access to a true professional partner—with world-class equipment and aftermarket support, industry-leading warranties and flexible financing.

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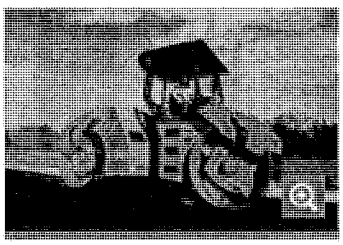


## CASE COMPACTOR MODELS

Leading the industry in performance level, CASE Compactors combine climbing power, high centrifugal forces and 360-degree visibility to provide you with superior productivity and power. Whether you are in need of an asphalt roller or a soil compactor, the three series compaction line offers easy operation and outstanding serviceability. Easy maintenance helps to minimize compactor downtime while maximizing your productivity from dusk to dawn.

There are a number of variables that determine the right roller for each compaction job, find out which CASE Compactor is right for you.

Sorted By: **ENGINE POWER**

| SINGLE DRUM | DOUBLE DRUM | PNEUMATIC |
|---|---|---|
| *SV208* | *DV23* | *PT240* |
|  |  |  |
| **ENGINE POWER** 99 hp \| 73.8 kW **OPERATING WEIGHT** 15,830 lb \| 7180 kg | **ENGINE POWER** 31 hp (23 kW) **OPERATING WEIGHT** 5,400 lb (2450 kg) | **ENGINE POWER** 99 hp \| 74 kW **OPERATING WEIGHT** 20,525 lb \| 9310 kg |
| More Details | More Details | More Details |
| *SV210* | *DV26* | |
|  |  | |
| **ENGINE POWER** | **ENGINE POWER** | |

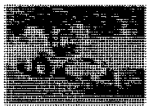
99 hp | 73.8 kW
**OPERATING WEIGHT**
19,445 lb | 8820 kg

More Details

31 hp (23 kW)
**OPERATING WEIGHT**
5,842 lb (2650 kg)

More Details

*SV212*



**ENGINE POWER**
148 hp | 110 kW
**OPERATING WEIGHT**
25,530 lb | 11 580 kg

More Details

*DV36*



**ENGINE POWER**
40 hp (30 kW)
**OPERATING WEIGHT**
9,480 lb (4300 kg)

More Details

*SV216*



**ENGINE POWER**
148 hp | 110 kW
**OPERATING WEIGHT**
31,479 lb | 14 274 kg

More Details

*DV45*



**ENGINE POWER**
40 hp (30 kW)
**OPERATING WEIGHT**
10,296 lb (4670 kg)

More Details

*DV207*



**ENGINE POWER**
80 hp | 60 kW
**OPERATING WEIGHT**
16,226 lb | 7360 kg

More Details

*DV210*



**ENGINE POWER**
99 hp | 74 kW
**OPERATING WEIGHT**
22,928 lb | 10400 kg

More Details

*DV209C*



**ENGINE POWER**
100 hp (74.4 kW)
**OPERATING WEIGHT**
21,030 lb (9,540 kg)

More Details

*DV210C*



**ENGINE POWER**
100 hp (74.4 kW)
**OPERATING WEIGHT**
22,730 lb (10,310 kg)

More Details

*DV213*



**ENGINE POWER**
130 hp | 97 kW
**OPERATING WEIGHT**
28,718 lb | 13030 kg

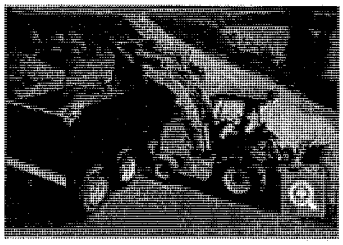
More Details

NOT IN LIST?
TRY TO SEARCH FOR PRIOR MODELS:

model

SEARCH

**WHY**



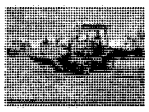
## CASE TRACTOR LOADER

The CASE 570N EP (Efficient Power) Tractor Loader offers the same industry-leading performance as our 570N XT Tractor Loader, but is engineered with a maintenance-free Tier 4 Final engine. This efficient model delivers the power, speed, versatility, gradeability, outstanding reach and superior serviceability that customers have come to expect from CASE while also meeting the industry's latest emission standards with a cost-effective solution.

Sorted By: **ENGINE POWER**

UNDER 75HP | 76HP - 100HP | OVER 100HP

*570N EP*



**ENGINE POWER**
74 hp (55 kW)
**OPERATING WEIGHT**
11,134 lb (5,051 kg)

More Details

NOT IN LIST?
TRY TO SEARCH FOR PRIOR MODELS: model

SEARCH

# Exhibit D

LAFIRE.COM
Los Angeles Fire Department
Historical Archive

September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

F-113 REV-(3-78)

**City of Los Angeles**
**DEPARTMENT OF FIRE**

ANALYSIS OF GREATER ALARM OPERATIONS

| LOCATION: | DATE: | TIME: | PLATOON: |
|---|---|---|---|
| Laurel Canyon Brush Fire | 9-16-79 | 14:57 | A XB C |
| **TYPE OF OCCUPANCY:** | **OCCUPANCY CODE** | | **ESTIMATE LOSS** |
| Brush and Structures | 850 | | $4,000,000. |

**COMPANIES AND CHIEF OFFICERS RESPONDING:**
26-Chief Officers
76-Companies

**EVALUATION OF OPERATIONS/SUGGESTED AREAS FOR IMPROVING FUTURE OPERATIONS:**

I. SUMMARY:
This fire was of major proportions on arrival of the first Companies. I do not believe that in the last 10 years we have been faced with the degree of property loss and potential loss in the early stages of any brush fire as posed by this one.

I would estimate that at least one-half to two-thirds of the structure loss occurred before the Fire Department laid the first line. The overall losses were minimized in relation to the potential because of the overwhelming efforts by every involved member. This is not to say that every action was correct and operational improvements are needed as will be addressed under "Operational Improvements."

This Form F-113, Analysis of Emergency Operations, is a very brief overview of the fire and suggestions on how I feel we can improve our operations for future incidents. One of the best learning tools I have found from this fire is in reviewing the tape recordings of radio communications, not once, but several times.

II. CONDITIONS AFFECTING FIRE:
The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

The majority of structure loss occurred prior to the arrival of Fire Companies, or before Fire Companies could be deployed into the area. In areas where Fire Department resources became operational, minimum fire loss progressed beyond that point.

The primary reasons for the structure losses were high temperatures for the previous two weeks, low humidity, wind from the south-southwest, 10 to 12 knots, delayed alarm, wood siding, structures built on ridges, with minimal brush clearance, and the fire starting at the base of a very steep slope (approximately 70 degrees), covered with dense brush. With all of these conditions combined, the fire swept up the slope, exposing the houses on three ridges, where the houses sustained almost total destruction.

The aforementioned conditions were evident as observed by the first-responding Companies, in that the loom-up had attained an altitude of between 1,000 to 1,500 feet, and between 5 and 10 structures were involved before the first Companies arrived.

The primary reason for the losses being limited to the immediate area of involvement was the result of the coordinated efforts of all resources deployed during the emergency.

III. FIRE FACTORS

A. Major brush fire in progress on arrival of first Company with 5 to 10 structures involved.
B. Access--Very limited narrow winding streets, obstructed roadways.
C. Weather--BBI 54--Extreme, (red flag alert).
D. Structural--Older, adjacent to brush, minimal brush (clearance) built on ridge tops with very steep slopes coming right up to foundations, wood siding, large trees.
E. Water--Old systems with tuberculated mains, poor grid system, and hydrant spacing on dead-end mains.

I. OPERATIONAL IMPROVEMENTS:

These are areas, where if I had this same fire today, I would consider different actions than taken on September 16, 1979, (date of fire). I think we can all learn from this incident and hopefully will implement operational changes and thinking to equip our Command Officers to more effectively deal with this type of major fire.

A. Additional simulated training of Command Officers and staff personnel in the Incident Command System.
B. With a fire moving this fast, the Incident Commander should call for the closest Engine Companies to be sent to staging with sufficient Chief Officers and make up strike teams and deploy as needed.
C. The Incident Commander should consider setting up the Command Post at a Fire Station with adequate facilities.
D. The Incident Commander should require OCD to give him sufficient operating channels, i.e. one or two for fire ground, command, and Incident Commander to OCD.
E. The Incident Commander should name the fire as soon as possible for communication purposes. (The Laurel Canyon Fire was called five different names during its course.)
F. Better communication with helicopters must be established. Consider a Chief as air observation with a high band walkie-talkie. I could see the helicopter overhead, but had difficulty communicating.
G. Division Commanders and strike team leaders should release resources if at all possible when other Divisions are in need. You don't have to spring a whole strike team, maybe a couple of Engines will help.
H. Field Commanders need additional training in how to properly access

and address OCD.

I. Incident Commander is the only person who should contact OCD. All other Commanders should either use the fire ground or command channels.

J. All Division sedans should be equipped with outside radio speakers and transmitting capabilities for each radio head.

K. Specific persons must be assigned to monitor and communicate on designated channels. Too many radio messages were not acknowledged or had to be reported several times.

L. A Documentation Officer is very important to coordinate information and resource status.

M. Two staging areas should be considered, especially if the fire could cut off access from one end into fire areas, i.e. Laurel Canyon closed; staging at Sunset could not service north flank of fire.

N. It is important that all major changes in fire behavior, assignments, communications channels, and staging areas be announced over all operational radio channels connected with the fire.

O. That damage assessment be started while the fire is still burning, if at all possible. This may be done by strike team leaders through their respective Division Commanders.

II. CONCLUSION:

This fire, in my opinion, was handled well; and the on-line personnel, whether ground, air, staff, or resource, did their very very best. There are lessons to be learned. Some are identified in this report, and I hope more will be identified during the formal critique.

The best lessons learned or improvements identified are only worthwhile if we do something about them.

**NAME: RANK: ASSIGN:** **DATE:**

D.F. Anthony A/C Div.I-"C" 9-28-79

DIST:
COMMANDER--BUREAU OF FIRE SUPPRESSION THROUGH CHANNELS (ORIGINAL)
COMMANDER--BUREAU OF FIRE SUPPRESSION THROUGH CHANNELS (DUPLICATE)
COMMANDER--TRAINING SECTION THROUGH CHANNELS (TRIPLICATE)

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Los Angeles Fire Department
Historical Archive

September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

LOS ANGELES FIRE DEPARTMENT

JOHN C. GERARD
CHIEF ENGINEER AND GENERAL MANAGER

October 5, 1979

| | |
|---|---|
| TO: | Bureau Commander, Bureau of Fire Suppression and Rescue |
| FROM: | Robert S. Furr, Commander, Battalion 9, "C" Platoon |
| SUBJECT: | ACTIVITIES DURING THE LAUREL CANYON BRUSH FIRE |

September 16, 1979

| | |
|---|---|
| 1503 hours | - Dispatched to Sunset and Fairfax |
| 1515 hours | - Arrived at Command Post, Sunset and Fairfax. Assigned the command function of Division "A", and directed to report to Kirkwood and Laurel Canyon Boulevard. Identity of companies working on the fire in this area was not given - no other resources were available at this time. Strike Teams requested were responding and would be sent to Division "A" as soon as available. |
| 1525 hours | - Arrived at Kirkwood and Yucca Trail (in bottom of Canyon directly below main front of fire) Established operational base at this point - Communications with S & R and I.C. through not good, seemed to be best at this point. Several structures on ridge above us and to the south were involved or exposed directly in line of travel of fire - winds at this time were mild, probably gusting from 15 to 20 M.P.H. My attempts to contact and identify the companies working on the fire, on the ridge above were unsuccessful. Messages to S & R regarding this initial size-up were not acknowledged. |
| 1535 hours | - Battalion Chief Olsen, Strike Team Leader (ST #20) reported on scene without his entire Strike Team - I directed him to take charge of the unidentified companies on the ridge and incorporate them into his Strike Team. The street that ran along the ridge was Grandview and Strike Team #20 was directed to operate in this area. This line was the head of the fire - Strike Team #20 was |

hampered in their efforts to move into position by the civilian traffic that clogged the narrow streets - Hordes of news media Personnel added to the congestion.

1545 hours

- Strike Team #20 reported that several of his companie were isolated from exposed structures on Grandview, due to high voltage power lines falling and blocking streets - He also reported a severe loss of water pressure in this area. These problems were reported to S & R and Water and Power requested on the ridge.

1555 hours

- Fire spotted on hillside behind us to the north, several structures along Kirkwood were exposed and fire was sweeping up towards other structures on the ridge.

1600 hours

- Strike Team #22 (B/C Dianitto) reported on scene - They were directed to cover the exposed structures on Kirkwood and B/C Dianitto was directed to take the balance of his team to the 8400 block of Ridpath and Brier Drive. There he placed his companies strategically to head off the fire moving toward numerous structures. Strike Team #20 was successful in containing and extinguishing this sector of the fire with a minimal loss.

1610 hours

- L.A.P.D. appeared in the Canyon with an evacuation team (four sedans) over a P.A. they were announcing that all residents were to evacuate this fire area - I stopped the team and discussed the situation with the Officer in charge. I requested that they discontinue their activities until I could contact our I.C. for confirmation. My contact with the I.C. proved they were unaware of this action. I recommended to the L.A.P.D. command to reconsider the seriousness of this action and confirm this with their C.P. They discontinued their efforts of evacuation at this point.

1620 hours

- Containment of the fire at this point was evident - some structures were still burning but lines were in position for extinguishment and aided by excellent water drops, full extinguishment was in sight- The winds had favored us throughout the fire never becoming a predominant factor.

CONCLUSIONS:

Narrow streets, some practically inaccessible to fire apparatus, coupled with hordes of sight seer, residents and numerous teams from the news media, clogged the streets with autos and foot traffic. This condition prevailed throughout the height of the incident and hampered our operations severely. Inability to put adequate companies on the fire in the initial stages was due to the method employed requesting Strike Teams from OCD. It is my opinion and certainly a confirmed policy in some areas, to call for x number of companies and x number of B/C's to a staging area in the early stages of the fire. This allows the I.C. to put the first arriving units in the most critical areas. It also provides a positive control of documentation and assignment.

It occurs to me that development of the I.C.S. was somewhat out of sequence or priority, when I was assigned a critical field command function with no identifiable resources! The segment of the first alarm companies in the area of Division "A", were not under any specific command and my efforts to rally them together was futile, attempts to identify them by number only was not accomplished for approximately 45 minutes to 1 hour.

Regardless of the difficulties encountered in organization, the companies working on the fire on Grandview and without a specific command, displayed a high degree of initiative in augmenting their water supply from swimming pools. Their aggressiveness and ingenuity played a major roll in stopping the spread of fire.

Strike Team #22 under command of B/C Dianitto was an example of effectiveness of our I.C.S. This team reported as a unit to my command received a briefing, were assigned a mission and under positive direction accomplished their goal. Strike Team #22 kept me informed with short concise radio messages regarding the needs or changing situations in his area.

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|---|---|---|---|---|
| COMPANY/STATION OR UNIT COMMANDER | ASSIGN. | DIVISION COMMANDER | | ASSIGN. |
| BATTALION OR SECTION COMMANDER | ASSIGN. | BUREAU COMMANDER | OPERATIONS | |

F-225 - REV. 2-78

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September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

# FIRE! IN LAUREL CANYON

Los Angeles Herald Examiner, Monday, September 24, 1979

One of the most spectacular blazes of this year's brush-fire season occurred Sept. 16 in West Hollywood's Laurel Canyon, where a four-hour inferno destroyed 23 homes, partially ruined another five structures and caused an estimated $4 million damage. But what quickly became yesterday's news, remained a human tragedy for those left without homes or possessions.

For five days, a team of Los Angeles Herald Examiner reporters trooped from lot to lot in the charred Hollywood hills trying to record the effect of the fire on the people whose homes vanished in smoke.

Ironically, they discovered that two houses at 8280 and 8320 Grandview listed by the Los Angeles Fire Department as destroyed, in fact never existed. And, several houses that were ruined were not on any official list. Two structures listed as fatalities on Cole Crest, apparently referred to two houses at a different address.

The reporters also discovered Laurel Canyon homeowners were badly underinsured and whatever is done to rebuild the area -- with its narrow roads and limited water supply -- it will remain one of the city's most visible tinderboxes.

This report was prepared by staff writers Rudy Aversa, Ellen Futterman, Carol Gulotta, Andrew Jaffe, Robert Knowles, Sarai Ribicoff and Joel Sappell.

* * * * *

## 8464 COLE CREST DRIVE

**Lost:a 350-page book draft and an 1831 Goethe Bible**

Wolfgang Brook, 51, an executive at a bead curtain plant, and actor James Dobson were finishing a tostada lunch on their patio, enjoying a somewhat smoggy view of the city. When Brook got up to take the dishes into the kitchen he saw the flames coming from next door ... "I screamed (to Dobson) to get out." They got their dogs -- an Afghan hound and whippet -- and ran for the car in the ground-floor garage.

## 8476 COLE CREST DRIVE

**It was a wood-stone affair with a magnificent fireplace**

Jack R. Kime and George E. Hunt had lived in this view house for 15 years, according to neighbors. The house, constructed of wood and stone and built around a kidney-shaped swimming pool, they said, was designed by architect Ray Neutra. Little is known of the two men, who were not seen at the burned-out premises after the fire. At the time of the blaze, neighbors said only Hunt was inside and he was able to escape before flames engulfed the structure. No one knew if the two men would rebuild.

## 8482 COLE CREST DRIVE

At the last moment, Brook grabbed a porcelain statue and some Waterford crystal and threw them into the delta-shaped pool. They survived the holocaust. Everything else, including a 350-page draft of a book Dobson was writing and Brook's rare-book collection -- with an 1831 Goethe Bible -- was lost.

And the men had a close shave of their own. Just as they were about to leave, Brook discovered he couldn't get the automatic garage door to open, because power was out in the fire area. Several vital minutes were lost before Brook finally found the key to switch the door on to manual operation. The whole experience left both men shattered. "Insurance will never cover it," said the tired, defected Brook, picking up a pair of melted eyeglasses from the rubble around the pool,"but we'll rebuild."

### Actress lost video tapes of TV show, Warhol posters

Actress MacKenzie Phillips was on the way back from her honeymoon in Hawaii when the fire broke out. She and her husband Jeff Sessler, rushed from Los Angeles International Airport to the house, but arrived only in time to witness the still-smoldering ruins. A friend said she lost her collection of Andy Warhol posters and video tapes of the television show she costars in, "One Day at a Time." Worst of all, her pet cat, "Brains," either died in the fire or ran away.

Phillips is staying in a hotel temporarily and she is looking for a rental property to stay in during the rebuilding of her home. "I haven't been able to sleep thinking about that fireplace," she said.

One bright spot, however. Neighbors and police managed to keep her Mercedes 450 SL from being destroyed.

## 8500 COLE CREST DRIVE

### Police said he'd be arrested if he tried to save his house

Ernst Mayer had the frustration of being one of few residents away from home who reached the area possibly in enough time to save his own house from burning. The 43-year-old construction company owner saw the fire from the city at about 2:30 and immediately drove home in his Ford Mustang. Coming in from Blue Heights Drive to the west, he avoided police barricades making way for Fire Department vehicles.

Mayer rounded up eight neighborhood friends with trucks as a rescue crew. But police in the street and on his driveway kept him and his crew from the threatened property. Mayer steered the convoy up a hill for a quick escape and then tried to come back alone to rescue his pet cat, Tanya, who was locked inside the house. But, he again was stopped by a policeman.

"He told me he would arrest me if I tried to go in," remembered Mayer with obvious bitterness. "I only regret I didn't get his badge number." Mayer stood there, infuriated, watching the windows break in the fire ... then he heard the burglar alarm go off. About 5 p.m. the fire overtook the wood-frame structure, burning it to its foundation and gutting a cement-block garage and office complex below.

Besides all his office records, Mayer said he lost $20,000. worth of cameras, expensive underwater equipment and rare art brought back from overseas jobs, including a 14th-century Sukothai Buddah statue and a 2,000-book library. The cat was never found.

Mayer said he had little insurance. "The superscoopers dropped three loads on the house on the hill," he said pointing to a house that had been spared by the fire. "But nothing here until it was too late. I'm sure if we could have watered the roof and fought the blaze ourselves we could have saved this place. Instead it's gone. I told the cop (who stopped him) I had a gun inside. I was so mad, if I had got to it I might have blown his head off. It's a terrible thing standing and watching your home burn when you can still do something to save it."

Mayer said a decision about rebuilding would have to await a settlement of his insurance claims. Meanwhile, he was struggling to relocate the headquarters for his construction firm at another address.

## 8438 BRIER DRIVE

### It took 20 years to build; only $60 in coins remained

Michael Duzick, 62, a technical engineer for NBC-TV on sick leave with a back injury, was working in the back yard of his redwood home one ridge behind the fire when he saw flames on Grandview. The fire seemed as far away ... until a change of wind made it jump to Brier Drive.

Duzick saw the flames start up the hill. "It was so smoky. I'd take a breath, then hold it and water the hill, then run back for another breath," he recalled.

Two police officers tried to help by watering his roof, until the pressure dropped. "Then the police told me: "That's it. This is the end." A half-hour later, a fire truck arrived. But it was too late. A redbrick chimney and a cement stairway were all that remained of the rustic, $200,000 home. It had taken 20 years to build and all that survived was $60 in coins in a homemade wall safe.

Among the prized possessions lost in the fire: 12 hours of 60mm film on his children's travels, a 10-speaker homemade stereo system ("it sounded like Hollywood Bowl") and a collection of expensive cameras. He plans to rent a trailer and live on the property. "I don't know if I can rebuild it now," he said. "I'm too old."

## 1745 CRISLER WAY

### 'I cried and cried and cried and then collapsed'

All that was left amid the blackened rubble of Sid and Marie Loev's two-bedroom, single-story, 28-year-old house was a red-brick fireplace and a concrete front porch leading nowhere. Mrs. Loev, whose husband works as a camera salesman in Los Angeles, was dabbing at her eyes with a tattered tissue early this week, as she scanned what was once her $170,000 dream home. "We lost everything," the blond, middle-age woman said. "But we have each other...You can't buy a life."

The Loevs were at a Sunset Boulevard supermarket when they looked up and saw their street on fire. They tried to return to their hillside home, but were stopped at a police roadblock. All they could do was watch it burn from below.

## 1741 CRISLER WAY

### Wardrobe now consists of blue jeans and a T-shirt

Song writer Mike Hazlewood was lounging on the sundeck of his two-story home, listening to Stravinski's Violin Concerto in C, when he heard what sounded like "water from an open fire hydrant" gushing through the dense, dried brush on the hillside below.

But before the lanky, Englishman could peer down the steep cliff, fire was everywhere. "I couldn't believe it was happening. I had that feeling that everything was going to be OK until I saw a 50-foot-high flame devouring a home at the end of the street," he said. Though shaken, Hazlewood had the presence of mind to scoop up the manuscript of a musical he'd been working on for two years, a couple of tape recorders and then ran outside to his maroon, 1979 Cadillac Seville

## 1755 CRISLER WAY

### They scampered for safety in only a towel and a robe

Rather than brave the city's sweltering heat, Steve and Debra Karpf decided to spend Sunday in their air-conditioned bedroom, snacking and watching the Dallas Cowboys-Chicago Bears game on television. Outside, they heard what sounded like a 70-mph wind. Debra opened the drapes and saw flames. They immediately scampered for their lives -- Steve, with only a towel wrapped around his waist and Debra with a robe she threw on in a panic.

"I could actually feel the heat on my back as we ran down the street," Steve recalled. The couple said because of the smoke they did not have time to go into the downstairs area of the house and rescue their two cats. In addition to the cats, they lost two cars, including a prized

"I cried and cried and cried and then I collapsed," the stylish, retired teacher said. Besides their pet Sheltie dog, they lost a $4,000 Steinway piano, expensive camera and stereo equipment, a 1968 Barracuda parked in their two-car garage and a houseful of early American furnishings.

Loev, a stocky, rapid-talking man, said he plans to rebuild on the fire-charred site. "My wife's a little nervous about it," he said, wiping a hand over his curly hair. "But I'm not. Fires in the flatlands can be just as devastating."

parked in the garage.

As he sped away, he knew that everything else, including a $1,000 plus stereo system and a houseful of expensive French art prints, would be destroyed. "It was beautifully decorated," Hazlewood said of his view home. "Now it's a black pile of rubble." Hazlewood's wardrobe now consists only of a pair of blue jeans and a white T-shirt. Asked if he would rebuild, the ragged-looking bachelor replied: "I don't know. I just don't know."

1976 Cadillac convertible, a modest collection of antiques and a star-sapphire ring that had belonged to Karpf's grandfather.

But Karpf, who manages Nick's Fish Market restaurants, is most upset about sentimental items claimed by the flames, such as photographs of their 1978 wedding. All that was left of the towering three-bedroom house were two cinderblock walls, a fireplace and a murky, kidney-shaped swimming pool. "As each day goes by,"Karpf said, "we realize how lucky we were to get out...I guess we'll just have to start over."

## 8250 GRANDVIEW DRIVE

### She never had chance to get back inside her home

Leigh Christian and her baby, Toby, had just left home to shop at a Sunset Boulevard market when flames engulfed her one-story home. According to neighbor Don Connoley, the fire destroyed the home so quickly that the actress never had a chance to get back inside, Christian's husband, Norbert Aleaman, a film producer, was in France on business. Only a brick fireplace and the blue-and-white oval swimming pool remained of the redwood-and-glass ridgeline home.

Connoley said the couple's white Cadillac convertible burned along with the garage. The couple had another car, a Mercedes, which was not in the garage. The couple had another car, a Mercedes, which was not in the garage the day the fire broke out. A relative of the former owner of the house, Jacques A. Delepine, said it recently had been sold to a French investor, whom he declined to identify. He confirmed, however, that the new owner planned to rebuild.

Connoley speculated that Christian was lucky not to have been in the house during the fire. "It was the most incredibly scary thing," said Connoley. "But I guess Leigh was lucky not to be here."

## 8300 GRANDVIEW DRIVE

### Spiral staircase twisted like a giant dead insect

Jim Walker walked through the remains of the house he and his partner, Robert Huskinson, had been in the process of building for the past year. "There was a whole frame going 30 feet in the air," Walker said, "and now there's not more than an inch or two of ashes. The frames of the house and a guest house were gone with hardly a trace as were four 6-foot by 24-foot cantilevered wooden decks behind each house.

What remained were cinders, thousands of nails and a steel spiral staircase that had run up the center of the main house and now lay twisted out of shape on the ground, like a kind of giant multilegged dead insect. Looking at the scorched foundation, Walker laughed bitterly when he came across the words, "El Porto Construction 1978," inscribed in concrete. "When we poured the concrete, we put our name on it and we said, 'No one will ever see that again unless the house burns down.' " Walker said Huskinson had told him he wanted work on the house begun again at once.

## 8310 GRANDVIEW DRIVE

### They lost 'tons of clothes' and a new 924 Porsche

Film director Jack Frost Sanders was at a meeting at a midtown office building when he got a call from his answering service saying there was a fire near his home. The silver-haired young man ran to the roof of the office building and looked out at the hillside where his modernistic glass-and-wood home, designed by architect Raymond Neutra, literally was sandwiched by fire.

"I saw the homes on both sides go up," Sanders told a reporter later when he returned to the site. After he realized the hill was on fire, Sanders said he rushed to the bottom of the canyon, where he met his wife Nancy. The couple were prevented from going further by police and had to watch helplessly while their house burned to the ground.

"I'm convinced we could have saved it if they would have let us," Mrs. Sanders, a willowy blonde explained, when the couple returned to the site to search for mementos. She said they lost their collection of art deco furniture, including a baby grand piano, her fur coat, "tons of clothes," diamond jewelry and a new 924 Porsche.

They had planned to remodel the 1950s-vintage home, but now will have to rebuild. "It was all white-wood and glass...I guess we'll be able to start from scratch now," said a rueful Mrs. Sanders as she looked at their melted Porsche.

Pages of burned scripts were scattered around her feet. "One of the first things we did was make sure there were copies of the scripts we had in the house," said Mrs. Sanders. Only the swimming pool and patio furniture and said:"It's almost as if they're waiting for us to return."

## 8326 GRANDVIEW DRIVE

### Ceramic pots, charred plants stood askew near the lawn

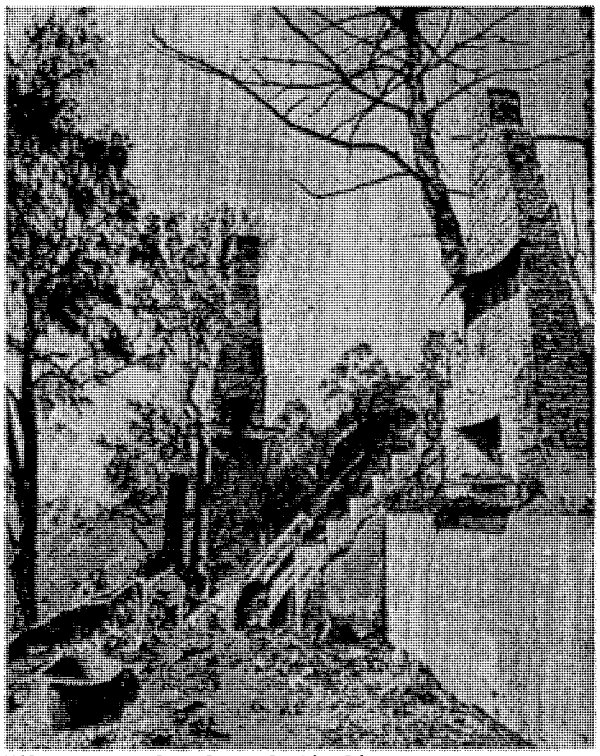
Dick Pearce, also a film director, didn't want to discuss the details of the fire which completely gutted his newly purchased, one-story home. The athletic-looking man stood with his wife in the rubble of the home they had moved into only six months ago, talking quietly to an insurance adjuster about rebuilding. As a reporter approached, he said politely: "There are things I really don't want you to hear."

Ceramic pots with charred plants stood askew on the edge of the home's ashen lawn. The blackened shell of an AMC Hornet was the only reminder of the place where a garage once stood. And all that remained of the living room was a massive, rustic wall built around a stone fireplace.

When the reporter returned, Pearce seemed too shaken to discuss the fire. He confirmed that he was out of town at the time of the blaze and asked if other residents had indicated a desire to rebuild. When told that they had, he said that was heartening. "I love it here," said the tall vacant-eyed director. "It had lots of plants, outside and inside the house."

## 8350 GRANDVIEW DRIVE

### Free-lance photographer lost 15 years of his work



**Fifteen years of work was lost in this duplex at 8350 Grandview Drive**

Free-lance photographer Phil Groves, 30, lost 15 years worth of work when the duplex he rented went up in flames. Groves was down the hill when the fire started. He tried to drive in, but police wouldn't let him through the barricades. He parked his car and began running up the steep hill, scooping up water that was draining off the hill to keep his throat wet in the acrid air.

When Groves reached the house, he and his companion, Geri Price, who had been drinking beer at a neighbor's house when the fire broke out, tried to save his portfolios, negatives and slide collection. But the fire quickly devoured the cabinlike house built in the late 1800s.

John Schweitzer, a carpenter who rented the other half of the duplex house, according to Groves, lost his power tools, a few gold coins, some handcrafted furniture and a modest collections of diamonds.

Groves, who said his work has appeared in European men's magazines, said he didn't know where he would go now. "I was only living there for three months," he said in a soft British accent. All that remained of the two-story house was a large bathtub, tipped on its side and two fireplaces.

"I lost 15 years," said Groves, sipping a beer at the undamaged house of a neighbor across the street, where he was staying temporarily, "I guess I don't have to worry about material tings anymore." He then leaned out his neighbor's window and yelled to no one in particular: "I'm free."

**8353 GRANDVIEW DRIVE**
**Musician lost rock diaries spanning 25-year period**

**8354 GRANDVIEW DRIVE**
**Former actor will rebuild; says he'll take the chance**

Rock-blues singer John Mayall's three-story home was nicknamed "The Brain Damage Club," because of the great parties thrown there. A private movie-viewing room and swimming pool built into the side of the hill made the house ideal for barbecues and parties.

Mayall and a few friends were watching a movie in the house when the blaze started. They were able to escape, but the house with a film library of 2,000 hours of video-taped movies, many valuable 16th century antiques, a pornography collection dating back to the 1800s and rock'n'roll diaries spanning 25 years, was destroyed.

All that remained was a charred foundation and a hand-painted swimming pool, littered with soot and ash. Two cars, including a restored 1958 Volvo belonging to Mayall's son Jason, melted completely in the fire.

"We used to have some great barbecues here," said a blond in clog shoes and shorts, as she looked down on the remains of the Mayall home. "People used to jump out of the third story into the swimmingpool," she added, looking at a bedroom fireplace, the only remnant of the third floor. Neighbors said he had not yet decided whether to rebuild on the property.

It was just a lazy, carefree Sunday for Skip Ludwig as he sipped and dipped at Rock Hudson's Beverly Hills pool party. Yet a dozen miles away, Ludwig's $200,000 single-story home was ablaze--a fact he didn't learn until late that night when a kindly policeman drove him past the fire blockade and up to the charred remains. "I was hoping my home was saved, but I wasn't fooling myself," the former child actor said.

The fire ruined not only his spacious two-bedroom house but also valuable collections of Victorian antiques and early-1900s carnival glass, tin-type photographs of his ancestors and countless career mementos. A friend's AMC Pacer that Ludwid was "babysitting" also was burned. Ludwig, who bought the white-and-blue house just last year, said he plans to rebuild, but he recognized the possibility fore could claim any reincarnation of his dreamhouse. "That's a chance you take living in the hills. I'll take it," he said.

## 8364 GRANDVIEW DRIVE

### Loss of family heirlooms makes owner 'just sick'

Bill Whaling was late sending in his fire-insurance payment. The hairdresser finally mailed it Saturday morning, after being told it would take four days to be processed. Sunday, fire claimed the home he has lived in for 16 years.

Whaling was in Seattle on business when disaster struck, but his roommate, Gary Harworth, said the house was destroyed within minutes. "I was sitting in the house when I realized the fire was coming up the hill," said Harworth. "I got the dog (a German shepherd, Topaz), and the pet rabbit, put them in the car and drove down the street. But when I came back up to get the valuables pot of the house, the flames had spread."

Whaling sifted through the ashes, looking for valuables. But even before he returned from Seattle, a friend, Milly Paul, came to the premises with Harworth and recovered a box of gems Whaling kept hidden under a bed. Paul, who said she had once lived in the house, told a reporter the box contained gold, silver, some watches and turquoise Indian jewelry.

On his return, friends presented Whaling with the gems and the Cadillac Harworth moved before the fire got too close. But he insisted their recovery barely made up for his losses. "I don't know," said Whaling. "I lost everything. Family heirlooms, antiques, and an entire collection of valuable paintings." Harworth said he lost an uninsured Chevrolet Camaro in the blaze. Whaling said he would have to wait to see if the insurance company would honor his late payment and make good part of the loss before deciding whether to rebuild. "I'm just sick," he said. "If I don't have fire insurance, I don't know what I'll do."

## 8370 GRANDVIEW DRIVE

### Country-rock group sleeping after show at Disneyland

At the time of the fire, Michael Riley and several other members of the country-rock group Pure Prairie League were living in the two-story,four-bedroom wood-and-glass house. They were featured at Disneyland the night before and friends said the group was still sleeping when the fire hit.

Chi Nishida, a co-owner of the house, returned to the premises later to take pictures of the damage. The owner declined to give any information about the group, which lost all their clothes, records and stereo equipment and some instruments in the fire. But she confirmed she does plan to rebuild. No member of the group was seen near the site in the days that followed the fire.

"What else can I do?" said Nishida with a shrug, picking through pieces of broken glass and fire-eaten wood that were all that remained of the structure. "I hope there won't be a next time when it comes to fire in this area."

## 8410 GRANDVIEW DRIVE

### Cadillac flattened into 2-foot-high metal pancake

For 11 years, Chuck and Ann Schneider spent their weekends building the two-story home that dominates the ridgeline where Grandview Drive runs into Cole Crest. After the blaze, only a 10-foot-high pole of twisted metal, cement hunks and other unrecognizable materials remained. A Cadillac that was in the garage when the fire struck had been flattened into a 2-foot-high pancake of melted metal by a fallen garage ceiling.

Oddly, the red-brick walls of the curved, crescent-shaped pool enclosure withstood the flames, but the glass panes which shaded light from the pool deck were shattered by the intense heat and were scattered in heaps in and around the pool.

The couple was seen in the vicinity of the fire late Sunday, but were not available for interviews later. Neighbors, who couldn't recall the Schneiders' professions, said they kept pretty much to themselves. One recalled, however, they seemed "extremely sad" about the loss. "I heard that Chuck had attended a demonstration of those superscooper planes at LAX," said one neighbor. "It's ironic and sad that those planes couldn't help him save his house.

## 8416 GRANDVIEW DRIVE

### Outdoor Jacuzzi fried, leaving cracked-cement hole

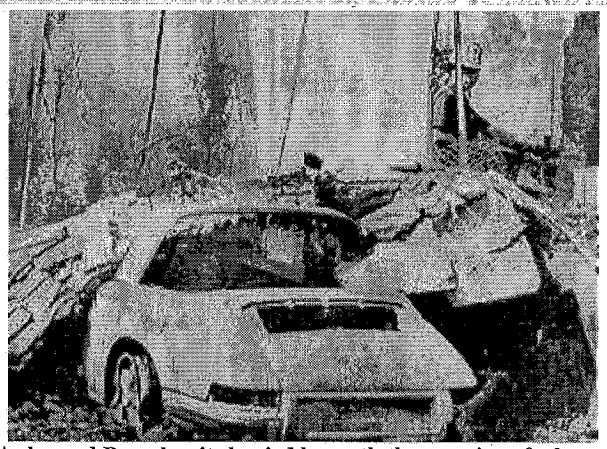
On the hill, just to the west of the Schneider home, separated by a tall, chain-link fence, stood two other homes only a few feet apart. One, overlooking the Sunset Strip at 8416, belonged to Armand Riza and Dan Bramson. The other belonged to night club impresario Elmer Valentine. Both were burned so badly it was hard to tell where one house began and the other ended. (Valentine also owned a house at 8400 which only was partially damaged).

Flames nearly melted the electric gate that protected the two homes from intruders. Neither Riza nor Bramson were available for interviews. However, it was clear from the charred debris that they were able to rescue few of their possessions.

The white tile of the main bathroom was a heap on the ground. What appeared to have been some kind of outdoor Jacuzzi overlooking the city had been fried into little more than a cracked cement hole. After the garage floor fell about 10 feet down the hill, the heat from the ashes stretched a Mercedes sport coupe into a grotesquely elongated figure, with half of its hulk still on high ground and the other part 10 feet lower. Only the three-pronged Mercedes emblem on the auto's hubcaps identified the car as a premier German make.

Standing intact in the midst of the ruins on a still-standing brick fireplace mantel was a small statue of an Inca god, its hands clasped together in prayer. Friends think Riza now is

living in another house he owns, this one in Malibu. His roommate, Dan Bramson, who runs the Universal Amphitheater, has been in New York on business, according to friends.



**A charred Porsche sits buried beneath the remains of a house owned by Elmer Valentine on 8424 Grandview Drive, but the nightclub owner is more upset about his two missing dogs.**

## 8424 GRANDVIEW DRIVE

### Whisky-a-Go-Go owner searching for bull terriers

Elmer Valentine, owner of three Sunset Boulevard nightclubs--the Whisky-a-Go-Go, the Roxy and Rainbow Room -- was visiting friends when the fire erupted Sunday. His first thoughts were for his three bull terriers. He rushed home in his chartreuse Mercedes, but couldn't get through police roadblocks.

A day later he toured the neighborhood with two weepy teen-age girls but gruffly shooed away reporters. Finally, reached by at phone at his Whisky-a-Go-Go office, Valentin explained that he had found only one dog and was heartsick.

"There is no way I can replace my house. Only ashes of it are left," the bachelor said. "I am making some plans to rebuild. But right now I'm worried about my dogs

## 8446 GRANDVIEW DRIVE

### Two little girls fearful, still frightened after ordeal

G. Greely Wells Jr. animator and free-lance artist, was doing some yard work when he spotted the fire several hundred feet down the hill. Misjudging the speed of the wind, he took time out to run back inside and call the Fire Department. Meanwhile, the fire sped to the edge of his property and he heard a friend shout for him to gather up his two daughters, Beth, 8, and Meg, 6, who were inside watching television, and get out.

The Wells family piled into neighbor Dan Weiss' car and drove into the inky smoke that now clouded their way out of the canyon.

"A neighbor (Weiss) drove through the blaze and got them safely out of the area," Wells' ex-wife, Cathleen, explained. "The girls told me the fire was all

## 8450 GRANDVIEW DRIVE

### Resident says TV crews blocked firefighters' trucks

Dan Weiss, 53, who describes himself as a home-furnishings executive, was watering shrubs and plants that border his hillside home when he smelled smoke. Weiss shares the house with fabric salesman Ron McGraw, 40, who was down the street at the time, and high school teacher Darrell Parker, 34. Weiss recalls McGraw shouting to tell him there was a fire in the area. He said he yelled back to McGraw to alert his neighbor, artist Greeley Wells, and his two daughters at 8466 and then started to organize his own escape.

Leaving the area wasn't easy for the grizzled Weiss, who had spent most of a lifetime in the neighborhood. "I've been on this hill 26 years," he said, staring gravely at the wreckage.

The three men were left with

and trying to do everything I can to find them."

Two of the missing bull terriers, Bo, and Annie, may have escaped through a dog door when the fire started. A third terrier, Maggie May, wandered over to the wasted Ernst Mayer residence, where Mayer's friends caught and returned her. Valentine said the missing dogs both were wearing yellow identification tags around their necks at the time of the fire. He declined to discuss what was destroyed in the fire.

A friend described his one-story stucco house as "lavish." Certainly it was clear from the wreckage that the house had been spacious: there was a rectangular outdoor swimming pool, a stone fireplace and a wooden deck that skirted the hill. In the garage area was the burned frame of a Porsche 924. On the front stoop, four wine bottles -- their labels and corks charred but intact -- stood next to a ceramic turtle sitting on a rock.

"He's really upset about the dogs," explained a receptionist at Whisky-a-Go-GO. "We hoped the dogs would come to the club since they are familiar with the place but so far they haven't showed up. Everything is just so upsetting."

around the car as they drove through the hills. The kids said that if (Weiss) didn't know his way out of the area, they could have been badly injured. The fire was spreading that fast." Later, she said, the girls complained of having fears about the fire, which she tried to quiet by telling them they could use it for "show and tell" at school.

The Wells' redwood home burned to the ground. Not only did he lose his house, but he also lost all of his paintings. "As it was, one of the kids left the house barefoot and all Greeley had on was red underwear and some flip-flops." Mrs. Wells said. "There was no time to grab anything, they just got out as fast as they could."

The family cat, Biscuit, was also lost in the blaze, but may have escaped through a door opening. All attempts to locate the blotchy orange, black and white cat so far have failed. Mrs. Wells said her ex-husband was staying with a friend and planned to rebuild.

nightmares. "I can't sleep at night thinking how lucky we are to be alive," Weiss added. "It all happened so fast. By the time we got to the car, there were cinders as big as your first flying through the air. I remember trying to get the car started with one hand and get the electric windows closed with the other while cinders blew in on us." He drove the car into what he called a "solid wall of black smoke" feeling his way down the narrow road.

The fire was so intense it melted McGraw's Chevy Caprice and a Datsun 240Z, owned by a woman visiting the men from Airzona. The three men didn't have time to take any of their possessions. They left in bathing suits, Weiss receiving burns down the side of one leg. An ABC television crew took pity on them and donated pants and a T-shirt. Weiss was luckier than the other two: some friend gave him a pair of Gucci loafers.

Standing in the rubble of what was left of their house -- the outline of a stone fireplace and twisted water pipes which in a mocking afterstatement, a day after the fire, were still spouting water -- Weiss and his partners were unable to say for sure whether they would rebuild. "I have nothing left," said Weiss. "I have nothing left," said Weiss. "I'll be lucky to find my grandfather's diamond ring in this mess." His only criticism: that Fire Department trucks were blocked by television cameramen who converged on the tiny street. "Twenty minutes after the fire started, they still couldn't get a truck in here," he said.

**LAFIRE.COM**
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# Exhibit E

**Jason Hernandez** <jason.hernandez@lacity.org>
Date: Tue, May 15, 2018 at 3:38 PM
Subject: Re: 1800, 1806, 1812 and 1818 Crisler Way/Case Nos. ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD and ZA-2015-4149 ZAD/ENV 2015-4131-MND (A-F): HEARING DATE: May 22, 2018
To: Jamie Hall <jamie.hall@channellawgroup.com>

Hi Jamie,

All the information Aidan copied is the material we currently have. If you need to review letters that were referenced in the Geo and Soils Approval Letter, you should speak to LADBS about those files. Furthermore, our department does not review sewer plans as it does not fall under our expertise. The plan sets that are provided to LADBS during plan check add additional plan sheets that are not subject to our review because they do not fall under our purview.

Best,

On Tue, May 15, 2018 at 2:44 PM, Jamie Hall <jamie.hall@channellawgroup.com> wrote:

Hi Jason:

Aidan O'Brien made copies of all the materials in the case file and the list of documents I e-mailed you are NOT in the case file. Yet, they are referenced in the MND. Please advise.

**Jamie T. Hall**
Channel Law Group, LLP
8200 Wilshire Blvd., Suite 300
Beverly Hills, CA 90211
Main Number: (310) 347-0050
Direct: (310) 982-1760
Fax: (323) 723-3960
Email:jamie.hall@channellawgroup.com
Website: www.channellawgroup.com

****CONFIDENTIAL & PRIVILEGED TRANSMISSION****
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*Please consider the environment before printing this email*

On Tue, May 15, 2018 at 2:41 PM, Jason Hernandez <jason.hernandez@lacity.org> wrote:

Hi Jamie,

You are free to review all materials provided to us that are found in the Crisler Way case files. All the technical studies that were provided to us are those available online. Let me know when you would like to come in so I can have the case files ready for your review.

Best,

On Tue, May 15, 2018 at 1:58 PM, Jamie Hall <jamie.hall@channellawgroup.com> wrote:

Dear Jason:

We are reviewing the MND for the Project and would like to request the following documents:

-- Plans for the roadway
-- The geotechnical reports for the four houses and the roadway, including:
- Addendum Report CYG-14-7350, 3/31/15
- Dept. Correction Letter 79258-01
- Addendum Report CYG-14-7350, 11/26/2014
- Dept. Correction Letter 79258
- GeologylSoil Report PG 1091
- Approval (Lots 97 & 98) Log # 36891
- Geology/Soil Report PG1224, 9/19/2012

-- Stormwater Drainage Plan, Robert Anderson, Architect, dated 3-12-2015, including Sheet Number A-1..1
-- Hovell and Pilarski Engineering, Inc., Sewer Plan and Profile, Grandview Sewer Main, Design Permit/Construction Permit BC-401804.
-- Sewer line plans for the four houses
-- Any other technical studies or plans that aren't included as technical appendices to the MND that are available in electronic format.

Thanks,

**Jamie T. Hall**
Channel Law Group, LLP
8200 Wilshire Blvd., Suite 300
Beverly Hills, CA 90211
Main Number: (310) 347-0050
Direct: (310) 982-1760
Fax: (323) 723-3960
Email:jamie.hall@channellawgroup.com
Website: www.channellawgroup.com

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# Exhibit F

**Reference Number** 8910 **Job Address:** 8350 GRAND VIEW DR.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CLASS "B" APPLICATION / PERMIT (DESIGN PHASE)**<br>ISSUED UNDER SECTIONS 62.105 TO 62.116<br>INCLUSIVE, LOS ANGELES MUNICIPAL CODE **(SEE REVERSE HEREOF)** | | | | | | | DISTRICT:<br>**WEST LA** | Work Order(s)<br>**BR402571** | |
| I HEREBY REQUEST PERMISSION TO CONSTRUCT THE IMPROVEMENTS DESCRIBED BELOW UNDER PRIVATE CONTRACT AND, IF PERMISSION IS GRANTED, I AGREE TO CONSTRUCT SAME IN ACCORDANCE WITH PLANS AND/OR SPECIFICATIONS APPROVED BY THE CITY ENGINEER. I ALSO ACKNOWLEDGE THAT I HAVE REVIEWED THE GENERAL INFORMATION PRESENTED ON THE REVERSE OF THIS APPLICATION, AND AGREE TO THE PROVISIONS STATED THEREON. | | | | | | | SHEET NO. 1<br>OF 2 SHEETS | DATE ISSUED:<br>**01/12/2016** | DATE EXPIRES:<br>**01/12/2018** |
| MJR PROJECT/PROJECT:<br>**EBPER/ EBPERGEN** | PROGRAM: **7804** | ENGR DIST.: **E6201850** | | REIMB FLG: **YES** | | | DIR/INDIR: **D** | | |
| **STREETS AND LIMITS TO BE IMPROVED**<br>(SEE CONSTRUCTION TOTALS AT RIGHT)<br>**GRAND VIEW DRIVE & CRISLER WAY (S.W. CORNER)**<br><br>ESTIMATED 2% Surcharge = **$696.00**<br>ESTIMATED 7% Surcharge = **$2,436.00** | | | | **INDICATE SCOPE**<br>**GRADING, PAVEMENT, CURB & GUTTER, DRIVEWAY, STORM DRAINS. (DEPOSITED $3,000.00 ON 9/7/2012.) (REQUIRED INSPECTION DEPOSIT AMOUNT = $37,932.00)THIS PERMIT SUPERCEDED THE CLOSED BC401611,P-35874 WAS APPROVED PER BC401611,PAID $53,737.00 ON 02/17/2015.** | | | | | |
| ENGR. PLAN CHECK DEPOSIT<br>**$0.00** | Number of Trees<br>**0** | Wells<br>**0** | Tree Planting Fee<br>**$0.00** | District Map Number<br>**148.5 A 175** | DIVISION INDEX | DRAINAGE MAP<br>**470** | COUNCIL DISTRICt<br>**5** | **CONSTRUCTION ITEMS** | **ESTIMATED COST** |
| Sandblasting Fee<br>**$0.00** | DOT Sign Deposit<br>**$0.00** | Traffic Deposit<br>**$0.00** | | PROPOSED R/W NO. | | SPECIAL REFERENCES<br>**P-35874** | | GRADING | **$112,500.00** |
| CONST. - INSPECTION DEPOSIT<br>**$34,800.00** | | TOTAL FEE DEPOSIT<br>**$37,932.00** | | | | | | PAVING CURB / GUT. / SDWLK | **$371,500.00** |
| TYPE OF PROJECT<br>**Street Improvement** | | TOTAL BOND DEPOSIT<br>**$580,000.00** | | | | | | SEWER | **$0.00** |
| IMPROVEMENT BOND NO.<br>**CAO140257** | | | | | | | | STORM DRAIN | **$20,000.00** |
| LIABILITY INSURANCE NO. | | LIAB. INSUR. EXPIR. DATE | | | | | | STREET LIGHTS | **$0.00** |
| PRIVATE ENGINEER<br>**HOVEL & PILARSKI** | | | | | | | | TRAFFIC SIGNALS | **$0.00** |
| STREET ADDRESS<br>**4525 INDUSTRIAL ST. SUITE 4L** | | | | | | | | **SUBTOTAL** | **$504,000.00** |
| CITY<br>**SIMI VALLEY** | ZIP<br>**93062** | PHONE NO.<br>**805-522-1900** | | | | | | + % PCF | **$75,600.00** |
| OWNER (SEE REVERSE)<br>**AARON COHEN** | | | | | | | | CONSTRUCTION ESTIMATE | **$580,000.00** |
| STREET ADDRESS<br>**1504 S. FLOWER ST.** | | | | | | | | + % CIF | **$0.00** |
| CITY<br>**LOS ANGELES** | STATE<br>**CA** | ZIP<br>**90015** | | | | | | BOND ESTIMATE | **$580,000.00** |
| (AREA CODE) PHONE NO.<br>**818-335-0028** | DATE SIGNED BY APPLICANT | | | | | | | REGISTER RECEIPT VALIDATION | |
| SIGNATURE (SEE REVERSE BEFORE SIGNING) | | | | **Job Address:**<br>**8350 GRAND VIEW DR.** | | | | | |
| APPLICANT'S NAME (ADD TITLE IF OFFICER)<br>**ROBERT ANDERSON** | | | | | | | | | |
| DISTRICT/DIVISION OFFICE | ISSUED BY:<br>**KATHLEEN HUGHEY** | | | DIST. ENGR. DATE<br>_____ _____<br>**Mike Patonai, P.E.** | | | | Permit Title:<br>**In conn. w/ building permit GRAND VIEW DR. (8350) & CRISLER WAY S.W. CORNER (IN CONN.W/ BLDG. PERMIT)** | |
| TIME | DATE | | | | | | | | |

Job Address: 8350 GRAND VIEW DR.

MULTIPLE PERMITTEE ENTRIES
Ref. No. 8910

**GENERAL INFORMATION**
This form shall be used for all Class "B" Permits. It is not necessary to repeat the STREETS AND LIMITS breakdown on **CONSTRUCTION** B-PERMITS that are preceded by checking only permits.

**1. LIABILITY INSURANCE** and performance bonds are only required for approval of construction B-Permits.

**2. OWNER-APPLICANT** must be the owner of the affected property, and must be the same as the performance bond principal. Contractors for governmental agencies under faithful performance bonds shall be entered as OWNER-APPLICANT. Applicant issued to CORPORATIONS shall be executed by the President, Vice-President, Secretary or Asst. Secretary, and the CORPORATE SEAL shall be impressed.

**3. SAFETY ORDERS**--Sec. 6500 of the STATE LABOR OR CODE requires the APPLICANT to obtain a **STATE A DIVISION OF INDUSTRIAL SAFETY (DIS) PERMIT** and a copy of **STATE INDUSTRIAL SAFETY ORDERS** BEFORE BEGINNING WORK ON **ANY** TRENCH OR EXCAVATION **FIVE FEET OR DEEPER** into which a person must descend. City personnel will not enter such excavations until the required permit and safety orders have been obtained and are displayed on the job site.*

**4. PCF** percentage factors apply to possible construction change orders. CIF percentage factors apply to cost increases through the life of the project. (See CONSTRUCTION ITEMS on the reverse side of this application.)

**5. PLAN CHECKING DEPOSITS** are subject to charges for blueprints, engineering, testing, traffic signal design, street lighting design, and administrative service. **CONSTRUCTION PERMIT DEPOSITS** may be charged against for blueprints, engineering, testing, surveying, inspection, administrative services, emergency light and barricade services, street tree planting and maintenance, street lighting burn tests, Street Name signs, traffic warning and regulatory signs, sandblasting and painting of traffic markings, erosion control, etc. Unused fees are refunded after closure of the permit. The applicant will be billed for unreimbursed charges (fee deficits).

**6. DESIGN OFFICE** will determine if applicant must dedicate a right of way to the City for construction purposes. The applicant shall open a right of way work order and deposit necessary fee with the REAL ESTATES SECTION, DEVELOPEMENT SERVICES DIVISION, BUREAU OF ENGINEERING.

**7. NOT MORE THAN ONE TRACT OR PARCEL MAP SHALL BE ASSIGNED TO A SINGLE B-PERMIT.**

**8. PERMITTEE SHALL STOP WORK AND CONTACT THE PERMITTING AGENCY PRIOR TO CUTTING OR EXCAVATING ANY DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK.**
**9. ANY DAMAGE TO DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK MUST BE REPAIRED IN KIND OR RECONSTRUCTED IN KIND BY THE PERMITTEE, AS DIRECTED BY THE PERMITTING AGENCY, IN A MANNER SATISFACTORY TO THE CITY ENGINEER AND THE INSPECTOR OF PUBLIC WORKS.**

**THIS CONSTRUCTION B-PERMIT MUST BE ON THE JOB SITE AL ALL TIMES.**

**THIS PERMIT VALID ONLY IF ACCOMPANIED BY A DIS PERMIT AND SAFETY ORDERS** (SEE NOTE 3 ABOVE). DIS PERMIT MAY BE OBTAINED FROM STATE DIVISION OF

INDUSTRIAL SAFETY, 3460 WILSHIRE BOULEVARD, LOS ANGELES. **NOTE**: GOVERNMENTAL AGENCIES AND PUBLIC UTILITIES UNDER **PUC** CONTROL **ARE EXEMPT**. PRIVATE CONTRACTORS ACTING AS PERMITTEE FOR SUCH AGENCIES **ARE NOT EXEMPT**.

NOTE: CHARGES AGAINST THE PERMIT FEE DEPOSIT WILL BE COMPILED APPROXIMATELY 6 TO 8 WEEKS AFTER THE DATE FINAL INSPECTION IS COMPLETED. THE B-PERMIT WILL BE CLOSED AND THE IMPROVEMENT BOND EXONERATED AFTER ALL PERMIT FEE CHARGES HAVE BEEN ACCUMULATED AND PAID.

# Exhibit G

# Channel Law Group, LLP

8200 Wilshire Blvd
Suite 300
Beverly Hills, CA 90211

www.channellawgroup.com

ROBERT JYSTAD
JULIAN K. QUATTLEBAUM, III
JAMIE T. HALL *
CHARLES J. McLURKIN
NATASHA ERNST**

*ALSO Admitted in Texas
**ALSO Admitted in Oregon

Writer's Direct Line: (310) 982-1760
jamie.hall@channellawgroup.com


July 2, 2015

**VIA PERSONAL DELIVERY**

City Council
via Los Angeles City Clerk
200 N. Spring Street, Room 360
MS 160-01
Los Angeles, California 90012

**Re: Appeal to Board of Public Works of CEQA Determination for B-Permit No. BR402571 (Public Resources Code Section 21151(c))**

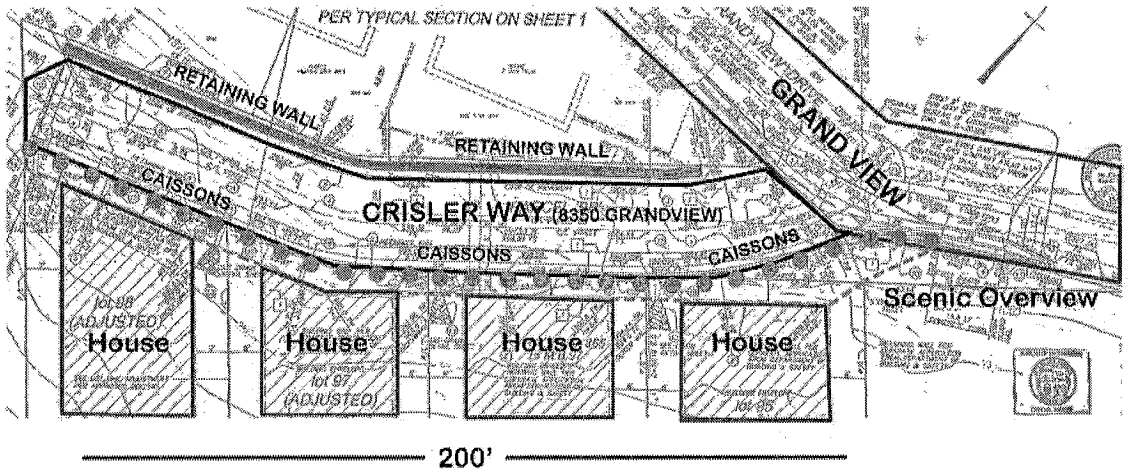
Dear Madame Clerk:

Concerned Citizens of Kirkwood Bowl ("CCKB"), an unincorporated association, hereby appeals any environmental determination (or failure to issue a determination) that has been issued for B-Permit No. BR402571 under the California Environmental Quality Act. This right to appeal is provided for via Public Resources Code Section 21151(c).

**The Project**

The City of Los Angeles Bureau of Engineering ("BOE" or "City") approved B Permit No. BR402571 on or about June 17, 2015 (hereinafter referred to as "Project."). The B-Permit would authorize the construction of a road known as "Crisler Way" – which is a "paper road." In other words, it only exists on paper. In reality, the road is part of a steep undeveloped hillside in the Hollywood Hills in a neighborhood known as the "Kirkwood Bowl." The plans submitted for B-Permit No. BR402571 demonstrate that the road would facilitate the construction of four new single-family homes. The plans also show that the road would be approximately 200 feet in length and would require up to 30 caissons and two large retaining walls. A marked up screenshot from the plans is depicted below.

The Plans




**Non-Compliance with CEQA**

The City either did not conduct any review for the Project as required by the California Environmental Quality Act ("CEQA") or erroneously determined that the Project was exempt from CEQA. The City previously determined that the *dedication* of the road was exempt from CEQA in 2006 via Ordinance No. 177533. However, the City did not approve the construction of the road at that time – only the dedication of the road. In other words, no physical change to the environment was proposed at that time. In issuing the B-Permit, the City failed to comply with the California Environmental Quality Act ("CEQA") as follows:

**1. Failure to Conduct Preliminary Review under CEQA**

The City was required to conduct a Preliminary Review to determine whether the Project was subject to CEQA before approving the B-Permit. CEQA Guidelines §15060, Pub. Resources Code § 21065. CEQA Guidelines § 15060(c) establishes a clear duty, stating "a lead agency must first determine whether an activity is subject to CEQA . . . ." However, there is no evidence in the Record that the City performed a Preliminary Review for the Project. This failure to perform a Preliminary Review constitutes failure to perform the City's duty. *Davidon Homes v. City of San Jose* (1997) 54 Cal.App.4th 106, 117 ("There is no indication that any preliminary environmental review was conducted before the exemption decision was made. The agency produced no evidence to support its decision and we find no mention of CEQA in the various staff reports. A determination which has the effect of dispensing with further environmental review at the earliest possible stage requires something more.") The City's approval of the Project, in contravention of this duty, was an abuse of discretion.

**2. Unlawful "Piecemealing"**

There are reasonably foreseeable significant environmental impacts associated with the construction of four new single-family homes on a substandard hillside road. It is clear that construction of the road at issue is intended to facilitate development. In fact the plans for the B-

Permit use the word "building envelope" and outline spaces for four new homes. New single family homes constructed on Grand View generally require a zoning permit pursuant to LAMC 12.21 A.17, namely a Zoning Administrator's Determination (or "ZAD"), public hearings, and require extensive environmental review under CEQA. For example, there are three new homes proposed on Grand View at this time and the City is conducting an Initial Study and has proposed Mitigated Negative Declarations ("MNDs") for each of these projects. *See* ZA 2014-3436-ZV ZAD (8289 Grand View), ZA 2015-718-ZAD-ZAA (8461 Grand View) and ZA-2014-2854-ZAD-ZAA (8413 Grand View). An extensive environmental critique (consisting of 100 pages) was commissioned by residents for the home located at 8413 Grand View outlining the environmental impacts of that project. The City is still evaluating this project and has not issued any approval to date. There are similar, albeit heightened, environmental concerns related to the construction of a new road and four new homes along Crisler Way. Moreover, the road that Crisler Way will connect to (Grand View Drive) contains only one entry and exit point, has extremely limited parking, and is located in a high fire hazard severity zone. In fact, the historic Kirkwood Bowl fire occurred in 1979 at this exact location and burned down numerous homes. Also, the construction of the road itself will require excavation and hauling of dirt and there is no evidence that the City has approved a hauling route, which requires notice and a public hearing. In sum, there are very real environmental impacts associated with the Project that need to be analyzed.

The failure of the City to conduct an environmental review for the Project at this stage would amount to piecemealing, which is prohibited. *Berkeley Keep Jets Over the Bay Committee v. Board of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1358 ("There is no dispute that CEQA forbids "piecemeal" review of the significant environmental impacts of a project.") CEQA contemplates consideration of environmental consequences at the "earliest possible stage, even though more detailed environmental review may be necessary later." *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1346. The requirements of CEQA cannot be avoided by piecemeal review which results from "chopping a large project into many little ones-each with a minimal potential impact on the environment-which cumulatively may have disastrous consequences." *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283–284; *City of Antioch v. City Council* (1986) 187 Cal.App.3d 1325, 1333; *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370. For example, "[w]here an individual project is a necessary precedent for action on a larger project, or commits the lead agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project." CEQA Guidelines, § 15165.

**3. Cumulative and Growth-Inducing Impacts**

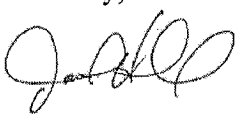
CEQA mandates that a public agency consider, among other impacts, a project's potential growth-inducing impacts. (CEQA Guidelines §15126(d), §15126.2(d); *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 368.) Here, the full improvement of this portion of Crisler Drive is likely to result in the development of at least four new homes that will be serviced by this roadway. The environmental effects of the road construction could therefore be cumulative and potentially growth-inducing.

**Conclusion**

Because the Project is not exempt from CEQA, the City should immediately issue a stop work order, conduct a public hearing and either rescind the B-Permit or require the Board of Public Works to conduct Initial Study under CEQA. *See* CEQA Guidelines § 15070(a).

If you have any questions, feel free to call me at 31-982-1760.

Sincerely,



Jamie T. Hall

# Exhibit H

(/pdiscaseinfo/default.aspx)

# Department of City Planning
# Case Summary & Documents

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4125-ZAD | Search | Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4125-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4125-ZAD

| | Type ↑ | Scan Date | Signed | |
|---|---|---|---|---|
| No Documents were found | | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1800 N CRISLER ST 90069 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,221-SQUARE-FOOT, 3-STORY, 33 FEET ONE FAMILY DWELLING AND ATTACHED 2-CAR GARAGE

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,221-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjA20 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjA20)



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# Department of City Planning
(/pdiscaseinfo/default.aspx) **Case Summary & Documents**

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4130-ZAD Search Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4130-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

| 0 Case Documents found for Case Number: ZA-2015-4130-ZAD | | | |
|---|---|---|---|
| | Type ↑ | Scan Date | Signed |
| No Documents were found | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1806 N CRISLER WAY 90069 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33-FOOT HIGH ONE-FAMILY DWELLING WITH A TWO-CAR ATTACHED GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33FEET HIGH, ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjEx0 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjEx0)



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(/pdiscaseinfo/default.aspx)

# Department of City Planning
# Case Summary & Documents

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4146-ZAD | Search | Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4146-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4146-ZAD

| | Type ↑ | Scan Date | Signed | |
|---|---|---|---|---|
| No Documents were found | | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1812 N CRISLER WAY 90046 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,653-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,653-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY 818-716-2689 [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjI40 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjI40)



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# Department of City Planning

(/pdiscaseinfo/default.aspx) **Case Summary & Documents**

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4149-ZAD | Search | Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4149-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4149-ZAD

| | Type ↑ | Scan Date | Signed | |
|---|---|---|---|---|
| No Documents were found | | | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1818 N CRISLER WAY 90046 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjMy0 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjMy0)



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# Exhibit I

Phone: (323) 650 3655
Email : apobr@yahoo.com

8382 GrandView Drive

Los Angeles

CA 90046-1918

March 25, 2015

TO: Zoning Administrator
Staff Contact Luciralia Ibarra

FROM: Aidan P. O'Brien MD

SUBJECT: ZA 2014-2854(ZAD)(ZAA)/ March 31, 2105 Hearing
Project Location 8413 GrandView Drive

**********

I have lived at 8382 GrandView Drive for 32 years.

I am deeply concerned about a proposed project at 8413 GrandView.

I wish this letter to be included in the packet for the hearing on Tuesday March 31

I did not receive a notice of the hearing even though I am within 100 feet of the project.

I object to the proposed development at 8413 on the following grounds:

**Site**

Grand View Drive is a Substandard Hillside Limited Street

At 8413 the road is 142 inches - less than 12 feet. BHO requires 20 feet.

See attached **Photo 1** with two adults lying down and they cannot do it head to foot.

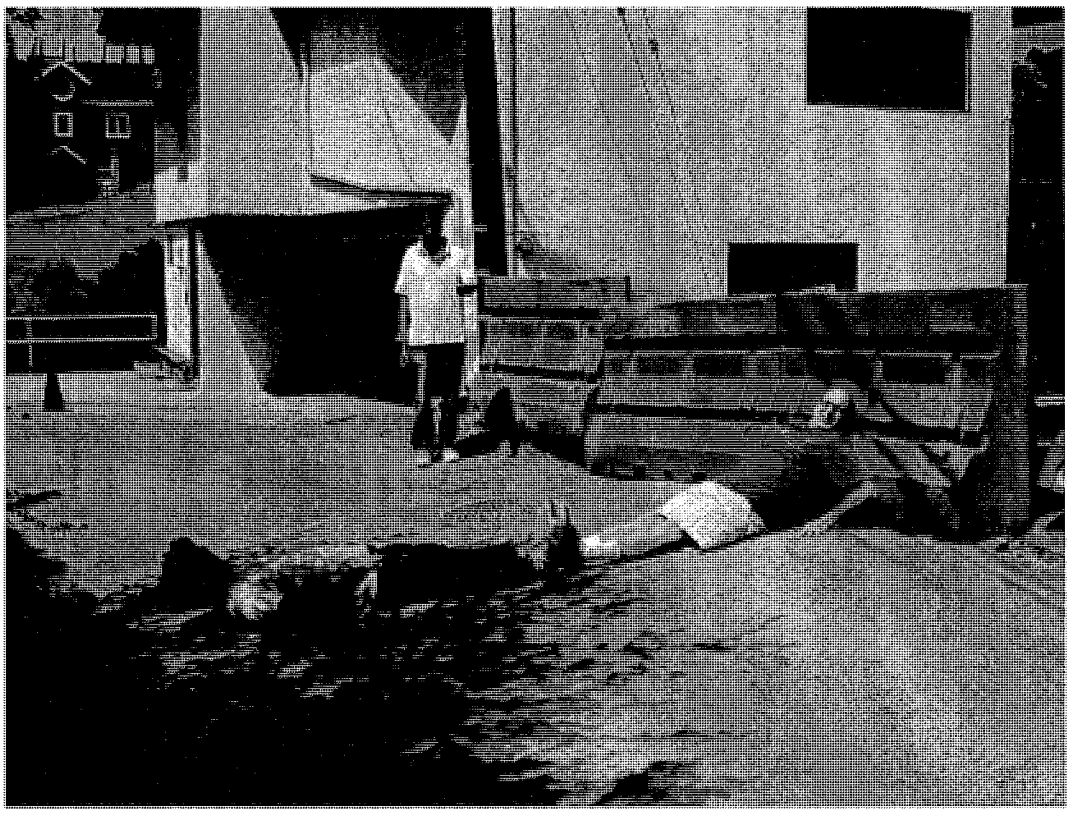


PHOTO 1 – Substandard Street Width

This is at an acute bend in the road with a guardrail where it will be impossible to maintain traffic flow. **Photo 2.**

**Photo 3** is at this point on Grand View and illustrates the nature of the problem. The caterpillar occupies the whole street. This went on for over two years with construction at 8401 after we had been assured it was "temporary."

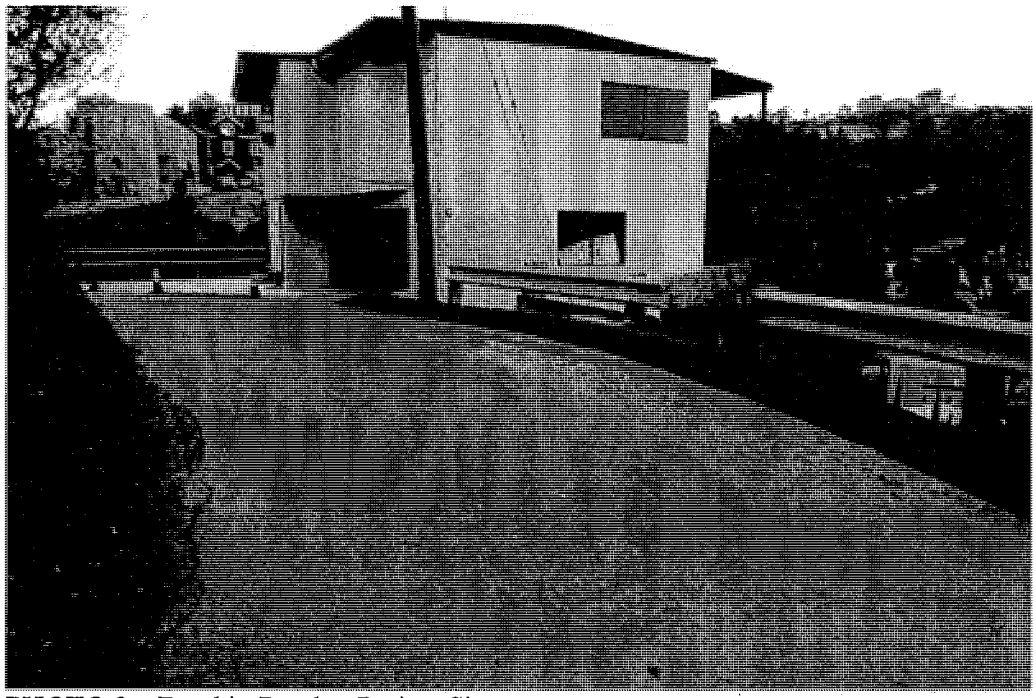


PHOTO 2 – Bend in Road at Project Site

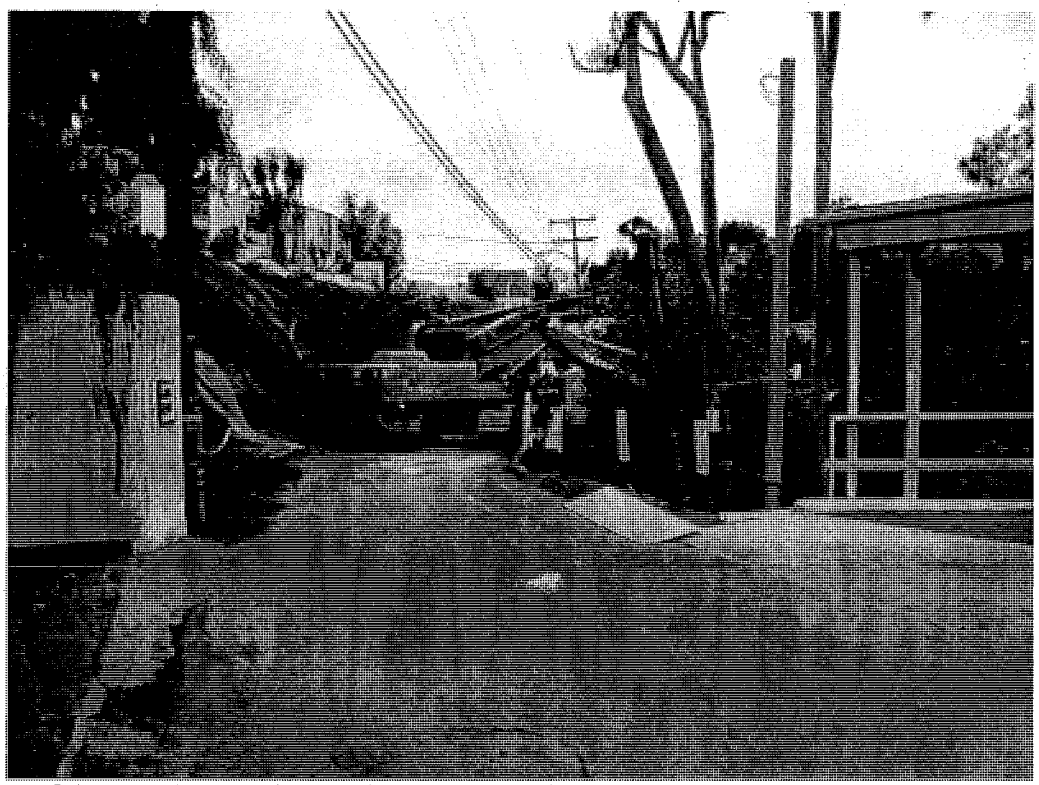


PHOTO 3 – Construction Equipment for 8401 Grand View Blocking Street

It will result in multiple road closures such as happened at 8401.

This will divert all the traffic to Yucca where there have been so many water breaks.

**Plans**

I do not see any plans as follows:

- No plan for ingress, egress, parking or placement of trucks and equipment to eliminate or minimize disruption, damage and prevention of emergency services
- No plan for off-site storage of supplies and equipment
- No plan for staging of vehicles and heavy equipment;
- No plan for protecting the Substandard Hillside Limited Street and the structures in, on and under them from further damage
- No plan for protecting the homes of residents near the project from damage.

My own property was extensively damaged during the last construction and I was never compensated.

A recent illegal assault on the Lot at 8413 adjacent to it resulted in damage to the foundation at 8417 **Photo 4**

Plans include a swimming pool suspended from the hillside directly above the properties on Yucca Trail. Even without a swimming pool with 8401 the properties beneath suffered great danger with objects falling such that Hanna Melzer of Yucca had to leave for her own safety and has never returned.

The Initial Study and Checklist indicates "555 cubic yards of Grading and 340 cubic yards to be exported off site. With the proposed swimming pool I feel it will be way beyond that and over the BHO Limit. This is from what happened at 8401 GrandView with similar terrain when truckloads of dirt were hauled away at all hours under cover of dark

An independent slope analysis will be required to validate the height.

The geologicals will have to be redone as well as an Environmental report.

**GrandView Drive Condition**

The road is falling apart from construction at 8460 GrandView. The City has not repaired it. **Photo 5**



PHOTO 5 – Roadway Erosion and Damage.

It is costing the city far more in constant repairs to GrandView than any revenue from permits. **This makes no financial sense.**

**Cumulative Impact**

The neighborhood has profound fatigue from "Over Construction" in a delicate area.

The lot was purchased for $140,000

It is now for sale for $450,000

Redfin Quote" Seller will work with buyer in getting approval of plans."

No one has ever met the actual owner of the lot.

For such a sensitive and connected area this seems seriously wrong.

What follows is an account of a development at 8401 GrandView that went profoundly wrong

In 2004 an application was made for construction at 8401 GrandView
There was a ZA Hearing 2004-4197.

Essentially no one showed up as they did not know about it.

I was within 20 feet of the project and never informed.

By the time I figured out what was proposed it had already been greenlighted.

The consequence of this was three years of dangerous out of control events in spite of appealing to every agency.

I am Chief of Anesthesiology at a large Regional Medical Center and believe I can competently document. I have four full binders of all I describe below. We had Channel 5 News, Chief of Building and Safety and Councilmember Jack Weiss out to the site. It developed into a huge problem both politically and in terms of community action.

Construction started on April 2006 and then went on for almost three years.

**Street Damage**

Massive street damage from the Kirkwood entrance to the site. This has never been repaired properly. Costs to the City will be huge – a fraction of whatever is gotten in permits.

**Street Closures**

Between April 29 and June 14 we had seven street closures for four hours each which always went to 8 hours. The builder thereafter just closed the street whenever he wanted without notice. This resulted in huge backups along GrandView and nowhere to turn around it was chaos with many near violent incidents.

**Traffic Flow**

See the scanned item 1 is from the ZA of 2004 (Page 13) highlighted in yellow. The problems of traffic on GrandView are made abundantly clear. Quote:

*" for five minutes the staff's car was entirely blocked form exiting GrandView Drive. A van illegally parked blocking more than half the road. Additional cars pulled up behind*

*the City's car. There was no room to either go around the parked vehicle or reverse. (Topography – up slope to the south side of the road, steep downslope to the north). The van had to move, going in excess of more than 10 lots east before vehicles passed."*

Nothing on GrandView has changed and it has only gotten worse.

**Property damage.**

I had repeated damage to the front of house from machines crashing into it- walls/lamps/ poles/tile. I stopped getting it repaired.

After it was over I just did all the repairs myself and had to have the whole repainted (even though it had a recent job).

Property at junction of Kirkwood and GrandView was damaged as a mobile crane crashed into it (Excuse - It wasn't my fault. It had no brakes!). Builder had run out of money and could not repair.

**Emergency Access**

My neighbor next door Shannan Nishida at 8370 GrandView broke her leg. There was a long delay to get to her as the street was blocked and the ambulance could not get through at Yucca Trail.

**Danger**

Multiple episodes of objects failing and hear misses.

Hanna Melzer of Yucca Trail left as she felt her children's lives were in danger.
This was featured prominently on Channel 5 news.

She has never returned.

**Neighbor Distress**

8410 and 8424 sold and moved out not being able to take it anymore.
Others wanted to leave but by then the situation was so bad they could not.

**Excavation/Grading**

This was way beyond anything they stated. Large trucks would appear after 8:00pm and be loaded with dirt and removed. This was a huge source of mess and distress.

**Storage**

There is no place to store materials on GrandView. Large rolls of Reebar were all over

the sides of a 12 foot road. Equipment was stored on top of Fire Hydrants!
To store items he without authorization broke into the DWP old water tower site.

**Workers**

No parking on GrandView. Employees drove cars along the narrow street and there were constant terrifying near misses.

Hard hats were rarely worn even under cranes and caterpillars. I was scared for the workers.

**Staging / Parking**

Virtually all items of ENV V11-40 were violated.

**********

I note on February 11, 2015 a Mitigated Negative Declaration prepared by the city states:

"*will reduce any potential adverse effects to a level of insignificance*".

A Guiding item for ZA Determination is:

*"The Granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the same zone or vicinity in which the property is located."*

This project will unquestioningly:

- Be materially detrimental to the public welfare and injure property.
- Will cost the City way beyond anything acquired in permits.
- Will injure property and lives on the street.

if "... the dwelling will be a contemporary design which will blend in with the rest of the neighborhood. The side yard setback will be 9 feet on each side ... The building shall also be equipped with fire sprinklers through the house ... It will also provide a space for on coming vehicles to pull over to let them pass by. "

The proposed structure is to be built with one-story above street level. Properties located both west and east are two stories above street level. Given the surrounding topography, staff could not determine the existing height of surrounding structures along the downslope.

Given the configuration of the proposed structure, during a vehicle ingress/egress a vehicle should have a clear line-of-sight to both vehicles and pedestrians. The property is proposed to be positioned (northerly) along a downslope. Therefore, the site will not cast a shadow onto the southerly properties on an up slope. As far as the northerly downslope, the dwelling sits far enough from the property line as to not cast a shadow on abutting (northerly) properties. Light, and air will not be obstructed. Both the east and west properties on the northerly side of Grand View Drive seems to be built in a similar manner.

The applicant submitted signatures of property owners directly across Grand View Drive (up slope) and the signature for the west abutting property (vacant land).

During field investigation staff was approached by an abutting property homeowner who expressed concerns about large equipment on a 14-foot wide road, road availability for daily use, and excavating "on a steep unstable slope". Though distance toward the east may be considerable, staff found residents may utilize each exit/entry at the end of the road. With the narrow width of the road, the only turnaround are driveways. Upon completion of field investigation, for five minutes staff s car was entirely blocked from exiting Grand View Drive. A van illegally parked blocking more than half of the road. Additional cars pulled behind the City's car. There was no room to either go around the parked vehicle or reverse. (Topography--up slope on the south side of the road, steep downslope on the north). The van had to move, going in excess of more than 10 lots east before vehicles passed.

The Building and Safety referral document within the case file shows "Need "B" permit to widen street to 20 feet. Dedication required: 5.5 feet, Improvement required: "B" permit street and curb, and gutter. The roadway does not contain encroachments prohibiting the passage of emergency vehicles."

**FINDINGS - SECTION 12.24-X.11 (Height, Yards, Coverage, Parking)**

1. **The request is in conformity with the public necessity, convenience, general welfare and good zoning practice and will be in substantial conformance with the various elements and objectives of the General Plan.**

   The Zoning Administrator Authority granted will be in conformity with the public necessity convenience, general welfare and good zoning practice.

   The involved site is located in an area of steep downslope. For this reason, room for expansion or construction is extremely limited. In order to stay within a reasonable building envelope with a minimum amount of destruction to the slope the requested zoning entitlements are required.

Now that you are all familiar with my home being down the hill from Mr. Smith property you might understand the DANGER and difficult situation that Mr. Smith is putting my family in ONCE AGAIN. My children are out of school for summer vacation and I find myself having to stay out of my home in the heat of the summer due to Mr. Smith unsafe conduct of building a house on his 8401 Grandview property. Not only for the street closure time which he is constantly violating. I come back home at 3pm because that is the time his street closure to use this heavy machinery ends, only to find out that he is still working from the street with heavy machinery digging, piling dirt way above his temporary retaining wall until 4:30pm. When I ask Mr. Smith for explanation, his contractor lies to me that the digger got stuck and they are waiting for a mechanic but once the dump-truck comes the digger miraculously self fixed and continues to work. How can I work things out with these people?

I can't stay in my back yard or open my doors and windows because stones and pieces of asphalt will be rolling down from the road deterioration. The wire fences that Mr. Smith put up "for protection" will not protect my family and my house since he is storing metal pieces and debris not even on his property but in-between his property and 8383 Grandview. I do have experience of stones rolling down from Mr. Smith's area down to my property, hitting my house and my deck where minutes before my children were playing basketball with their playdate. How would you feel if that child who was there was yours? I don't want to be writing you all in a few days that something terrible happened due to this negligence PLEASE prevent it NOW!!!!!!!!!!!!!!!
This is only the small things which can roll down. keep on reading....



How about one or two of these Reebar rolling down the hill? The reebars are stored behind Mr. Smith's temporary "retaining wall"? To be more precise, they are piled OVER the "temporary retaining wall" those reebars are so massive that the ones against the wall are creating pressure against it wall. Only a few days ago on June 21, Mr. Smith told Officer Lichtenstein from Parking Enforcement that they have to continue to clear the dirt from behind the wall beyond their permit hours because "the soil creates unsafe pressure on the wall since it was piled high." When it's convenient the wall is very safe for the heavy weight of the reebars. To make the whole situation worse, Mr. Smith who is unconcerned with any safety, replaced a metal plate with a wood plate in the temporary retaining wall.....
I am not an engineer but it just does not make any sense.



what is holding that woodplate? Is it a 2"x4" board or a 2"x6" board? You can see it clearly in this picture...NOT MUCH.



I feel threatened and unsafe. I live in constant FEAR. I no longer trust Mr. Smith. He lies, he ignores basic safety rules. I feel you need to put a stop work order on Mr. Smith's activities at 8401 Grandview. A safety concious contractor who understands of the rules, regulations and follows them needs to take it over.

I can't be roaming the streets of LA with my two children because of Mr. Smith and his project I don't feel even safe to sleep at home or spend the day there. I am leaving my home until Wednesday morning since it is not a safe place for me to be but I am eagerly awaiting your answers. If you need to contact me, please call me on my cell 213 248-0452.

Thank you for taking the time to read this email and do something about it.

Hanna Melzer
8440 Yucca Trail
LA CA 90046

# Exhibit J

*Información en Espa•ol acerca de esta junta puede ser obtenida llamando al (213) 978-1300*

# COMMISSION MEETING AUDIO

**CENTRAL AREA PLANNING COMMISSION**
**REGULAR MEETING**
**TUESDAY, SEPTEMBER 8, 2015, 4:30 P.M.**
**CITY HALL, 10th FLOOR**
**200 NORTH SPRING STREET**
**LOS ANGELES, CA 90012**

**CLICK ON THE LINKS BELOW TO LISTEN TO AUDIO FROM THE MEETING**

***TO REQUEST A COPY ON COMPACT DISC,***
***PLEASE CONTACT THE DEPARTMENT OF CITY PLANNING PUBLICATIONS AT (213) 978-1255***

1. **TRACK #1**

   DEPARTMENTAL REPORT

2. **TRACK #2**

   COMMISSION BUSINESS

   **(NOTE: Item #3 & #4 were heard together-same track)**

3. **TRACK #3**

   CASE: **ZA-2013-2084-ZAD-1A**
   LOCATION: **2170-2172 STANLEY HILLS DRIVE**

4. **TRACK #3**

   CASE: **ZA-2013-2087-ZAD-1A**
   LOCATION: **2166 STANLEY HILLS DRIVE**

5. **TRACK #4**

   CASE: **ZA-2014-1621-ZAD-ZAA-1A**
   LOCATION: **2104 NORTH STANLEY HILLS DRIVE**

6. **TRACK #5**

   CASE: **DIR-2015-1365-SPR-CDO-1A**
   LOCATION: **928-1026 SOUTH BROADWAY**

*Informacion en Español acerca de esta junta puede ser obtenida llamando al (213) 978-1300*

# COMMISSION MEETING AUDIO

**CENTRAL AREA PLANNING COMMISSION**
**REGULAR MEETING**
**TUESDAY, FEBRUARY 24, 2015, 4:30 P.M.**
**CITY HALL, 10th FLOOR**
**200 NORTH SPRING STREET**
**LOS ANGELES, CA 90012**

**CLICK ON THE BLUE LINKS BELOW TO LISTEN TO AUDIO FROM THE MEETING**

***TO REQUEST A COPY OF A PORTION OR THE ENTIRE MEETING ON COMPACT DISC, PLEASE CONTACT THE DEPARTMENT OF CITY PLANNING PUBLICATIONS AT (213) 978-1255***

POLICY FOR DESIGNATED PUBLIC HEARING ITEM(S): 3 and 4.
Pursuant to the Commission's general operating procedures, the Commission at times must necessarily limit the speaking times of those presenting testimony on either side of an issue that is designated as a public hearing item. All requests to address the Commission on public hearing items must be submitted prior to the Commission's consideration on the item. TIME SEGMENTS noted herein are approximate. Some items may be delayed due to length of discussion of previous items.

**To ensure that the Commission has ample opportunity to review written materials, members of the public who wish to submit written materials on agenda items should submit them to the Commission office, 200 North Spring Street, Room 272, Los Angeles, CA 900152, at least 10 days prior to the meeting at which the item is to be heard in order to meet the mailing deadline.** ***Note: Materials received after the mailing deadline will be placed in the official case file.***

**Day of hearing submissions (10 copies must be provided) are limited to 2 pages plus accompanying photographs, posters, and PowerPoint presentations of 5 minutes or less.**

The Commission may RECONSIDER and alter its action taken on items listed herein at any time during this meeting or during the next regular meeting, in accordance with the Commission Policies and Procedures and provided that the Commission retains jurisdiction over the case.

AGENDAS are posted for public review in the Main Street lobby of City Hall East, 200 N. Main Street, Los Angeles, California, and are accessible through the internet World Wide Web at **http://www.planning.lacity.org**.

**In the case of a Commission meeting cancellation, all items shall be continued to the next regular meeting date or beyond, as long as the continuance is within the legal time limits of the case or cases.**

If you challenge these agenda items in court, you may be limited to raising only those issues you or someone else raised at this public hearing, or in written correspondence on these matters delivered to this agency at or prior to the public hearing.

If you seek judicial review of any decision of the City pursuant to California Code of Civil Procedure Section 1094.5, the petition for writ of mandate pursuant to that section must be filed no later than the 90th day following the date on which the City's decision became final pursuant to California Code of Civil Procedure section 1094.6. There may be other time limits which also affect your ability to seek judicial review.

**GLOSSARY OF ENVIRONMENTAL TERMS:**
CEQA – California Environmental Quality Act
CE – Categorical Exemption
EIR – Environmental Impact Report
MND – Mitigated Negative Declaration
ND – Negative Declaration

1. **DIRECTOR'S REPORT**

A. Items of interest.

2. **COMMISSION BUSINESS**

A. Advanced Calendar

B. Commission Requests

C. Minutes of Meeting – February 10, 2015

3. **ZA-2013-2084-ZAD-1A PART2 PART3**
**CEQA:** ENV-2013-2085-MND-REC1

**Plan:** Hollywood
**Council District:** 4 - LaBonge
**Expiration Date:** 3/12/15
**Appeal Status:** Not further appealable

**PUBLIC HEARING**

**LOCATION: 2170-2172 Stanley Hills Drive**

**REQUESTED ACTION:**
An appeal of the Zoning Administrator's decision to approve a Zoning Administrator's Determination pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit a remodeling of and an addition to two existing single-family dwellings on a lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code, and the Zoning Administrator's decision to adopt the recommendation of the Lead Agency by adopting Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**APPLICANT:** Ryan Noto
Representative: David Johnson

**APPELLANTS:** Matthew Friedman, Stanley Hills Drive Community of Neighbors, and 51 additional appellants (see attached list)

**RECOMMENDED ACTION:**
1. **Deny** the appeal.
2. **Sustain** the Zoning Administrator's decision and approve:
   a. a Zoning Administrator's Determination, pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit a remodeling of and an addition to two existing single-family dwellings on a lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway

apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code.

3. **Adopt** the Findings of the Zoning Administrator.
4. **Adopt** Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**Staff:** Sue Chang (213) 978-3304

4. **ZA-2013-2087-ZAD-1A (Heard w/ Item #3)**
**CEQA:** ENV-2013-2085-MND-REC1

**Plan:** Hollywood
**Council District:** 4 - LaBonge
**Expiration Date:** 3/12/15
**Appeal Status:** Not further appealable

**PUBLIC HEARING**

**LOCATION: 2166 Stanley Hills Drive**

**REQUESTED ACTION:**
An appeal of the Zoning Administrator's decision to approve a Zoning Administrator's Determination pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit the construction, use and maintenance of a new single-family dwelling on a hillside lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code, and the Zoning Administrator's decision to adopt the recommendation of the Lead Agency by adopting Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**APPLICANT:** Ryan Noto
Representative: David Johnson

**APPELLANTS:** Ronald K. Charles, Stanley Hills Drive Community of Neighbors, and 51 additional appellants (see attached list)

**RECOMMENDED ACTION:**
1. **Deny** the appeal.
2. **Sustain** the Zoning Administrator's decision and approve:
   a. a Zoning Administrator's Determination, pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit the construction, use and maintenance of a new single-family dwelling on a hillside lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code
3. **Adopt** the Findings of the Zoning Administrator.
4. **Adopt** Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**Staff:** Sue Chang (213) 978-3304

## 5. PUBLIC COMMENT PERIOD

The Area Planning Commission shall provide an opportunity in open meetings for the public to address it, on items of interest to the public that are within the subject matter jurisdiction of the Area Planning Commission. (This requirement is in addition to any other hearing required or imposed by law.) Persons making requests are encouraged to do so in writing and should submit 10 copies to the Area Planning Commission for its consideration.

**Persons wishing to speak must submit a speaker's request form *prior* to the commencement of the public comment period.**

Individual testimony within the public comment period shall be limited to five (5) minutes per person and up to ten (10) minutes per subject.

The next regular meeting of the Central, Area Planning Commission
will be held at **4:30 p.m.** on **Tuesday, March 10, 2015** at

City Hall
200 North Spring Street, 10th Floor
Los Angeles, California 90012

An Equal Employment Opportunity/Affirmative Action employer

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate. The meeting facility and its parking are wheelchair accessible. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or other services may be provided upon request. To ensure availability of services, please make your request no later than three working days (72 hours) prior to the meeting by calling the Commission Executive Assistant at (213) 978-1300 or by e-mail at APCCentral@lacity.org.

**SUPPLEMENT TO PROJECT DESCRIPTION FOR SADDLEROCK RECREATIONAL CENTER**

*The Project Description submitted with the Project applications on November 9, 2017 addressed the wine bar and certain recreational elements of the Project. It also addressed what was previously referred to as the "Wine Experience Building", which was originally proposed to provide a venue for events focused around the actual wine making process and vine-to-table experiences. Since the November 2017 filing, the Applicant has further refined the program for the Project to expand upon the previously proposed outdoor recreational uses, as well as additional recreational elements offered within the previously referred to "Wine Experience Building", which is now called the "Recreation Hall". Below is a description of these newly included recreational elements.*

## History of Saddlerock

Saddlerock Ranch has been a pivotal part of recreation in the Santa Monica Mountains for decades. Through the various families owning the property, it has been home to hiking, biking, rock climbing, outdoor fitness, horseback riding and many other recreational activities. From the 1950s, dating back to the Mudd Family's ownership, the land was used for camping, student retreats, hiking, horseback riding, and other recreational activities.[1]

The Semler family has continued this tradition by maintaining trails, horse boarding facilities, and developing other hiking and tour experiences. County residents have come to know Saddlerock as one of the more spectacular community resources for outdoor recreation. The concept for a recreational center has been a priority for the Semlers for the past ten years. Ronald Semler's original idea for the Ranch in 1978 was to open a visitor-serving barn that would allow guests to experience the property.

Due to the growing interest in recreational activities, the Applicant is proposing the Recreational Center to provide an environmentally sensitive recreation hub, which will continue to educate area residents regarding our diverse ecosystems and recreational resources, while also celebrating the region's rich tradition of vineyards and local wine by relocating the amenities now offered at Malibu Wines.

## Proposed Recreational Center

The proposed Saddlerock Recreational Center has been designed with three guiding principles: recreation, conservation and preservation. These guiding principles have inspired the proposed programming for our Recreation Hall building, amphitheater, and outdoor picnic area. The Project will create indoor and outdoor spaces for locals and visitors to the area alike. Activities center around responsible recreation and conservation of wild spaces, making use of existing trails on the site, and conserving native oak woodlands. And the final goal is to preserve the recreational land uses in the Santa Monica Mountains, offering guests an opportunity to partake in a variety of activities and not be limited from accessing these open spaces.

---

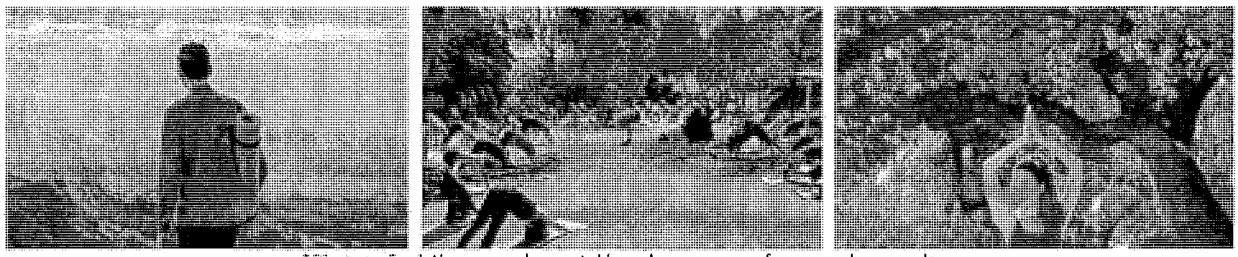
[1] http://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1001&context=hmc_facbooks

**Supplement to Project Description for Saddlerock Recreational Center**

From the in-house yoga studios, to hiking and biking trails, to wildlife seminars and nature talks, to bocce ball and croquet, the Project will include a diverse set of recreational activities. These activities will create additional recreational opportunities leading to a more diverse population of visitors who are not currently visiting the Santa Monica Mountains.

## Yoga Retreats:

The Recreation Hall's second level will provide a serene retreat for visitors to escape the urban setting. One of our most unique experiences that will take place is the indoor/outdoor yoga classes and retreats. These experiences, to be offered throughout the week, will be differentiated from traditional yoga classes by focusing more on the symbiotic relationship to our surrounding ecosystems. The regularly scheduled indoor classes will take place in glass studios, which will open up to magnificent views of the mountains. On weekends, classes will expand beyond our indoor studios to outdoor areas of the site, including the outdoor amphitheater and yoga pads located along hiking trails that cross the parcel.



*Photos of existing yoga classes taking place on one of our nearby parcels.

## Hiking Tours:

Our hiking tours will provide guests with an opportunity to marvel at the beauty the mountains have to offer, with a trained guide. All hiking tours will be led by a docent versed in the local flora, fauna, and history. All hiking experiences will begin in the Recreation Hall. The amphitheater also may be used for orientations and nature talks before or after hikes. Trails crossing the parcel and connecting to the National Park System will be utilized. The Santa Monica Mountains have a wide array of hiking trails, although not all of them have camp stores or general stores. The project would augment that existing system by providing an opportunity for guests to come to the Recreational Center, visit our general store, and take to the trails, further strengthening the recreational opportunities available in the mountains.

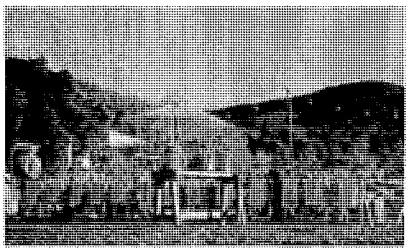
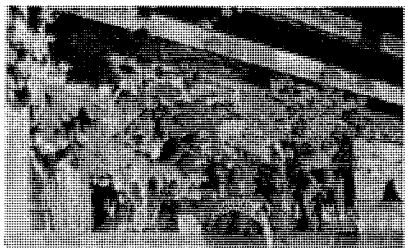


*Photos of existing hiking tours at the adjacent Saddlerock Ranch.

**Supplement to Project Description for Saddlerock Recreational Center**

## General Store:

The organic gardens at the adjacent Saddlerock Ranch property are a set of unique venues that educate guests about sustainable agricultural practices. In the proposed Recreational Hall, there will be a general store offering locally grown products for consumption. The store will have a small seating area for guests to enjoy recently picked produce or fresh pressed juices after a yoga class or hiking tour.


## Bike Shop & Tours

The proposed Recreational Center will be located along Mulholland Highway, one of the top roads in Southern California and the world for biking enthusiasts. The bike shop would serve dual functions, offering neighborhood riders a location to rest and recharge, while also serving as a hub for bike tours across Saddlerock Ranch and off-site as well. The shop would offer replacement parts, bike rentals, and be located adjacent to the general store, so tired bikers could grab a free water refill or a quick snack. While biking in the mountains is not for the faint of heart, it is a truly unique way to experience the recreational area, and we aim to provide non-bikers a resource for safe biking experiences.

## Bocce Ball & Croquet

Visitors to the Recreational Center will be able to engage in other group recreational activities, to include bocce ball and croquet. These recreational activities will be a fun complement to the food and beverage components of the Recreational Center.

3

Connect Create Collaborate

Jason Hernandez <jason.hernandez@lacity.org>

# 1800, 1806, 1812, & 1818 Crisler Way, ENV-2015-4131-MND

**Garrett Weinstein** <garrett.weinstein@mrca.ca.gov> Wed, May 23, 2018 at 10:33 PM
To: Jason Hernandez <jason.hernandez@lacity.org>

Dear Mr. Hernández,

Please accept the attached letter and two accompanying figures regarding the proposed projects at 1800, 1806, 1812, and 1818 Crisler Way (ENV-2015-4131-MND). Please include in the project file and make available to all decision makers for the four projects.

Thank you,

Garrett Weinstein

Mountains Recreation & Conservation Authority

*A local public agency exercising joint powers of the Santa Monica Mountains Conservancy and the Conejo and Rancho Simi Recreation & Park Districts*

5810 Ramirez Canyon Rd.

Malibu, CA 90265

310-589-3230 x124

garrett.weinstein@mrca.ca.gov

**3 attachments**

**MRCA-1800-1818CrislerWy_ltr_5-23-18.pdf**
2933K

**MRCA_ CrislerWyProjects_rua_ENV-2015-4131-MND_5-23-18.pdf**
878K

**aerial ENV-2015-4131-MND 1800-1818 crisler way.pdf**
4324K

**MOUNTAINS RECREATION & CONSERVATION AUTHORITY**
Ramirez Canyon Park
5810 Ramirez Canyon Road
Malibu, California 90265
Phone (310) 589-3230 Fax (310) 589-3237

May 23, 2018

Mr. Jason Hernández
Department of City Planning
City of Los Angeles
200 North Spring Street, Room 621
Los Angeles, California 90012

**ENV-2015-4131-MND, ZA-2015-4125-ZAD, 1800 Crisler Way**
**ZA-2015-4130-ZAD, 1806 Crisler Way**
**ZA-2015-4146-ZAD, 1812 Crisler Way**
**ZA-2015-4149-ZAD, 1818 Crisler Way**

Dear Mr. Hernández:

3-1 CEQA-BIO LOCATION IN HABITAT LINKAGE

The staff of the Mountains Recreation and Conservation Authority (MRCA) offers the following comments and recommendations on the four above-referenced subject proposed projects, and their associated subject Mitigated Negative Declaration and Initial Study (MND). The subject MND is deficient under the California Environmental Quality Act (CEQA) for failing to address multiple potentially significant impacts to wildlife movement that would result from the proposed projects.

The subject property lies within Habitat Block No. 57 on the Santa Monica Mountains Conservancy's "Eastern Santa Monica Mountains Habitat Linkage Planning Map". This habitat block, which is comprised of both public and private ownerships, is the southernmost area of undeveloped land able to facilitate east-west wildlife movement between lower Laurel Canyon (to the east) and similar habitat blocks to the west. Wildlife movement throughout these habitat blocks is becoming increasingly restricted due to development and associated impacts. One purpose of the afore-mentioned Habitat Linkage Planning Map is to provide decision makers with a visual representation of the undeveloped open space in the vicinity of specific projects remaining available to facilitate wildlife movement in the eastern Santa Monica Mountains.

3-2 CEQA-BIO GROWTH-INDUCING HABITAT LINKAGE

The four subject proposed projects require the improvement of the paper-street Crisler Way southward from Grand View Drive, but the MND does not address the potential growth-inducing impacts of this street extension. The current northern terminus of the improved portion of Crisler Way is located within less than 600 feet of 1800 Crisler Way (Assessor Parcel No. (APN) 5556-022-004), the southernmost lot proposed for development. Further development along the paper street Crisler Way would potentially choke off the last remaining habitat linkage between Habitat Blocks 57 and 58, permanently obstructing wildlife movement and resulting in undeniable significant adverse biological impacts.

3-3 EASEMENTS

The MRCA regularly accepts dedications of conservation easements and deed restrictions via covenant, and our staff is available to assist with the drafting and recording of the required documents in either case.

3-4 CROSS-REFERENCE

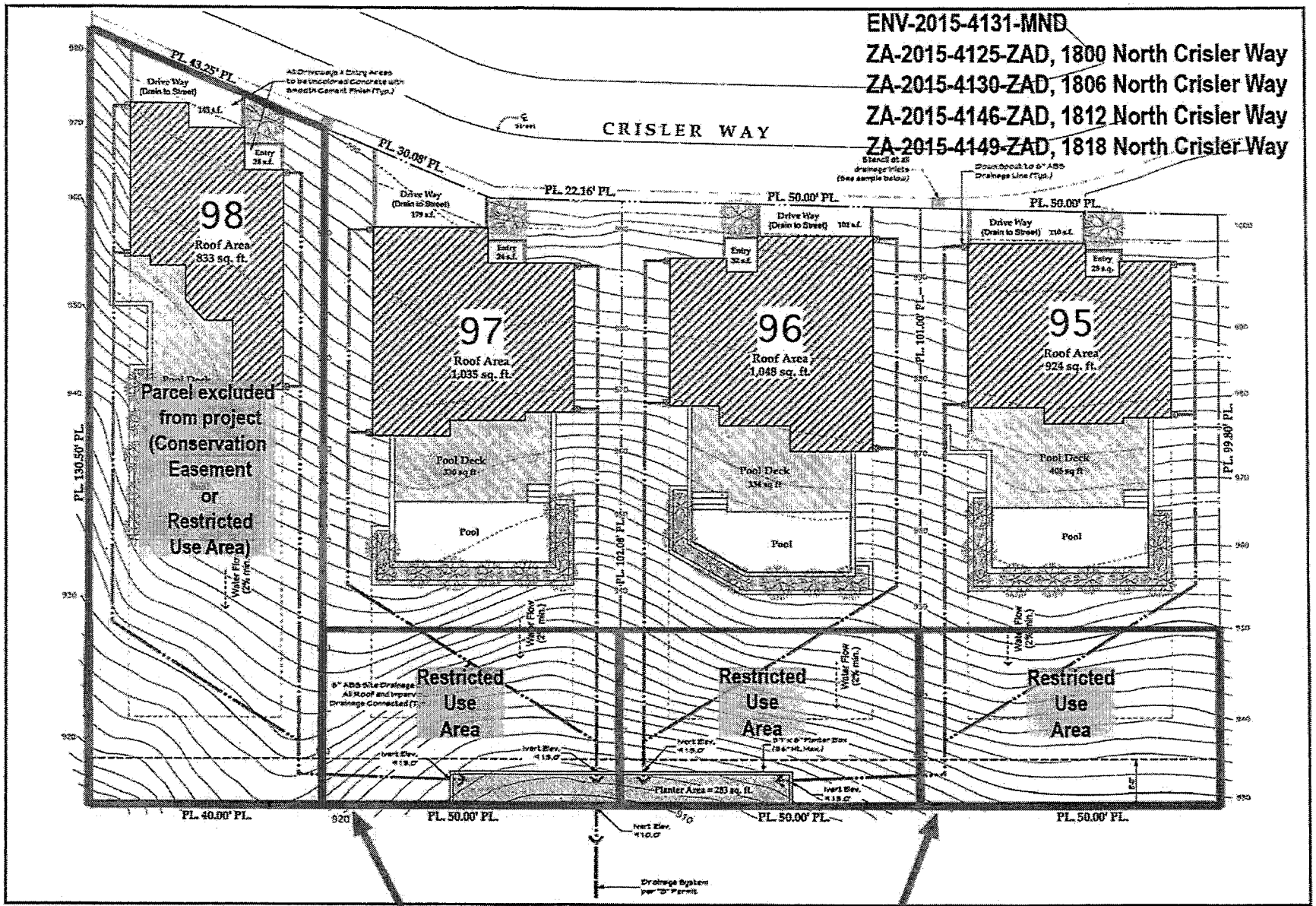
MRCA staff supports the comments made in the May 21, 2018 letter from Jamie T. Hall with respect to the subject MND's deficiencies in the inadequately described environmental setting, the inadequately addressed issues of access from Grand View Drive, and the inadequately addressed growth inducing impacts of the subject proposed projects.

If you have any questions or clarifications, please contact me at 310-589-3230, ext. 124, or by e-mail at garrett.weinstein@mrca.ca.gov. Alternately, Paul Edelman, Chief of Natural Resources and Planning, may be contacted at 310-589-3200, ext. 128, or edelman@smmc.ca.gov. The applicant should feel encouraged to contact our agency. Thank you for your time and consideration.

Sincerely,

Garrett Weinstein
Project Analyst

Attachments:
A – Diagram of Site Specific Recommendations, May 23, 2018
B – Aerial Map of Subject Properties and Surrounding Habitat



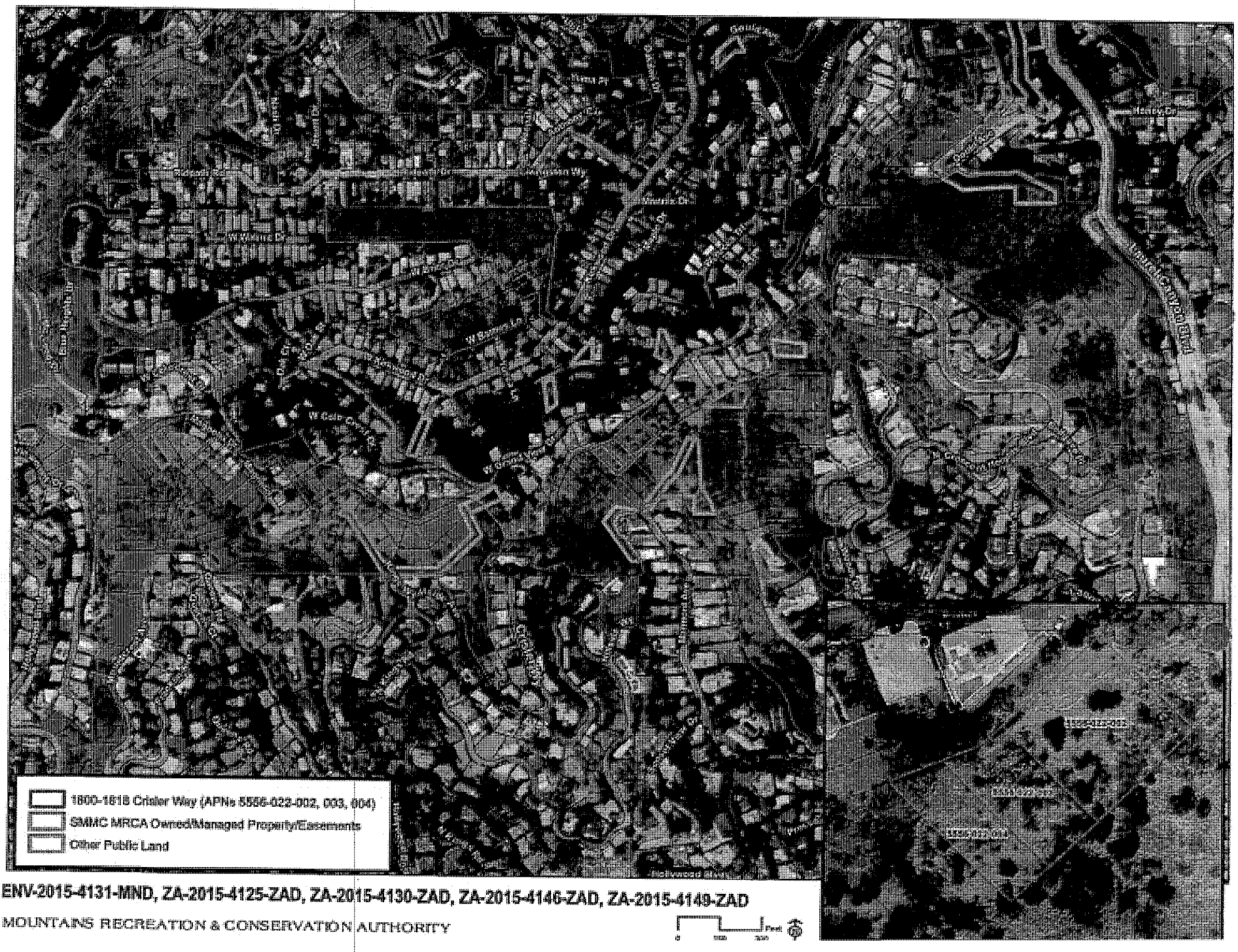

Source: Robert Anderson Architect, StormWater Drainage Plan, Map A 1.1, March 2015.

Approximate boundaries of recommended Deed Restrictions via Covenants for wildlife movement purposes. See letter from Mountains Recreation and Conservation Authority staff dated May 23, 2018.

CRISLER WAY RESIDENCES IS/MND

## Proposed Site Plan

FIGURE 3



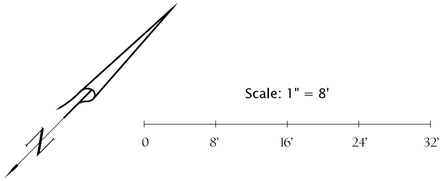

**ENV-2015-4131-MND, ZA-2015-4125-ZAD, ZA-2015-4130-ZAD, ZA-2015-4146-ZAD, ZA-2015-4149-ZAD**

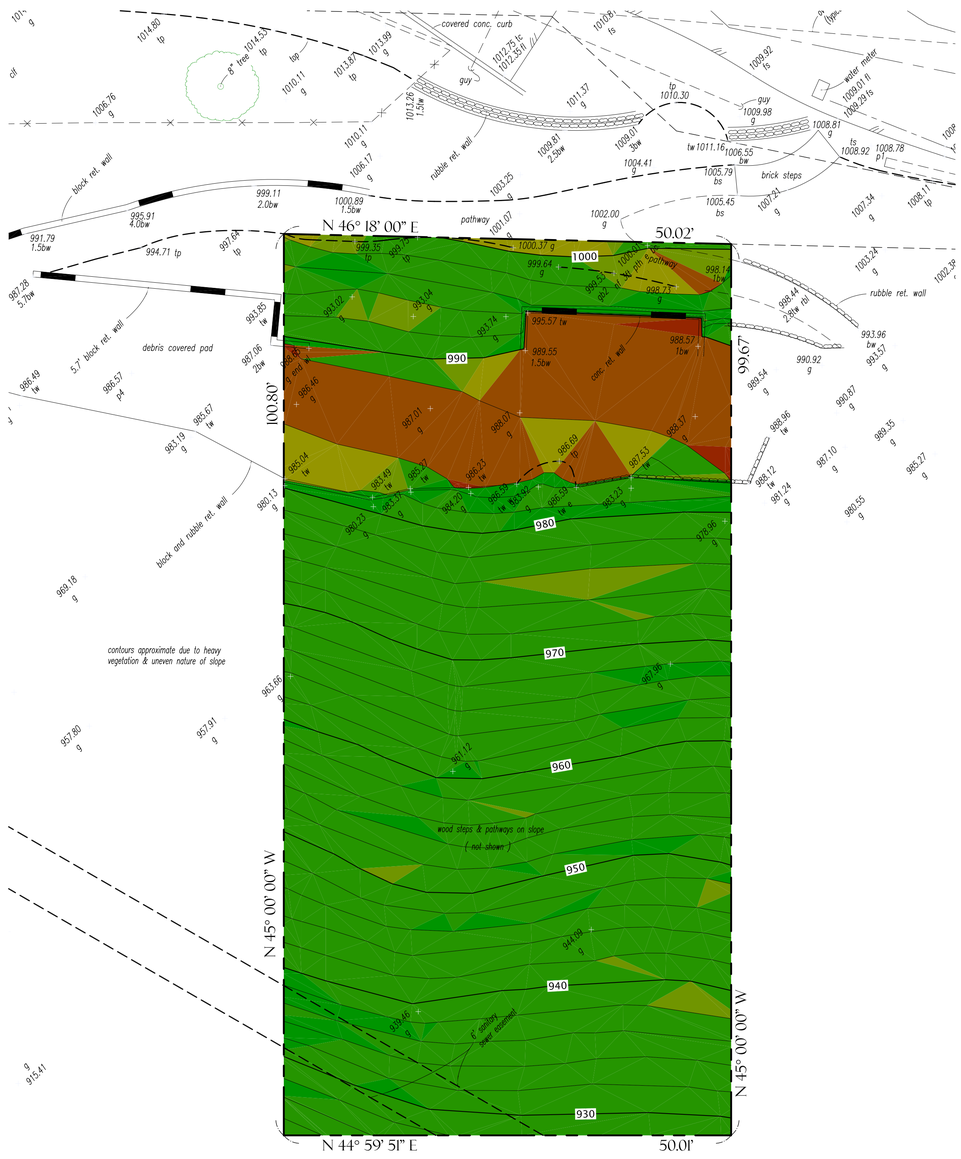
MOUNTAINS RECREATION & CONSERVATION AUTHORITY

# Exhibit A

# Slope Band Analysis

# SLOPE ANALYSIS MAP




Municipal code, chapter 1 (planning and zoning code)
Chapter 1 General Provisions and Zoning
Article 2 specific planning – zoning
Sec 12.21 general provisions

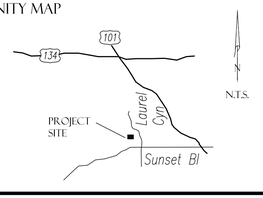
(2) **Guaranteed Minimum Residential Floor Area.** Notwithstanding the above, the maximum Residential Floor Area for all Buildings and Accessory Buildings on any Lot may be least the percentage of the Lot size as outlined in Table 12.21 C.10-3 below or 1,000 square feet, whichever is greater.

**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**
**ZonePercentage of Lot Size**
R1 25%

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,253 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 22.36 | 0.50 | 0.45 | 11.18 |
| 2 | 15.00% | 29.99% | | 592.40 | 0.45 | 11.82 | 266.58 |
| 3 | 30.00% | 44.99% | | 171.81 | 0.40 | 3.43 | 68.72 |
| 4 | 45.00% | 59.99% | | 182.67 | 0.35 | 3.64 | 63.93 |
| 5 | 60.00% | 99.99% | | 3683.05 | 0.30 | 73.48 | 1104.92 |
| 6 | 100.00% | 4000.00% | | 359.71 | 0.00 | 7.18 | 0 |
| | | Totals: | | 5,012 | | 100% | 1,515.33 |

VICINITY MAP




## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 95
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-002

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 95: 5,012 square feet; 0.12 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
Shown in F.B. 40412 pg. 257 dated 12/20/95
Description: Spike in PP #828393H (n. side 1' up) s/s Grand View Dr. E/O Hse # 8354 & opp. Hse # 8353.

## Date of Survey:

Topography: 27 August 2001
Slope Analysis: 19 May 2016

## Note:

This slope analysis has been accurately calculated.

PREPARED FOR:

ROBERT ANDERSON, ARCHITECT

PREPARED BY:

J.O. NELSON
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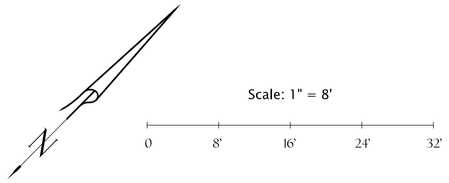
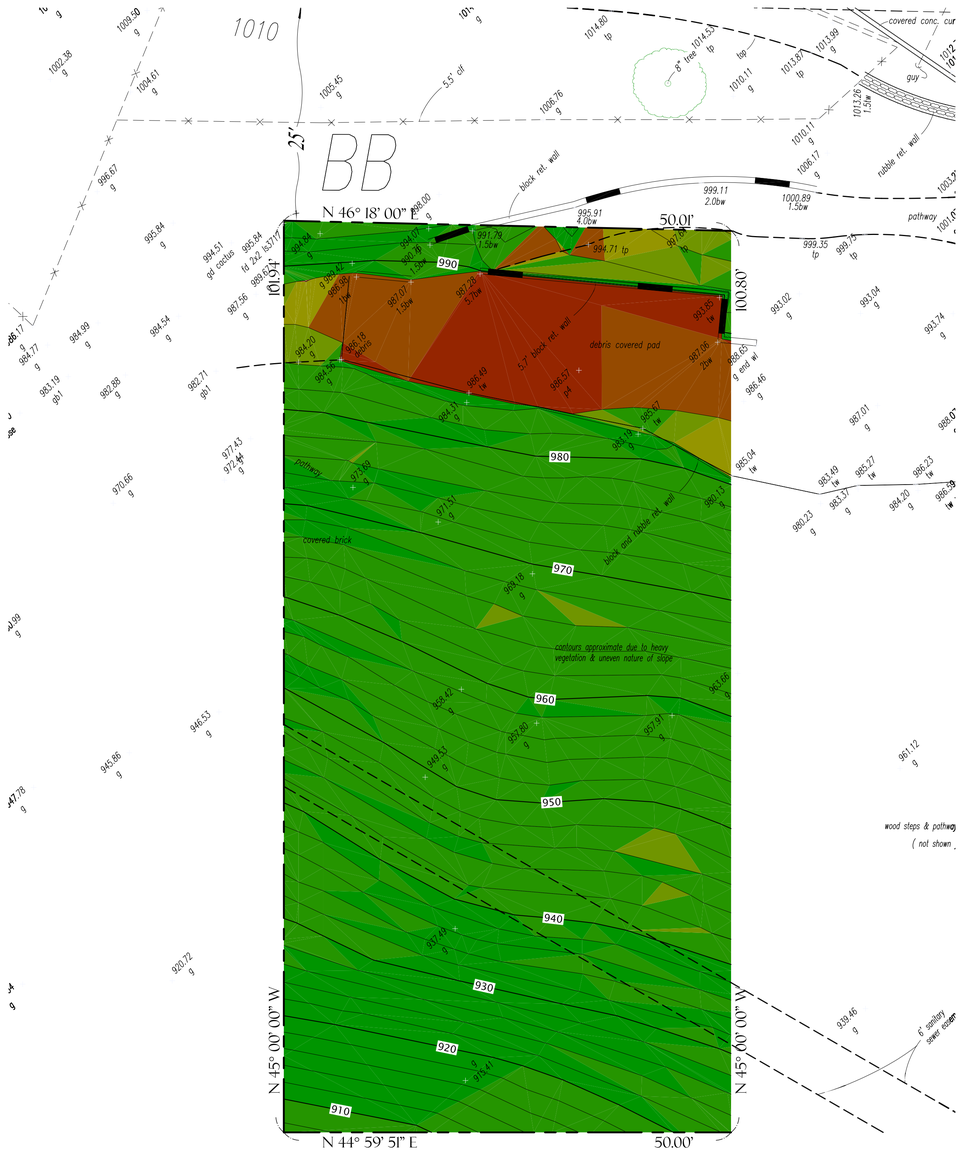
LICENSED LAND SURVEYOR
JAMES O. NELSON
No. 6831
EXP. 09-30-16
STATE OF CALIFORNIA

# SLOPE ANALYSIS MAP




Municipal code, chapter 1 (planning and zoning code)
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Article 2 specific planning – zoning
Sec 12.21 general provisions

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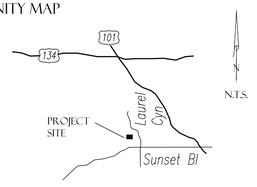
**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**

| Zone | Percentage of Lot Size |
|---|---|
| R1 | 25% |

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,267 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 310.44 | 0.50 | 6.13 | 155.22 |
| 2 | 15.00% | 29.99% | | 298.57 | 0.45 | 5.89 | 134.36 |
| 3 | 30.00% | 44.99% | | 69.02 | 0.40 | 1.36 | 27.61 |
| 4 | 45.00% | 59.99% | | 154.56 | 0.35 | 3.05 | 54.10 |
| 5 | 60.00% | 99.99% | | 2959.05 | 0.30 | 58.39 | 887.71 |
| 6 | 100.00% | 4000.00% | | 1276.36 | 0.00 | 25.18 | 0 |
| | | Totals: | | 5,068 | | 100% | 1,259 |

VICINITY MAP




## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 96
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-002

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 96: 5,068 square feet; 0.12 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
Shown in F.B. 40412 pg. 257 dated 12/20/95
Description: Spike in PP #828393H (n. side 1' up) s/s Grand View Dr. E/O Hse # 8354 & opp. Hse # 8353.

## Date of Survey:

Topography: 27 August 2001
Slope Analysis: 19 May 2016

## Note:

This slope analysis has been accurately calculated.

PREPARED FOR:

ROBERT ANDERSON, ARCHITECT

PREPARED BY:

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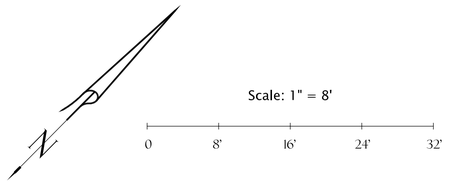
No. 6831
EXP. 09-30-16
STATE OF CALIFORNIA

# SLOPE ANALYSIS MAP



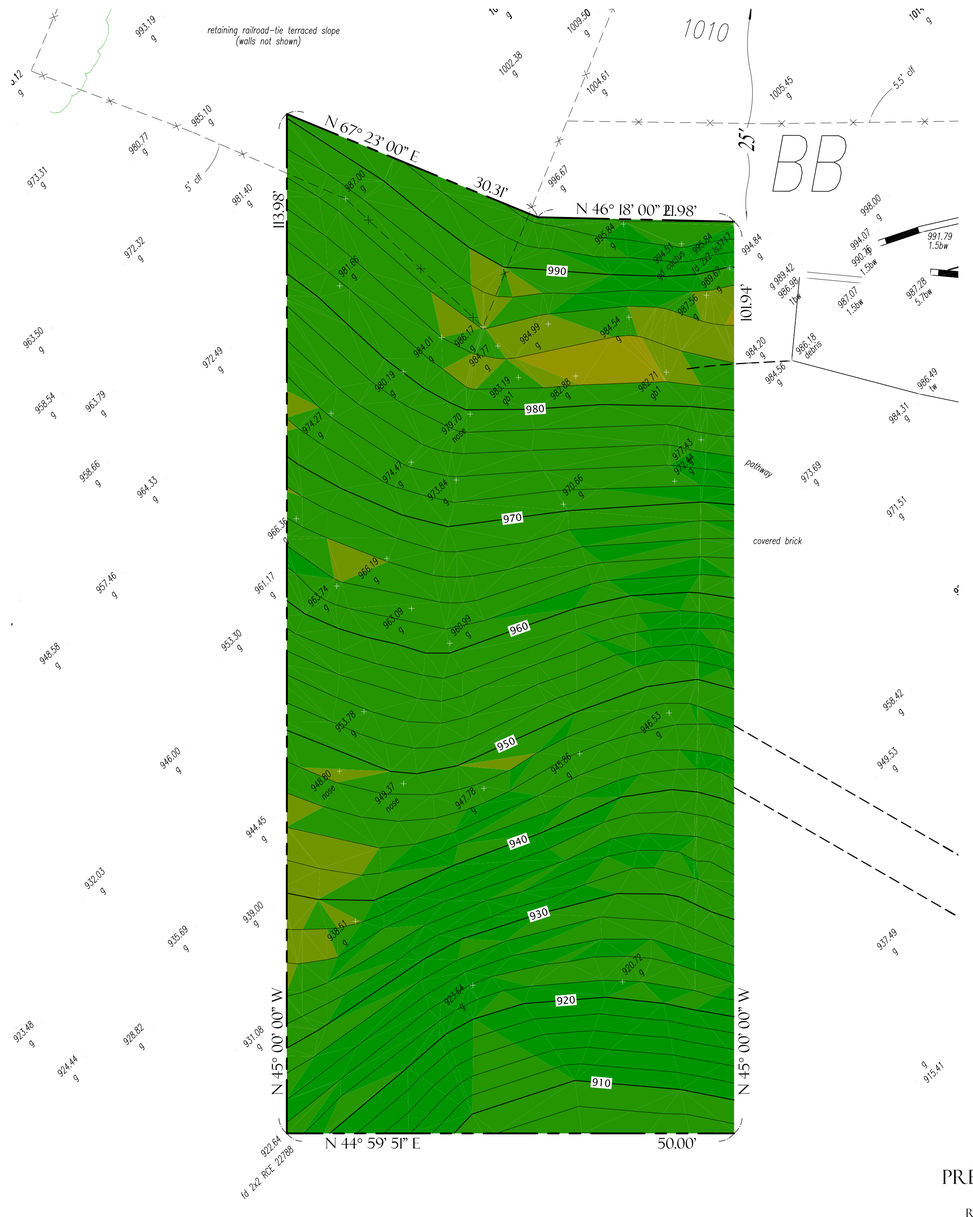




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**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**
**ZonePercentage of Lot Size**
R1 25%

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,319.5 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 0.11 | 0.50 | 0.00 | 0.06 |
| 2 | 15.00% | 29.99% | | 0.05 | 0.45 | 0.00 | 0.02 |
| 3 | 30.00% | 44.99% | | 59.18 | 0.40 | 1.12 | 23.67 |
| 4 | 45.00% | 59.99% | | 315.06 | 0.35 | 5.97 | 110.27 |
| 5 | 60.00% | 99.99% | | 3644.21 | 0.30 | 69.05 | 1093.26 |
| 6 | 100.00% | 4000.00% | | 1259.39 | 0.00 | 23.86 | 0 |
| | | Totals: | | 5,278 | | 100% | 1,227.28 |

## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 97
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-003

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 97: 5,278 square feet; 0.12 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
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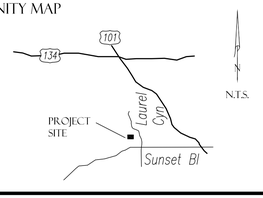
VICINITY MAP

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EXP. 09-30-16
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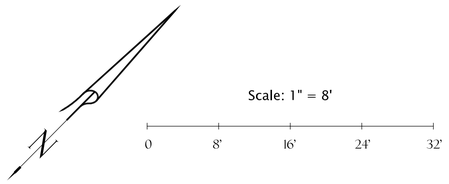
# SLOPE ANALYSIS MAP



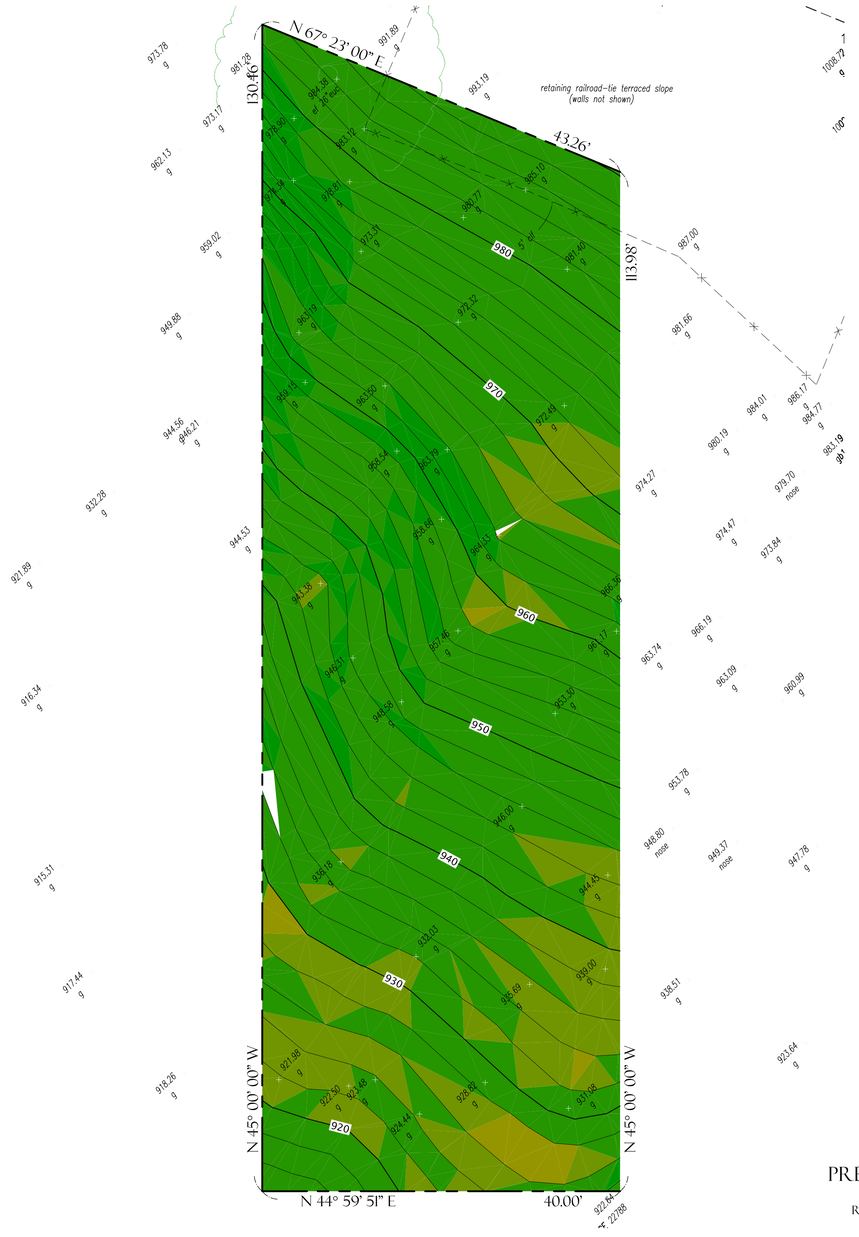




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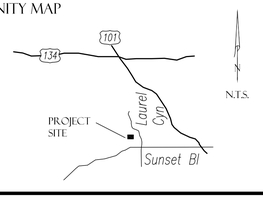
**Table 12.21 C.10-3**
**Guaranteed Minimum Residential Floor Area**
**ZonePercentage of Lot Size**
R1 25%

Guaranteed Minimum Residential Floor Area excluding any bonus: 1,222.25 square feet

| Slopes Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Number | Minimum Slope | Maximum Slope | Color | Area (sq. ft.) | Floor Area Ratio Zone (Zone RE-1) | % of Lot | Max Floor Area (Sq. Ft.) |
| 1 | 0.00% | 14.99% | | 0.03 | 0.50 | 0.00 | 0.02 |
| 2 | 15.00% | 29.99% | | 0.06 | 0.45 | 0.00 | 0.03 |
| 3 | 30.00% | 44.99% | | 77.13 | 0.40 | 1.58 | 30.85 |
| 4 | 45.00% | 59.99% | | 782.27 | 0.35 | 16.00 | 273.79 |
| 5 | 60.00% | 99.99% | | 3530.06 | 0.30 | 72.20 | 1059.02 |
| 6 | 100.00% | 4000.00% | | 499.45 | 0.00 | 10.22 | 0 |
| | | Totals: | | 4,889 | | 100% | 1,363.7 |

VICINITY MAP




## Job site:

Vacant Lots South of 8354 Grand View Drive
Los Angeles, CA 90046

## Legal Description:

Lot 98
Tract No. 865
MB 16 pg. 97 et al

## APN:

5556-022-004

## Source:

The source of the contours and slope analysis for this map come from a field survey performed by S.E.I. Land Surveying, Inc. in August 2001.

## Lot Area:

Lot 98: 4,889 square feet; 0.11 acres

## Zone:

R1-1
Taken from Zimas on 19 May 2016

## Datum:

### Bench mark:

L.A. City Bench Mark: BMTP #12
Elevation: 1012.955
Shown in F.B. 40412 pg. 257 dated 12/20/95
Description: Spike in PP #828393H (n. side 1' up) s/s Grand View Dr. E/O Hse # 8354 & opp. Hse # 8353.

## Date of Survey:

Topography: 27 August 2001
Slope Analysis: 19 May 2016

## Note:

This slope analysis has been accurately calculated.

PREPARED FOR:

ROBERT ANDERSON, ARCHITECT

PREPARED BY:


J.O. NELSON
CONSULTING LAND SURVEYORS, INC.
A PROFESSIONAL LAND SURVEYING CORPORATION
501 SOUTH REINO R.D., #105
NEWBURY PARK, CA 91320
(310) 337-1778
WWW.JONELSONCLS.COM


LICENSED LAND SURVEYOR
JAMES O. NELSON
No. 6831
EXP. 09-30-16
STATE OF CALIFORNIA

# Exhibit B

# Geology and Soils Reports

# C. Y. GEOTECH, INC.
## Engineering Geology and Geotechnical Engineering

9428 Eton Avenue, Unit M, Chatsworth, CA 91311
Tel: (818) 341-1899 Fax: (818) 341-1897 Email: cygeotech@sbcglobal.net

June 8, 2018

P.N. CYG-14-7350

CAC Development
1504 South Flower Street
Los Angeles, CA 90049

Subject: Response to Geology and Soils Questions from Review of MND,
Proposed Four Single Family Residences and Street Improvement,
Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818
Crisler Way, Los Angeles, California

Dear Robert,

As requested, C. Y. Geotech (CYG), Inc. has prepared this addendum report for the subject project to respond the geology and soils questions from review of MND. A copy of the geology and soils questions from review of MND are enclosed in Appendix A.

Question 1:
Inadequate Description of Existing Slope Condition

Response to Question :
A regional topographic map showing the site and site vicinity, including the top to the toe of the southeast-facing slope and Grand View Drive, was enclosed in the referenced GeoSystems reports and the referenced Parmelee/geology reports. A geologic cross section showing the entire southeast-facing slope and subsurface earth materials and geologic structure was enclosed in the referenced GeoSystems reports. For your convenience, the regional topographic map and geologic cross section showing the entire southeast-facing slope are enclosed in Appendix B of this report.

The descriptions of the slope was also presented by GeoSystems and Parmelee/Geology in the referenced GeoSystems and Parmelee/Geology report. For your convenience, the descriptions of the southeast-facing slope by GeoSystems and Parmelee/Geology are presented below:

By GeoSystems :
The property is topographically situated at the top of a south-facing slope that descends from the south side of Grandview Drive. The slope has a height of approximately 240-feet and a gradient ranging from 3/4:1 (H:V) to about 2:1. The average slope angle is about 40 degrees. The property was previously developed with a single-family residence constructed in the 1920's which has since burned down. All that remains of the previous residence is the concrete floor slab, the fireplace, several retaining walls, and landscape rock rubble walls. These items will be removed from the site prior to construction of the new residence. The natural slope below the property is vegetated with natural grasses and brush. Bushes and trees which were planted adjacent to the old residence are present within the property limits. Drainage of the slope is via natural contours down to the canyon bottom.

By Parmelee/Geology :
The subject property consists of four contiguous undeveloped hillside lots on the south flank of the Santa Monica Mountains, Los Angeles, California. Lots 95 and 96 were previously occupied by a single family residence which was destroyed in a fire. The remnants of the concrete floor slabs and walls are still present on the site. Lots 97 and 98 are vacant. The surrounding area consists of a hillside residential community.

Past grading on the subject property has consisted of spilling approximately two feet of uncompacted fill over the upper portion of the site during initial grading for Grand View Drive and construction activities performed during the prior site development on Lots 95 and 96. The surface of the property descends below Grand View Drive approximately 280 feet at gradients ranging from 2:1 to slightly steeper than 1:1. The average slope gradient is about 40 degrees. Vegetation on the site consists of natural grasses and sparse native chaparral.

As shown on the regional topographic map geologic cross section, the southeast-facing slope descends up to approximately 260 feet from the top of the slope (close to Grand View Drive) to the top of the slope. The gradient of the slope varied from approximately 1.5:1 to 1:1(horizontal:vertical). The slope is composed primarily of granitic rock.

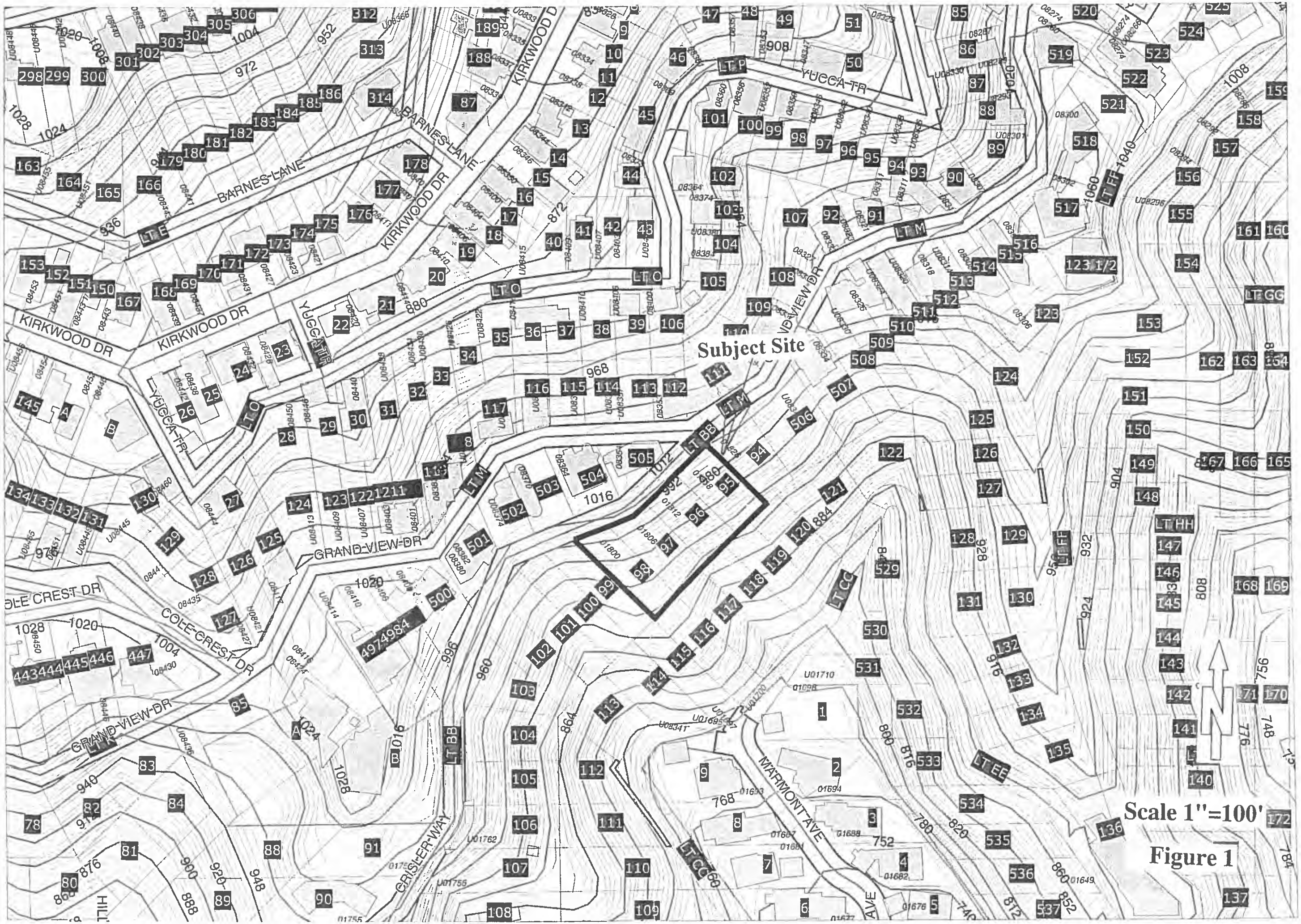
A topographic Map showing the site and site vicinity, adopted from the City of Los Angeles Topographic Map, is shown on Figure 1. As shown on Figure 1, the subject site (Lots 95 to 98) is located below the proposed extension of Crisler Way.

The static gross slope stability of the southeast-facing slope was analyzed by GeoSystems in th referenced GeoSystems report dated November 12, 1997. The analyses indicated a factor of safety of 1.83 which is greater than greater than the minimum code requirement of 1.50. For your convenience, the graphic output of the static gross slope stability analysis is presented in Figure 2.

The static and seismic gross slope stability of the southeast-facing slope was analyzed by Parmelee/Geology in the referenced Parmelee/Geology report dated December 9, 2001. The analyses indicated a factor of safety of 1.825 for static slope stability and a factor of safety of 1.419 for seismic slope stability. The factor of safety for static gross slope stability of 1.825 is greater than the minimum code requirement of 1.5 and the factor of safety for seismic gross slope stability of 1.419 is greater than the minimum code requirement of 1.1. For your convenience, the graphic outputs of the static and seismic gross slope stability analyses are presented in Figures 3 and 4.

The static and seismic gross slope stability of the southeast-facing slope were updated by Geomatrix (previously as Parmelee/Geology) in the referenced Geomatrix report dated September 10, 2012 due to the update requirement for the use of seismic coefficient in the seismic slope stability analysis. The analyses indicated a factor of safety of 1.814 for static slope stability and a factor of safety of 1.260 for seismic slope stability. The factor for static slope stability of 1.814 is greater than the minimum code requirement of 1.5 and the factor for static slope stability of 1.260 is greater than the minimum code requirement of 1.0. The update City of Los Angeles requirements for seismic slope stability analyses required the use of a greater value of seismic coefficient in seismic slope stability analyses and a minimum factor of safety of 1.0. For your convenience, the graphic outputs of the slope stability analyses are presented in Figures 5 and 6.

Question 2:
Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslide.


Subject Site
KIRKWOOD DR
BARNES LANE
KIRKWOOD DR
YUCCA TR
YUCCA TR
KIRKWOOD DR
BARNES LANE
KIRKWOOD D
YUCCA TR
YUCCA TR
LT P
LT E
LT O
LT O
LT O
LT O
LT M
LT M
LT M
LT BB
LT BB
LT BB
LT CC
LT CC
LT EE
LT FF
LT FF
LT GG
LT HH
LT K
LT M
LT O
LT O
LT O
LT O
VIEW DR
MARMONT AVE
MARMONT AVE
CRISLER WAY
GRAND VIEW DR
GRAND VIEW DR
COLE CREST DR
COLE CREST DR
Scale 1"=100'
Figure 1

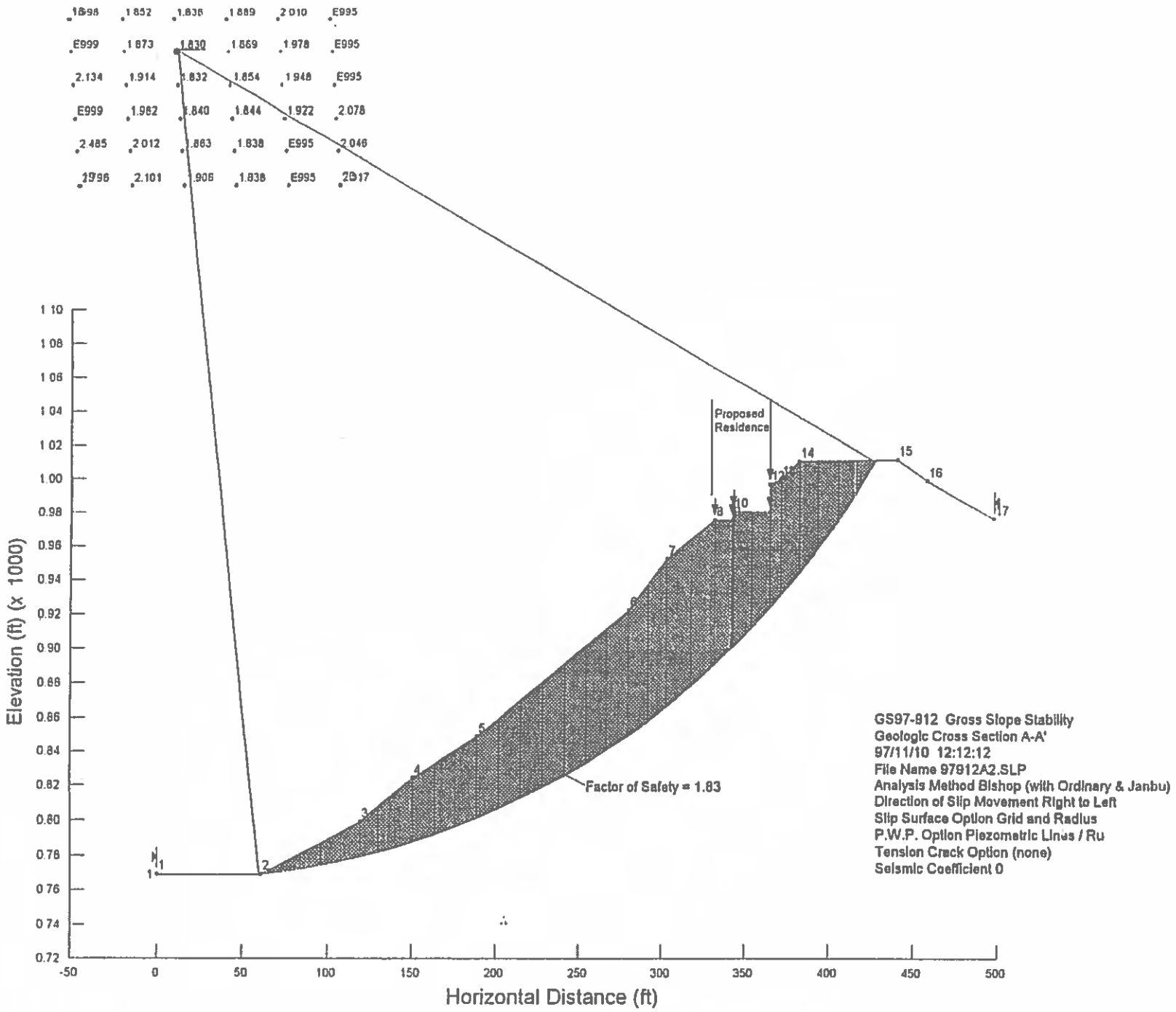



PLATE SA-1 -

Figure 2

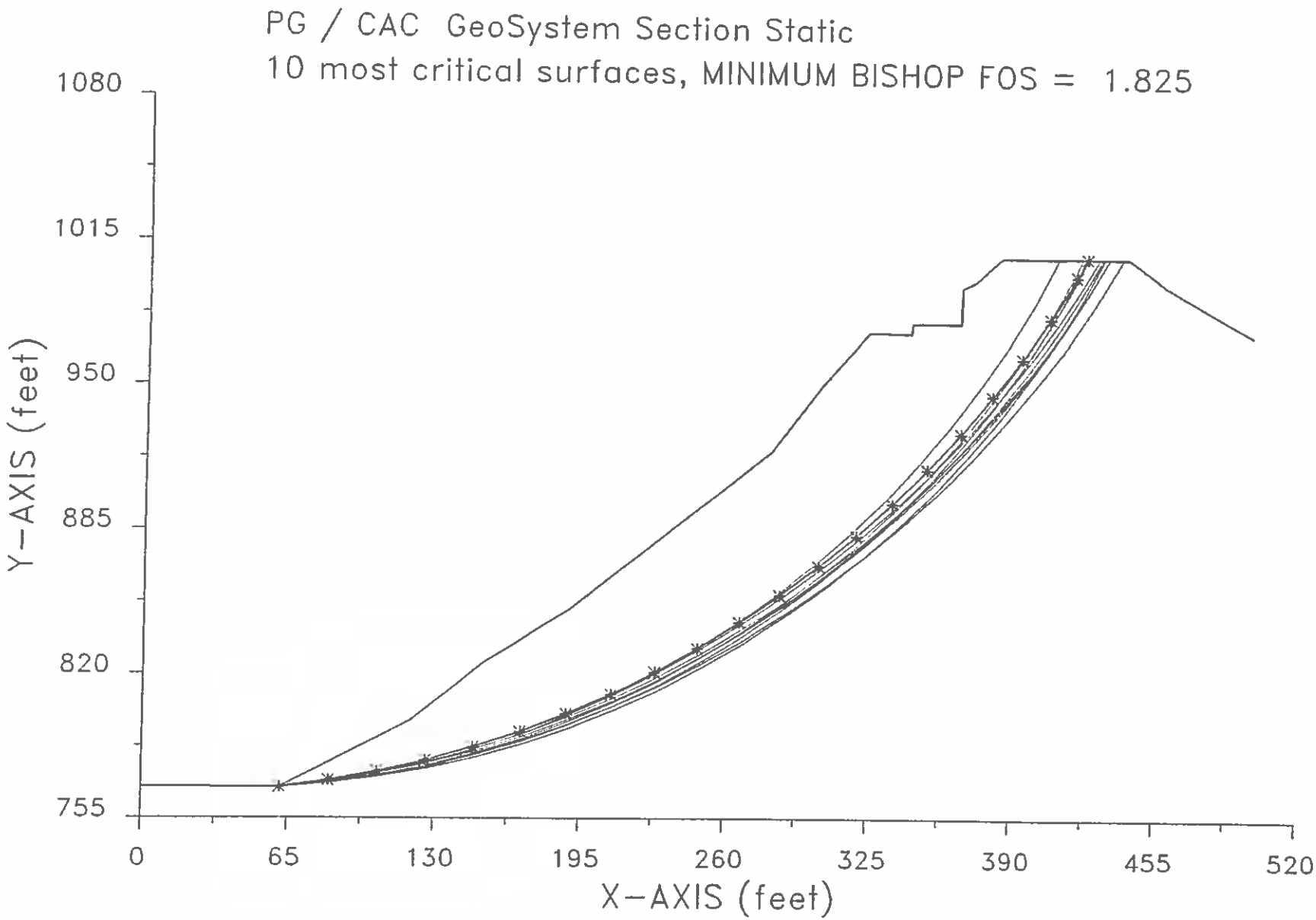

PG / CAC GeoSystem Section Static
10 most critical surfaces, MINIMUM BISHOP FOS = 1.825
1080
1015
950
885
820
755
Y-AXIS (feet)
0
65
130
195
260
325
390
455
520
X-AXIS (feet)

Figure 3

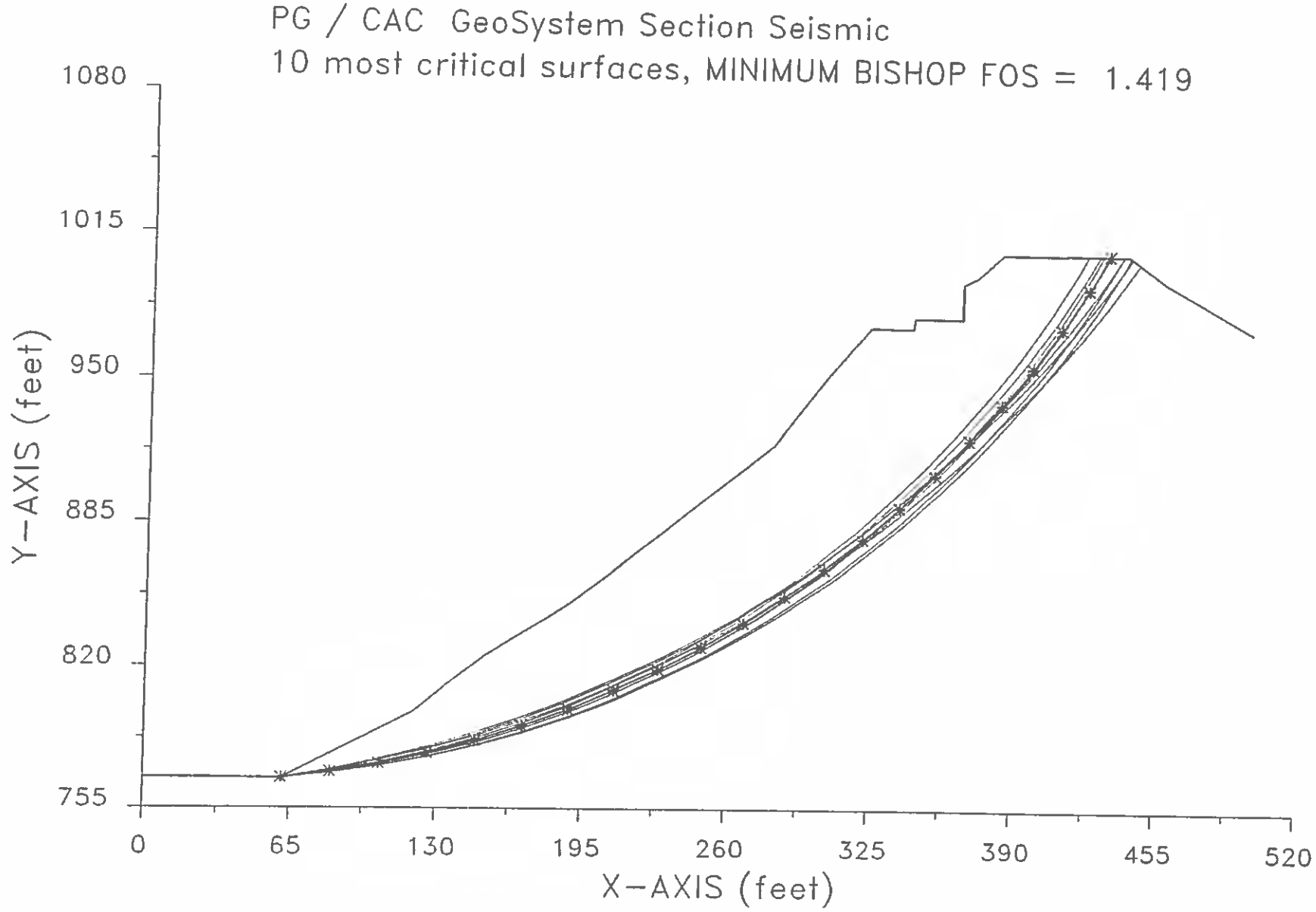

PG / CAC GeoSystem Section Seismic
10 most critical surfaces, MINIMUM BISHOP FOS = 1.419
1080
1015
950
885
820
755
Y-AXIS (feet)
0
65
130
195
260
325
390
455
520
X-AXIS (feet)

Figure 4

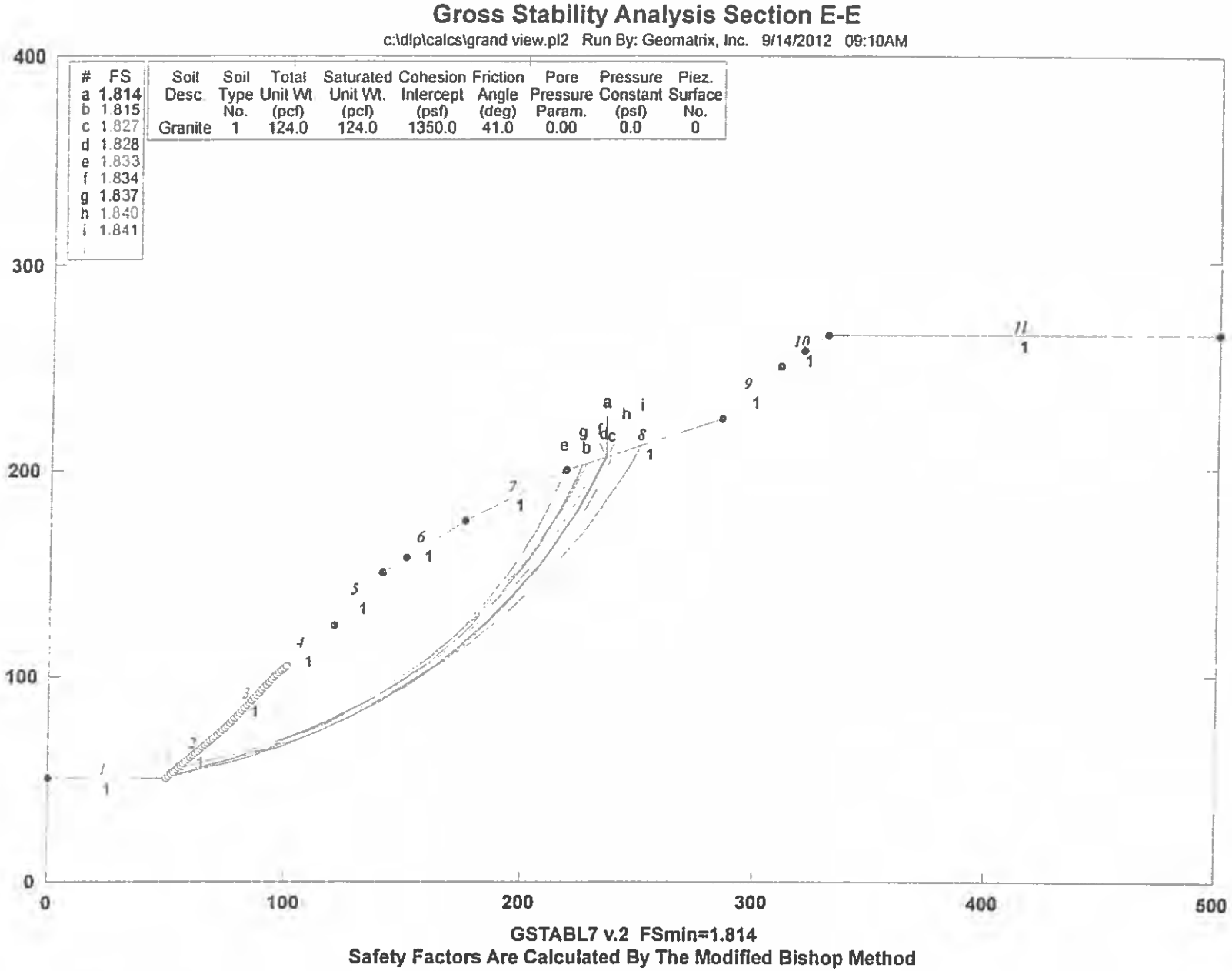

Gross Stability Analysis Section E-E
c:\dlp\calcs\grand view.pl2 Run By: Geomatrix, Inc. 9/14/2012 09:10AM
# FS
a 1.814
b 1.815
c 1.827
d 1.828
e 1.833
f 1.834
g 1.837
h 1.840
i 1.841
Soil Desc | Soil Type No. | Total Unit Wt (pcf) | Saturated Unit Wt. (pcf) | Cohesion Intercept (psf) | Friction Angle (deg) | Pore Pressure Param. | Pressure Constant (psf) | Piez. Surface No.
Granite | 1 | 124.0 | 124.0 | 1350.0 | 41.0 | 0.00 | 0.0 | 0
400
300
200
100
0
0
100
200
300
400
500
GSTABL7 v.2 FSmin=1.814
Safety Factors Are Calculated By The Modified Bishop Method

Figure 5

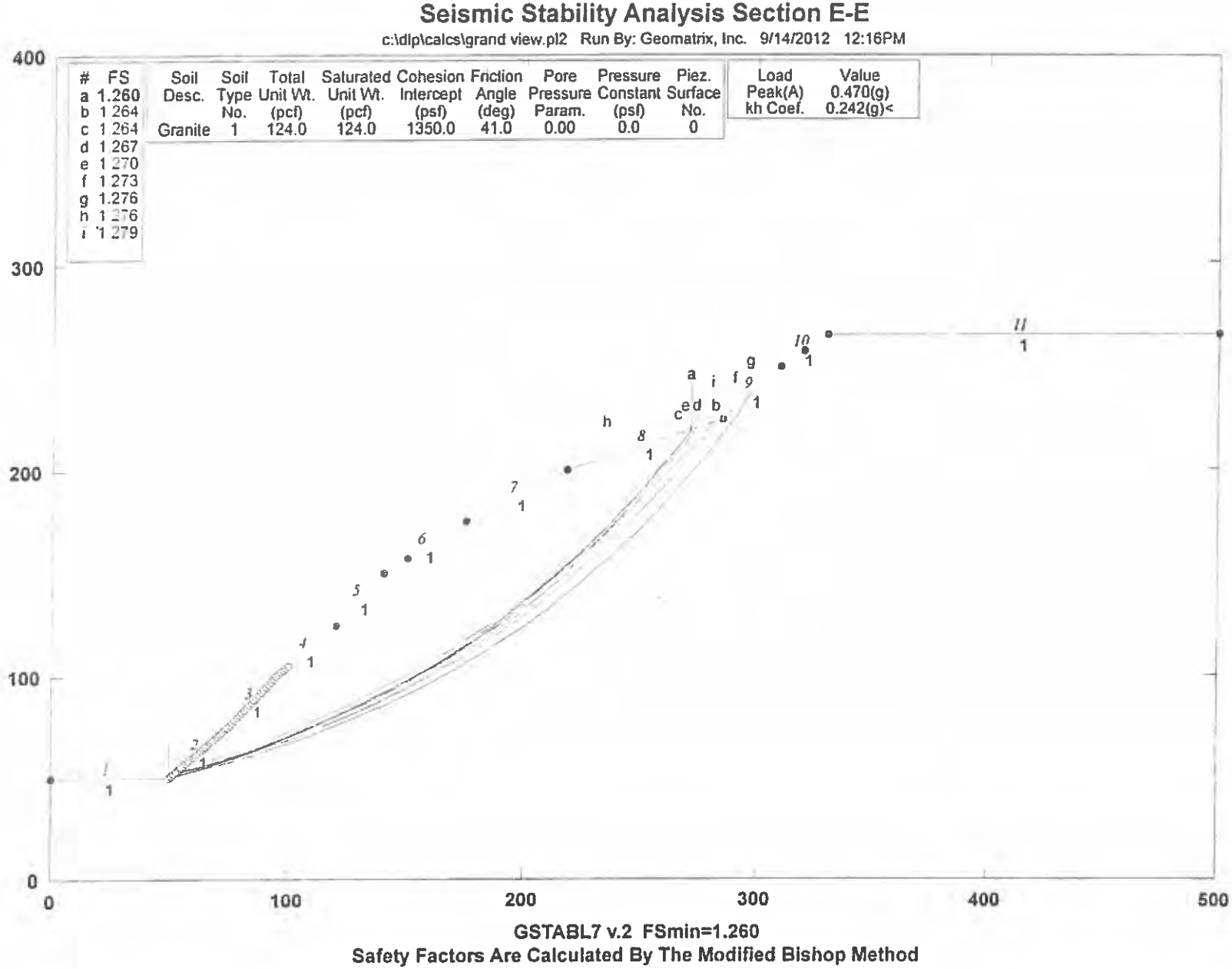

Seismic Stability Analysis Section E-E
c:\dlp\calcs\grand view.pl2 Run By: Geomatrix, Inc. 9/14/2012 12:16PM
# FS
a 1.260
b 1.264
c 1.264
d 1.267
e 1.270
f 1.273
g 1.276
h 1.276
i 1.279
Soil Desc. | Soil Type No. | Total Unit Wt. (pcf) | Saturated Unit Wt. (pcf) | Cohesion Intercept (psf) | Friction Angle (deg) | Pore Pressure Param. | Pressure Constant (psf) | Piez. Surface No.
Granite | 1 | 124.0 | 124.0 | 1350.0 | 41.0 | 0.00 | 0.0 | 0
Load Peak(A) 0.470(g)
Value kh Coef. 0.242(g)<
0
100
200
300
400
0
100
200
300
400
500
GSTABL7 v.2 FSmin=1.260
Safety Factors Are Calculated By The Modified Bishop Method

Figure 6

Response to Question 2:
The "potential" earthquake-induced landslide zones mapped in the CDMG Seismic Hazard Maps is basically based on the steepness of the slope, the potential of seismic activity and the type of earth material and the geologic structure of bedrock. A site located within the zones means that the site has a potential of earthquake-induced landslide and not the site will have earthquake-induced landslide. Therefore, a geologic and soils engineering report is required to address the seismic slope stability analyses for residential development if the site falls into the following conditions:

1. The site is located within the "potential" earthquake-induced landslide zones as mapped in the CDMG Seismic Hazard Maps and the proposed residential development has three floor levels or greater.

2. The site is located within the "potential" earthquake-induced landslide zones as mapped in the CDMG Seismic Hazard Maps and the number of proposed residence is four or greater.

Although portions of the site are located within one of the "potential" earthquake-induced landslide zones as mapped in the California of Mines and Geology (CDMG) Seismic Hazard Maps (see Figure 7), no evidence of deep-seated slope failure was observed within the site and no landslide was mapped within the site or in immediate site vicinity in the published geologic maps.

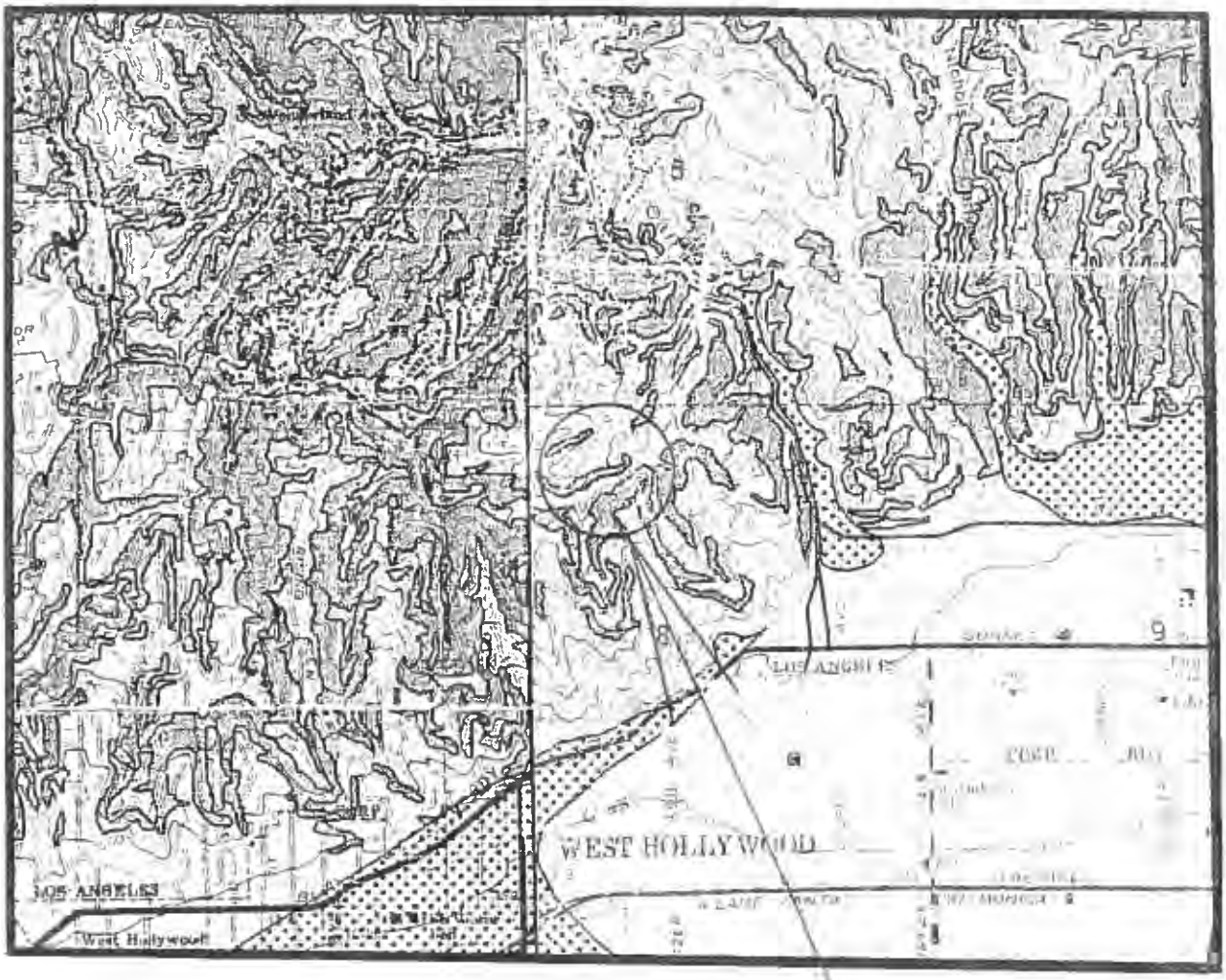
The gross and surficial slope stability of the entire southeast-facing slope descending from Grand View Drive to the toe of the slope were analyzed by GeoSystemes in 1997. The analyses indicated factors of safety greater than the minimum code requirement for static gross slope stability and static surficial slope stability. For your convenience, the graphic output of the static gross slope stability analysis is presented in Figure 2 and the output of the static surficial slope stability analysis is presented in Figure 8.

The static and seismic gross slope stability of the entire southeast-facing slope descending from Grand View Drive to the toe of the slope were analyzed by Parmelee/Geology in 2001. The analyses indicated factors of safety greater than the minimum code requirements for both static and seismic gross slope stability. For your convenience, the graphic output of the static and seismic gross slope stability analyses are presented in Figures 3 and 4.

The static and seismic gross slope stability of the southeast-facing slope were updated by Geomatrix in the referenced Geomatrix report dated September 10, 2012 due to the update requirements for the use of greater seismic coefficient in the seismic slope stability analyses. The update slope stability analyses indicated factors of safety greater than the minimum code requirements for both static and seismic gross slope stability For your convenience, the graphic output of the update static and seismic gross slope stability analyses are presented in Figures 5 and 6.

The stability of temporary excavation and retaining wall design were analyzed by Parmelee/Geology in 2001 and by Geomatrix (previously as Parmelee/Geology) in 2012. The recommendations for the design of temporary excavations and the recommendations for the design and construction of retaining wall were provided based on the findings of slope stability analyses for temporary excavation and retaining wall design so that the temporary excavation and retaining wall will be stable from engineering viewpoint and building code viewpoint.

The most recent geologic and soils engineering report approved by the City of Los Angeles Grading Division is dated March 31, 2015 and the most recent city of Los Angeles approval letter for geology and soils engineering reports is dated April 10, 2015. Both the most recent geologic and soils engineering report and City of Los Angeles approval letter are not older than four (4) years. Therefore, the findings and conclusions




## Legend

**Subject Site**

**Liquefaction**

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such as that mitigation as defined In Public Resources Code section 2693 (c) would be required

**Earthquake-Induced Landslide**

Areas where previous occurrence of landslide movement, or local topographic, geolog cal, geotechnical and subsurface water conditions Indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code section 2693 (c) would be required

N

Scale 1" = 2000'

(Adopted from State of California Seismic Hazard Zones.)

**C. Y. GEOTECH, INC.**

Engineering Geology
and Geotechnical Engineering

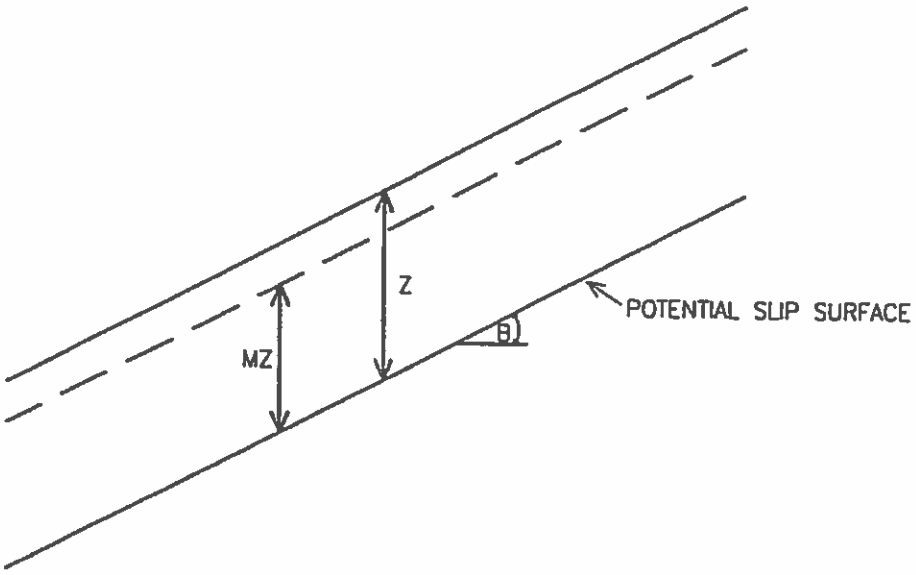
**Seismic Hazard Map**

**CYG-14-7350**

**Figure 7**

# SURFICIAL SLOPE STABILITY ANALYSIS

Reference: USGS Professional Paper 851, Campbell, 1975




$$F.S. = \frac{C + (\gamma_S - M\gamma_W)\ Z\ \cos^2 B\ \tan \phi}{\gamma_S Z\ \sin B\ \cos B}$$

C = COHESION = 150 PSF

$\phi$ = ANGLE OF SHEARING RESISTANCE = 36 degrees

$\gamma_S$ = UNIT WEIGHT OF THE SOIL = 120 PCF

$\gamma_W$ = UNIT WEIGHT OF WATER = 62.4 PCF

B = SLOPE ANGLE = 40 degrees

Z = VERTICAL DEPTH OF SLIP SURFACE = 2 FEET (3' MAX)

M = FRACTION OF Z SUCH THAT MS IS THE VERTICAL HEIGHT OF THE TEMPORARY WATER SURFACE ABOVE THE SLIP SURFACE = 1

$$F.S. = \frac{150 + (120 - 62.4)\ 2\ \cos^2 40\ \tan 36}{120\ 2\ \sin 40\ \cos 40} = 1.68 > 1.5 = O.K.$$

CALIFORNIA GEOSYSTEMS

*Project:* 8350 Grandview Drive
Los Angeles, California

*Date:* November 1997

*GS #* 97-912

**Figure 8**

of the investigation and the recommendations for the design and construction are still applicable as long as the proposed development remain the same and the permit process is still valid and not expired. Therefore, the bringing the entire project to meet the 2017 building code is not mandatary. For your information, an additional seismic slope stability analysis was performed using a update seismic coefficient (0.299g) in seismic slope stability analyses o meet 2017 regulations. The date of the most recent update City of Los Angeles regulations for the use of seismic coefficient in seismic slope stability analyses is July 16, 2014. The results of the analyses are presented in Appendix C. The analysis indicated a factor of 1.129 which is still greater than safety greater than the minimum code requitement (see Figure 9).

No evidence of deep-seated slope failure was observed within the site. No landslide was mapped within the site or in immediate site vicinity in the published geologic maps. The slope stability analyses performed by GeoSystems, Parmelee/Geology, Geomatrix and CYG indicated factors of safety greater than the minimum code requirement for gross slop stability, surficial slope stability and local slope stability for retaining wall and temporary excavation. Therefore, the potential impacts of landslide for the subject project should be considered in a level considered less than significant.

Question 3:
Would the Project result in substantial soil erosion or the loss of topsoil.

Response to Question 3:
The recommendations for the design and performance of grading, the design and construction of conventional spread footings, skin friction piles and end beating caissons, and the design and construction of retaining wall and temporary excavation were presented in the referenced geologic and soils engineering reports prepared by GeoSystems and Parmelee/Geology.

The addendum geologic and soils engineering reports prepared by C. Y. Geotech, Inc., are for the purposes of the filing of change of Consultant letter and the responses to City of Los Angels review letters dated January 30, 2013 and March 23, 2015. The concept and scope of proposed residential development remain the same. Therefore, the addendum geologic and soils engineering reports prepared by CYG do not include all recommendations for the design and performance of grading, the design and construction of conventional spread footings, skin friction piles and end beating caissons, and the design and construction of retaining walls and temporary excavations. The recommendations for the design and performance of grading, the design and construction of conventional spread footings, skin friction piles and end beating caissons, and the design and construction of retaining walls and temporary excavations in the referenced Geomtrix report dated September 19, 2012 are still applicable to the subject project.

As shown on the geologic maps and geologic cross sections shown on Plate 1, 2 and 3 which were enclosed in the referenced CYG report dated November 26, 2014, the grading of the site mainly include the cutting of onsite portion of the east-facing slope to create subterraneous building floors. The placement of fill soil within the site is limited to retaining wall backfill. Therefore, the evaluation of substantial soil erosion or loss of topsoil is not a concern for the subject project. Therefore, the potential impacts of substantial soil erosion or the loss of topsoil on the subject project should be in a level considered less than significant.

Question 4:
Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite, lateral spreading, subsidence, liquefaction or collapse.

PG1091E 6-08-·· 16:21

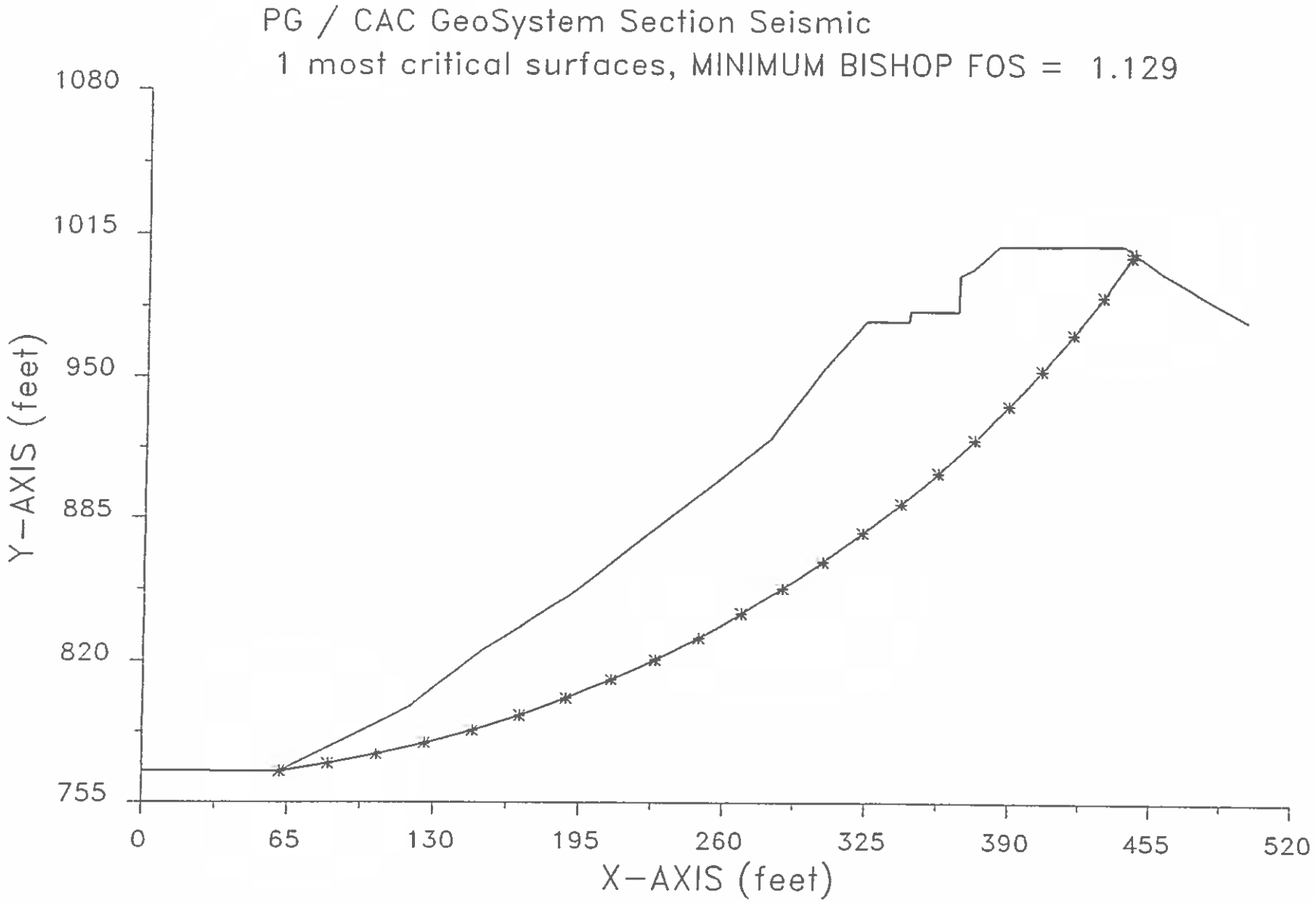



**Figure 9**

Response to Question 4:
The site is a hillside project and mainly composed of granite of igneous rock. The slope stability analyses by GeoSystems, Parmelee/Geology, Gematrix and CYG indicated adequate factors of safety for both static and seismic slope stability of the southeast-facing slope. The proposed single family residences will be supported by conventional spread footings, skin friction piles and/or end bearing caissons founded into granitic rock. Therefore, the site, as well as the recommended building foundations, should be considered stable fro geologic, soils engineer and building code viewpoints.

A rock foundation in a rock site will not subjected to earthquake-induced liquefaction, earthquake-induced lateral spreading, liquefaction-induced lateral spreading, ground subsidence or ground collapse. As shown on Figure 7, the site is not located with any of the potential earthquake-induced liquefaction zones as mapped in the CDMG Seismic Hazards Report. The potential impacts of earthquake-induced liquefaction, earthquake-induced lateral spreading, liquefaction-induced lateral spreading, earthquake-induced ground subsidence, earthquake-induced ground collapse and earthquake-induced foundation settlement to the suject site should be in a level considered less than significant.

## ENDING

We appreciate the opportunity for providing this professional service. If you have any questions regarding this report, please do not hesitate to contact us.

Very truly yours,
C. Y. Geotech, Inc.

Paul Cai
RCE 80352

John T. Tsao
RCE 46886/CEG 1783

Encl: References
Appendix A, Geology and Soils Questions from Review of MND
Appendix B, Topographic Map and Cross Section Showing Southeast-Facing Slope
Appendix C, Additional Slope Stability Analysis by CYG

cc: (5) Addressee

## REFERENCES


1. GeoSystems, November 12, 1997, Soils and Engineering-Geologic Investigation for Proposed Single-Family Residence, Lots 95 & 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

2. City of Los Angeles Geology and Soils Report Correction Letter Dated December 16, 1997 (Log 23068).

3. GeoSystems, January 19, 1998, Response to City of Los Angels department of Building and safety, Grading Division Geotechnical Review Letter for Lots 95 & 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

4. GeoSystems, April 2, 1998, Revised Temporary Stability Calculation, Lots 95 & 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

5. City of Los Angeles Geology and Soils Report Approval Letter Dated April 2,1998 (Log 23791).

6. Parmelee/Geology, December 9, 2001, Geologic and Soils Engineering Update Report, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

7. City of Los Angeles Approval Letter Dated February 20, 2002 (Log# 35753).

8. Parmelee/Geology, May 19, 2002, Geologic and Soils Engineering Report, Proposed Two Residences, Lots 97 and 98, Tract 865, Adjacent to 8350 Grandview Drive, Los Angeles, California.

9. City of Los Angeles Approval Letter Dated June 27, 2002 (Log# 36891).

10. Parmelee/Geology, March 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

11. Parmelee/Geology, April 14, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

12. City of Los Angeles Inter-Department Correspondence, April 25, 2003, 8350 Grandview Drive (BD 401611).

13. Parmelee/Geology, May5, 2003, Response to City Review Letter Dated April 25, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

14. City of Los Angeles Inter-Department Correspondence, May 14, 2003, 8350 Grandview Drive (BD 401611).

15. Parmelee/Geology, May 25, 2003, Response to City Review Letter Dated May 14, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

16. Parmelee/Geology, October 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

17. Parmelee/Geology, November 26, 2003, Additional Information, Proposed Two Residences, Lots 95, 96, 97 and 98, Tract 865, 8350 Grandview Drive, Los Angeles, California.

18. Geomatrix, Inc., September 19, 2012, Geologic and Soils Engineering Update Report, Proposed Four Hillside Residences and Street Improvement, Lot 95, 96, 97 and 98, Tract 865, 8350, 8354, 8358 and 8362 Grand View Court, Los Angeles, California.

19. City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013 (Log# 79258).

20. C. Y. Geotech, Inc., November 10, 2014, Letter of Change of Geologist and Soils Engineer of Record, Proposed

Four Single Family Residences, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California.

21. C. Y. Geotech, Inc., November 26, 2014, Response to City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

22. City of Los Angeles Geology and Soils Report Correction Letter Dated March 23, 2015 (Log# 79258-01).

23. C. Y. Geotech, Inc., March 31, 2015, 2015, Response to City of Los Angeles Geology and Soils Report Correction Letter Dated march 23, 2015, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

24. City of Los Angeles Geology and Soils Report Approval Letter Dated April 10, 2015 (Log# 79258-02).

# APPENDIX A

## GEOLOGY AND SOILS QUESTIONS FROM REVIEW OF MND

document fails to provide sufficient information regarding roadway conditions and access issues, or provide a map showing the recommended routing showing the Crisler Way turn. As a result the analysis of the potential for traffic impacts is underestimated and the potential for impacts remains, as detailed in Section V of this comment letter.

2-12 CEQA CRISLER SLOPE DESCRIPTION

*I.g.* *Inadequate Description of Existing Slope Conditions*

As shown in **Figures 2 and 3**, the project site is located on a steep slope. The MND does indicate, on page 43, that as: "noted in the LADBS Approval Letter, the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope." This is the only substantive description of existing slope conditions in the area and is very non-specific as to the location of slopes, particularly slopes of 1:1. The environmental document for the project needs to include a copy of the slope analysis. In addition, the quoted language from the MND does not identify slopes along the proposed extension of Crisler Way; the description is only of the area "below the proposed extension of Crisler Way." The MND is deficient in its description of geotechnical conditions for the whole site (Crisler Way extension and single-family lots). This is evidence of the MND's failure to analyze the whole of the action.

2-13 CEQA - FIRE HAZARD

I.h. *Inadequate Description of Very High Fire Severity Zone Conditions in Project Area and Fire History*

The property has been officially mapped in a "Very High Fire Hazard Severity Zone" due to its location in a fire-prone hillside area of the City. It is identified as such in the City's ZIMAS system and on the Parcel Profile Reports for the project site. The City has defined the "Very High Fire Hazard Severity Zone" as follows:

> "Any area within the City of Los Angeles that poses a significant threat of fire from adjoining natural brush hillside areas and which is determined by the following factors: topography, infrastructure, fire protection, population density, types of construction, weather, existing fire codes and ordinances, and fire history." LAMC Section 57.202.

The City's Zone Information and Map Access System ("ZIMAS") describes the Very High Fire Hazard Severity Zone as follows:

> "Lands designated by the City of Los Angeles Fire Department pursuant to Government Code 51178 that were identified and recommended to local agencies by the Director of Forestry and Fire Protection based on criteria that includes fuel loading, slope, fire weather, and other relevant factors. These areas must comply with the Brush Clearance Requirements of the Fire Code. The Very High Fire Hazard Severity Zone (VHFHSZ) was first established in the City of Los Angeles in 1999 and replaced the older 'Mountain Fire District' and 'Buffer Zone.'"

*VI.c. Geology and Soils*

| VI GEOLOGY AND SOILS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| iv) Landslides? | ☒ | ☐ | ☐ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgements:**

According to ZIMAS and page 45 of the MND: "The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides." We have not been able to review the current geotechnical reports for the project as a whole, since the geotechnical reports for the project are not in the project file (see **Appendix E**). We were only able to obtain a copy of the September 19, 2012 Soils and Geology Report (PG1091) and associated Correction Letter. We are therefore unable to verify that impacts would be reduced to a level considered less than significant.

According to page 46 of the MND:

> The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced with the following Regulatory Compliance Measure (RCM) RC-GEO- 3 which, requires the Applicant to submit a Geology and Soils Report to the Department of Building and Safety for review. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development.

The MND is deficient because is fails to provide information on the remedial grading, retaining walls, and conventional and/or drilled-pile foundations required for the project or to identify the required conditions/mitigations specified in the report. In addition, it is unclear whether the 2015 geotechnical report for the project addressed the project as a whole, since it appears that the B-permit for Crisler Way and the permits for the four single-family dwellings, which were issued June 8, 2015, were processed separately. As noted on page i of the MND:

2-42 CEQA - GED PROJECT CHANGES SINCE PERMITS ISSUED

The proposed residences were previously permitted by the Los Angeles Department of Building and Safety (LADBS); however, subsequent to the issuance of the building permits, LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the building permits because the project site fronts a Substandard Hillside Limited Street that is not fully improved and the Applicant had not obtained the requisite approvals as required by Los Angeles Municipal Code (LAMC) Sections 12.24 X.28(a)(7)(i) and (ii).

The MND fails to indicate whether any changes have been made to the proposed project, from the project that the City mistakenly issued permits for in 2015, and thus it is unclear whether the 2015 geotechnical report and the 2015 Geology and Soils Report Approval Letter address the project as currently proposed. According to page 46 of the MND:

2-43 CEQA GED 2017 BUILDING CODE

Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the **2014 City of Los Angeles Building Code**. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than significant. (Emphasis added).

Although the project applications for each of the four single-family homes were filed in November of 2015, they were not accepted for review until March of 2017, as shown in **Attachment H**. Projects submitted after January of 2017 are subject to the

2017 Building Code. Since the applications were not accepted for review until March of 2017, the projects should arguably be subject to the 2017 building code and the approval letter may not be accurate. In the absence of a clear and complete project description, public access to the geotechnical, soils and grading reports, and a determination of whether the project is subject to the 2017 building code, the potential for soil stability impacts remains. In addition, as noted in MND Appendix D: "The subject lots are located below the proposed Crisler Way at the top of an approximately 200 foot high average slope gradient of about 40 degrees with localized areas steeper than 1: 1. The earth materials at the subsurface exploration locations consist of up to 2 feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock." Therefore the potential for grading and construction to result in the loss of topsoil also remains potentially significant.

*VI.d. Hazards and Hazardous Materials*

2-44 CEQA

FIRE HAZARD

| VIII HAZARDS AND HAZARDOUSMATERIALS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☒ | ☐ | ☐ | ☐ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As discussed earlier in this comment letter, the proposed project is located in a High Fire Severity area on a site that previously burned in the Kirkwood Bowl Fire (see **Figure 8**) in an area is characterized by very narrow roadways. Maintenance of roadway and emergency access is a very important issue for residents along these narrow streets. Both Yucca Trail and Grand View Drive are substandard streets of limited width. (See MND Appendix F).

As noted in the City of Los Angeles's analysis of the Kirkwood Bowl/Laurel Canyon fire (see **Attachment D**) which destroyed 23 homes, including 14 on Grand View Drive and three on Crisler Way, partially ruined another five structures, and caused an estimated $4 million in damages in 1979:[3]

> The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

[3] City of Los Angeles Department of Fire, Analysis of Greater Alarm Operations, 9-16-79, page 1-2.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less-than-significant Impact | No Impact |
|---|---|---|---|---|
| **VI. GEOLOGY AND SOILS.** Would the project: | | | | |
| a. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii. Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv. Landslides? | ☐ | ☐ | ☒ | ☐ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |

Unless noted otherwise, the following impact analysis is based on the LADBS Geology and Soils Report Approval Letter ("LADBS Approval Letter") dated April 10, 2015, provided in **Appendix D**, and the Geology and Soils Reports referenced therein as listed in **Table 4.6-1, Project Geology and Soils Reports**. As noted in the LADBS Approval Letter, the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope. Earth materials identified at subsurface exploration locations consist of up to two (2) feet of uncertified fill underlain by silty sand, natural residual soils, and granite bedrock.

**Table 4.6-1**
**Project Geology and Soils Reports**

| Geology Report | Report Number | Date of Document | Prepared By |
|---|---|---|---|
| Addendum Report | CYG-14-7350 | 03/31/2015 | C.Y. Geotech, Inc. |
| Department Correction Letter | 79258-01 | 03/23/2015 | LADBS |
| Addendum Report | CYG-14-7350 | 11/26/2014 | C.Y. Geotech, Inc. |
| Responsibility Letter | CYG-14-7350 | 11/10/2014 | C.Y. Geotech, Inc. |
| Department Correction Letter | 79258 | 01/30/2013 | LADBS |
| Geology/Soil Report | PG 1091 | 09/19/2012 | GeoMatrix |
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log #23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | Geosystems |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |

*a.* ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

*i.* ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project site is located within a State-designated Alquist-Priolo Zone or other designated fault zone. Alquist-Priolo Earthquake Fault Zones are regulatory zones that encompass surface traces of active faults that have potential for future surface fault rupture. Fault rupture occurs when movement on a fault breaks through the earth's surface. Faults that show evidence of movement within the past 11,000 years (during the Holocene Epoch) are referred to as active faults. The California Geological Survey establishes regulatory zones around active faults, called Alquist-Priolo Earthquake Fault Zones. These zones extend from 200 to 500 feet on each side of the known fault. The zones identify areas where a potential surface fault rupture could prove hazardous for buildings used for human occupancy. Development located within an Alquist-Priolo Earthquake Fault Zone or other designated fault zone is required to prepare special geotechnical studies to characterize hazards from any potential surface ruptures.

The nearest known fault to the project site is the Hollywood Fault. The Site is not located in the Alquist-Priolo Fault Zone for the Hollywood Fault[17] or a Preliminary Fault Rupture Study Area.[18] Given that the project site is not located within an Alquist-Priolo Fault Zone, the potential risk for surface fault rupture through the site is considered low. Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[17] California Geological Survey, Earthquake Zones of Required Investigation Hollywood Quadrangle, Earthquake Fault Zones Official Map, November 6, 2014, http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD maps/Hollywood_EZRIM.pdf (accessed November 2016).

[18] Los Angeles Dept. of City Planning, ZIMAS, Seismic Hazards, http://zimas.lacity.org (accessed November 2016).

*ii. Strong seismic ground shaking?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project represents an increased risk to public safety or destruction of property by exposing people, property, or infrastructure to seismically induced ground shaking hazards greater than the average risk associated with other locations in Southern California. The project site is located within a seismically active region, as is all of Southern California. The intensity of ground shaking depends primarily on the earthquake's magnitude, distance from the source, and the site response characteristics. Several active and potentially active faults could affect the project site. The potential for ground shaking to result in ground failure impacts are discussed and evaluated below in subsections VI. a.iii. and VI.a.iv.

Although future earthquakes could result in a perceptible degree of seismic ground shaking at the Site, the ground shaking would not be considered strong or of sufficient strength to expose people or structures to potential substantial adverse effects. In addition, current California Building Codes and seismic standards specified in the Los Angeles Building Code as approved by the LADBS require that new buildings be designed to resist ground shaking through the use of shear panels, moment frames, and structural reinforcement. The design and construction of the Project would be required to conform to current Building Codes and the Site-specific geotechnical recommendations of the previously prepared Geology and Soils Reports to minimize potential impacts due to strong seismic ground shaking. Therefore, seismic ground shaking impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

*iii. Seismic-related ground failure, including liquefaction?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project site is located within a liquefaction zone. Liquefaction is the loss of soil strength or stiffness due to buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine- to medium-grained, cohesionless soils. The State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that the project site is not located within an area designed as a liquefaction zone, where historical occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements.[19] Therefore, impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

*iv. Landslides?*

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A project-related, significant adverse effect may occur if the Project is located in a hillside area with soil conditions that would suggest a high potential for sliding. The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides.[20]

[19] California Geological Survey, Earthquake Zones of Required Investigation Hollywood Quadrangle, Earthquake Fault Zones Official Map, Seismic Hazard Zones, March 25, 1999, http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM.pdf (accessed November 2016).

[20] Ibid.

The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced with the following Regulatory Compliance Measure (RCM) RC-GEO-3 which, requires the Applicant to submit a Geology and Soils Report to the Department of Building and Safety for review. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***b. Would the project result in substantial soil erosion or the loss of topsoil?***

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have significant sedimentation or erosion impacts if it would: (1) constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or (2) accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on site.

Although development of the Project has the potential to result in the erosion of soils during site preparation and construction, erosion would be reduced by implementation of stringent erosion controls imposed by the City through standard grading and building permit conditions. During Project operations, soil erosion would be minimized with the installation and maintenance of landscaping and stormwater collection and drainage. Although minor erosion and siltation could occur during grading, all grading activities would require grading permits from the LADBS, which include requirements and standards designed to limit potential impacts to acceptable levels. The Project would also install a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope.[21] In addition, all on-site grading and site preparation would comply with applicable provisions of Chapter IX, Division 70 of the LAMC, which addresses grading, excavations, and fills. Through compliance with regulatory requirements and permit conditions, potential soil erosion impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

[21] CAC Development, Crisler Way, April 12, 2016.

**Less-than-significant Impact.** Based on the criteria established in the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it could cause or accelerate geologic hazards causing substantial damage to structures or infrastructure, or expose people to substantial risk of injury. For the purpose of this specific issue, a significant impact may occur if the Project is built in an unstable area without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property.

As discussed above, the Site is located within an area subject to potential seismically-induced slope instability likely due to the presence of relatively steep slopes. Soil stabilization measures incorporated into the grading plan would include soil remediation, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to support the proposed structures. The Project would be required to incorporate slope reinforcement measures for compliance with City Code and site-specific recommendations by geology and soils engineers. Compliance with existing regulations and geology and soil engineer recommendations, as required by Regulatory Compliance Measure (RCM) RC-GEO-1, which requires the design and construction of the project to comply with the California Department of Conservation, Division of Mines and Geology (CDMG), which provides guidance for the evaluation and mitigation of earthquake-related hazards, and with the seismic safety requirements in the Uniform Building Code (UBC) and the LAMC. Compliance with such requirements would reduce seismic ground shaking impacts to the maximum extent practicable with current engineering practices; RC-GEO-2, which requires that the grading plan conform with the City's Landform Grading Manual guidelines, subject to approval by the Department of Building and Safety's Grading Division, and appropriate erosion control and drainage devices to the satisfaction of the Building and Safety Department; and RC-GEO-6, which requires that expansive soils areas be assessed in a geotechnical report and compliance with conditions contained in the Department of Building and Safety's Soils Report Approval letter when issued, would reduce landslide impacts to less-than-significant.

Lateral spreading is a term referring to landslides that form on gentle slopes and have a fluid-like flow movement. Potential landslide impacts are addressed above in Subsection VI.a.iv.

Subsidence is a form of ground failure that occurs when subsurface fluids such as groundwater or petroleum are extracted. The Seismic Hazard Zone Report for the Hollywood Quadrangle indicates that the historically-highest groundwater level at the site is greater than 40 feet below ground surface.[22] The project proposes to grade approximately 800 cy of earth material to a depth of approximately 30 feet. Therefore, no groundwater would be expected to be encountered during Project construction, and potential subsidence impacts would be less-than-significant. Subsection VI.a.iii. provides a discussion of liquefaction potential, which would not be present on the site as indicated by the California Geologic Survey Seismic Hazard Zone map. The Project would have no impact regarding liquefaction.

In summary, potential impacts related to soil instability would be less-than-significant because the Project would be required to comply with applicable RCMs, City building codes and implement site-specific recommendations of a soils engineer to address soil stability. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

[22] California Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, California, 1998, Plate 1.2, Historically Highest Ground Water Contours and Borehole Log Data Locations, Hollywood Quadrangle. http://gmw.consrv.ca.gov/shmp/download/quad/HOLLYWOOD/reports/holly_eval.pdf (accessed November 2016).

***d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

**Less-than-significant Impact.** Based the *L.A. CEQA Thresholds Guide*, a project would normally have a significant geologic hazard impact if it would cause or accelerate geologic hazards that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. A significant impact may occur if the project is built on expansive soils without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property. Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation, heaving and cracking of building foundations could result.

The LADBS Approval Letter describes the earth materials of the project site, which include small amounts of up to two feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock. These materials would not be considered expansive, as they would not contain significant amounts of clay particles with potential to swell or shrink. Construction of the Project would be required to comply with the City's applicable building codes, which include building foundation requirements appropriate to site-specific conditions. Therefore, soil expansiveness impacts would be less-than-significant.

***Mitigation Measures:*** No mitigation measures are required.

***e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

**No Impact.** A project would cause a significant impact if adequate wastewater disposal is not available. The project site is located in a developed area of the City served by an existing wastewater collection, conveyance, and treatment system operated by LA Sanitation, a part of the City Department of Public Works. No septic tanks or alternative disposal systems are necessary, nor are they proposed. Therefore, no impact regarding septic tanks or alternative wastewater disposal systems would occur.

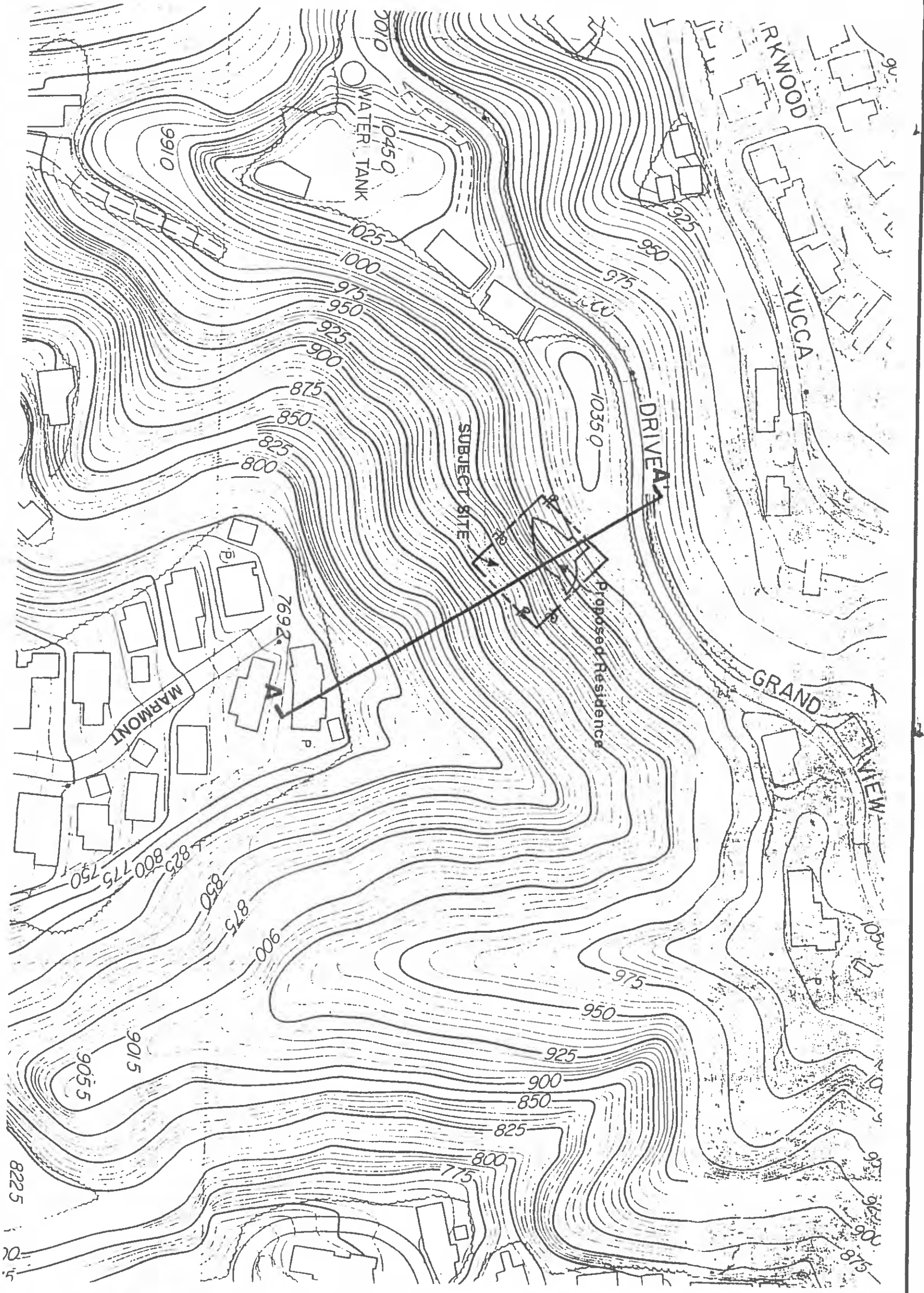
***Mitigation Measures:*** No mitigation measures are required.

### *Cumulative Impacts*

This cumulative impact analysis considers the impact of the Project in connection with eight (8) related projects (see Section 3.9, Related Projects) with respect to the topics listed in the previous geology and soils analysis. Geological hazards are site-specific and there is little connection between the hazards posed to the Project and those to related projects. Given that the region is seismically active, it is likely that related projects would be at risk from similar geological hazards as the proposed Project. As with the Project, adherence to applicable regulations, building codes, and comprehensive engineering practices, geologic hazards would be less-than-significant. Therefore, cumulative impacts related to geological hazards would be less-than-significant.

## APPENDIX B

## TOPOGRAPHIC MAP AND CROSS SECTION SHOWING SOUTHEAST-FACING SLOPE




Map Reference: Santa Monica Mountains Topographic Map Sheets No. 178 & 200, published by the City of Los Angeles

GEOSYSTEMS
ENVIRONMENTAL AND GEOTECHNICAL CONSULTANTS
312 WESTERN AVE GLENDALE CA 91201-2836
PHONE 818-500-9533 FAX 818-500-0134

# REGIONAL TOPOGRAPHIC MAP

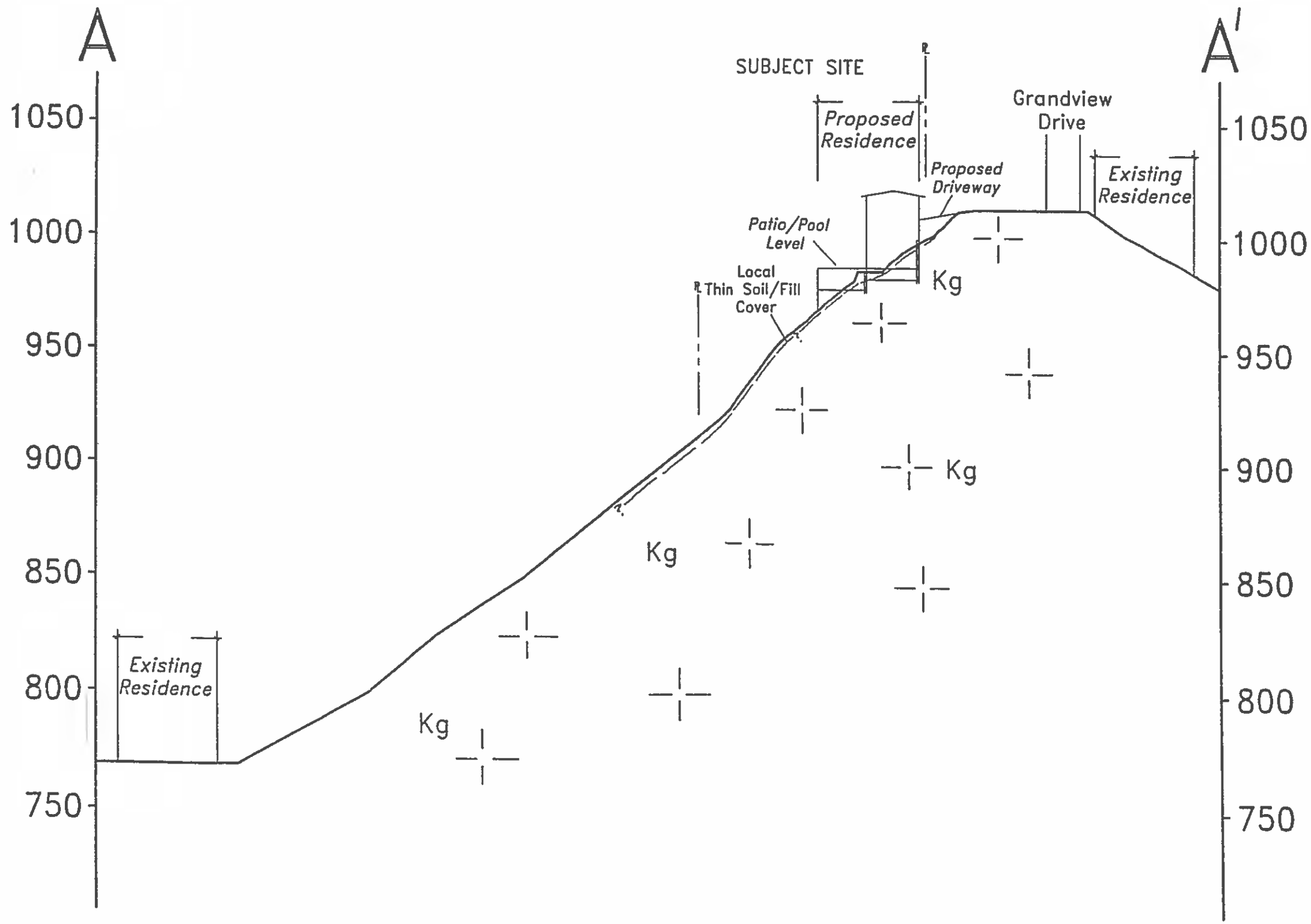
Scale: 1" = 100'

Lots 95 & 96, Tract No. 865
8350 Grandview Drive, Los Angeles, California

GS 97-912

DATE: November 1997

PLATE 1




GEOLOGIC CROSS SECTION A-A'

Scale: 1" = 50'

Lots 95 & 96, Tract No. 865

8350 Grandview Drive, Los Angeles, California

GS 97-912

DATE: November 1997

PLATE GS-1

GEOSYSTEMS
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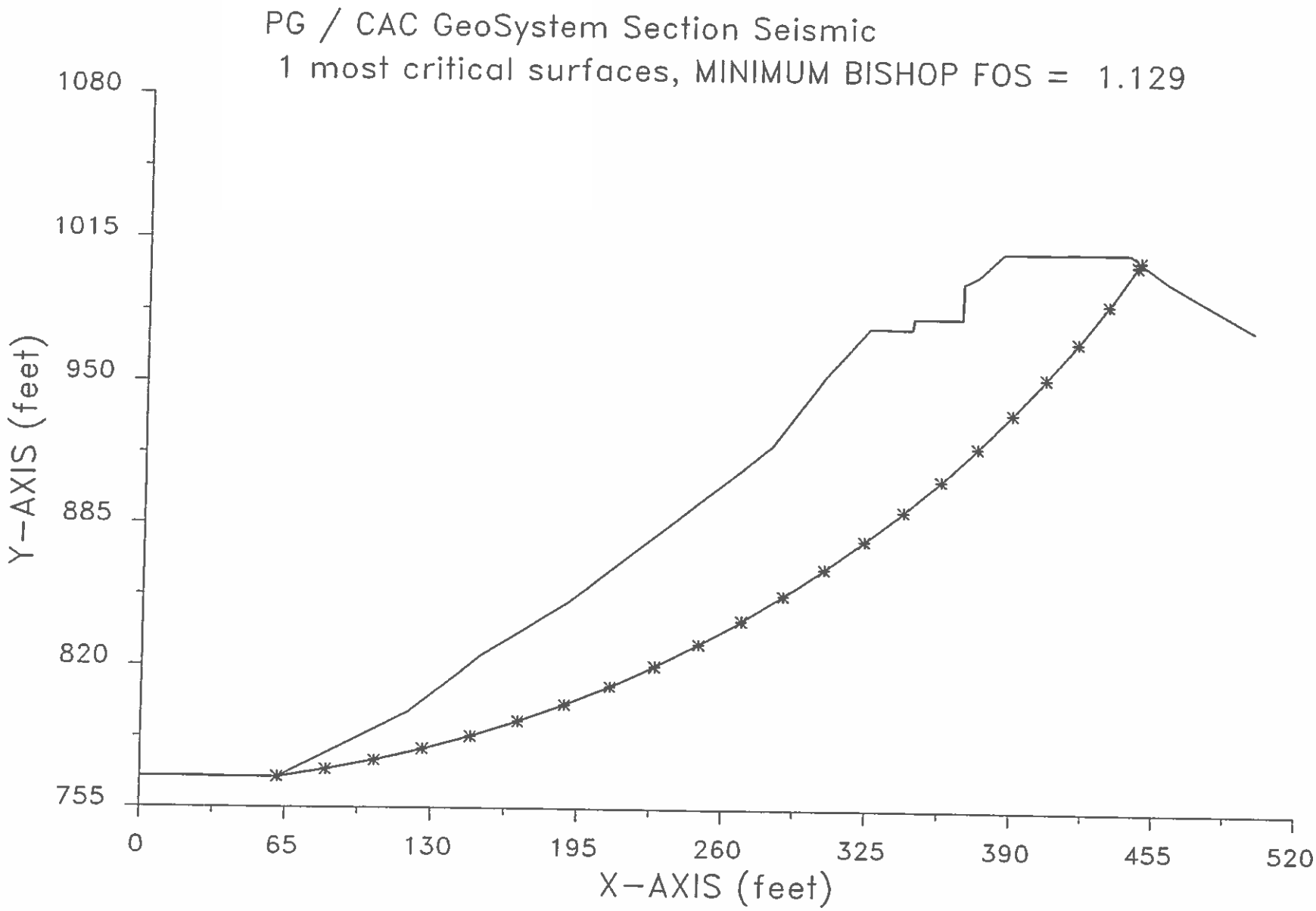
# APPENDIX C

## ADDITIONAL SLOPE STABILITY ANALYSIS BY CYG

PG1091E 6-08-** 16:21



Problem Description : PG / CAC GeoSystem Section Seismic

---
SEGMENT BOUNDARY COORDINATES
---

16 SURFACE boundary segments

| Segment No. | x-left (ft) | y-left (ft) | x-right (ft) | y-right (ft) | Soil Unit Below Segment |
|---|---|---|---|---|---|
| 1 | .4 | 769.2 | 61.5 | 769.0 | 1 |
| 2 | 61.5 | 769.0 | 119.6 | 799.2 | 1 |
| 3 | 119.6 | 799.2 | 151.0 | 824.8 | 1 |
| 4 | 151.0 | 824.8 | 189.4 | 849.2 | 1 |
| 5 | 189.4 | 849.2 | 280.3 | 921.0 | 1 |
| 6 | 280.3 | 921.0 | 303.5 | 952.0 | 1 |
| 7 | 303.5 | 952.0 | 323.3 | 975.0 | 1 |
| 8 | 323.3 | 975.0 | 342.5 | 974.9 | 1 |
| 9 | 342.5 | 974.9 | 343.1 | 979.7 | 1 |
| 10 | 343.1 | 979.7 | 365.0 | 979.6 | 1 |
| 11 | 365.0 | 979.6 | 365.1 | 995.5 | 1 |
| 12 | 365.1 | 995.5 | 371.6 | 998.4 | 1 |
| 13 | 371.6 | 998.4 | 383.3 | 1009.0 | 1 |
| 14 | 383.3 | 1009.0 | 441.0 | 1009.4 | 1 |
| 15 | 441.0 | 1009.4 | 458.5 | 997.0 | 1 |
| 16 | 458.5 | 997.0 | 498.3 | 975.0 | 1 |

---
ISOTROPIC Soil Parameters
---

1 Soil unit(s) specified

| Soil Unit No. | Unit Weight Moist (pcf) | Unit Weight Sat. (pcf) | Cohesion Intercept (psf) | Friction Angle (deg) | Pore Pressure Parameter Ru | Pore Pressure Constant (psf) | Water Surface No. |
|---|---|---|---|---|---|---|---|
| 1 | 130.0 | 133.0 | 1350.0 | 41.00 | .000 | .0 | 0 |

A horizontal earthquake loading coefficient
of .299 has been assigned
A vertical earthquake loading coefficient
of .000 has been assigned

A critical failure surface searching method, using a random
technique for generating CIRCULAR surfaces has been specified.
1000 trial surfaces will be generated and analyzed.
1000 Surfaces initiate from each of 1 points equally spaced
along the ground surface between x = 61.5 ft
and x = 61.5 ft
Each surface terminates between x = 250.0 ft
and x = 480.0 ft
Unless further limitations were imposed, the minimum elevation
at which a surface extends is y = .0 ft

* * * * * DEFAULT SEGMENT LENGTH SELECTED BY XSTABL * * * * *
22.0 ft line segments define each trial failure surface.

ANGULAR RESTRICTIONS :
The first segment of each failure surface will be inclined within the angular range defined by :
Lower angular limit := -45.0 degrees
Upper angular limit := (slope angle - 5.0) degrees

Factors of safety have been calculated by the :

* * * * * SIMPLIFIED BISHOP METHOD * * * * *
The most critical circular failure surface is specified by 23 coordinate points

| Point No. | x-surf (ft) | y-surf (ft) |
|---|---|---|
| 1 | 61.50 | 769.00 |
| 2 | 83.21 | 772.54 |
| 3 | 104.77 | 776.92 |
| 4 | 126.15 | 782.14 |
| 5 | 147.30 | 788.18 |
| 6 | 168.20 | 795.04 |
| 7 | 188.82 | 802.71 |
| 8 | 209.13 | 811.18 |
| 9 | 229.09 | 820.42 |
| 10 | 248.68 | 830.44 |
| 11 | 267.86 | 841.21 |
| 12 | 286.61 | 852.72 |
| 13 | 304.90 | 864.94 |
| 14 | 322.70 | 877.87 |
| 15 | 339.99 | 891.48 |
| 16 | 356.73 | 905.76 |
| 17 | 372.90 | 920.67 |
| 18 | 388.48 | 936.20 |
| 19 | 403.45 | 952.32 |
| 20 | 417.78 | 969.02 |
| 21 | 431.45 | 986.26 |
| 22 | 444.44 | 1004.01 |
| 23 | 445.78 | 1006.01 |

**** Simplified BISHOP FOS = 1.129 ****

The following is a summary of the TEN most critical surfaces

Problem Description : PG / CAC GeoSystem Section Seismic

| | FOS (BISHOP) | Circle Center x-coord (ft) | Circle Center y-coord (ft) | Radius (ft) | Initial x-coord (ft) | Terminal x-coord (ft) | Resisting Moment (ft-lb) |
|---|---|---|---|---|---|---|---|
| 1. | 1.129 | -18.69 | 1329.14 | 565.85 | 61.50 | 445.78 | 1.262E+09 |
| 2. | 1.129 | -20.70 | 1347.95 | 584.76 | 61.50 | 450.92 | 1.364E+09 |
| 3. | 1.130 | -31.56 | 1339.71 | 578.25 | 61.50 | 442.38 | 1.214E+09 |
| 4. | 1.131 | -19.55 | 1312.15 | 549.16 | 61.50 | 438.58 | 1.148E+09 |
| 5. | 1.132 | -58.24 | 1412.53 | 654.57 | 61.50 | 451.53 | 1.436E+09 |
| 6. | 1.132 | 10.46 | 1287.52 | 521.03 | 61.50 | 447.84 | 1.267E+09 |
| 7. | 1.132 | -14.90 | 1350.50 | 586.50 | 61.50 | 454.91 | 1.435E+09 |
| 8. | 1.132 | -42.36 | 1356.08 | 596.19 | 61.50 | 442.10 | 1.222E+09 |
| 9. | 1.133 | -57.95 | 1390.61 | 632.99 | 61.50 | 445.13 | 1.301E+09 |
| 10. | 1.133 | 8.62 | 1256.37 | 490.23 | 61.50 | 431.97 | 1.051E+09 |

# C. Y. GEOTECH, INC.
## Engineering Geology and Geotechnical Engineering

9428 Eton Avenue, Unit M, Chatsworth, CA 91311
Tel: (818) 341-1899 Fax: (818) 341-1897 Email: cygeotech@sbcglobal.net

March 31, 2015

P.N. CYG-14-7350

CAC Development
1504 South Flower Street
Los Angeles, CA 90049

Subject: Response to City of Los Angeles Geology and Soils Report Correction Letter Dated March 23, 2015, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818 Crisler Way, Los Angeles, California

Dear Mr. Robert,

As requested, C. Y. Geotech (CYG), Inc. has prepared this report in response to the City of Los Angeles geology and soils report correction letter dated March 23, 2015 (Log# 79258-01). A copy of the city review letter is attached at the end of this report. For your convenience, the responses are presented following each review comment.

City Review Comment 1:
Please provide a copy of the report submitted to and approved by Public Works for review by LADBS. Please also provide a copy of the approval letter from Public Works.

Response to Review Comment 1:
A copy of the report submitted to and approved by the Public Works was enclosed in Appendix A of this report.

City Review Comment 2:
Will a cross lot drainage easement be feasible to convey site water as discussed in the previous item 5 response? Note: If a cross lot drainage easement is required, the surveyed metes and bounds of the proposed easement for this purpose on the offsite properties to benefit the subject properties will require written notarized consent from all property owners involved and shall be recorded at the Los Angeles County Recorder's office.

Response to Review Comment 2:
The cross lot drainage easement is feasible. The cross lot drainage easement has been approved and recorded as the County records.

City Review Comment 3:
Show the location and label all proposed shoring on the plot plan and cross sections. Note: It appears that shoring locations were shown to support the proposed street but not the proposed building excavations.

Response to Review Comment 3:
The construction concept and procedures for the construction of the proposed single family residences are listed below:

1. Soldier piles are to be installed along the property lines as shown on Plate 1 in the referenced CYG report dated November 26, 2014.

2. Excavation for the building pad areas will be extended all the way to the soldier piles along the property lines.

3. Building walls will be built. The subterraneous building wall portions will be constructed as retaining walls.

4. The spaces between the subterraneous building wall and the soldier along the property lines will be backfilled to the finish grade as proposed.

With the above-mentioned construction concept and procedures, no shoring system or soldier piles are required for the construction the building walls.

City Review Comment 4:
Verify whether or not the horizontal seismic coefficient used in the 09/19/2012 report is still applicable to the 2014 LABC and / or revise seismic slope stability analysis.

Response to Review Comment 4:
The building permit application was submitted in 2012 and the permit process is still valid and has not expired. Therefore, the horizontal seismic coefficient in the 09/19/2012 report is still applicable to this project.

City Review Comment 5:
Provide design seismic earth pressure for retaining walls exceeding a height of six feet in accordance with 2014 LABC.

Response to Review Comment 5:
The building permit application was submitted in 2012 and the permit process is still valid and has not expired. Therefore, the earth pressures recommended in 09/19/2012 report are still applicable to this project.

We appreciate the opportunity for providing this professional service. If you have any questions regarding this report, please do not hesitate to contact us.

Very truly yours,
C. Y. Geotech, Inc.










John T. Tsao
RCE 46886/CEG 1783

Paul Cai
RCE 80352

Encl: References
City of Los Angeles Correction Letter Dated March 23, 2015
Appendix A, Supporting Documents

cc: (5) Addressee

## REFERENCES


1. Parmelee/Geology, December 9, 2001, Geologic and Soils Engineering Update Report, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

2. City of Los Angeles Approval Letter Dated February 20, 2002 (Log# 35753).

3. Parmelee/Geology, May 19, 2002, Geologic and Soils Engineering Report, Proposed Two Residences, Lots 97 and 98, Tract 865, Adjacent to 8350 Grandview Drive, Los Angeles, California.

4. City of Los Angeles Approval Letter Dated June 27, 2002 (Log# 36891).

5. Parmelee/Geology, March 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

6. Parmelee/Geology, April 14, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

7. City of Los Angeles Inter-Department Correspondence, April 25, 2003, 8350 Grandview Drive (BD 401611).

8. Parmelee/Geology, May5, 2003, Response to City Review Letter Dated April 25, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

9. City of Los Angeles Inter-Department Correspondence, May 14, 2003, 8350 Grandview Drive (BD 401611).

10. Parmelee/Geology, May25, 2003, Response to City Review Letter Dated May 14, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

11. Parmelee/Geology, October 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

12. Parmelee/Geology, November 26, 2003, Additional Information, Proposed Two Residences, Lots 95, 96, 97 and 98, Tract 865, 8350 Grandview Drive, Los Angeles, California.

13. Geomatrix, Inc., September 19, 2012, Geologic and Soils Engineering Update Report, Proposed Four Hillside Residences and Street Improvement, Lot 95, 96, 97 and 98, Tract 865, 8350, 8354, 8358 and 8362 Grand View Court, Los Angeles, California.

14. City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013 (Log# 79258).

15. C. Y. Geotech, Inc., November 10, 2014, Letter of Change of Geologist and Soils Engineer of Record, Proposed Four Single Family Residences, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California.

16. C. Y. Geotech, Inc., November 26, 2014, Response to City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

17. City of Los Angeles Geology and Soils Report Correction Letter Dated March 23, 2015 (Log# 79258-01).

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS
PRESIDENT

E FELICIA BRANNON
VICE-PRESIDENT

JOSELYN GEAGA-ROSENTHAL
GEORGE HOVAGUIMIAN
JAVIER NUNEZ

# CITY OF LOS ANGELES
CALIFORNIA

ERIC GARCETTI
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES CA 90012

RAYMOND S. CHAN, C.E., S
GENERAL MANAGER

FRANK BUSH
EXECUTIVE OFFICER

## GEOLOGY AND SOILS REPORT CORRECTION LETTER

March 23, 2015

LOG # 79258-01
SOILS/GEOLOGY FILE - 2

Aaron Cohen
1504 S. Flower Street
Los Angeles, CA 90015

TRACT: 865
LOTS: 98 / 97 / 96 / 95
LOCATION: 1800 / 1806 / 1812 / 1818 Crisler Way

| CURRENT REFERENCE REPORT/LETTER(S) | REPORT No. | DATE OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Addendum Report | CYG-14-7350 | 11/26/2014 | C.Y. Geotech, Inc. |
| Oversized Docs. | " | " | " |
| Responsibility Letter | " | 11/10/2014 | " |

| PREVIOUS REFERENCE REPORT/LETTER(S) | REPORT No. | DATE OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Dept. Correction Letter | 79258 | 01/30/2013 | LADBS |
| Geology/Soil Report | PG 1091 | 09/19/2012 | GeoMatrix |
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | " |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |

The referenced current report concerning the proposed construction of a new, multi-level dwelling with pool on each of the subject lots, has been reviewed by the Grading Division of the Department of Building and Safety. Crisler Way (currently unimproved) adjacent to the subject lots will be improved, as part of the proposed development. Retaining walls are proposed as part of the building construction and for the street improvement. The drainage improvements proposed currently are not acceptable. The review of the subject current report cannot be completed at this time and will be continued upon submittal of an addendum to the report which shall include, but need not be limited to. the following:


AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

The review of the subject reports cannot be completed because the stability or safety of the proposed development cannot be determined at this time. The review will be continued upon submittal of an addendum to the reports which includes, but need not be limited to, the following:

(Note: Numbers in parenthesis ( ) refer to applicable sections of the 2014 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. Please provide a copy of the report submitted to and approved by Public Works for review by LADBS. Please also provide a copy of the approval letter from Public Works.

2. Will a cross lot drainage easement be feasible to convey site water as discussed in the previous item 5 response? Note: If a cross lot drainage easement is required, the surveyed metes and bounds of the proposed easement for this purpose on the offsite properties to benefit the subject properties will require written notarized consent from all property owners involved and shall be recorded at the Los Angeles County Recorder's office.

3. Show the location and label all proposed shoring on the plot plan and cross sections. Note: It appears that shoring locations were shown to support the proposed street but not the proposed building excavations.

4. Verify whether or not the horizontal seismic coefficient used in the 09/19/2012 report is still applicable to the 2014 LABC and / or revise seismic slope stability analysis.

5. Provide design seismic earth pressure for retaining walls exceeding a height of six feet in accordance with 2014 LABC.

The geologist and soils engineer shall prepare a report containing the corrections indicated in this letter. The report shall be in the form of an itemized response. It is recommended that once all correction items have been addressed in a response report, to contact the report review engineer and/or geologist to schedule a verification appointment to demonstrate compliance with all the corrections. Do not schedule an appointment until all corrections have been addressed. Bring three copies of the response report, including one unbound wet-signed original for microfilming in the event that the report is found to be acceptable.

CASEY LEE JENSEN (213)
Engineering Geologist Associate II

YING LIU
Structural Engineering Associate II

CLJ/YL:clj/yl
Log No. 79258-01
213-482-0480/90

cc: Robert Anderson, Applicant
C.Y. Geotech, Inc., Project Consultant
LA District Office

## APPENDIX A

## SUPPORTING DOCUMENTS

1. **Letter from CAC Development**
2. **Letter from Project Structural Engineer (#1) Including Public Work Approval Document**
3. **Document for Drainage Easement (#2)**
4. **Sequences of Excavation and Construction (#3)**
5. **Documents for Building Permit Application (#4 & #5)**

CAC DEVELOPMENT

# Crisler Way Project

April 8, 2015

To: Engineers – Jensen and Lui
Grading Division DB&S

Log # 79258-01

Properties Located at: 1800 /1806 /1812 /1818 Cristler Way, Los Angeles, CA 90046

Please attached responses to the Correction Letter dated March 23, 2015

1. Please provide a copy of the report submitted to and approved by Public Works for review by LADBS. Please also provide a copy of the approval letter from Public Works.

Please see attached Structural Engineer, for both the Roadway and the Houses Comment, and the approved "B" Permit and Bond. We have this phase of the project indexed.

2. Will a cross lot drainage easement be feasible to convey site water as discussed in the previous item 5 response? Note: If a cross lot drainage easement is required, the surveyed metes and bounds of the proposed easement for this purpose on the offsite properties to benefit the subject properties will require written notarized consent from all property owners involved and shall be recorded at the Los Angeles County Recorder's office.

Please see attached Civil Engineer's recorded document for Sewer and Storm Water, also note that we have clearances from Sanitation Dept. for this work.

3. Show the location and label all proposed shoring on the plot plan and cross sections. Note: It appears that shoring locations were shown to support the proposed street but not the proposed building excavations.

Please see attached Structural Engineer, for both the Roadway and the Houses Comment on the construction sequence.

4. Verify whether or not the horizontal seismic coefficient used in the 09/19/2012 report is still applicable to the 2014 LABC and / or revise seismic slope stability analysis.

5. Provide design seismic earth pressure for retaining walls exceeding a height of six feet in accordance with 2014 LABC.

Please see attached submittal applications for the project, these have not expired and pre-date the change in the code before 2014.

Appreciate your consideration.

Regards –

**Robert Anderson AIA**
CAC DEVELOPMENT
Architect / Partner 818.335.0028 cell

STEVEN W. MEZEY & associates

STRUCTURAL ENGINEERING

#1

April 3, 2015

Mr. Robert Anderson
CAC Development
18169 Knoll Hill,
Granada Hills, CA 91344

Re:1800/1806/1812/1818 Crisler Way
Los Angeles, 90069

Dear Mr. Anderson,

In response to items 1 and 3, of the March 23, 2015 City of Los Angeles Geology and Soils Report Correction Letter, the following explanation is provided.

Lateral surcharge from the existing residences located up-slope of the proposed retaining walls abutting the proposed street has been considered in the the design of the retaining walls.

The future residences which are located down-slope of the proposed street shall be constructed after the following sequence of excavation and construction is performed:

1. The permanent soldier pile retaining walls supporting the street shall be constructed.
2. The soil down slope of the soldier piles shall be removed to the depth necessary for the construction of the foundation system of the proposed single family residences.
3. The shotcrete between the soldier piles shall be installed.
4. The adjacent retaining wall for the proposed single family residences shall be constructed 5' to 15' from soldier pile wall per plan.
5. The drainage system and waterproofing for the residence retaining walls shall be installed.
6. The earth between the residence retaining wall and soldier pile retaining wall shall be backfilled and compacted per the approved soil report.

In summary, the permanent street soldier piles perform as a temporary retaining ~~wall system~~ for the construction of the residence retaining walls and foundation.

Please don't hesitate to call if you have any questions.

Sincerely,

Steven W. Mezey
Structural Engineer
SE2665

REGISTERED PROFESSIONAL ENGINEER
STEVEN W. MEZEY
No. 2665
APR 03 2015
Exp 9-30-15
STRUCTURAL
STATE OF CALIFORNIA

15230 BURBANK BLVD., SUITE 105, VAN NUYS, CA 91411 VOICE (818) 908-1554 FAX (818) 908-0904

# CLASS "B" APPLICATION / PERMIT (DESIGN PHASE)

ISSUED UNDER SECTIONS 62.105 TO 62.116
INCLUSIVE, LOS ANGELES MUNICIPAL CODE (SEE REVERSE HEREOF)

DISTRICT: WEST LA

Work Order(s): BR402571

I HEREBY REQUEST PERMISSION TO CONSTRUCT THE IMPROVEMENTS DESCRIBED BELOW UNDER PRIVATE CONTRACT AND, IF PERMISSION IS GRANTED, I AGREE TO CONSTRUCT SAME IN ACCORDANCE WITH PLANS AND/OR SPECIFICATIONS APPROVED BY THE CITY ENGINEER. I ALSO ACKNOWLEDGE THAT I HAVE REVIEWED THE GENERAL INFORMATION PRESENTED ON THE REVERSE OF THIS APPLICATION, AND AGREE TO THE PROVISIONS STATED THEREON.

SHEET NO. 1 OF 2 SHEETS

DATE ISSUED: 09/07/2012

DATE EXPIRES: 09/07/2014

MJR PROJECT/PROJECT: EBPER/ EBPERGEN

PROGRAM: 7804

ENGR DIST.: E6201850

REIMB FLG: YES

DIR/INDIR: D

**STREETS AND LIMITS TO BE IMPROVED**
(SEE CONSTRUCTION TOTALS AT RIGHT)
GRAND VIEW DRIVE & CRISLER WAY (S.W. CORNER)

ESTIMATED 2% SURCHARGE = $696.00
ESTIMATED 7% SURCHARGE = $2,436.00

**INDICATE SCOPE**
GRADING, PAVEMENT, CURB & GUTTER, DRIVEWAY, STORM DRAINS. (DEPOSITED $3,000.00 ON 9/7/2012.) (REQUIRED INSPECTION DEPOSIT AMOUNT = $37,932.00)THIS PERMIT SUPERCEDED THE CLOSED BC401611,P-35874 WAS APPROVED PER BC401611,PAID $53,737.00 ON 02/17/2015

| ENGR. PLAN CHECK DEPOSIT | Number of Trees | Wells | TREE PLANTING FEE | District Map Number | DIVISION INDEX | DRAINAGE MAP | COUNCIL DISTRICT |
|---|---|---|---|---|---|---|---|
| $0.00 | 0 | 0 | $0.00 | 148.5 A 175 | | 470 | 5 |

| SANDBLASTING FEE | DOT SIGN DEPOSIT | TRAFFIC DEPOSIT | PROPOSED R/W NO. | SPECIAL REFERENCES |
|---|---|---|---|---|
| $0.00 | $0.00 | $0.00 | | P-35874 |

| CONST. - INSPECTION DEPOSIT | TOTAL FEE DEPOSIT |
|---|---|
| $34,800.00 | $37,932.00 |

| TYPE OF PROJECT | TOTAL BOND DEPOSIT |
|---|---|
| Street Improvement | $580,000.00 |

| IMPROVEMENT BOND NO. | |
|---|---|
| CAO140257 | |

| LIABILITY INSURANCE NO. | LIAB. INSUR. EXPIR. DATE |
|---|---|
| | |

PRIVATE ENGINEER
HOVEL & PILARSKI

STREET ADDRESS
4525 INDUSTRIAL ST. SUITE 4L

| CITY | ZIP | PHONE NO. |
|---|---|---|
| SIMI VALLEY | 93062 | 805-572-1900 |

OWNER-APPLICANT (SEE REVERSE)
AARON COHEN

STREET ADDRESS
1504 S. FLOWER ST.

| CITY | STATE | ZIP |
|---|---|---|
| LOS ANGELES | CA | 90015 |

| (AREA CODE) PHONE NO. | DATE SIGNED BY APPLICANT |
|---|---|
| 818-335-0028 | |

SIGNATURE (SEE REVERSE BEFORE SIGNING)

APPLICANT'S NAME (ADD TITLE IF OFFICER)
ROBERT ANDERSON

| DISTRICT/DIVISION OFFICE | ISSUED BY: |
|---|---|
| | KATHLEEN HUGHEY |
| TIME | DATE |

| CONSTRUCTION ITEMS | ESTIMATED COST |
|---|---|
| GRADING | $112,500.00 |
| DPW ENGINEERING | |
| PAVING CURB/ GUT. /SDWLK | $371,500.00 |
| SEWER | $0.00 |
| PERMIT DEPOSIT | |
| STORM DRAIN | $20,000.00 |
| STREET LIGHTS | $0.00 |
| TRAFFIC SIGNALS | $0.00 |
| SUBTOTAL | $504,000.00 |
| + % PCF | $75,600.00 |
| CONSTRUCTION ESTIMATE | $580,000.00 |
| + % CIF | $0.00 |
| BOND ESTIMATE | $580,000.00 |

REGISTER RECEIPT VALIDATION

WL 02/17/15 12:17:15 11:07AM
53 131 $53,737.00
1 PERMIT DEPOSIT
BR 8350 GRAND VIEW DR
Total Rec: $53,737.00
Check: $53,737.00
HAVE A NICE Day

**Job Address:**
8350 GRAND VIEW DR.

DIST. ENGR. Mike Patonai DATE 02/17/15
Mike Patonai, P.E.

Permit Title:
In conn. w/ building permit GRAND VIEW DR. (8350) & CRISLER WAY S.W. CORNER (IN CONN.W/ BLDG. PERMIT)

Reference Number 8910 Job Address: 8350 GRAND VIEW DR.

**GENERAL INFORMATION**

This form shall be used for all Class "B" Permits. It is not necessary to repeat the STREETS AND LIMITS breakdown on CONSTRUCTION B-PERMITS that are preceded by checking only permits.

1. **LIABILITY INSURANCE** and performance bonds are only required for approval of construction B-Permits.

2. **OWNER-APPLICANT** must be the owner of the affected property, and must be the same as the performance bond principal. Contractors for governmental agencies under faithful performance bonds shall be entered as OWNER-APPLICANT. Applicant issued to CORPORATIONS shall be executed by the President, Vice-President, Secretary or Asst. Secretary, and the CORPORATE SEAL shall be impressed.

3. **SAFETY ORDERS** Sec. 6500 of the STATE LABOR OR CODE requires the APPLICANT to obtain a **STATE A DIVISION OF INDUSTRIAL SAFETY (DIS) PERMIT** and a copy of **STATE INDUSTRIAL SAFETY ORDERS** BEFORE BEGINNING WORK ON ANY TRENCH OR EXCAVATION FIVE FEET OR DEEPER into which a person must descend. City personnel will not enter such excavations until the required permit and safety orders have been obtained and are displayed on the job site.

4. PCF percentage factors apply to possible construction change orders.CIF percentage factors apply to cost increases through the life of the project. (See CONSTRUCTION ITEMS on the reverse side of this application.)

5. **PLAN CHECKING DEPOSITS** are subject to charges for blueprints, engineering, testing, traffic signal design, street lighting design, and administrative service.

**CONSTRUCTION PERMIT DEPOSITS** may be charged against for blueprints, engineering, testing, surveying, inspection, administrative services, emergency light and barricade services, street tree planting and maintenance, street lighting burn tests, Street Name signs, traffic warning and regulatory signs, sandblasting and painting of traffic markings, erosion control, etc. Unused fees are refunded after closure of the permit. The applicant will be billed for unreimbursed charges (fee deficits).

6. **DESIGN OFFICE** will determine if applicant must dedicate a right of way to the City for construction purposes. The applicant shall open a right of way work order and deposit necessary fee with the REAL ESTATES SECTION, DEVELOPEMENT SERVICES DIVISION, BUREAU OF ENGINEERING.

7. NOT MORE THAN ONE TRACT OR PARCEL MAP SHALL BE ASSIGNED TO A SINGLE B-PERMIT.

8. **PERMITTEE SHALL STOP WORK AND CONTACT THE PERMITTING AGENCY PRIOR TO CUTTING OR EXCAVATING ANY DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK.**

9. **ANY DAMAGE TO DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK MUST BE REPAIRED IN KIND OR RECONSTRUCTED IN KIND BY THE PERMITTEE, AS DIRECTED BY THE PERMITTING AGENCY, IN A MANNER SATISFACTORY TO THE CITY ENGINEER AND THE INSPECTOR OF PUBLIC WORKS.**

THIS CONSTRUCTION B-PERMIT MUST BE ON THE JOB SITE AT ALL TIMES.

**THIS PERMIT VALID ONLY IF ACCOMPANIED BY A DIS PERMIT AND SAFETY ORDERS** (SEE NOTE 3 ABOVE). DIS PERMIT MAY BE OBTAINED FROM STATE DIVISION OF INDUSTRIAL SAFETY, 3460 WILSHIRE BOULEVARD, LOS ANGELES. **NOTE: GOVERNMENTAL AGENCIES AND PUBLIC UTILITIES UNDER PUC CONTROL ARE EXEMPT.** PRIVATE CONTRACTORS ACTING AS PERMITTEE FOR SUCH AGENCIES ARE NOT EXEMPT.

NOTE: CHARGES AGAINST THE PERMIT FEE DEPOSIT WILL BE COMPILED APPROXIMATELY 6 TO 8 WEEKS AFTER THE DATE FINAL INSPECTION IS COMPLETED. THE B-PERMIT WILL BE CLOSED AND THE IMPROVEMENT BOND EXONERATED AFTER ALL PERMIT FEE CHARGES HAVE BEEN ACCUMULATED AND PAID.

"CORRECTED ORIGINAL"

APPROVED FOR THE
CITY ENGINEER BY

BOND CONTROL

City of Los Angeles
DEPARTMENT OF PUBLIC WORKS
Office of the City Engineer

Premium: $11,600.00/2 Years

Bond #8026615
SURETY'S BOND NO.

WEST LA
District/Division Design Office
Council District No. 5
Date Issued: 11/21/2013

CAO 1402573
CAO-RISK MGMT. NO.
DATE APPROVED 9/18/2014

## GENERAL IMPROVEMENT PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, **AARON COHEN, ISAAC M. COHEN, ANDREA R. COHEN AND GRANDVIEW LOTS, LLC**

as PRINCIPAL and Developers Surety and Indemnity Company a corporation incorporated under the laws of the State of Iowa and authorized by the laws of the State of California to execute bonds and undertakings as sole surety, as SURETY, are held and firmly bound unto the City of Los Angeles, in the JUST and FULL SUM of **FIVE HUNDRED EIGHTY THOUSAND AND NO/100 Dollars ($580,000.00)**, lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION of the foregoing obligation is such that WHEREAS the above bounden PRINCIPAL has applied for a building permit, zone change, zone variance, conditional use of property, street or alley vacation, legal lot access, or has voluntarily offered to dedicate and/or improve certain public easements, and said PRINCIPAL, in conjunction therewith, has agreed to construct and install all of the following public improvements, to wit: construct and install **STREETS, STORM DRAINS.**

Said improvements to be located at or in, and adjoining: **8350 GRAND VIEW DR. - GRAND VIEW DR. (8350) & CRISLER WAY S.W. CORNER (IN CONN.W/ BLDG. PERMIT)**

Said work shall be performed under permit or permits to be issued by the Board of Public Works of the CITY, hereinafter called the BOARD, in accordance with the standards and specifications of the BOARD, as amended, and to the approval of the City Engineer. The PRINCIPAL agrees to pay for such inspection of work and improvements as may be required by the BOARD, and further agrees to furnish all necessary final plans, profiles and standard specifications in a form that will be sufficient to be processed and be approved by the City Engineer not later than six (6) months prior to the date specified for the completion of the required work, which shall be on or before: **December 21, 2015.**

Continuation Sheet For:

**GENERAL IMPROVEMENT PERFORMANCE BOND**

or within any lawful extension of said term by the City Engineer, or as otherwise provided by law. If it is deemed necessary to extend the time within which to complete said work, it is understood and agreed that such extension of time shall be subject to a revision of the estimated improvement costs, and that the required improvements shall be constructed and installed in accordance with the standards and specifications of the BOARD in effect at the time such extension of time is granted. This bond is further conditioned upon and guarantees due compliance with all of the applicable provisions of ARTICLES 2 and 7 of CHAPTER 1, and Sections 62.105 through 62.118, inclusive, of the Municipal Code of the CITY, as amended.

NOW, THEREFORE, if the above bounden PRINCIPAL shall well and truly perform the work specified hereinabove in all respects within the time specified for such performance, or with any lawful extension thereof, this obligation shall be void upon the delivery to the PRINCIPAL and SURETY of a CERTIFICATE OF ACCEPTANCE, signed by the City Engineer of the CITY certifying that all of the requirements for which this bond is a guarantee have been completed to the satisfaction of the City Engineer; otherwise, this obligation shall be and remain in full force and effect until exonerated or canceled by the City Engineer.

IN WITNESS WHEREOF, this instrument has been duly executed by the above named PRINCIPAL and SURETY on September 5, 20 14.

Principal Signatories

**AARON COHEN, ISAAC M. COHEN, ANDREA R. COHEN AND GRANDVIEW LOTS, LLC**

SURETY: Developers Surety and Indemnity Company

By: _____ (Attorney-in-Fact)

Steven A. Swarts, Attorney-in-Fact

Surety's Address: 17771 Cowan #100, Irvine, CA 92614

GRANDVIEW
SEWER / STORM
EASEMENT
#2

Recording requested by
Wishire Escrow Co.
4270 Wilshire Blvd.
Los Angeles, CA 90010

When recorded mail to:
Wishire Escrow Co.
4270 Wilshire Blvd.
Los Angeles, CA 90010

COPY of Document Recorded
20150051325 2/11/15
Has not been compared with original.
Original will be returned when
processing has been completed.
LOS ANGELES COUNTY REGISTRAR - RECORDER

---

**GRANT OF EASEMENT**

**Preamble**

This Agreement made this 16th day of January, 2015 by and between Cilgia Halprin, as Trustee of the Cilgia Halprin Family Trust hereafter referred to as "Grantor" and Grandview Lots, LLC, hereafter referred to as "Grantees."

**Recitals**

WHEREAS, Grantor is the owner of the certain real property described herein as Lot 118, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the County Recorder, County of Los Angeles, State of California, and

WHEREAS, Grantees are the owner of the certain real property described herein as all or a portion of Lots 95, 96, 97 and 98, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the County Recorder, County of Los Angeles, State of California, and

WHEREAS, Grantees desires to acquire certain rights from Grantor;

NOW, THEREFORE, it is agreed as follows:

**Grant of Easement**

1. For valuable consideration in the amount of $25,000 Grantor hereby grants to Grantees a nonexclusive easement as hereinafter described.

**Character of Easement**

2. Grantor hereby grants unto Grantees, for the benefit of Lots 95, 96, 97 and 98, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the

PLEASE CONFORM

21F

County Recorder, County of Los Angeles, State of California and all successor Owners thereof, a perpetual and permanent appurtenant non-exclusive easement under, upon and across the Easement Area for the sole purpose of erecting, installing and maintaining storm and sanitary sewer pipelines.

**Easement Area**

3. The easement granted herein is located as follows: The southwesterly 8 feet of Lot 118, Tract 865, as shown on Map in Book 16, Page 97, as recorded in the office of the County Recorder, County of Los Angeles, State of California and shown on Exhibit B attached hereto and made a part hereof.

**Description of Easement**

3. The easement granted herein is the right to erect, install, build, and maintain storm and sanitary sewer pipelines under, upon and across the Easement Area described herein.

**Maintenance of Easement**

4. Grantees and all successor Owners thereof, at their sole cost and expense, shall keep and maintain the Improvements within the Easement Area in a clean, safe and first class condition, including, without limitation, keeping the improvements free of debris, rubbish, blockage and other hazards that can or may affect Grantor's use or enjoyment of the Easement Area and shall maintain the Improvements in compliance with all applicable laws, rules and ordinances pertaining to the Easement Area; provided, however, that any repair or maintenance cost resulting from negligent acts or omissions or intentional misconduct by Grantor or their Permittee's shall be the sole responsibility of the Grantor.

**Reasonable Use of the Easements**

5. The easements granted and reserved in this Agreement shall be used and enjoyed by Grantees and all successor Owners thereof in such a manner as to not unreasonably interfere with, obstruct or delay the conduct and operations of the Grantor upon the Easement Area.

**Indemnification**

6. Grantees and all successor Owners thereof using or permitting the use of the Easement Area shall and do hereby agree to indemnify, defend and hold the Grantor harmless for, from and against any and all costs, expenses (including, without limitation, attorneys' fees and litigation costs), damages, claims, liabilities, liens, encumbrances and charges incurred by such Grantor arising out of or alleged to have arisen from the use, maintenance and repair of the Easement Area, as applicable, for a breach of this Agreement.

**Insurance**

7. Grantees and all successor Owners thereof shall maintain a policy of general liability and fire insurance, covering the Easement Area.

**Lender Protection**

8. No default under this Agreement shall defeat or render invalid the lien of any mortgage or deed of trust made in good faith and for value, but all of the easements and other provisions of this Agreement shall be binding and effective against any successor Owners whose title is acquired by foreclosure, trustees sale, conveyance in lieu thereof or otherwise.

**Run With The Land**

9. The easements and the other provisions of this Agreement shall run with and be appurtenant to and binding upon the Grantor and Grantees and all successors in title to same.

**No Rights for Third Parties**

10. This Agreement shall not be construed as creating any rights in the general public nor as dedicating for public use any portion of the Easement Area. Nothing contained in this Agreement shall be deemed to grant or confirm to any other person, other than those specifically named in this Agreement, the right to assert or exercise a separate or independent right to enforce this Agreement, or a separate or independent right to enjoy any of the benefits or privileges granted, it being understood that such rights are forever expressly held, retained and shall be exercised solely by and through the Grantor and Grantees and all successor Owners thereof.

**Integration and Modification**

11. This Agreement constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof and all prior or contemporaneous agreements and understandings, oral or written, are hereby superseded and merged herein. The provisions hereof may be abrogated, modified, rescinded or amended in whole or in part only by written instrument executed by the parties hereto of their successors in interest and recorded with the County Recorder for Los Angeles County, California.

**Partial Invalidity**

12. If any provision or provisions hereof or the application thereof to any party or to any person or circumstance shall be held to be invalid, void or illegal, the remaining provisions hereof and the application of such provisions other than those as to which it is held to be invalid, void or illegal, shall nevertheless remain in full force and effect and not be affected thereby.

**Governing Law**

13. This Agreement shall be governed by, and construed and enforced in accordance with, the internal substantive laws of the State of California (without reference to choice of law principles).

**Attorneys' Fees**

14. In the event that suit is brought to enforce or interpret any part of this Agreement, the prevailing party shall be entitled to recover its court costs and reasonable attorneys' fees (as set by the court) from the non-prevailing party.

**Miscellaneous**

15. The waiver by Grantor or Grantees or any successor Owner thereof shall not be deemed to be a waiver of any other right granted hereunder, nor shall the same be deemed to be a waiver of a subsequent right obtained by reason of the continuation of any matter previously waived. The Grantor and Grantees any successor Owner thereof shall promptly execute such other documents and perform such other acts as may be reasonably necessary to carry out the purpose and intent of this Agreement. This Agreement may be executed in one or more counterparts, each of which when taken together shall form one and the same document.

**IN WITNESS WHEREOF,** Grantor and Grantees have executed this Agreement to be effective as of the Effective Date.

Executed on January 16, 2015, at Los Angeles, Los Angeles County, California.

GRANTOR

_____, Trustee
Cilgia Halprin Family Trust

GRANTEES

_____, Managing Member
Grandview Lots, LLC

ESCROW NO.: 129593-008

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

## ACKNOWLEDGMENT

State of California

County of Los Angeles

On January 16, 2015 before me, Sheiba Rajadas, a Notary Public personally appeared, Cilgia Halprin, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

SHEIBA RAJADAS
COMM. # 2053892
NOTARY PUBLIC-CALIFORNIA
LOS ANGELES COUNTY
MY COMM. EXP. MAY. 7, 2018

**Recorded at the Request of and Return to:**

ROB ANDERSON
18180 Knoll Hill
Granada Hills, CA
91344

---

## EASEMENT GRANT DEED

No Documentary Transfer Tax due since easements have no apparent value. No other consideration received by any party.

For valuable consideration, receipt of which is hereby acknowledged,

hereby GRANT(S) to

the following described real property in the City of Los Angeles, County of Los Angeles, State of California:

AN EASEMENT for Storm Drainage purposes over, under and upon that parcel of land described as the southeasterly 8.00 feet of Lot 96 for the benefit of Lot 95, in the City of Los Angeles, as shown on Tract Map No 865 as filed in Book 16 at Page 97 of Maps in the office of the County Recorder, County of Los Angeles, State of California as shown on the Sketch attached hereto as Exhibit A for reference only.

Print name / title

Print name / title

The Acknowledgment Form is attached hereto.

Prepared by:
HOVELL & PILARSKI ENGINEERING, Inc.

9.2.15

James T. Pilarski, LS 4755 Date
WO 1860-02.2 CAC - Grandview

LICENSED LAND SURVEYOR
JAMES T. PILARSKI
NO. 4755
STATE OF CALIFORNIA

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF } S

ON _____ BEFORE ME, _____ NOTARY PUBLIC PERSONALLY APPEARED _____ WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL

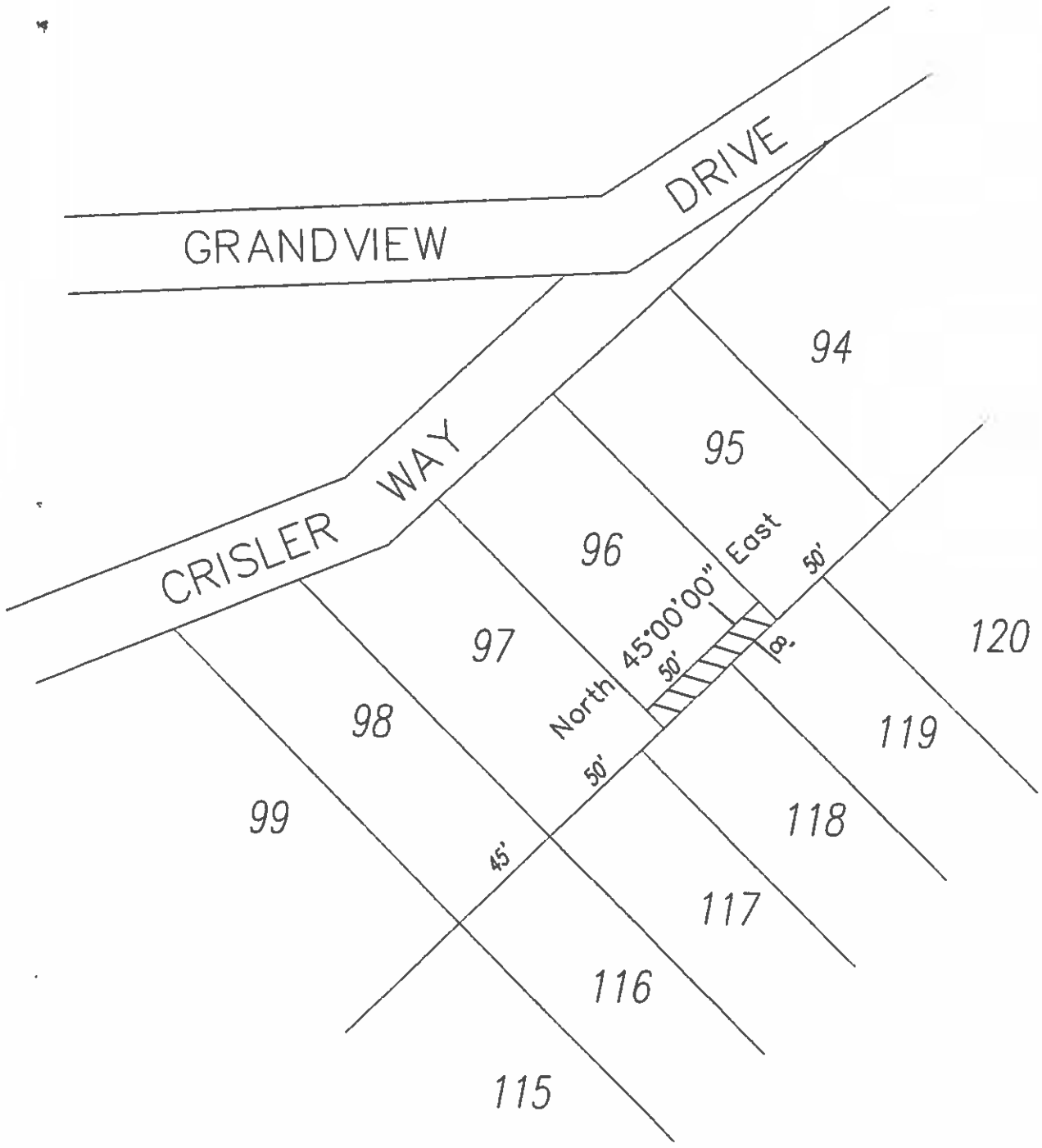
SIGNATURE _____

Not to Scale

# EXHIBIT A

## Tract No 865

MB 16-97



**Recorded at the Request of and Return to:**

ROB ANDERSON
18180 Knoll Hill
Granada Hills, CA
91344

## EASEMENT GRANT DEED

No Documentary Transfer Tax due since easements have no apparent value. No other consideration received by any party.

For valuable consideration, receipt of which is hereby acknowledged,

hereby GRANT(S) to

the following described real property in the City of Los Angeles, County of Los Angeles, State of California:

AN EASEMENT for Storm Drainage purposes over, under and upon that parcel of land described as the southeasterly 8.00 feet of Lot 97 for the benefit of Lot 98, in the City of Los Angeles, as shown on Tract Map No 865 as filed in Book 16 at Page 97 of Maps in the office of the County Recorder, County of Los Angeles, State of California as shown on the Sketch attached hereto as Exhibit A for reference only.

Print name / title

Print name / title

The Acknowledgment Form is attached hereto.

Prepared by:
HOVELL & PILARSKI ENGINEERING, Inc.

4.2.15

James T. Pilarski, LS 4755 Date
WO 1860-02 2 CAC - Grandview



A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF } S

ON _____ BEFORE ME, _____ NOTARY PUBLIC PERSONALLY APPEARED _____ WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL

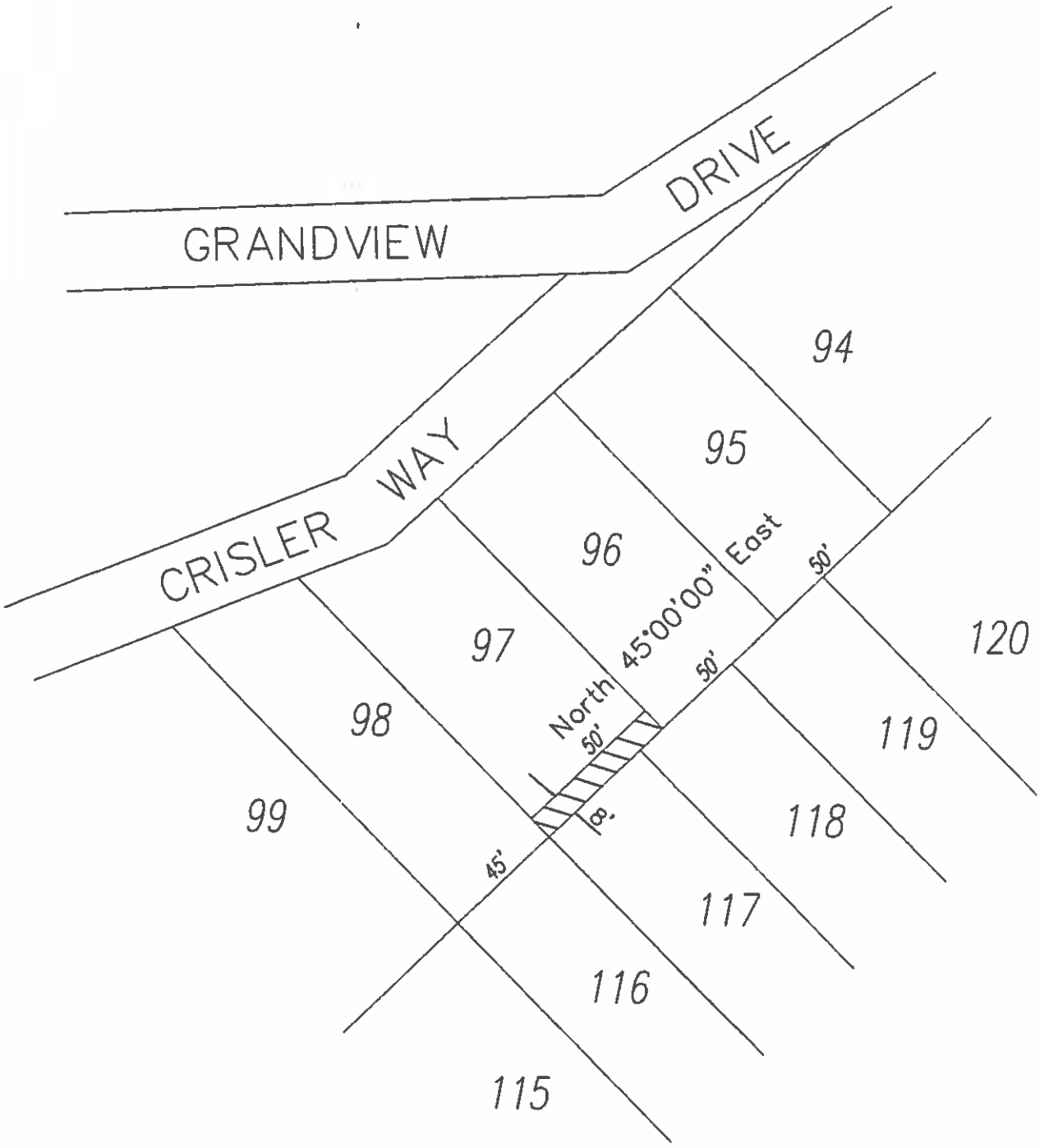
SIGNATURE _____

Not to Scale

# EXHIBIT A

## Tract No 865

MB 16-97



#3

# STEVEN W. MEZEY & associates

STRUCTURAL ENGINEERING

April 3, 2015

Mr. Robert Anderson
CAC Development
18169 Knoll Hill,
Granada Hills, CA 91344

Re:1800/1806/1812/1818 Crisler Way
Los Angeles, 90069

Dear Mr. Anderson,

In response to items 1 and 3, of the March 23, 2015 City of Los Angeles Geology and Soils Report Correction Letter, the following explanation is provided.

Lateral surcharge from the existing residences located up-slope of the proposed retaining walls abutting the proposed street has been considered in the the design of the retaining walls.

The future residences which are located down-slope of the proposed street shall be constructed after the following sequence of excavation and construction is performed:

1. The permanent soldier pile retaining walls supporting the street shall be constructed.
2. The soil down slope of the soldier piles shall be removed to the depth necessary for the construction of the foundation system of the proposed single family residences.
3. The shotcrete between the soldier piles shall be installed.
4. The adjacent retaining wall for the proposed single family residences shall be constructed 5' to 15' from soldier pile wall per plan.
5. The drainage system and waterproofing for the residence retaining walls shall be installed.
6. The earth between the residence retaining wall and soldier pile retaining wall shall be backfilled and compacted per the approved soil report.

In summary, the permanent street soldier piles perform as a temporary retaining wall system for the construction of the residence retaining walls and foundation.

Please don't hesitate to call if you have any questions.

Sincerely,

Steven W. Mezey
Structural Engineer
SE2665

REGISTERED PROFESSIONAL ENGINEER
STEVEN W. MEZEY
No. 2665
APR 03 2015
Exp 9 30 15
STRUCTURAL
STATE OF CALIFORNIA

15230 BURBANK BLVD., SUITE 105, VAN NUYS, CA 91411 VOICE (818) 908-1554 FAX (818) 908-090

8350 W Grand View Dr → 1818 N. CRISLER WAY D. Chen 12/11/12

#4 #5

Application #: 11010 - 20000 - 00921
Plan Check #: B11VN03971 Printed: 06/15/11 10:19 AM
Event Code:

Bldg-New GREEN - MANDATORY

8352 W Grand View Dr → 1812 N. CRISLER WAY D. Chen 12/11/12

Application #: 11010 - 20000 - 01123
Plan Check #: B11VN03971 Printed: 06/15/11 10:11 AM
Event Code:

Bldg-New GREEN - MANDATORY City of Los Angeles - Department of Building and Safety Last Status: PC in Progress

8354 W Grand View Dr → 1806 N. CRISLER WAY D. Chen 12/11/12

Application #: 11010 - 20000 - 01124
Plan Check #: B11VN03971 Printed: 06/15/11 10:07 AM
Event Code:

Last Status: PC in Progress

8356 W Grand View Dr → 1800 N. CRISLER WAY D. Chen 12/11/12

Application #: 11010 - 20000 - 011
Plan Check #: B11VN03971 Printed: 06/15/11 10:02 AM
Event Code:

Bldg-New GREEN - MANDATORY City of Los Angeles - Department of Building and Safety
1 or 2 Family Dwelling
Regular Plan Check
Plan Check

Last Status: PC in Progress
Status Date: 06/08/2011

# APPLICATION FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY

| 1. TRACT | BLOCK | LOT(s) | ARB | COUNTY MAP REF # | PARCEL ID # (PIN #) | 2. ASSESSOR PARCEL |
|---|---|---|---|---|---|---|
| TR 865 | | 98 | | M B 16-97 | 148-5A175 78 | 5556 - 022 - 004 |

**3. PARCEL INFORMATION**

Area Planning Commission - Central
LADBS Branch Office - LA
Council District - 5
Certified Neighborhood Council - Bel Air - Beverly Cres
Community Plan Area - Hollywood
Census Tract - 1942.00
District Map - 148-5A173
Energy Zone - 9
Fire District - VHFHSZ
Hillside Grading Area - YES
Hillside Ordinance - YES
Earthquake-Induced Landslide Area - Yes
Near Source Zone Distance - 0
Thomas Brothers Map Grid - 593-A4

ZONE(S): R1-1 /

**4. DOCUMENTS**

ZI - ZI-2415 Baseline Hillside -Ord 181
HLSAREA - Yes

**5. CHECKLIST ITEMS**

Special Inspect - Concrete>2.5ksi
Special Inspect - Field Welding
Special Inspect - Grade Beam/Caisson
Special Inspect - Structural Observation
Special Inspect - Structural Wood (periodic)
Fabricator Reqd - Prefabricated Joist
Fabricator Reqd - Shop Welds
Fabricator Reqd - Structural Steel
Std. Work Descr - Excess Flow Shut Off Valve

**6. PROPERTY OWNER, TENANT, APPLICANT INFORMATION**

Owner(s):

Tenant:

Applicant: (Relationship: Architect)
Robert Anderson -

(818) 788-4236

**7. EXISTING USE** | **PROPOSED USE**

**8. DESCRIPTION OF WORK**

26' x 49.5' THREE STORY SFD W/ BASEMENT AND ATTACHED GARAGE. LOT 98

**9. # Bldgs on Site & Use:** 11 OF 13

**10. APPLICATION PROCESSING INFORMATION**

BLDG. PC By:
OK for Cashier:
Signature:
DAS PC By:
Coord. OK:
Date:

For inspection requests, call toll-free (888) LA4BUILD (524-2845). Outside LA County, call (213) 482-0000 or request inspections via www.ladbs.org. To speak to a Call Center agent, call 311 or (866) 4LACITY (452-2489). Outside LA County, call (213) 473-3231.

For Cashier's Use Only W/O #:

# C. Y. GEOTECH, INC.

## Engineering Geology and Geotechnical Engineering

9428 Eton Avenue, Unit M, Chatsworth, CA 91311
Tel: (818) 341-1899 Fax: (818) 341-1897 Email: cygeotech@sbcglobal.net

November 26, 2014 P.N. CYG-14-7350

CAC Development
1504 South Flower Street
Los Angeles, CA 90015

Subject: Response to City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013, Proposed Four Single Family Residences and Street Improvement, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California

Dear Robert,

As requested, C. Y. Geotech (CYG), Inc. has prepared this addendum report in response to the City of Los Angeles Geology and Soils Report Correction Letter dated January 30, 2013 (Log# 79258). A copy of the city correction letter is attached at the end of this report. For your convenience, the responses are presented following each review comment.

City Review Comment 1:
Revise all geologic cross-sections so that all construction and grading (including the retaining wall construction on the uphill and downhill sides of the proposed street), are shown relative to the existing private property boundaries and existing structures.

Response to City Review Item 1:
The geologic cross sections A-A' to D-D have been extended to be A-A-A' to D-D-D' to include the portion of street improvement. The site plan shown on Plate 1 was used to extend the geologic cross sections. Based on the information provided, it is our understanding that the proposed street improvement of Crisler Way was already reviewed and approved the City of Los Angeles Department of Public Works. As shown on the revised geologic cross sections (see Plates 2 and 3), retaining walls are to be built along both uphill and downhill sides of Crisler Way. The maximum height of the retaining wall along the uphill side of Crisler Way is about 16.5 feet. The maximum height of the retaining wall along the down side of Crisler Way is about 7 feet.

City Review Comment 2:
Clearly depict all temporary excavations that will remove lateral support from offsite property, and revise recommendations to shore these excavations.

Response to City Review Item 2:
The northwesterly property line of the subject sites is along the downhill side of Crisler Way. Based on the information provided, it is our understanding that the proposed street improvement of Crisler Way was already reviewed and approved by the City of Los Angeles Department of Public Works. Therefore, the design and construction of the retaining wall along the uphill side of Crisler Way are not discussed and presented in this report. The temporary excavations within the site for the subject project which will remove lateral support of offsite properties are listed below:

1. The temporary excavations for the construction of the northwesterly subterraneous building walls of each single family residence.

2. The temporary excavation for the northwest 15 feet of the northeasterly subterraneous building wall of the single family residence at Lot 95.

3. The temporary excavation for the northwest 15 feet of the southwesterly subterraneous building wall of the single family residence at Lot 98.

The maximum height of the temporary excavations is up to about 21 feet. The stability of a 21 feet high temporary excavation was evaluated and the results were presented in the referenced Geomatrix report dated September 19, 2012. Therefore, the recommendations for the design and construction of temporary excavations, including the shoring system, in the referenced Geomatrix report dated September 19, 2012 are still applicable.

City Review Comment 3:
Clarify for the record if the improved portion of Crisler Way will be a private street.

Response to City Review Item 3:
The Crisler Way to be improved as a part of the residential development is a actually recorded public street. Based on the information provided, it is our understanding that the proposed street improvement of Crisler Way was already reviewed and approved by the City of Los Angeles Department of Public Works.

City Review Comment 4:
Consult and verify that retaining walls attached from building and their height will comply with the requirements of the zoning code and city ordinance 176,445, or obtain a variance. Note: Be advised that verification of compliance is a part of the structural plan-check and permitting process.

Response to City Review Item 4:
Acknowledged. Based on the amendment of the City of Los Angeles Ordinance No. 176445 (effective 09/26/05), a maximum of one free standing vertical or approximately vertical retaining wall may be built on any lot with a maximum height of 12 feet as measured from the top of wall to the lower side of the adjacent ground elevation. Alternatively, a maximum of two 10-foot high vertical or approximately vertical walls or portions of a wall can be built if the minimum horizontal distance between the two walls is 3 feet (see Figure 1). Based on the revised site plan, the number and height of the proposed retaining walls will comply with the City of Los Angeles Ordinance No. 176445. The number of exterior retaining walls will not be greater than 2 and the height of the exterior retaining walls will not be greater than 10 feet.

City Review Comment 5:
Clarify and show how all street drainage will be conducted to an improved street. The proposed elevations shown will result in a southwest flow direction to the Lot 98 area, and the rip rap pads shown currently, are not acceptable.

Response to City Review Item 5:
Based on the information provided, it is our understanding that the proposed street improvement of the Crisler Way was already reviewed and approved the City of Los Angeles Department of Public Works. CYG was informed that the water to be collected in Lot 98 will be drained through a solid pipe to the southeast side of the lot and then to the street. The details of the drainage system are to be included in the drainage plan is to be prepared by the Project Civil Engineer.

INFORMATION BULLETIN / PUBLIC - GENERAL INFORMATION
REFERENCE NO.: Ord.176,445 (Sec. 12.21C8) Effective: 9-26-05
DOCUMENT NO. P/ZC 2002-016 Revised:
Previously Issued As: None

# RETAINING WALLS IN A OR R ZONES LOCATED IN HILLSIDE AREAS

To control the proliferation of massive retaining walls on residential lots within the Hillside Area delineated on the Bureau of Engineering Basic Grid Map No. A-13372, the City Council passed Ordinance No. 176,445, which places limitations on the height and the number of retaining walls on a lot, and requires landscaping or screening in front of these walls.

The Ordinance defines retaining walls as *"a freestanding continuous structure, as viewed from the top, intended to support earth, which is not attached to a building."* According to the City Attorney's Office, the phrase "not attached to a building" is intended to exempt retaining walls that are structurally integrated as part of the building foundation, such as a basement wall. However, the portion of the retaining wall which is attached to the building but extend beyond the footprint of the building is subject to the regulation of this ordinance.

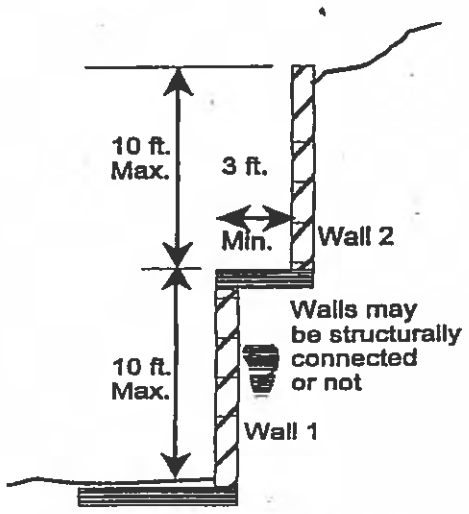
The height of each retaining wall is measured from the top of the wall to the lower side of the adjacent ground elevation.

For permit applications submitted on or after March 9, 2005, the design of retaining walls in A or R zones (including the RA Zone) located in Hillside Area shall comply with the following:

**I. Number and Height of Retaining Walls:**

A) A total of **one** freestanding retaining wall with a height of not to exceed 12 feet may be built on any lot.

B) In lieu of one 12 foot high retaining wall as allowed in A) above, a total of **two** retaining walls with a maximum height of 10 feet each (which may be stacked for a maximum of 20 feet in vertical height) may be built on any lot, provided that they are separated/offset horizontally by a minimum of 3 feet, as shown in the diagram to the right.




Note: 1) Retaining walls which can be built without building and grading permits are exempt from this ordinance and thus may be constructed in addition to the retaining wall permitted in IA) or IB) above.

2) Guard rails required by Los Angeles Municipal Code (LAMC) Section 91.509.1 may be placed on top of the retaining wall and are exempt from the height limitation specified herein. However, these guard rails shall be designed as open guard rails as specified in LAMC Section 91.509.3.

**II. All Other Walls**

In accordance with LAMC Section 12.21C8(c), walls exceeding the number or height limitations stated in IA) or IB) above require an approval from the Zoning Administrator ("ZA").
The number and height limitations specified under Section I above do not apply to retaining walls built to comply with an order issued by the Department of Building and Safety to repair an unsafe or substandard conditions.

**III. Walls in Required Yards**

Height of walls located in required yards shall comply with LAMC Section 12.22C20(f).

**IV. Landscaping**

Retaining walls 8 feet or higher shall be covered with landscaping material. The landscaping plan for such retaining walls shall be approved by the Department of City Planning in accordance with LAMC Sections 12.40 through 12.43.

**City of Los Angeles Ordinance 176445**
**Illustration of Double-Layered Retaining Wall**

**CYG-14-7350** | **Figure 1**

**C. Y. GEOTECH, INC**
ENGINEERING GEOLOGY &
GEOTECHNICAL ENGINEERING

City Review Comment 6:
Shoring is discussed and recommended (see Pgs. 27-29). Shown by labeling on the plan and on the revised geologic cross-sections requested in this letter, all areas where shoring will be employed during construction,

Response to City Review Item 6:
The soldier piles for the shoring of temporary excavations are labeled on the site plan (see Plate 1) and geologic cross sections (see Plates 2 and 3).

**ENDING**

We appreciate the opportunity for providing the professional service. If you have any questions regarding this report, please do not hesitate to contact us.

Very truly yours,
C. Y. Geotech, Inc.

REGISTERED PROFESSIONAL ENGINEER
TZE-TZONG TSAO
No. C 046886
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

REGISTERED GEOLOGIST
TZE-TZONG, TSAO
No. 1783
CERTIFIED ENGINEERING GEOLOGIST
EXP. 11-30-15
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LUO B. CAI
C 80352
EXP. 12-31-14
CIVIL
STATE OF CALIFORNIA

John T. Tsao
RCE 46886/CEG 1783

Paul Cai
RCE 80352

Encl: References
City of Los Angeles Correction Letter Dated January 30, 2013

cc: (5) Addressee

## REFERENCES


1. Parmelee/Geology, December 9, 2001, Geologic and Soils Engineering Update Report, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

2. City of Los Angeles Approval Letter Dated February 20, 2002 (Log# 35753).

3. Parmelee/Geology, May 19, 2002, Geologic and Soils Engineering Report, Proposed Two Residences, Lots 97 and 98, Tract 865, Adjacent to 8350 Grandview Drive, Los Angeles, California.

4. City of Los Angeles Approval Letter Dated June 27, 2002 (Log# 36891).

5. Parmelee/Geology, March 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

6. Parmelee/Geology, April 14, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

7. City of Los Angeles Inter-Department Correspondence, April 25, 2003, 8350 Grandview Drive (BD 401611).

8. Parmelee/Geology, May5, 2003, Response to City Review Letter Dated April 25, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

9. City of Los Angeles Inter-Department Correspondence, May 14, 2003, 8350 Grandview Drive (BD 401611).

10. Parmelee/Geology, May25, 2003, Response to City Review Letter Dated May 14, 2003, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

11. Parmelee/Geology, October 3, 2003, Additional Information, Proposed Two Residences, Lots 95 and 96, Tract 865, 8350 Grandview Drive, Los Angeles, California.

12. Parmelee/Geology, November 26, 2003, Additional Information, Proposed Two Residences, Lots 95, 96, 97 and 98, Tract 865, 8350 Grandview Drive, Los Angeles, California.

13. Geomatrix, Inc., September 19, 2012, Geologic and Soils Engineering Update Report, Proposed Four Hillside Residences and Street Improvement, Lot 95, 96, 97 and 98, Tract 865, 8350, 8354, 8358 and 8362 Grand View Court, Los Angeles, California.

14. City of Los Angeles Geology and Soils Report Correction Letter Dated January 30, 2013 (Log# 79258).

15. C. Y. Geotech, Inc., November 10, 2014, Letter of Change of Geologist and Soils Engineer of Record, Proposed Four Single Family Residences, Lots 95, 96, 97 and 98, Tract 865, 1800, 1806, 1812 and 1818, Crisler Way, Los Angeles, California.

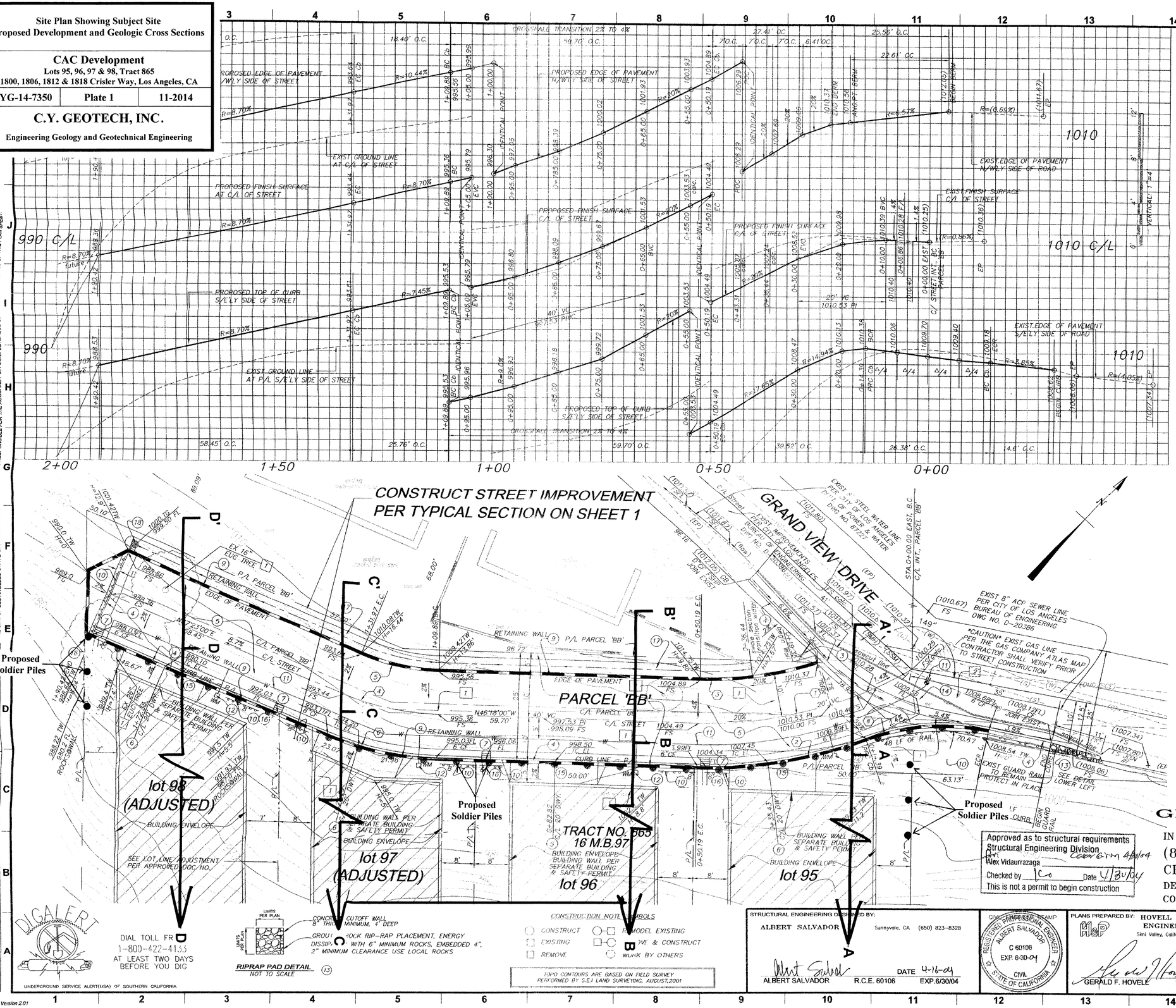
**Site Plan Showing Subject Site**
**Proposed Development and Geologic Cross Sections**

**CAC Development**
Lots 95, 96, 97 & 98, Tract 865
1800, 1806, 1812 & 1818 Crisler Way, Los Angeles, CA

| CYG-14-7350 | Plate 1 | 11-2014 |
|---|---|---|

**C.Y. GEOTECH, INC.**

Engineering Geology and Geotechnical Engineering




## CONSTRUCTION NOTES:

1. EXIST. WALLS, TREES, FENCES, AND GROUND COVER WITHIN LIMITS OF CONSTRUCTION ARE TO BE REMOVED
2. ADJUST EXIST.WATER METER TO FINISH SURFACE PER DWP STANDARD PLATE NO.18, AS NEEDED
3. EXIST STREET LIGHT AND OVERHEAD WIRING TO BE RELOCATED PER CITY OF LOS ANGELES BUREAU OF STREET LIGHTING STANDARDS.
4. CONSTRUCT 6" CONC CURB WITH 24" GUTTER PER CITY OF LOS ANGELES STD. PLAN S-410-2, TYPE 'C' INTEGRAL CURB AND GUTTER
5. CONSTRUCT 4" A.C. PAVEMENT ON 6" CRUSHED MISC. BASE COMPACTED TO A MIN.OF 90% MAX.DRY DENSITY, SUBGRADE TO BE COMPACTED TO A MINIMUM OF 95% MAX. DRY DENSITY, 24" MIN. WEED KILL AT BASE, FINAL STRUCTURAL SECTION TO BE DETERMINED BY SOILS ENGINEERS RECOMMENDATION
6. CONSTRUCT RESIDENTIAL DRIVEWAY PER CITY OF LOS ANGELES STD. PLAN S-440-3, CASE II, X=3', Y=4'
7. CONSTRUCT 3.5' WIDE CURBSIDE GRATING CATCH BASIN PER CITY OF LOS ANGELES, BUREAU OF ENGINEERING STANDARD S-354-0, SINGLE GRATE, W=4', T=6"
8. CONSTRUCT 6" AC BERM PER CITY OF LOS ANGELES STANDARD PLAN S-412-0
9. CONSTRUCT RETAINING WALL BY SEPARATE PERMIT TOP OF WALL ELEVATIONS PER PLAN, SHEET 5
10. CONSTRUCT METAL BEAM GUARD RAILING 2' FROM EDGE OF PAVEMENT PER BUREAU OF ENGINEERING STANDARD PLAN S-462-2, WITH REFLECTIVE MARKERS PER BUREAU OF ENGINEERING STD PLAN S-450.0
11. INSTALL 8" (SDR-35) CL.150, PVC WATER LINE 5' E/O CENTERLINE PER CITY OF LOS ANGELES-DWP STD. SPECS. LATEST EDITION, JOIN EXIST WATER LINE IN GRANDVIEW DR. CONTRACTOR TO VERIFY HORIZONTAL & VERTICAL LOCATION PRIOR TO INSTALLATION OF NEW WATER LINE, BY SEPARATE PERMIT
12. INSTALL 2" WATER SERVICE LINE WITH 1&1/2" METER PER CITY OF LOS ANGELES-DWP STND. SPECS., BY SEPARATE PERMIT
13. INSTALL GROUTED ROCK RIP-RAP PLACEMENT, ENERGY DISSIPATOR WITH 6" MINIMUM ROCKS, EMBEDDED 4", 2" MAXIMUM CLEARANCE USE LOCAL ROCKS, SEE DETAIL HEREON & SHEET 1
14. CONSTRUCT TYPICAL INTERSECTION GUTTER PER BUREAU OF ENGINEERING STD PLAN S-410-2
15. CONSTRUCT CONCRETE CAISSONS PER STRUCTURAL ENGINEERS SPECIFICATIONS SEE DETAILS ON SHEET 4
16. INSTALL 8" PVC (SDR35) DRAINAGE PIPE, LENGTH=5' REMOVE BLOCK AT BASE OF WALL AS NEEDED FOR PIPE
17. CONSTRUCT 3' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 5
18. INSTALL DRAIN INLET & PIPE PER DETAIL A, SHEET 1

### CURVE DATA

| | D | R | L | T |
|---|---|---|---|---|
| 1 | 31°57'12" | 90' | 50.19' | 25.76' |
| 2 | 22°38'44" | 100' | 39.52' | 20.02' |
| 3 | 19°38'00" | 80' | 27.41' | 13.84' |
| 4 | 21°05'00" | 60' | 22.08' | 11.07' |
| 5 | 21°05'00" | 50' | 18.39' | 9.36' |
| 6 | 21°05'00" | 70' | 25.76' | 13.03' |
| 7 | 129°57'40" | 10' | 22.68' | 21.43' |
| 8 | 32°50'13" | 50' | 28.66' | 14.73' |
| 9 | 26°47'46" | 150' | 70.35' | 35.83' |

REGISTERED PROFESSIONAL ENGINEER — No. C046896 Exp. 6-30-06 — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. 33118 Exp. 6-30-2006 — STATE OF CALIFORNIA

**GEOMATRIX, INC.**

IN CONNECTION WITH BUILDING PERMIT
(8350) GRAND VIEW DRIVE &,
CRISLER WAY S/W CORNER
DESIGN PERMIT BD-401611
CONSTRUCTION PERMIT BC

Approved as to structural requirements
Structural Engineering Division
By: Alex Vidaurrazaga
Checked by _____ Date 4/30/04
This is not a permit to begin construction

DIGALERT — DIAL TOLL FR 1-800-422-4133 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT(USA) OF SOUTHERN CALIFORNIA

RIPRAP PAD DETAIL — NOT TO SCALE
CONCRETE CUTOFF WALL 8" THICK MINIMUM, 4' DEEP
GROUTED ROCK RIP-RAP PLACEMENT, ENERGY DISSIPATOR WITH 6" MINIMUM ROCKS, EMBEDDED 4", 2" MINIMUM CLEARANCE USE LOCAL ROCKS

CONSTRUCTION NOTE SYMBOLS
CONSTRUCT / REMODEL EXISTING / REMOVE / REMOVE & CONSTRUCT / WORK BY OTHERS

TOPO CONTOURS ARE BASED ON FIELD SURVEY PERFORMED BY S.E.I. LAND SURVEYING, AUGUST,2001

STRUCTURAL ENGINEERING DESIGNED BY:
ALBERT SALVADOR — Sunnyvale, CA (650) 823-8328
ALBERT SALVADOR — DATE 4-16-04 — R.C.E. 60106 — EXP.6/30/04

CIVIL ENGINEER STAMP — REGISTERED PROFESSIONAL ENGINEER — ALBERT SALVADOR — C 60106 — EXP. 6-30-04 — CIVIL — STATE OF CALIFORNIA

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900
GERALD F. HOVELL — DATE 4/7/04 — R.C.E. 33118 — EXP.6/30/06

CIVIL ENGINEER STAMP — REGISTERED PROFESSIONAL ENGINEER — No. 33118 Exp. 6-30-2006 — CIVIL — STATE OF CALIFORNIA

THE CITY OF LOS ANGELES OR ITS OFFICERS OR ITS AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISION DATES (DESIGN STAGE ONLY)

Sheet Version 2.01

CITY OF LOS ANGELES — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

LA DPW — ENGINEERING — Symbol of Pride, Dedication, Professionalism & Future

GARY LEE MOORE, P.E. — CITY ENGINEER
ACCEPTED BY :
DATE
PLAN CHECKER

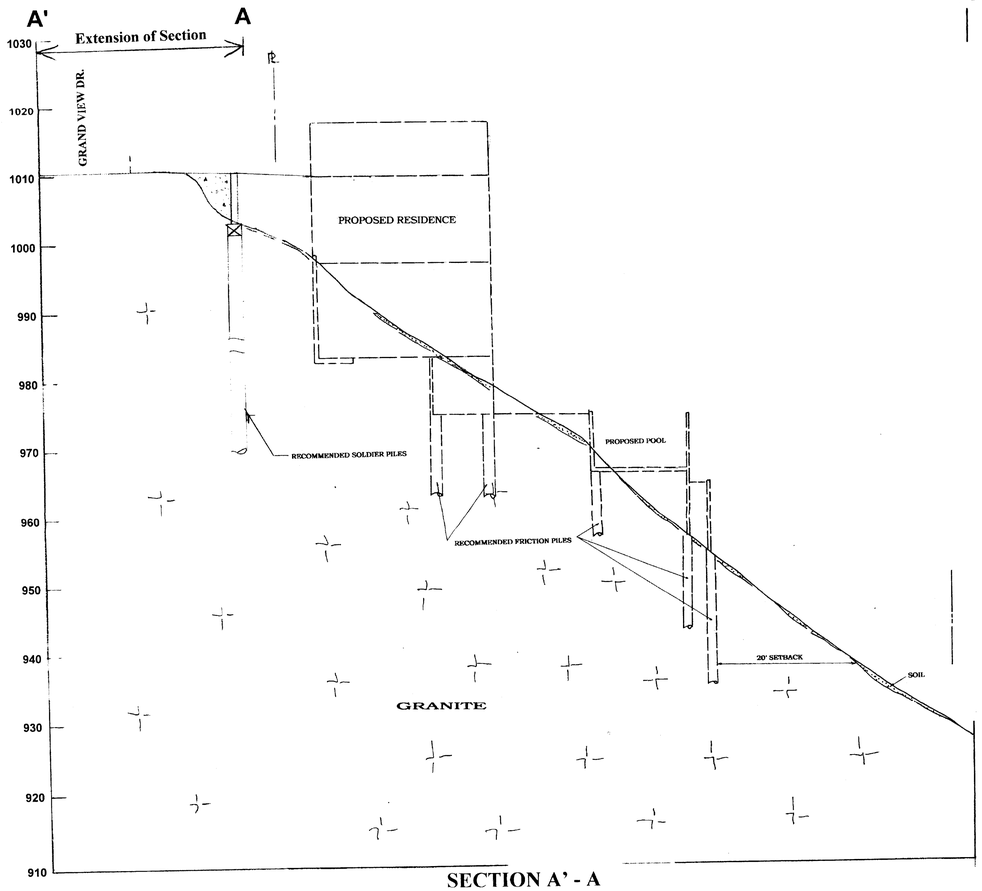
B - PERMITS BD-401611
INDEX NO. D-#
SERIAL NO.
DATE: BY:
NO. REVISIONS:
WORK ACCEPTED

VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS

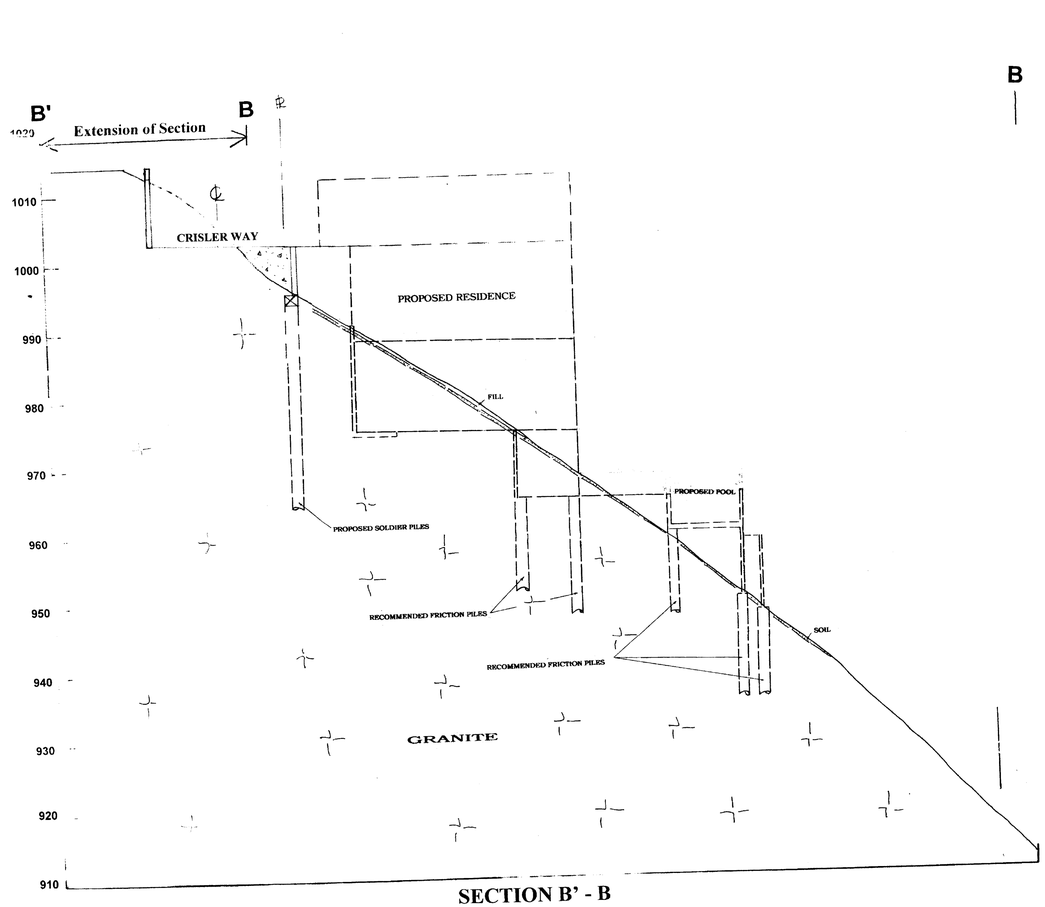
SHEET TITLE: STREET PLAN & PROFILE
PROJECT: 8350 GRNADVIEW DR. & CRISLER WAY S/W CORNER
ADDRESS:

PROJECT NO. CXXXXX
DRAWING NO. 2
SHEET 2 OF 6 SHEETS

| Geologic Cross Sections A'-A & B'-B | | |
|---|---|---|
| **CAC Development**<br>Lots 95, 96, 97 & 98, Tract 865<br>1800, 1806, 1812 & 1818 Crisler Way, Los Angeles, CA | | |
| CYG-14-7350 | Plate 2 | 11-2014 |
| **C.Y. GEOTECH, INC.**<br>Engineering Geology and Geotechnical Engineering | | |

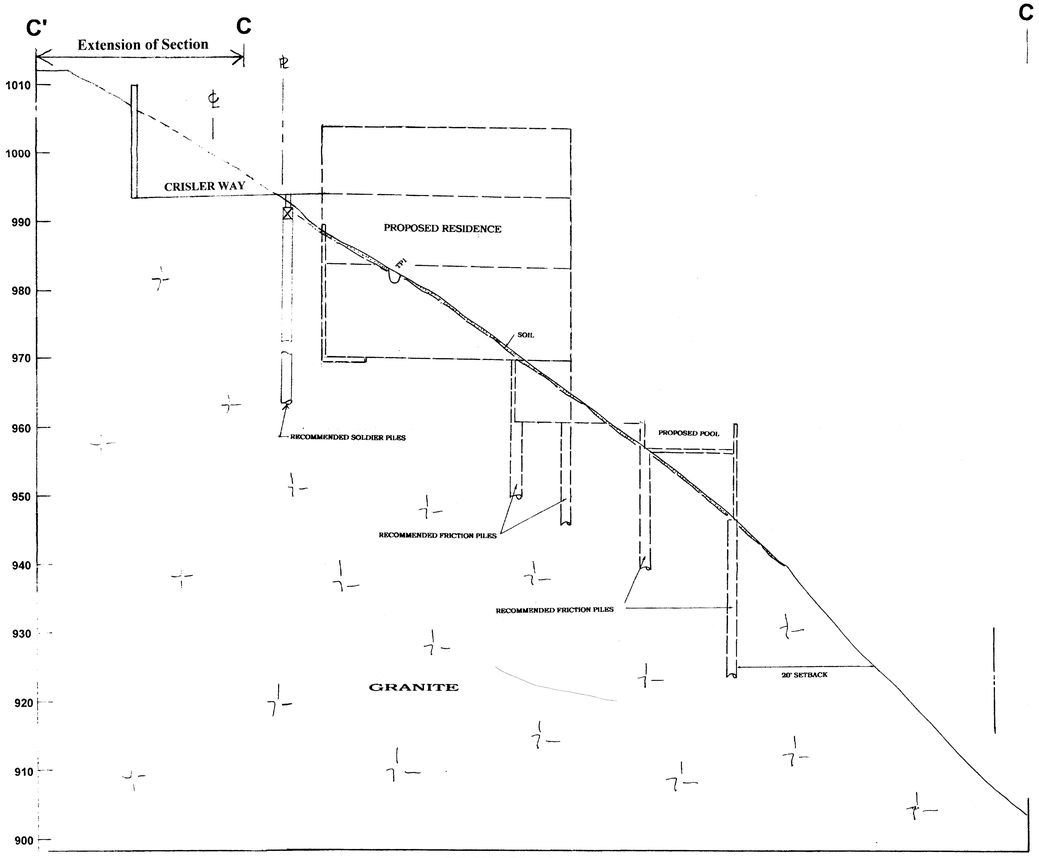



SECTION A' - A

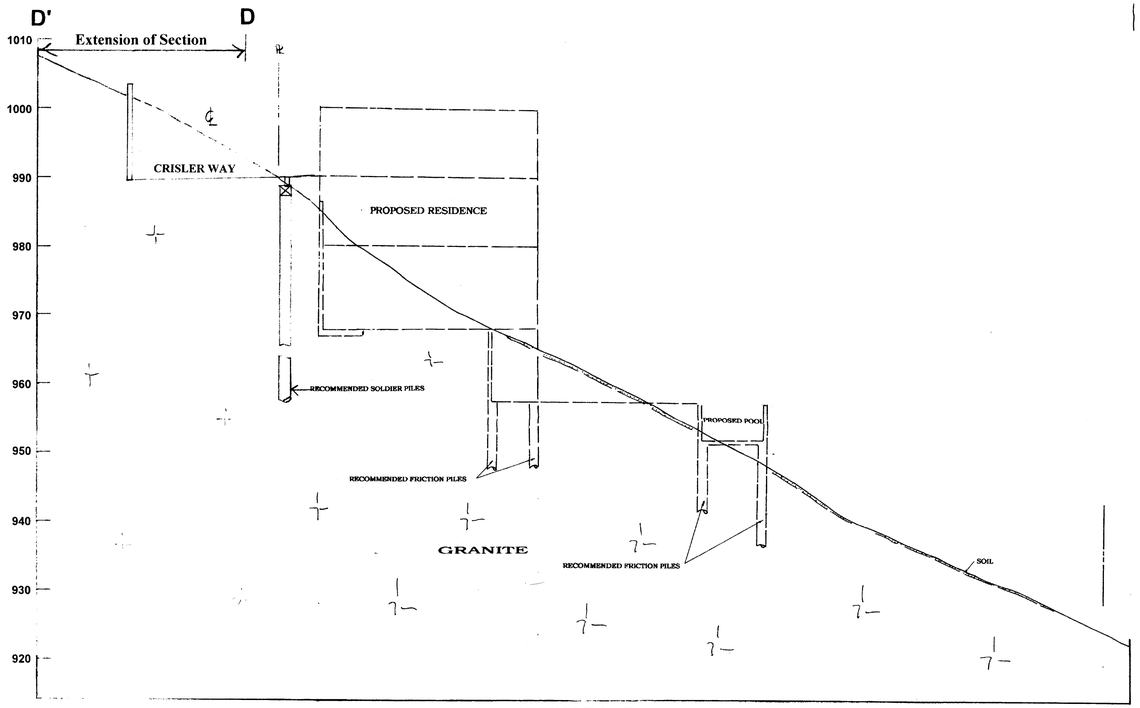



SECTION B' - B

| Geologic Cross Sections C'-C & D'-D | | |
|---|---|---|
| **CAC Development**<br>Lots 95, 96, 97 & 98, Tract 865<br>1800, 1806, 1812 & 1818 Crisler Way, Los Angeles, CA | | |
| CYG-14-7350 | Plate 3 | 11-2014 |
| **C.Y. GEOTECH, INC.**<br>Engineering Geology and Geotechnical Engineering | | |




SECTION C' - C




SECTION D' - D

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

HELENA JUBANY
PRESIDENT

VAN AMBATIELOS
VICE-PRESIDENT

E. FELICIA BRANNON
VICTOR H. CUEVAS
SEPAND SAMZADEH

# CITY OF LOS ANGELES
CALIFORNIA

ANTONIO R. VILLARAIGOSA
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

ROBERT R. "BUD" OVROM
GENERAL MANAGER

RAYMOND S. CHAN, C.E., S.E.
EXECUTIVE OFFICER

## GEOLOGY AND SOILS REPORT CORRECTION LETTER

January 30, 2013

Log # 79258
SOILS/GEOLOGY FILE - 2

C A C Development
1504 South Flower Street
Los Angeles, CA 90015

TRACT: 865
LOTS: 98 / 97 / 96 / 95
LOCATION: 1800 / 1806 / 1812 / 1818 Crisler Way

| CURRENT REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Geology/Soil Report | PG 1091 | 09/19/2012 | GeoMatrix |
| Oversized Documents | " | " | " |

| PREVIOUS REFERENCE REPORT/LETTER(S) | REPORT NO. | DATE(S) OF DOCUMENT | PREPARED BY |
|---|---|---|---|
| Approval (Lots 97 & 98) | Log # 36891 | 06/27/2002 | LADBS |
| Geology/Soil Report | PG1224 | 05/19/2002 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 35753 | 02/20/2002 | LADBS |
| Geology/Soils Report | PG1091 | 12/09/2001 | Parmelee/Geology |
| Approval (Lots 95 & 96) | Log # 23791 | 04/02/1998 | LADBS |
| Addendum Report | 97-912 | 04/02/1998 | Geosystems |
| Addendum Report | 97-912 | 01/19/1998 | " |
| Approval (Lots 95 & 96) | Log # 23068 | 12/16/1997 | LADBS |
| Geology/Soil Report | 97-912 | 11/12/1997 | Geosystems |

The referenced current report concerning the proposed construction of a new, multi-level dwelling with pool on each of the subject lots, has been reviewed by the Grading Division of the Department of Building and Safety. Crisler Way (currently unimproved) adjacent to the subject lots will be improved, as part of the proposed development. Retaining walls are proposed as part of the building construction and for the street improvement. The drainage improvements proposed currently are not acceptable. The review of the subject current report cannot be completed at this time and will be continued upon submittal of an addendum to the report which shall include, but need not be limited to, the following:



AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

1. Revise all geologic cross-sections so that all construction and grading (including the retaining wall construction on the uphill and downhill sides of the proposed street), are shown relative to the existing private property boundaries and existing structures.

2. Clearly depict all temporary excavations that will remove lateral support from offsite property, and revise recommendations to shore these excavations.

3. Clarify for the record if the improved portion of Crisler Way will be a private street.

4. Consult and verify that retaining walls detached from buildings and their heights will comply with the requirements of the zoning code and city ordinance 176, 445, or obtain a variance. Note: Be advised that verification of compliance is a part of the structural plan-check and permitting process.

5. Clarify and show how all street drainage will be conducted to an improved street. The proposed elevations shown will result in a southwest flow direction to the Lot 98 area, and the rip-rap pads shown currently, are not acceptable.

6. Shoring is discussed and recommended (see pgs. 27 - 29). Show by labeling on the plan and on the revised geologic cross-sections requested in this letter, all areas where shoring will be employed during construction.

The licensed geologist and soil engineer shall prepare an addendum response report containing the corrections indicated in this letter. The report shall be in the form of an itemized response. It is recommended that the undersigned reviewers be contacted at the phone number listed below, to schedule an appointment to verify that the report contains the required information. Please do not schedule an appointment until all correction items have been addressed. Bring three copies of the addendum response report, including one unbound wet-signed original for microfilming, in the event that the report is found to be acceptable.

STEPHEN DAWSON
Engineering Geologist II

PASCAL CHALLITA
Geotechnical Engineer II

Log # 79258
(213) 482-0480

cc: Robert Anderson (Applicant)
GeoMatrix
LA District Office

# Exhibit C

# Construction Management Schedule

# Rigo's Construction Inc.

Lic# 853575
P.O. Box 922918
Sylmar, Ca. 91392-2918
(818) 890-2325/ Fax# (818) 890-4399
Company Est. June 1991

**Company History:**

Hi, we are Rigo's Construction Inc, a family owned Construction Business based out of the San Fernando Valley and established in June of 1991. In the 27 years of business we have worked on and completed about 350 residential projects, with more than 150 of them being multi-million dollar homes and more than 100 of them being hillside projects. We have the knowledge and ability to work with temporary and permanent shoring, lagging, tiebacks, mass excavation and hauling, retaining walls, structural concrete decks, and hillside foundations. Knowledge is power and having a team of well-educated individuals makes any big task, seem small.

**Recent Projects:**

Completed - 1485 Blueridge Dr, Beverly Hills - 3 Story Basement, Piles and Grade Beams

Completed - 900 Stradella Rd, Bel Air - Piles and Grade Beams

Completed - 17475 Revello Dr, Pacific Palisades – Pool w/ Piles and Grade Beams, Underground Basement

**In Progress Projects:**

234 Monte Grigio Dr, Pacific Palisades – Underground Basement

1116 Napoli Dr, Pacific Palisades – Underground Basement, Structural Deck plus 2 floors

17880 Vicino Way, Pacific Palisades – Piles and Grade Beams.

**Upcoming Projects:**

746 S. Westholme Ave, Los Angeles

1345 Paskenta Rd, Pacific Palisades

3619 Goodland Dr. Los Angeles

# CRISLER WAY – CONSTRUCTION MANAGEMENT SCHEDULE

- Day 1 & 2 Mobilization: 4 men dropped at site will start to clear debris and vegetation of staging area with hand tools . End of day flat bed truck will arrive and haul debris away. The truck will be off the road.

- Day 3 Create a staging pad: 4 men dropped at site, Bobcat S300 72"x72" and Mini Excavator G35 62"x86" will be delivered to site by a 10 wheel 24' flat bed truck, unloaded off Grandview is the only inconvenience,15 minutes at most for each delivery.

- Day 4 This equipment will create the pad in one day.

- Day 5 Drilling Rig G135 8'x20' delivered by a 10 wheel 24' flat bed truck will be placed completely on the "created pad" – not on the street at all.

- Day 6 & 7 This equipment will drill the 6 temporary shoring piles on Lot 95.

- Day 8 to 11 The Drilling rig is equipped with a boom, as part of the 20' length - we don't need a separate crane. The Drilling Rig will set 6 "I Beams" W12x65 25' long, brought up in 3 loads one load a day. This will reduce the weight on the street and reduce unloading time. Truck delivering the steel beams will be only partially on Grandview. Delivery times will be 12 noon to minimize truck traffic or the neighbors can set a specific time, if they wish. This equipment will remain on the job through out the construction as it moves its way down Crisler Way.

- Day 12 Concrete pour of all 6 temporary shoring piles – one 8 yard truck, 2 to 3 hours at most will be only partially on Grandview.

- Day 13 Install lagging in "I Beams" 4"x12"x8' long wood beams delivered by a 12' flat bed truck completely off the street Lagging set in one day by 4 to 6 guys – dropped at site.

3 weeks M-F to complete all the work above

- Week 4 With the temporary shoring in place, between the Bobcat, small excavator and the drilling rig – all equipment on site we can cut further along the road, backfilling onto Lot 95 temporary shoring and start the foundation of Lot 96

We are completely off Grandview and now have a staging area on Lot 95. There will be no more trucks or equipment even located partially on Grandview.

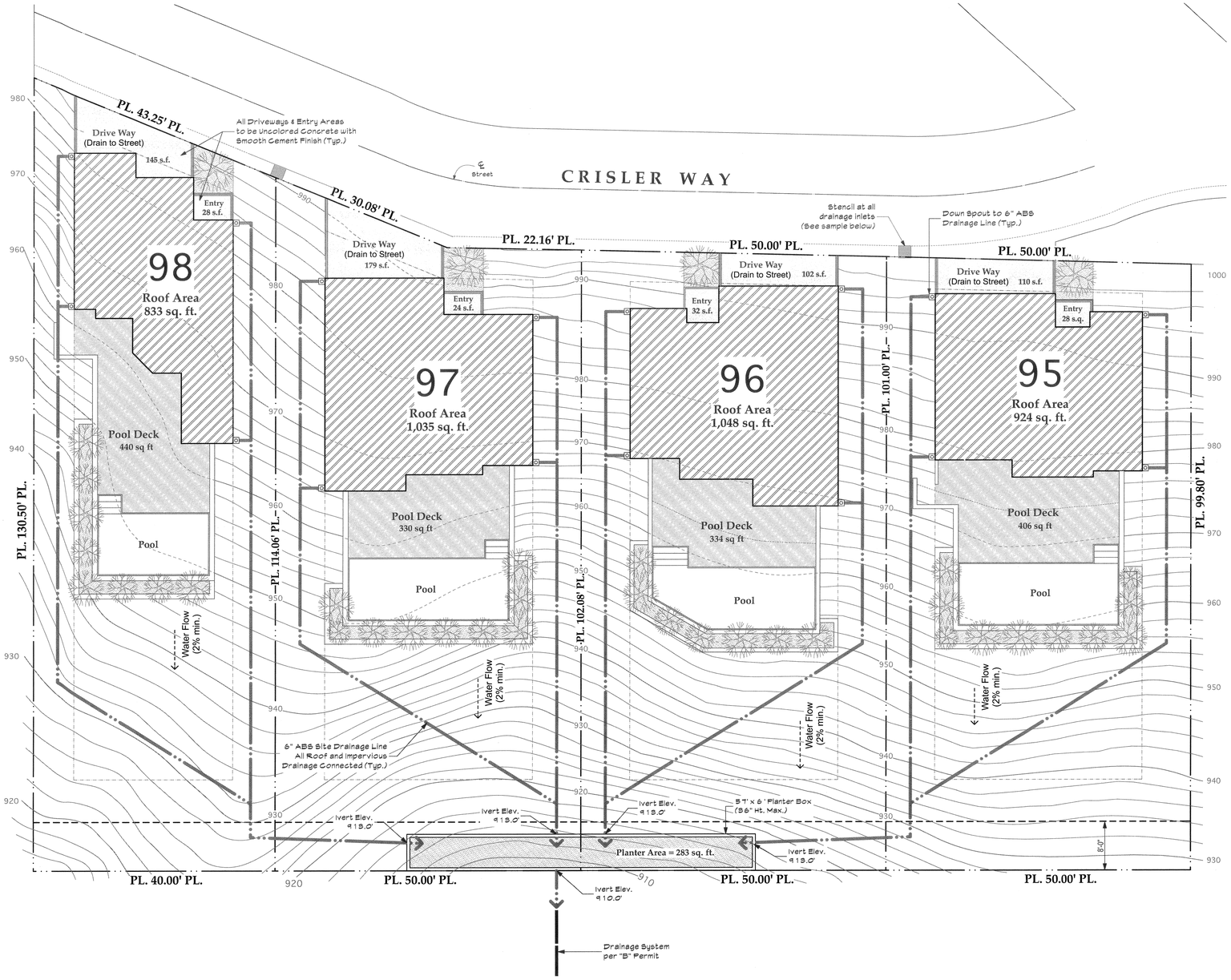
Work then progresses down the road, as we need dirt for backfilling.

Our original projection of two months – will now get us to the end of Lot 96, some 100' giving the project staging are and able room to bring in other trades.

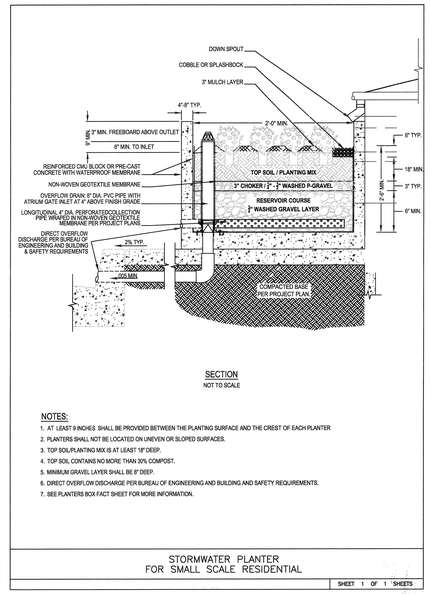
Prior to this happening, there will only be the Foundation Contractor on the construction site.

# Exhibit D

# Storm Drain Plan




## Site Drainage Plan

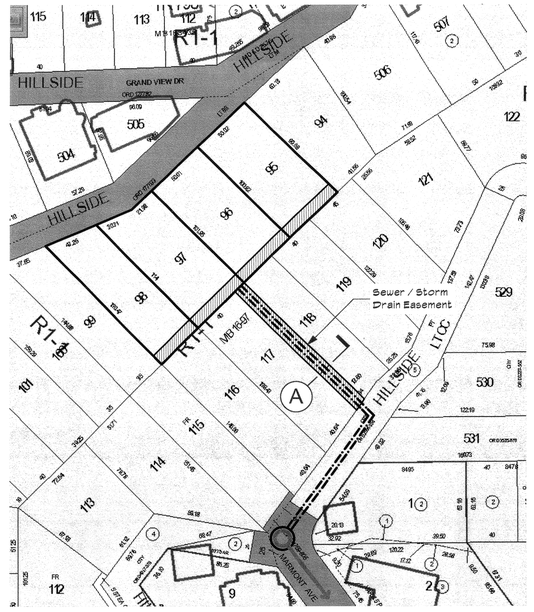



SECTION
NOT TO SCALE

NOTES:
1. AT LEAST 9 INCHES SHALL BE PROVIDED BETWEEN THE PLANTING SURFACE AND THE CREST OF EACH PLANTER
2. PLANTERS SHALL NOT BE LOCATED ON UNEVEN OR SLOPED SURFACES.
3. TOP SOIL/PLANTING MIX IS AT LEAST 18" DEEP.
4. TOP SOIL CONTAINS NO MORE THAN 30% COMPOST.
5. MINIMUM GRAVEL LAYER SHALL BE 6" DEEP.
6. DIRECT OVERFLOW DISCHARGE PER BUREAU OF ENGINEERING AND BUILDING AND SAFETY REQUIREMENTS.
7. SEE PLANTERS BOX FACT SHEET FOR MORE INFORMATION.

STORMWATER PLANTER
FOR SMALL SCALE RESIDENTIAL

SHEET 1 OF 1 SHEETS




## Vicinity Map

NOTE: Sewer / Storm Drain Easement on Lot 118 recorded on 2/11/15 # 20150151325

## StormWater Planter Calculation

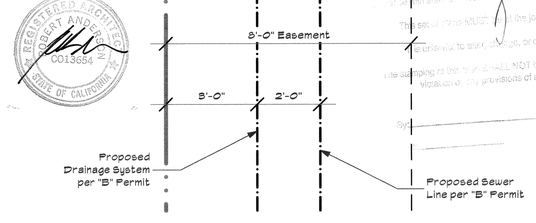
Total : 5,376 sq. ft. ( All Roofs : 3,840 s.f. + All Impervious Area: 1,536 s.f. )

Per Chart : 168 sq. ft. ( for the first 2,500 sq. ft. ) + 20 s.f. per every additional 500 sq. ft.
168 sq. ft. + ( 5,376 - 2,500 = 2,876 ÷ 500 ≈ 5.75 x 20 = 115 sq. ft. Additional ) = **283 sq. ft. Total needed**

## Site Paving Calculation

* All Driveways & Entry Areas to be Uncolored Concrete with Smooth Cement Finish (Solar Reflectance ≥ 0.30)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HOUSE 95 : | Pool Deck (406 sq. ft.) | + | Driveway (110 sq. ft.) | + | Entry (28 sq. ft.) | = | 544 sq. ft. | (25% = 136 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 110 | + | 28 | = | 138 sq. ft. | > | | 136 sq. ft. |
| HOUSE 96 : | Pool Deck (334 sq. ft.) | + | Driveway (102 sq. ft.) | + | Entry (32 sq. ft.) | = | 468 sq. ft. | (25% = 117 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 102 | + | 32 | = | 134 sq. ft. | > | | 117 sq. ft. |
| HOUSE 97 : | Pool Deck (330 sq. ft.) | + | Driveway (179 sq. ft.) | + | Entry (24 sq. ft.) | = | 533 sq. ft. | (25% = 133 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 179 | + | 24 | = | 203 sq. ft. | > | | 133 sq. ft. |
| HOUSE 98 : | Pool Deck (440 sq. ft.) | + | Driveway (145 sq. ft.) | + | Entry (28 sq. ft.) | = | 613 sq. ft. | (25% = 153 sq. ft.) ↓ |
| Hardscape w/ Solar Reflectance ≥ 0.30 : | 145 | + | 28 | = | 173 sq. ft. | > | | 136 sq. ft. |




## A Enlarged Plan

Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

# StormWater Drainage Plan

Four HOUSES for:
CAC Development
1504 South Figwer Street
Los Angeles, California 90015

S.HAL
DRAWN BY
DC
CHECKED BY
RA
APPROVED BY

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 3-12-15 | DC |

DATE ISSUED 3-9-15

DATE PRINTED 3-12-15

PROJECT REF. NUMBER

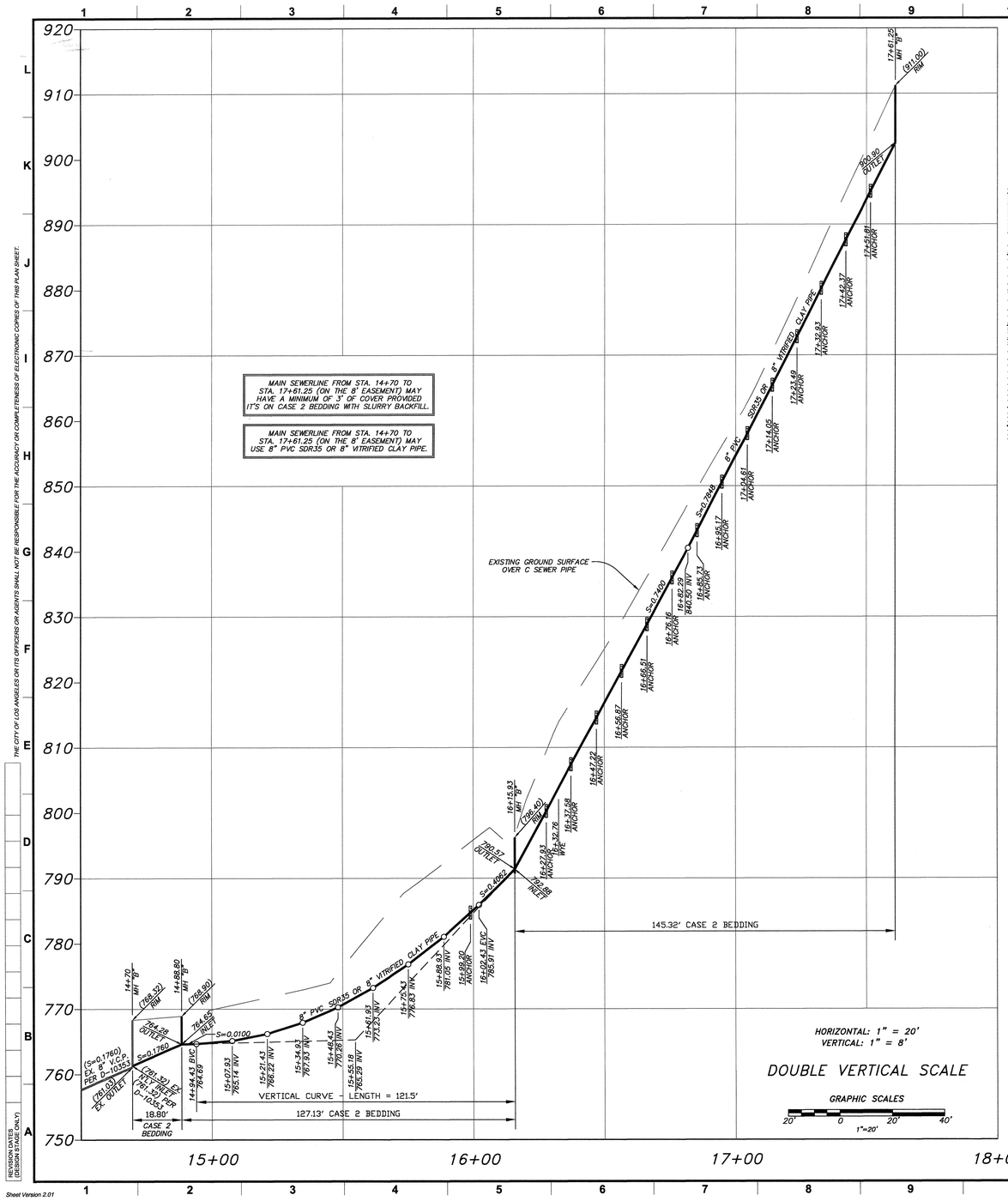
A-1.1

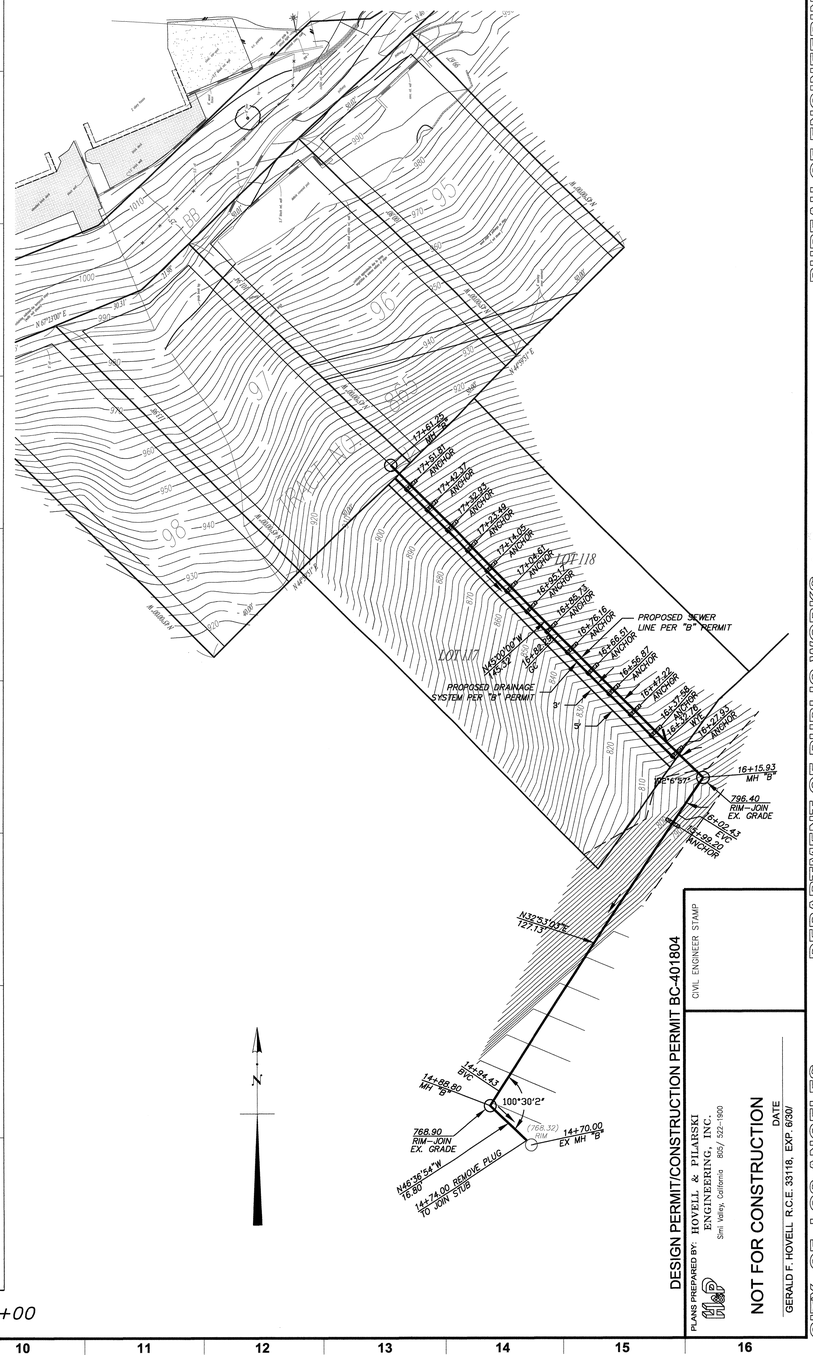
SHEET NUMBER

RT1 JUN 05 2015

# Exhibit E

# Sewer Plan and Profile




THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISION DATES (CROSS OUT OBSOLETE ONLY)

Sheet Version 2.01

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
CITY OF LOS ANGELES

DESIGN PERMIT/CONSTRUCTION PERMIT BC-401804

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900

NOT FOR CONSTRUCTION
DATE
GERALD F. HOVELL R.C.E. 33118, EXP. 6/30/

CIVIL ENGINEER STAMP

VERTICAL CONTROL:
HORIZONTAL CONTROL: BMTP #12

SHEET TITLE: SEWER PLAN AND PROFILE

PROJECT: GRANDVIEW SEWER MAIN

ADDRESS: PROPERTIES SOUTH OF GRANDVIEW TO MARMONT AVENUE

D.M. 147B173
DR. M. 470

PROJECT NO.

DRAWING NO. 2

SHEET 2 OF 2 SHEETS

GARY LEE MOORE, P.E.
CITY ENGINEER

DESIGN GROUP

| | | |
|---|---|---|
| ENGINEER: | GERALD F. HOVELL | R.C.E. 33118 |
| DESIGNED BY: | JEFFREY GARON | |
| DRAWN BY: | JEFFREY GARON | |
| CHECKED BY: | | |
| APPROVED BY: | | |

LA DPW ENGINEERING
Serving the People of Los Angeles

| NO. | REVISIONS: | DATE: | BY: |
|---|---|---|---|
| | | | |

WORK ACCEPTED
SERIAL NO.

INDEX NO. D

B - PERMITS
BC 401804

1860_Sewer_ACAD2000.dwg 2/13/2015 4:13:14 PM PST

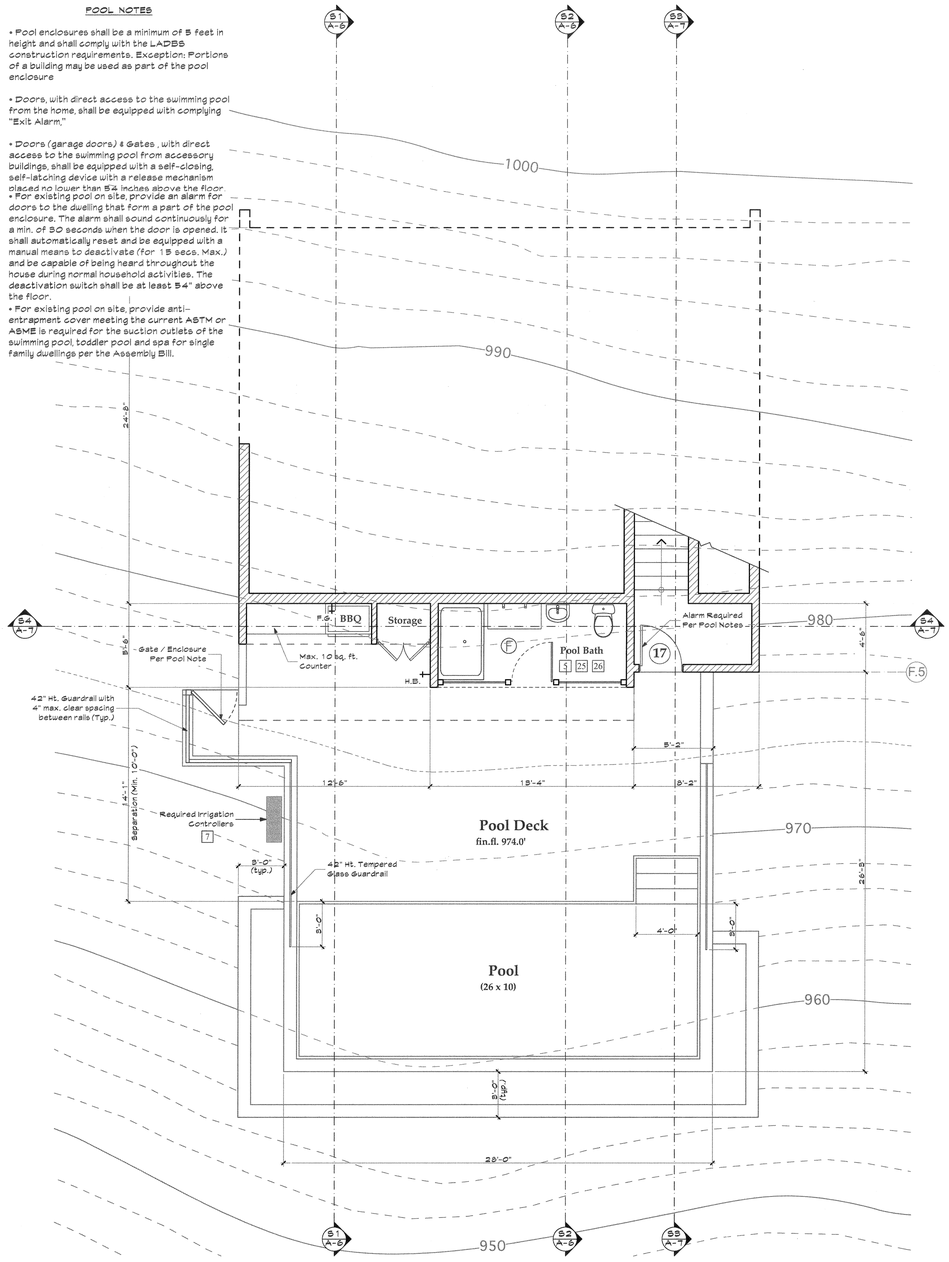
RT1 JUN 05 2015

# Exhibit F

# Elevation Sheets

**POOL NOTES**

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened, it shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ASME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




## Pool Level Plan

Scale : 1/4" = 1'-0"




## Floor Plan Notes

2 x 6 Stud Walls

2 X Stud Walls, as can be a convination of 2x4's, 2x6's, etc.

(SD) Los Angeles City Approved Smoke Detector hard wired w/ battery back up.

(F) "Energy star" 50 CFM Exhaust Fan ducted to terminate outside of the building.

Provide Emergency exit door or window from sleeping rooms. Net clear window opening area shall be not less than 5.7 sq. ft. min. w/ net window opening height of 24" clear with a min. net width opening of 20" clear. Finish sill height max. 44" above floor.

Provide natural light in (habitable rooms) by means of exterior wall openings with an area not less than 10% of floor area with a minimun of 10 sq. ft.

Under-floor ventilation shall be not less than 1/150 of under floor area.

The plumbing fixtures and plumbing fittings Flow Rates shall meet table 4.303.1 on Form GRN 16 (See Sheet GRN).

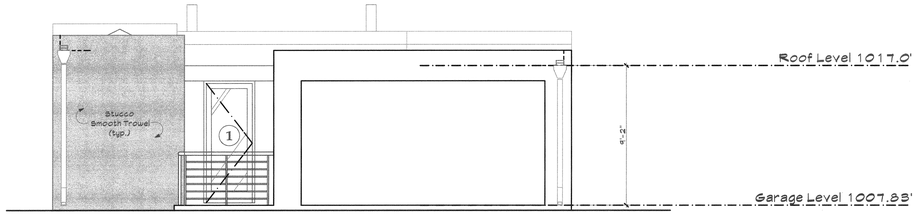
Incombustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1,000 square feet. Draftstopping shall divide the concealed space into approximately equal areas.

Attic ventilation of 1/150 of the area of ventilated space (approximately 10 sq. in. for each 10 sq. ft. of attic area) is required.

Bathrooms, water closet compartments and other similar rooms shall be provided natural ventilation and with mechanical ventilation capable of 50 cfm exhausted directly to the outside. Energy Star Compliant

Ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimun N° 26 gage sheet seel or other approved material & there shall be no openings from the ducts into the garage

Other Penetrations of garage/dwelling ceiling and walls are to be protected as required by Section R302.11




## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"


City of Los Angeles
Department of Building and Safety
Green Building Division

This set of plans and specifications has been reviewed and is approved for compliance with state and local ordinances related to the Green Building Code.

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It is unlawful to alter, change or deviate from these plans.

The stamping of this plan SHALL NOT be construed to be approval of violation of any provisions of any ordinances or Law.

By _____ Date _____



Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Pool Level Floor Plan / Exterior Elevations

1818 Crisler Way - HOUSE 95

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL
CHECKED BY DC
APPROVED BY RA

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-23-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 3-28-13 | DC |
| 5 | 6-20-13 | DC |
| 6 | 3-12-15 | DC |

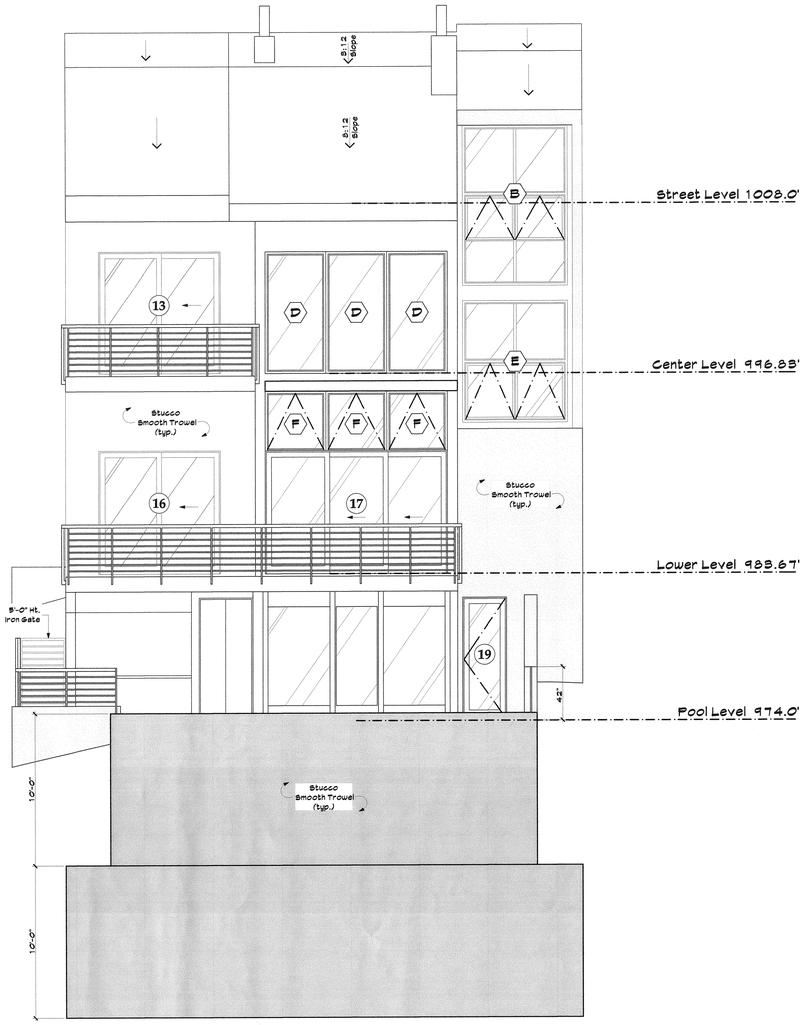
DATE ISSUED 5-1-11

DATE PRINTED 3-12-15

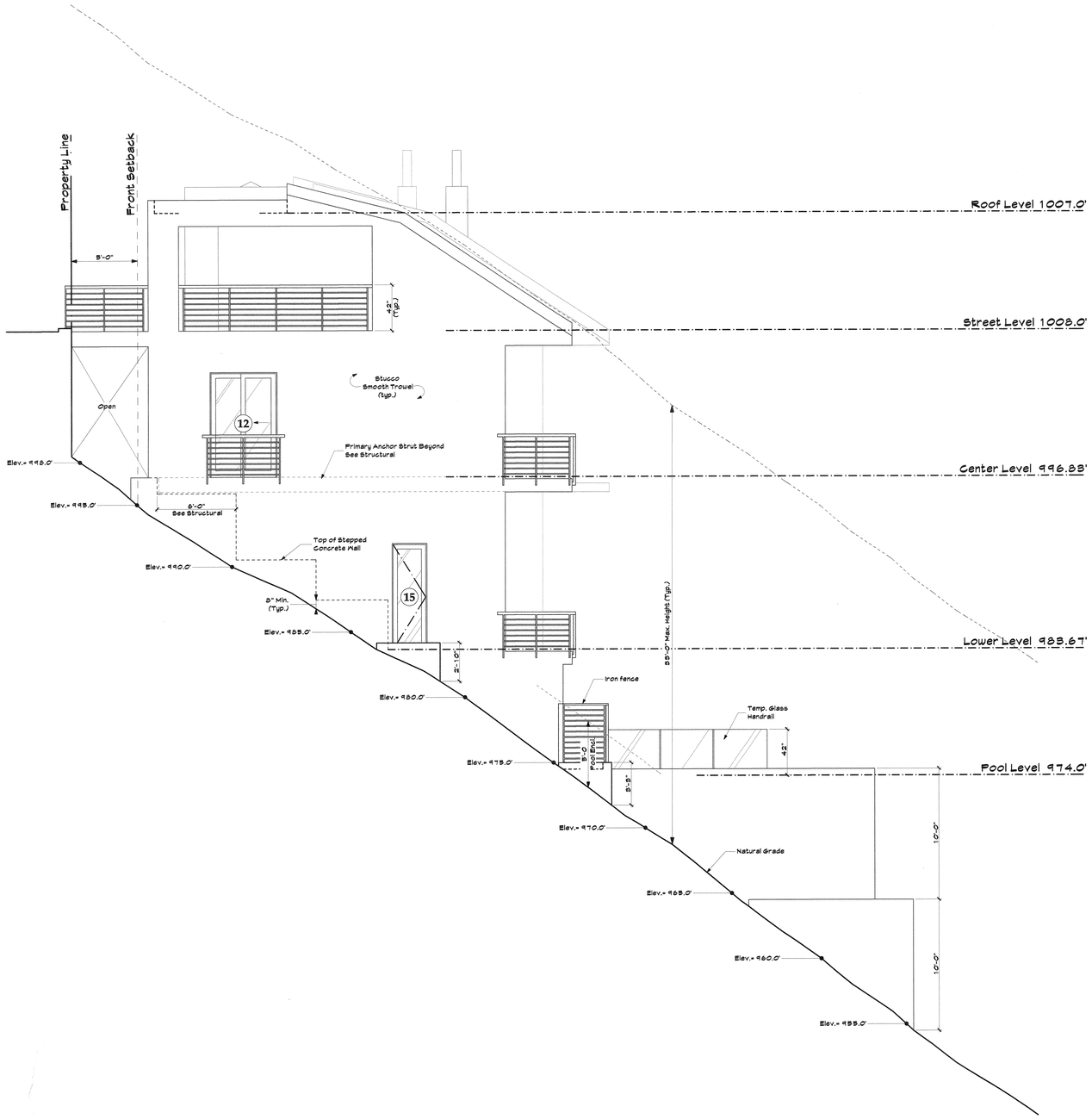
PROJECT REF. NUMBER

**A-4**

SHEET NUMBER RTI 95




## South Elevation




## West Elevation

# Exterior Elevations

Scale : 1/4" = 1'-0"

Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

**1818 Crisler Way - HOUSE 95**

**CAC Development**
**1504 South Flower Street**
**Los Angeles, California 90015**

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-23-12 | DC |
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| 3 | 11-8-12 | DC |
| 4 | 3-28-13 | DC |
| 5 | 6-20-13 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 6-20-13

PROJECT REF. NUMBER

**A-5**

SHEET NUMBER

RECEIVED JUN 0 5 2013

95

## POOL NOTES

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- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."

- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.

- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened, it shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.

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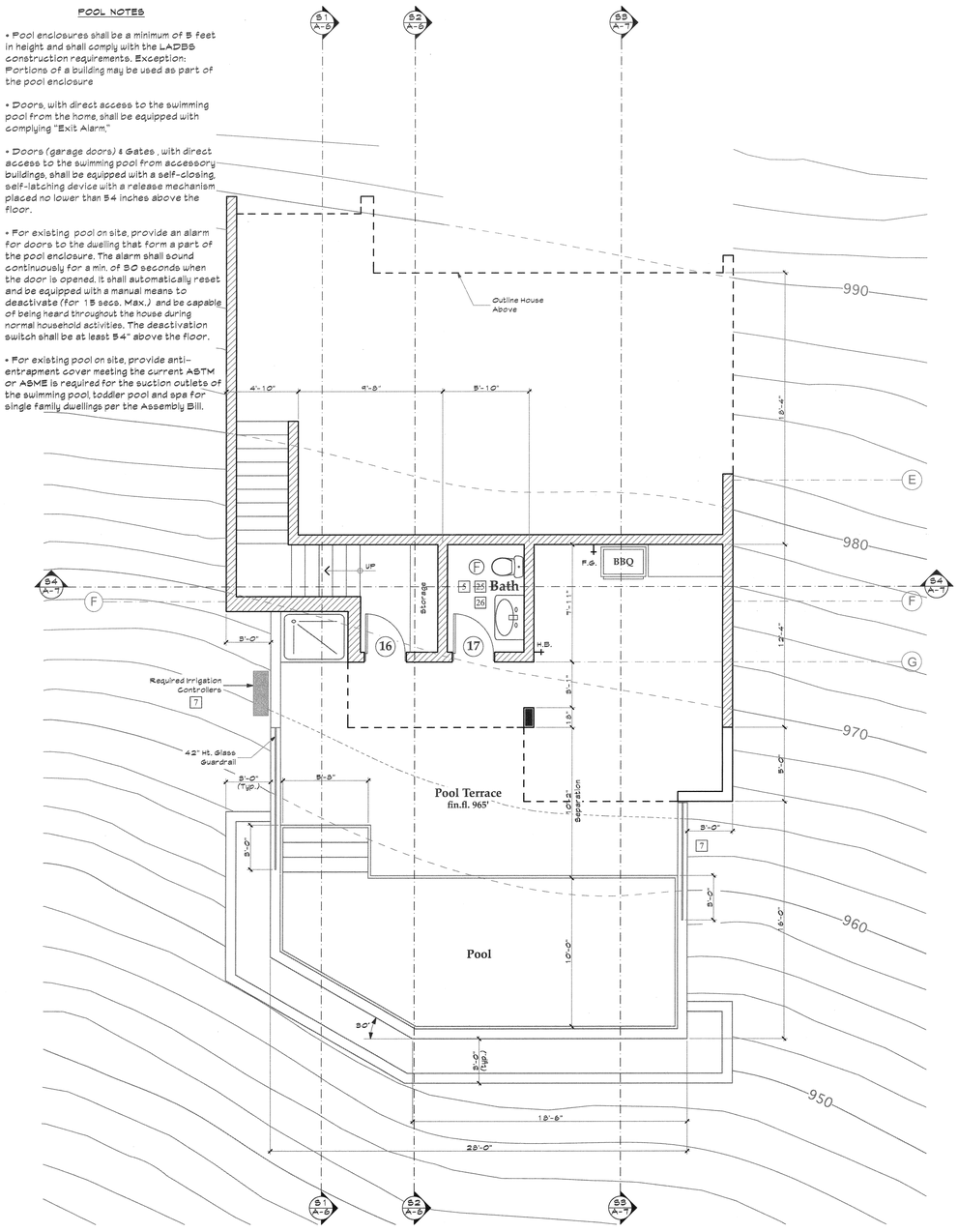


## Pool Level Plan

Scale : 1/4" = 1'-0"




## Floor Plan Notes

2 x 6 Stud Walls

2 X 4 Stud Walls, as can be a convination of 2x4's, 2x6's, etc.

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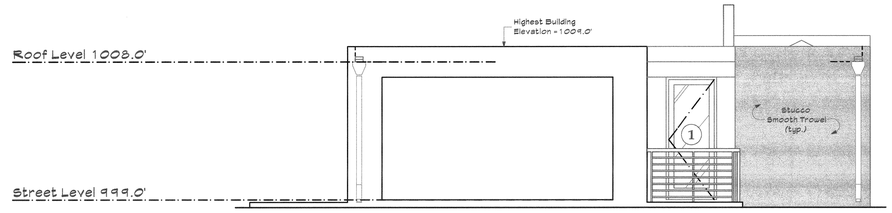
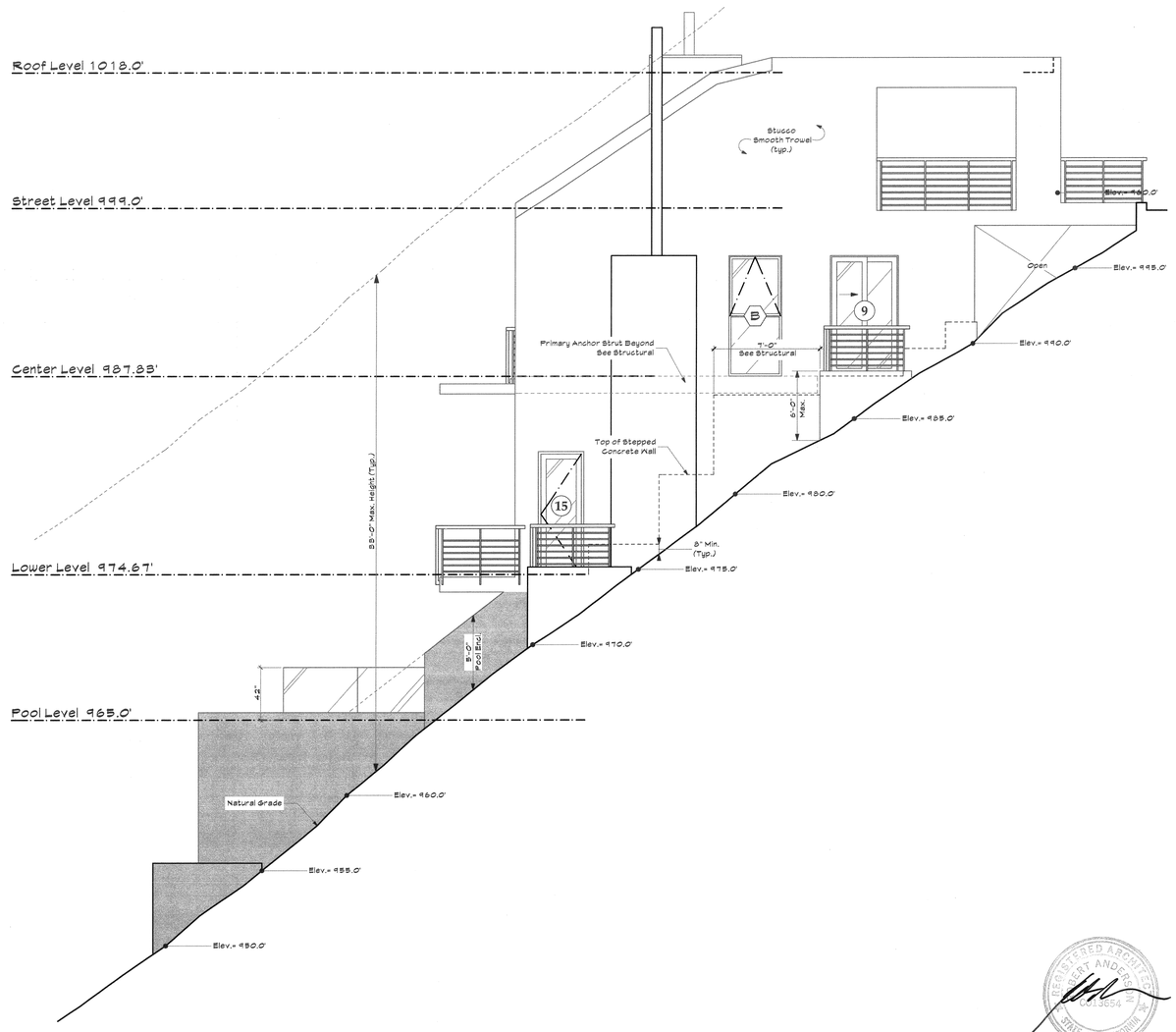



## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"

## Legend

| | |
|---|---|
| E.G. | Fixed Glass, Finish Grade , Fuel Gas |
| F.F. | Finish Floor Elevation |
| D.W. | Dry Wall |
| H.B. | Hose Bib |
| M.C. | Medicine Cabinet |
| A.B. | Anchor Bolt |
| D.S. | Downspout |
| I.D. | Inside Diameter |
| O.D. | Outside Diameter |
| E.O.B. | Face of Block |
| E.O.S. | Face of Stud |
| N.I.C. | Not in Contract |
| N.T.S. | Not to Scale |
| U.N.O. | Unless Noted Otherwise |
| (1) | Door Reference Number |
| (A) | Window Reference Letter |
| | Detail Reference Number / Sheet Reference Location |
| | Section Reference Number / Sheet Reference Location |
| | Exterior Elevation Number / Sheet Reference Location |
| | Interior Reference Number / Sheet Reference Location |
| | Ref. Letter per Elevation |
| # | See "Green Building Code" Notes in Sheet GRN |


Department of Building and Safety
Green Building Division

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By: _____ Date: _____



Robert Anderson Architect
18169 KNOLL HILL
GRANADA HILLS , CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Pool Level Plan

1812 Crisler Way - HOUSE 96

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-18-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |
| 5 | 3-12-15 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 3-12-15

PROJECT REF. NUMBER

A-4

SHEET NUMBER 96

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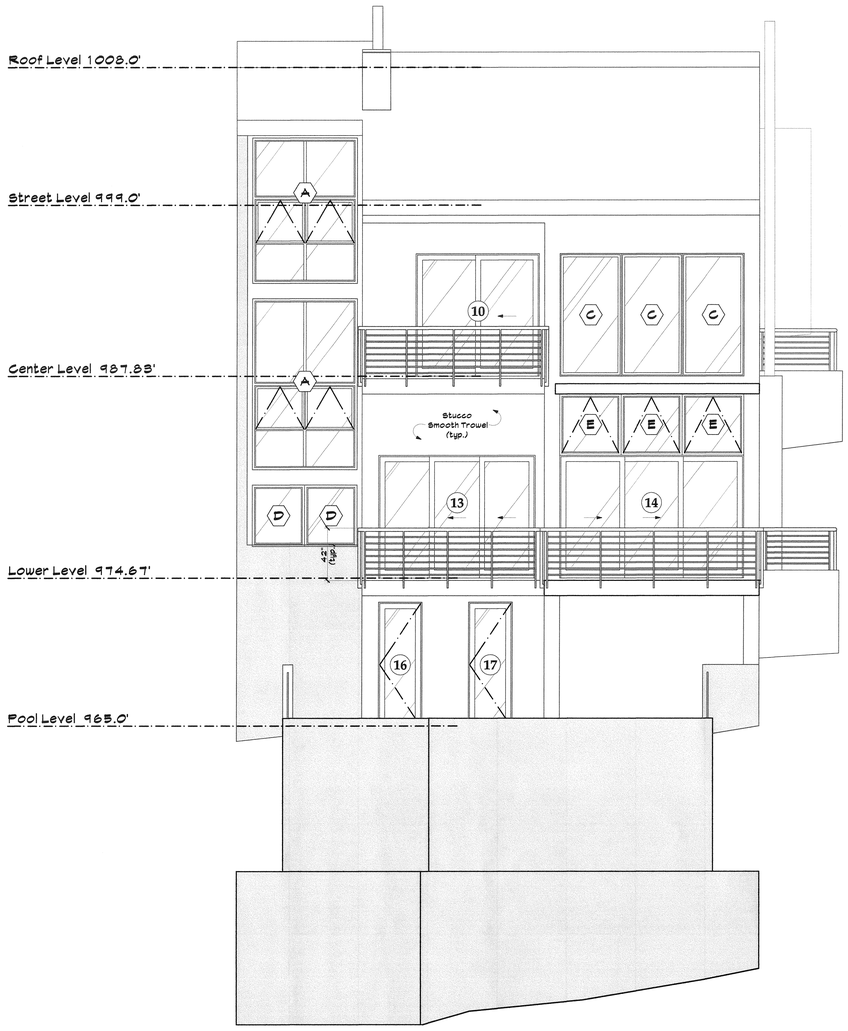
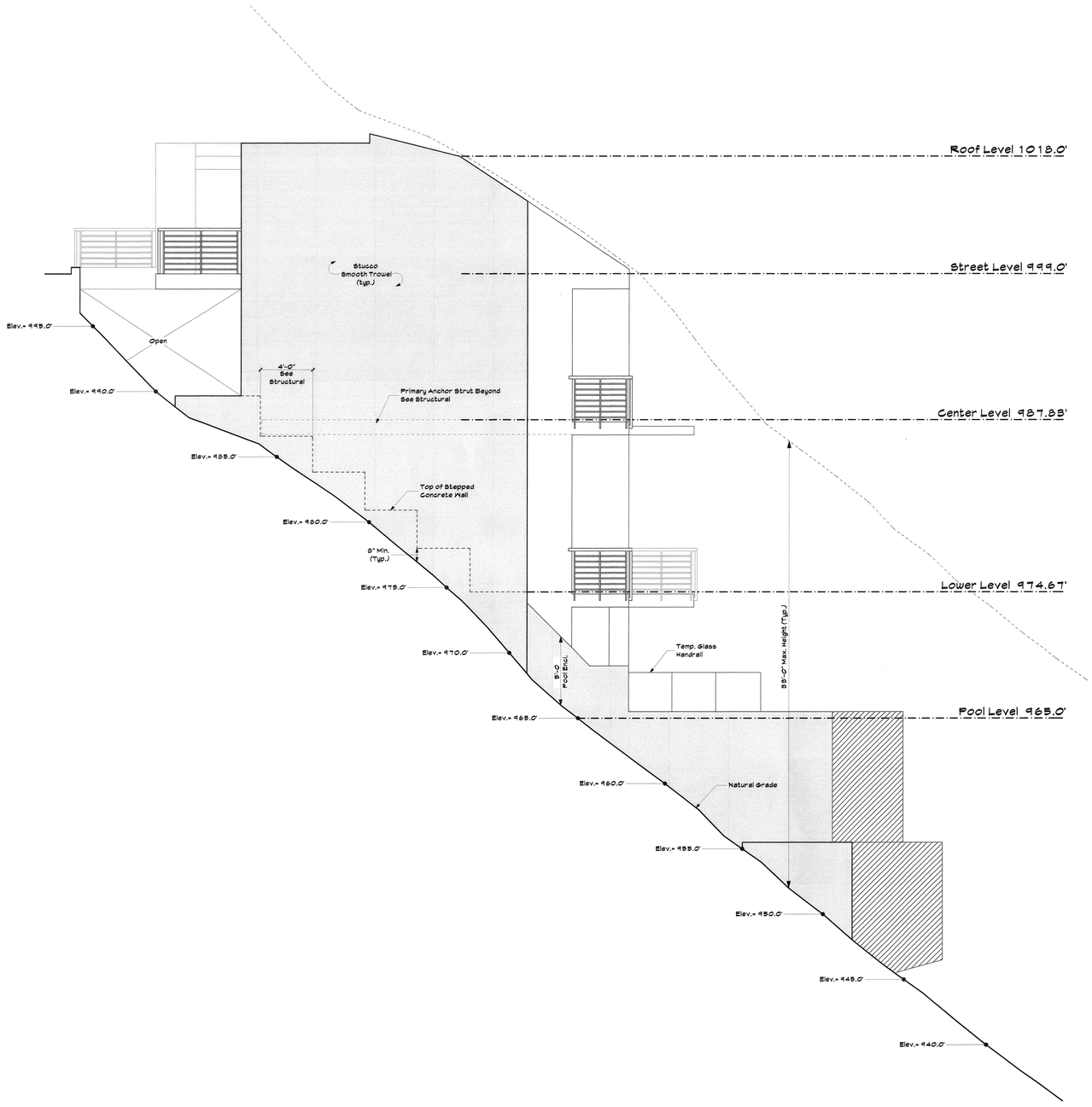



## South Elevation




## West Elevation

## Exterior Elevation

Scale : 1/4" = 1'-0"


Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Exterior Elevation

1812 Crisler Way - HOUSE 96

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
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DATE ISSUED 5-1-11

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PROJECT REF. NUMBER

A-5

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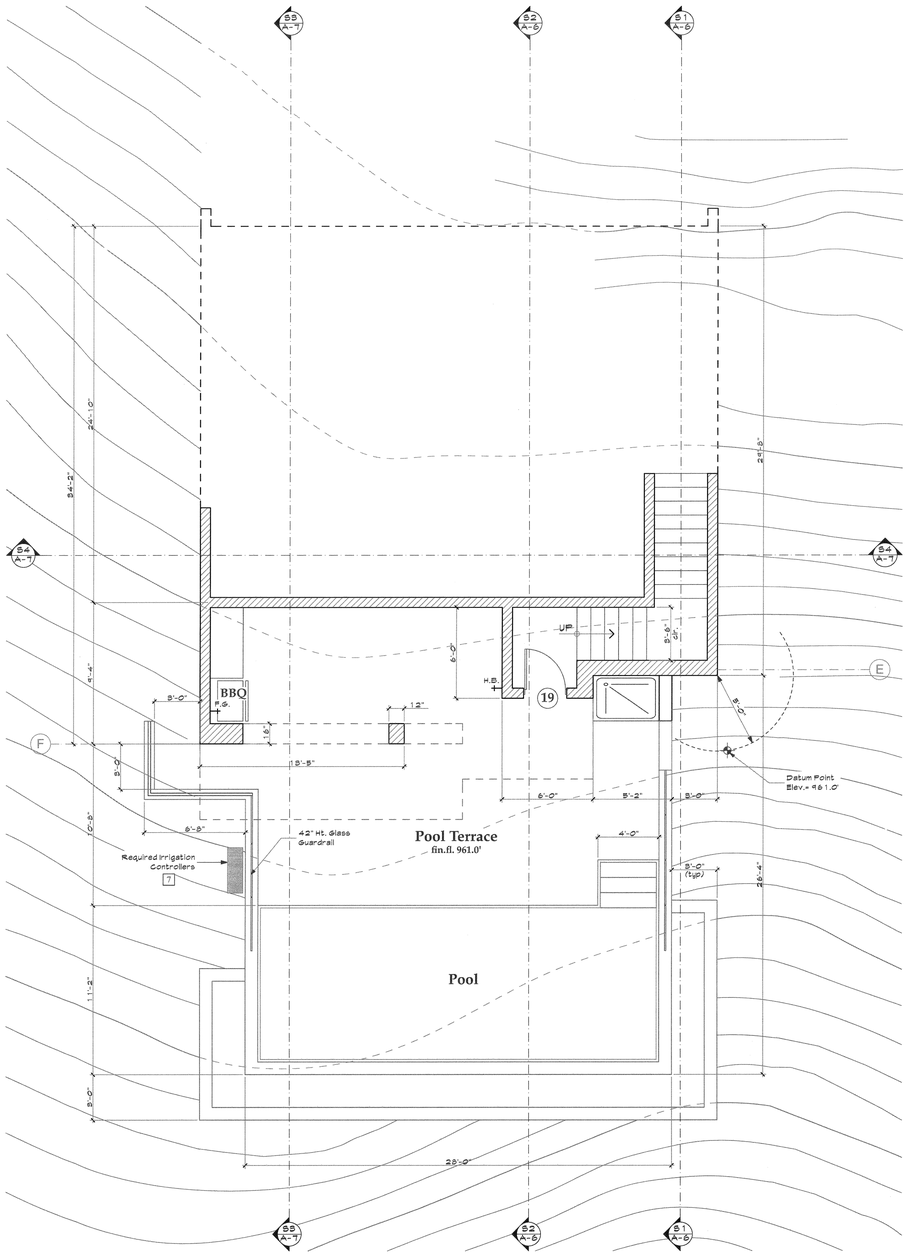
SHEET NUMBER 96




## Pool Level Plan

Scale : 1/4" = 1'-0"

### POOL NOTES

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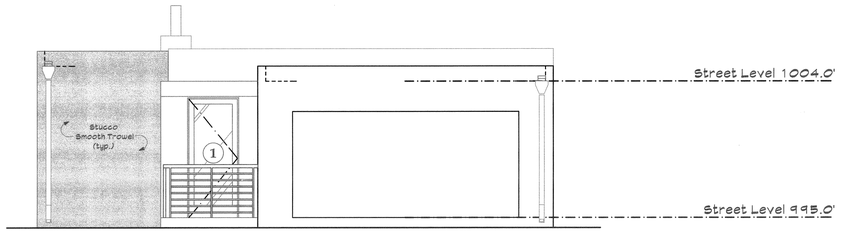
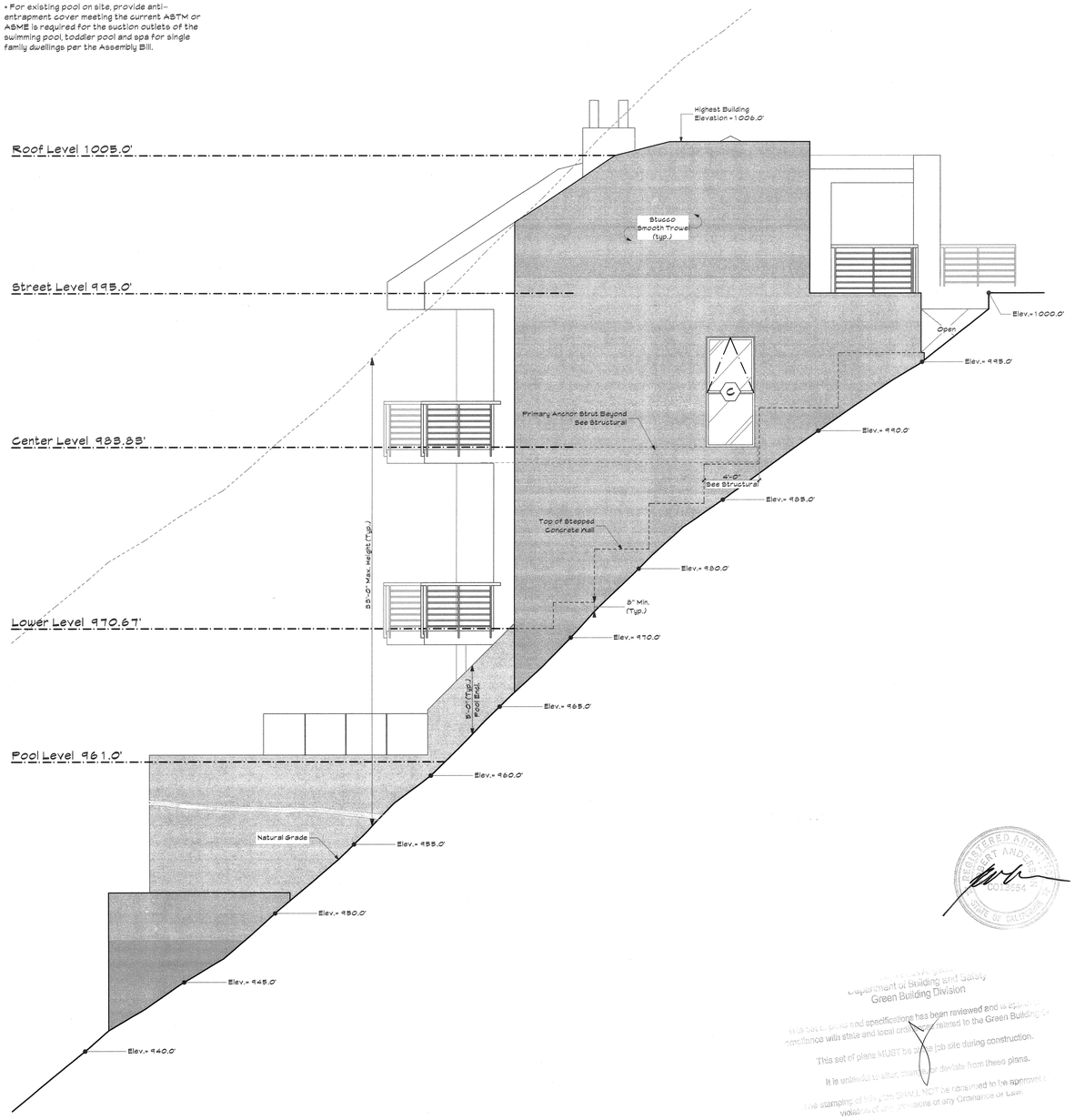



## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"

## Floor Plan Notes

2 x 6 Stud Walls

2 X Stud Walls, as can be a convination of 2x4's, 2x6's, etc.

SD — Los Angeles City Approved Smoke Detector hard wired w/ battery back up.

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Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

# Pool Level Plan

1806 Crisler Way - HOUSE 97

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |
| 5 | 3-12-15 | DC |

DATE ISSUED 5-1-11

DATE PRINTED 3-12-15

PROJECT REF. NUMBER

A-4

SHEET NUMBER

REGISTERED ARCHITECT
ROBERT ANDERSON
C035094
STATE OF CALIFORNIA

Department of Building and Safety
Green Building Division
Plans and specifications has been reviewed and is approved in accordance with state and local codes related to the Green Building Code.
This set of plans MUST be on the job site during construction.
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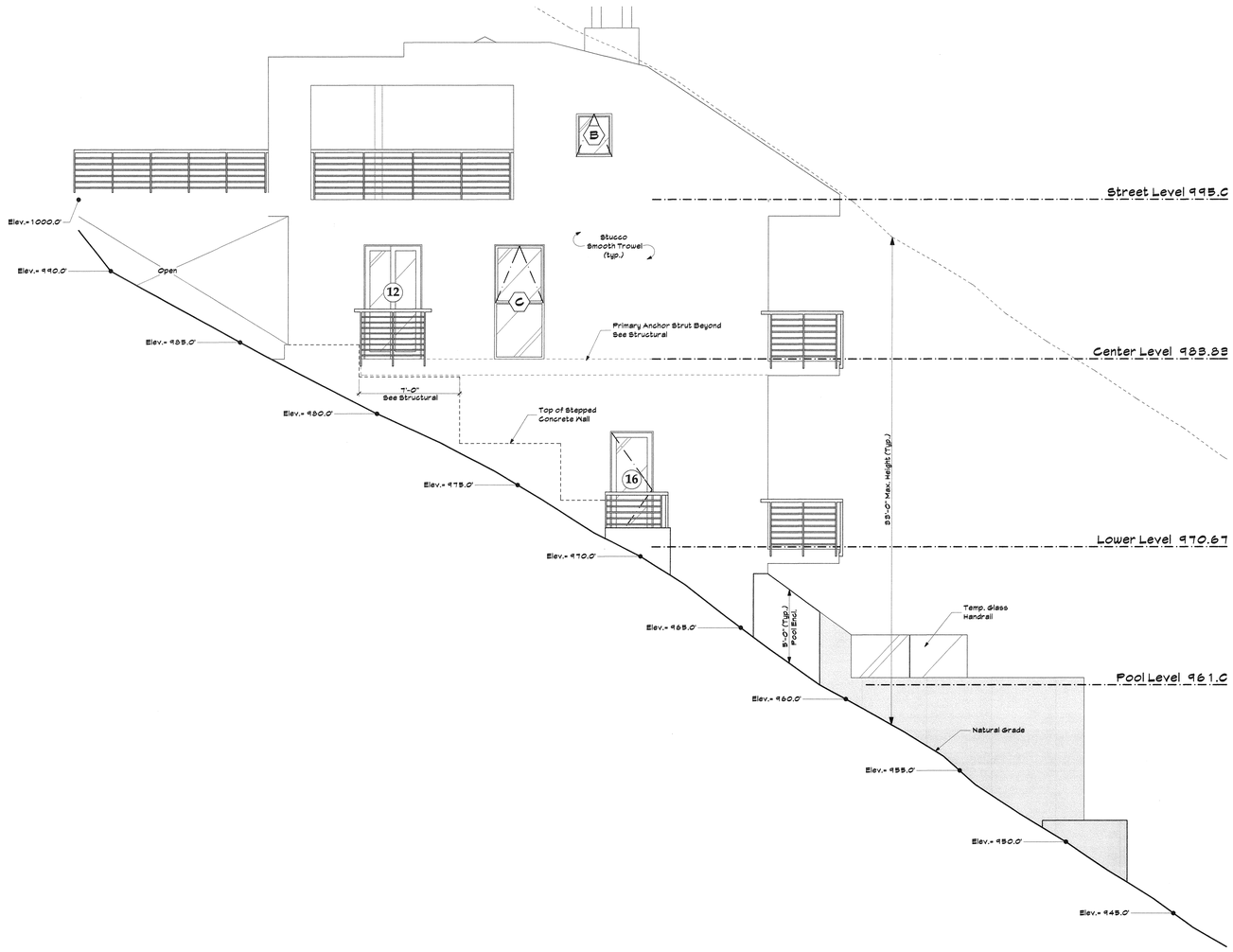
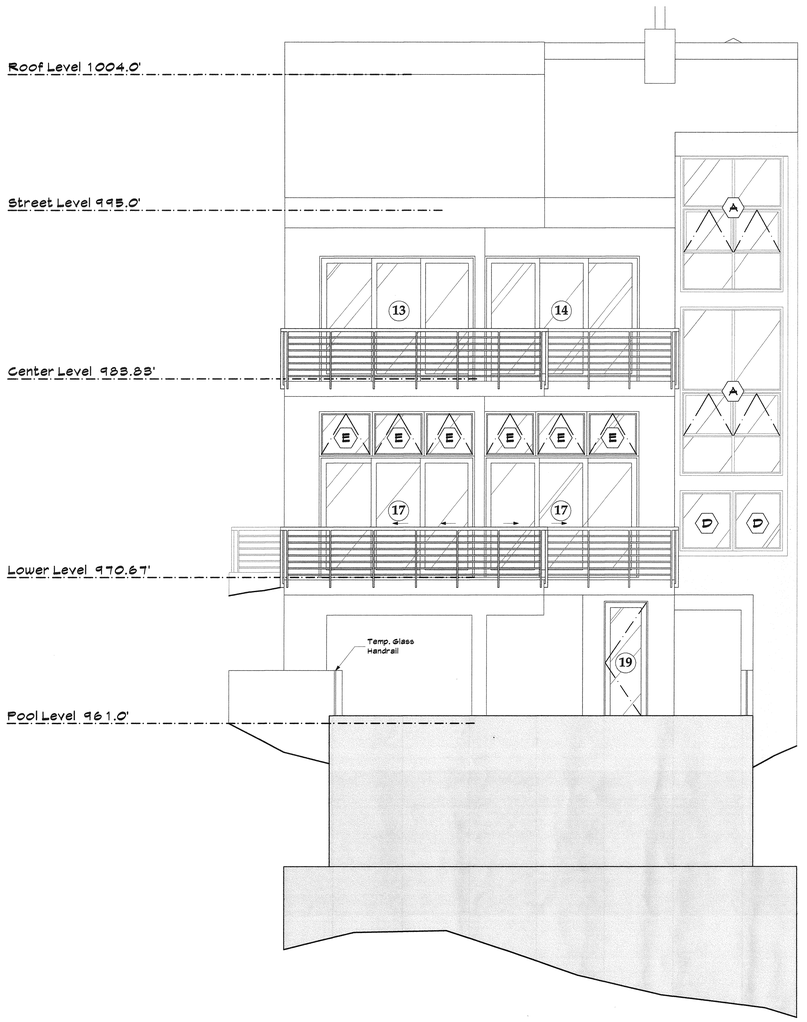



## South Elevation




## South Elevation

## Exterior Elevation

Scale : 1/4" = 1'-0"


Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134


# Exterior Elevations

1806 Crisler Way - HOUSE 97

CAC Development
1504 South Flower Street
Los Angeles, California 90015

| | |
|---|---|
| DRAWN BY | S.HAL |
| CHECKED BY | DC |
| APPROVED BY | RA |

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |

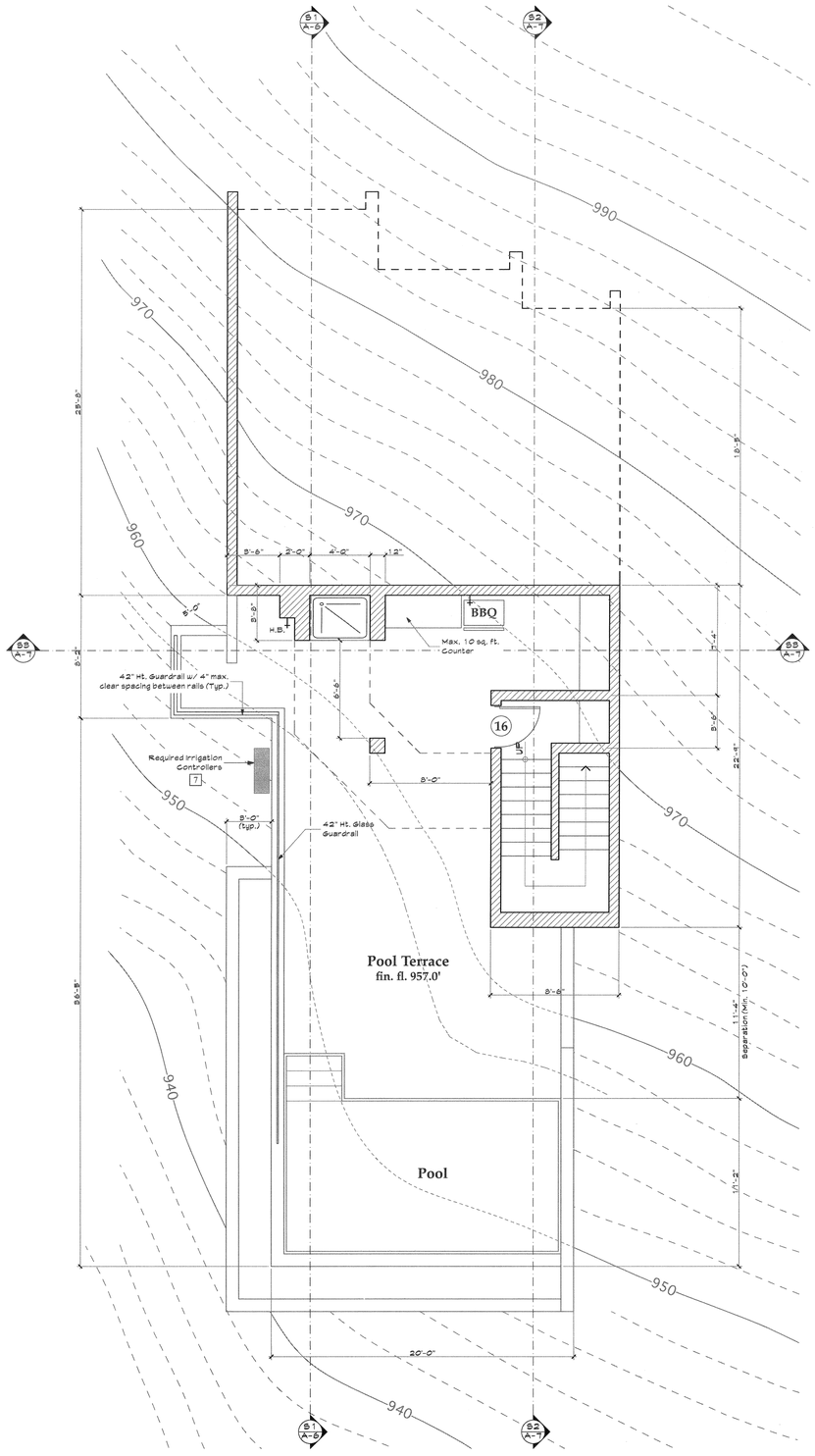
DATE ISSUED 5-1-11

DATE PRINTED 6-20-13

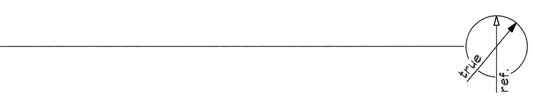
PROJECT REF. NUMBER

A-5

SHEET NUMBER 97




## Pool Level Plan

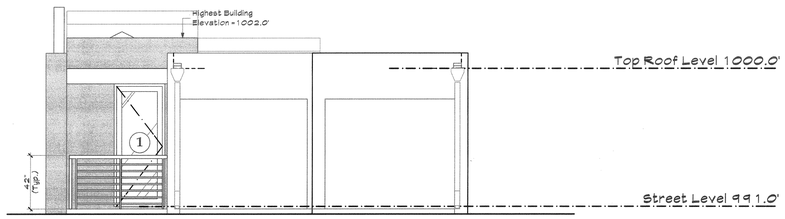



## Floor Plans

Scale : 1/4" = 1'-0"

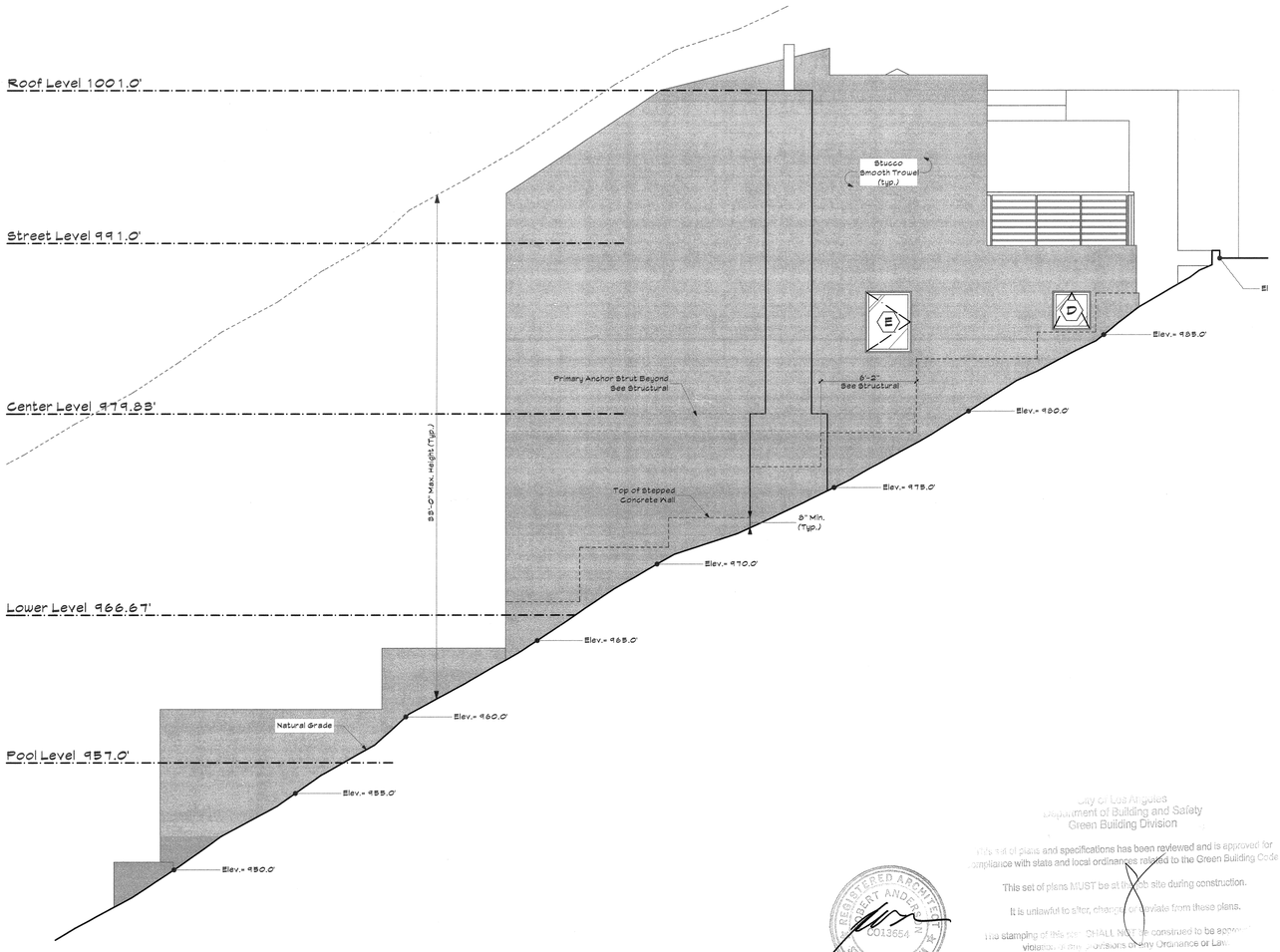
### POOL NOTES

- Pool enclosures shall be a minimum of 5 feet in height and shall comply with the LADBS construction requirements. Exception: Portions of a building may be used as part of the pool enclosure
- Doors, with direct access to the swimming pool from the home, shall be equipped with complying "Exit Alarm."
- Doors (garage doors) & Gates , with direct access to the swimming pool from accessory buildings, shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
- For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. Max.) and be capable of being heard throughout the house during normal household activities. The deactivation switch shall be at least 54" above the floor.
- For existing pool on site, provide anti-entrapment cover meeting the current ASTM or ABME is required for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per the Assembly Bill.




## North Elevation

Scale : 1/4" = 1'-0"




## East Elevation

Scale : 1/4" = 1'-0"

City of Los Angeles
Department of Building and Safety
Green Building Division

This set of plans and specifications has been reviewed and is approved for compliance with state and local ordinances related to the Green Building Code

This set of plans MUST be at the job site during construction.

It is unlawful to alter, change or deviate from these plans.

The stamping of this set SHALL NOT be construed to be approval of violation of the provisions of any Ordinance or Law.

By: _____

REGISTERED ARCHITECT ROBERT ANDERSON C013654 STATE OF CALIFORNIA

Robert Anderson
Architect
18169 KNOLL HILL
GRANADA HILLS, CALIFORNIA 91344
818 488-1327
FAX 360-6134

# Pool Level Plan

1800 Crisler Way - HOUSE 98

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY: S.HAL
CHECKED BY: DC
APPROVED BY: RA

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |
| 5 | 3-12-15 | DC |

DATE ISSUED: 5-1-11

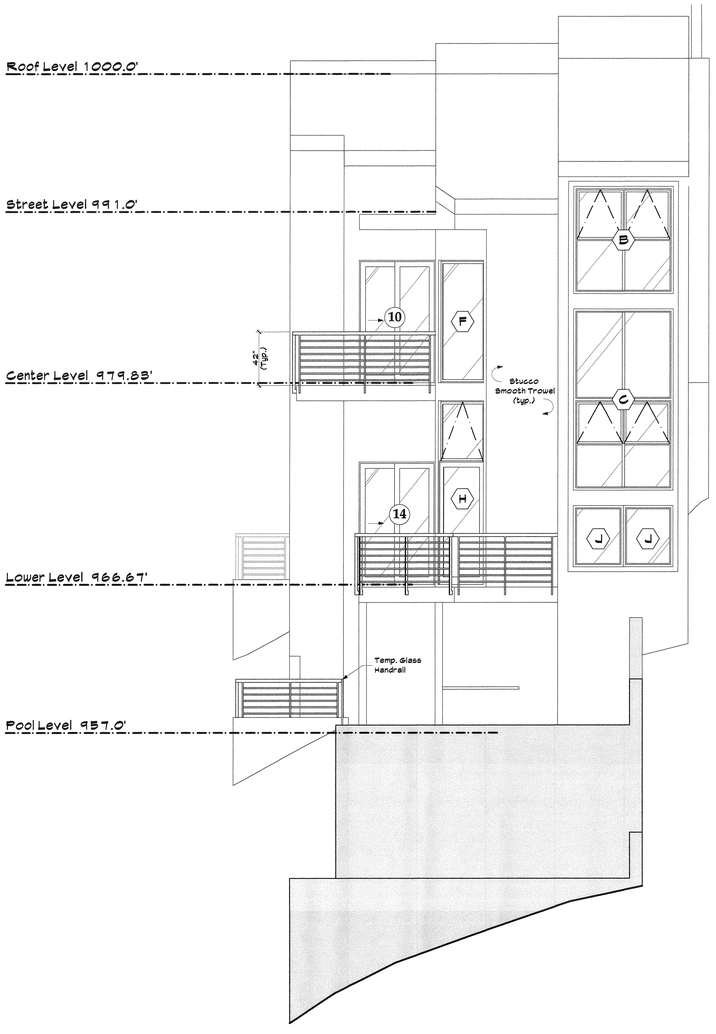
DATE PRINTED: 3-12-15

PROJECT REF. NUMBER

**A-4**

SHEET NUMBER 98

JUN 05 2015




## South Elevation




## West Elevation

## Exterior Elevations

Scale : 1/4" = 1'-0"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# Exterior Elevations

1800 Crisler Way - HOUSE 98
CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY: S.HAL
CHECKED BY: DC
APPROVED BY: RA

REVISIONS

| NUMBER | DATE | BY |
|---|---|---|
| 1 | 8-8-12 | DC |
| 2 | 9-14-12 | DC |
| 3 | 11-8-12 | DC |
| 4 | 6-20-13 | DC |

DATE ISSUED: 5-1-11

DATE PRINTED: 6-20-13

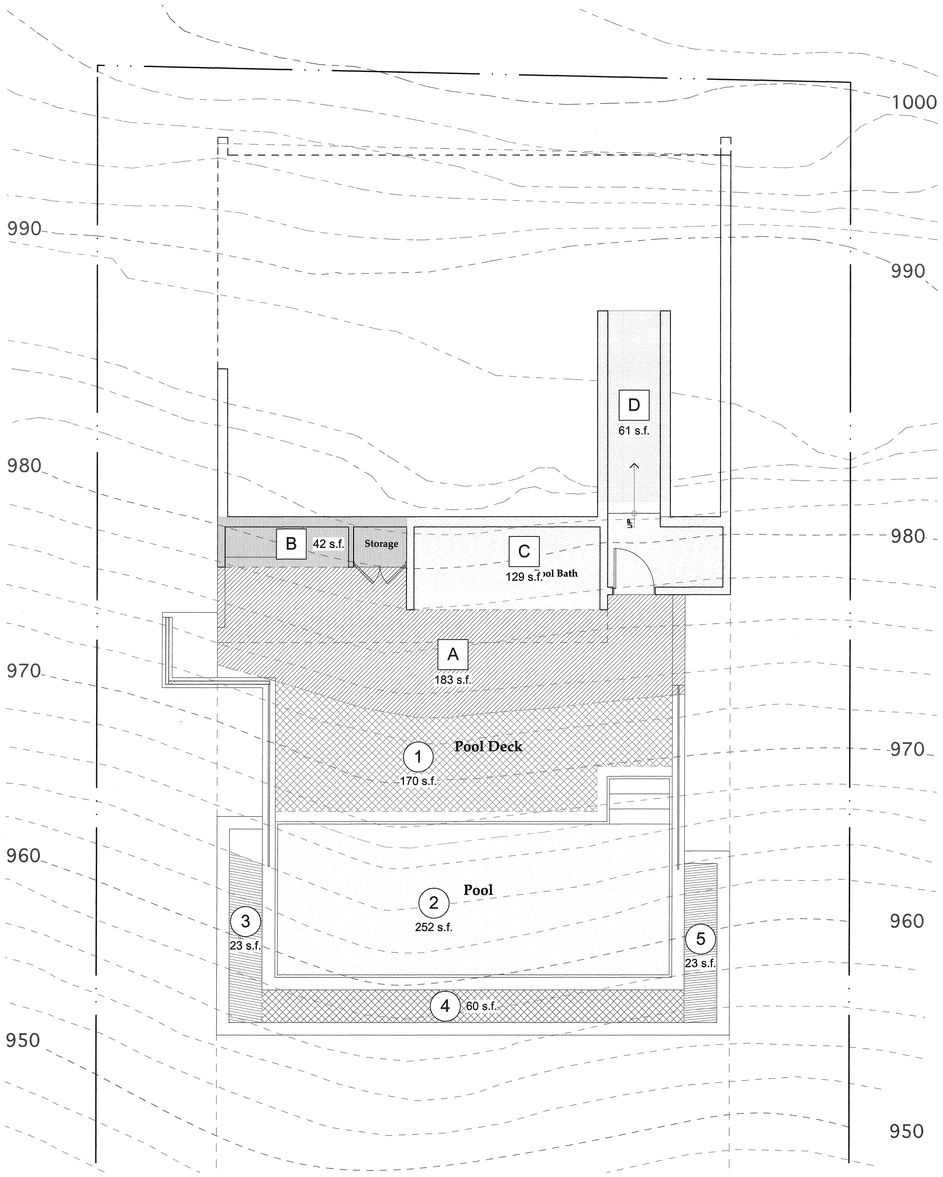
PROJECT REF. NUMBER

A-5

SHEET NUMBER 98

# Exhibit G

# Grading Calculations




## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

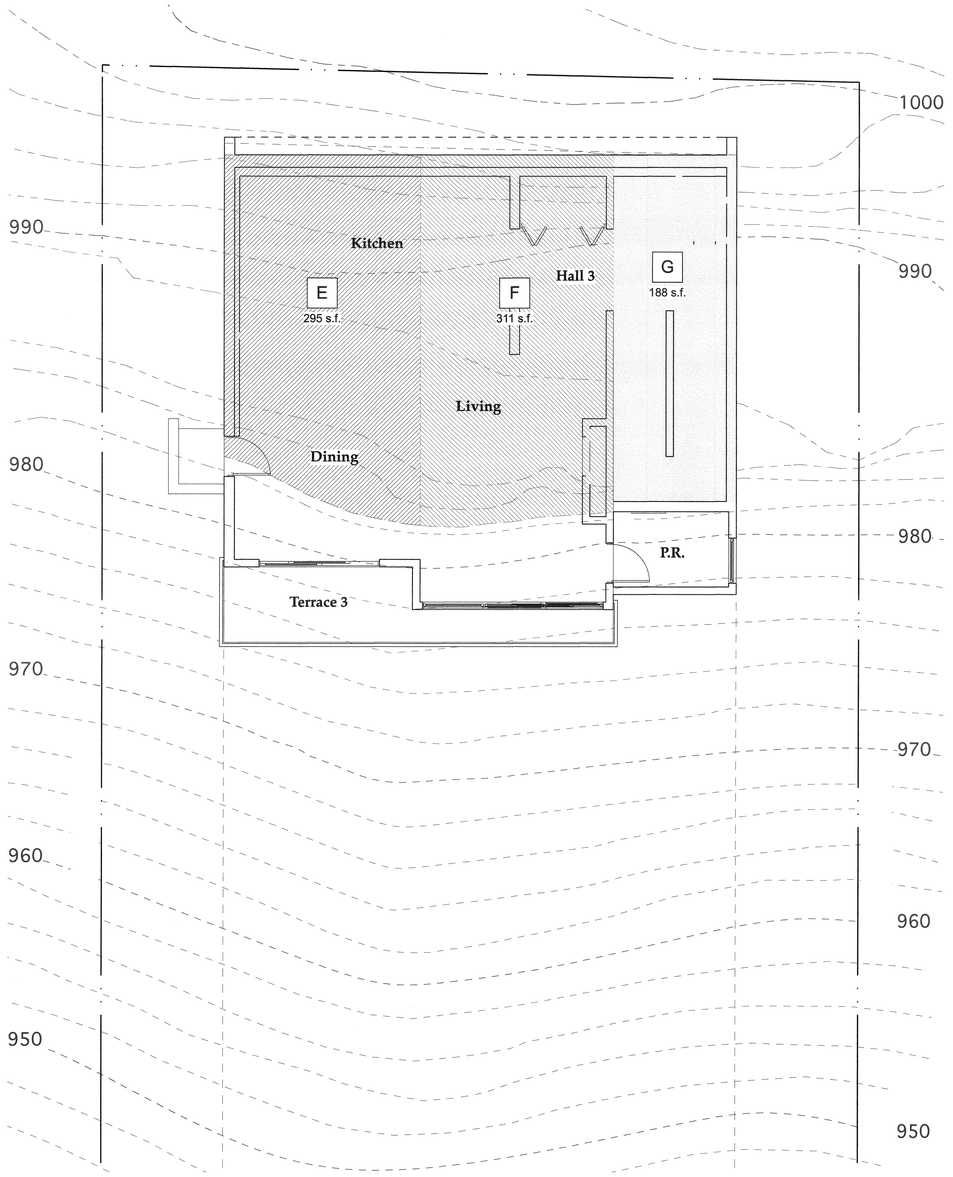
| | | | |
|---|---|---|---|
| A | 229 s.f. x 2.5 ÷ 27 | = | 21.2 $yd^3$ |

• Exempted Areas (Under House outline) :

| | | | |
|---|---|---|---|
| B | 42 s.f. x 6 ÷ 27 | = | 9.3 $yd^3$ |
| C | 129 s.f. x 5.5 ÷ 27 | = | 26.2 $yd^3$ |
| D | 61 s.f. x 3 ÷ 27 | = | 6.7 $yd^3$ |
| E | 295 s.f. x 5 ÷ 27 | = | 54.6 $yd^3$ |
| F | 311 s.f. x 5.75 ÷ 27 | = | 66.2 $yd^3$ |
| G | 188 s.f. x 6.5 ÷ 27 | = | 45 $yd^3$ |
| | Total Exempt | = | 208 $yd^3$ |

### Fill Calculation

| | | | |
|---|---|---|---|
| 1 | 170 s.f. x 2.25 ÷ 27 | = | 14.2 $yd^3$ |
| 2 | 252 s.f. x 4 ÷ 27 | = | 37.3 $yd^3$ |
| 3 | 24 s.f. x 4 ÷ 27 | = | 3.5 $yd^3$ |
| 4 | 60 s.f. ( x 5.75 = 345.0 ; x 0.875 = + 52.5 ) ÷ 27 | = | 14.7 $yd^3$ |
| 5 | 23 s.f. x 4.25 ÷ 27 | = | 3.6 $yd^3$ |
| | Total Fill = | | 73.3 $yd^3$ |




## Grading Calculation (Lower level)

Scale : 1/4" = 1'-0"

### Cut, Fill & Export Calculation

- Total Cut (21.2 $yd^3$) + Total Fill (73.3 $yd^3$) + Pool (N/A) = 94.5 $yd^3$ < 250 $yd^3$ ( Max. Allowed )
- Total Cut ( 21.2 $yd^3$ ) + Total Exempt Cut ( 208 $yd^3$ ) = 229.2 $yd^3$ ( Total Project Cut )
- Total Project Cut (229.2 $yd^3$) - Total Fill (73.3 $yd^3$) = 155.9 $yd^3$ ( TO EXPORT ) < 250 $yd^3$ ( Max. Allowed )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# Grading Calculation

1818 Crisler Way - HOUSE 95

CAC Development
1504 South Flower Street
Los Angeles, California 90015

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NUMBER DATE BY

DATE ISSUED 3-4-15
DATE PRINTED 3-4-15

PROJECT REF. NUMBER

A-8

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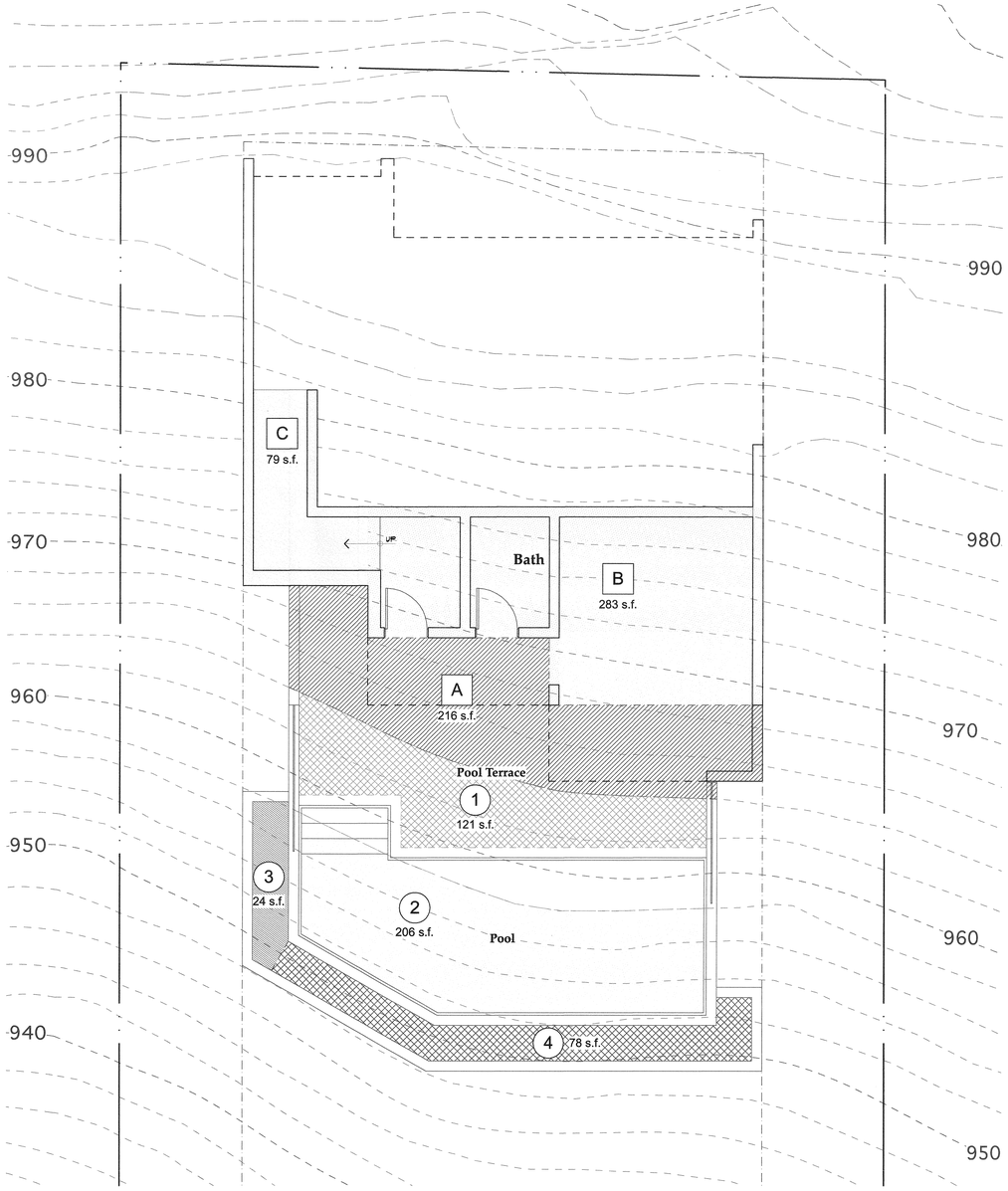



## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

A — 216 s.f. x 2.5 ÷ 27 = 20 yd³

- Exempted Areas (Under House Outline) :

B — 283 s.f. (x 2.75 = 990 ; x 3.5 = + 1132) ÷ 27 = 65.4 yd³

C — 79 s.f. x 2.75 ÷ 27 = 8 yd³

D — 121 s.f. (x 5 = 605 ; x 3 = + 363) ÷ 27 = 35.8 yd³

E — 483 s.f. (x 3 = 1499 ; x 4 = + 1932) ÷ 27 = 125 yd³

Total Exempt = 234.2 yd³

### Fill Calculation

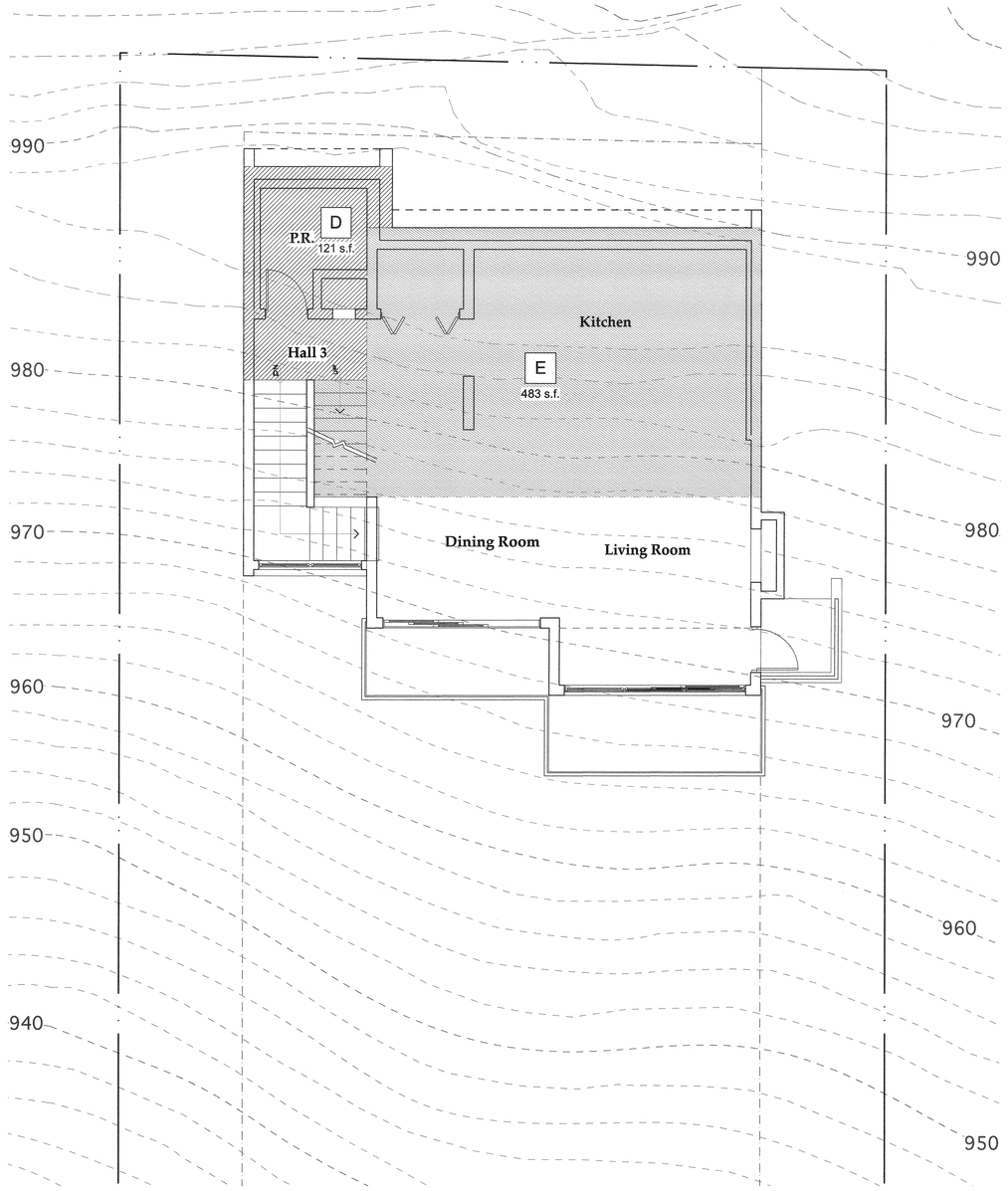
1 — 121 s.f. x 4 ÷ 27 = 18 yd³

2 — 206 s.f. x 3.5 ÷ 27 = 30.5 yd³

3 — 24 s.f. x 4.5 ÷ 27 = 4 yd³

4 — 78 s.f. (x 5 = 390 ; x 1 = + 78) ÷ 27 = 17.3 yd³

Total Fill = 66 yd³




## Grading Calculation (Lower Level)

### Cut, Fill & Export Calculation

- Total Cut (20 yd³) + Total Fill (66 yd³) + Pool (N/A) = 86 yd³ < 250 yd³ (Max. Allowed)
- Total Cut (20 yd³) + Total Exempt Cut (234.2 yd³) = 252.2 yd³ (Total Project Cut)
- Total Project Cut (252.2 yd³) - Total Fill (66 yd³) = 186.2 yd³ (TO EXPORT) < 250 yd³ (Max. Allowed)

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# Grading Calculation

1812 Crisler Way - HOUSE 96

CAC Development
1504 South Flower Street
Los Angeles, California 90015

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APPROVED BY RA

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DATE ISSUED 3-16-15

DATE PRINTED 3-16-15

PROJECT REF. NUMBER

A-8

SHEET NUMBER 96

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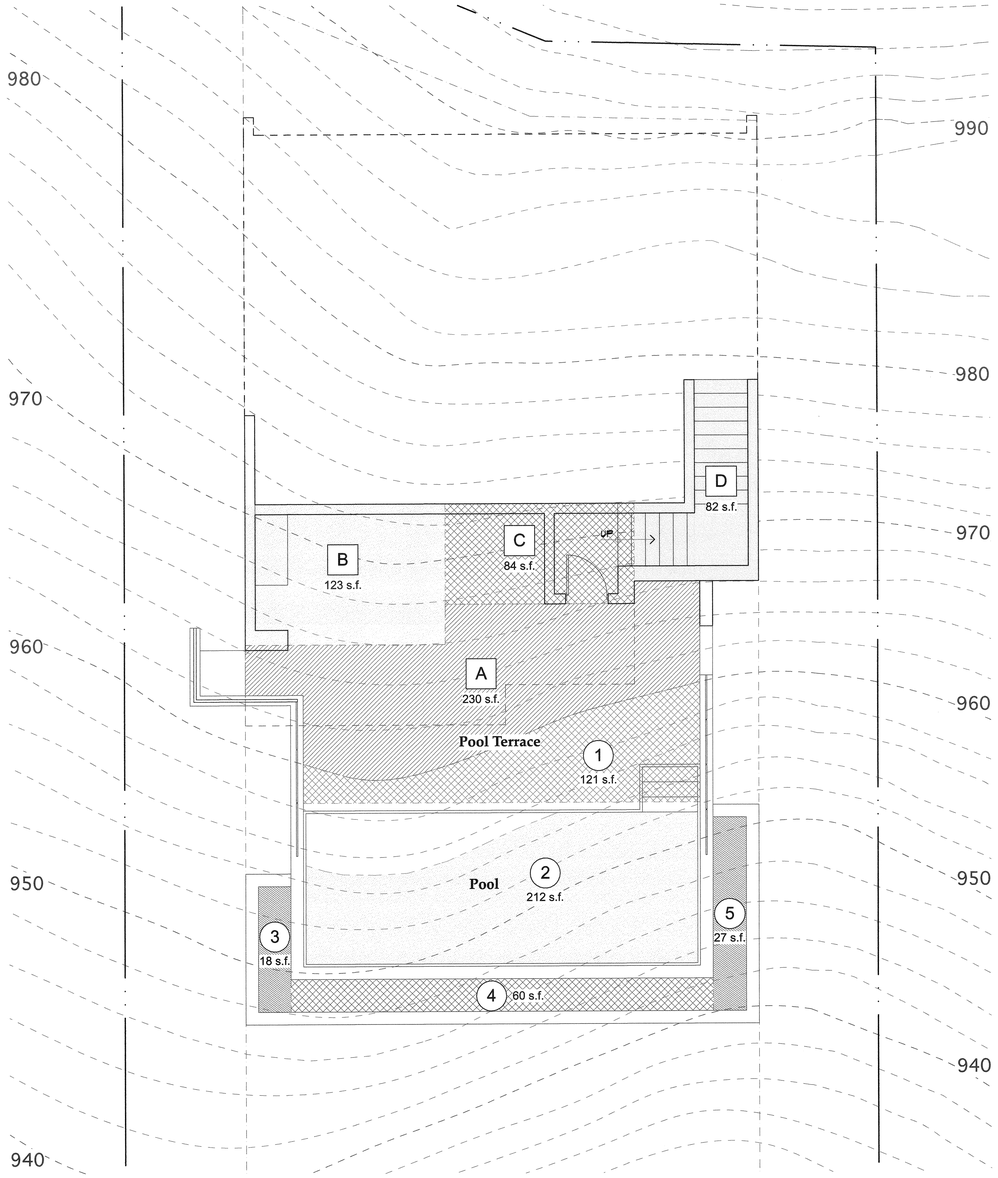



## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

A | 230 s.f. x 2.5 ÷ 27 = 21 $yd^3$

• Exempted Areas (Under House outline) :

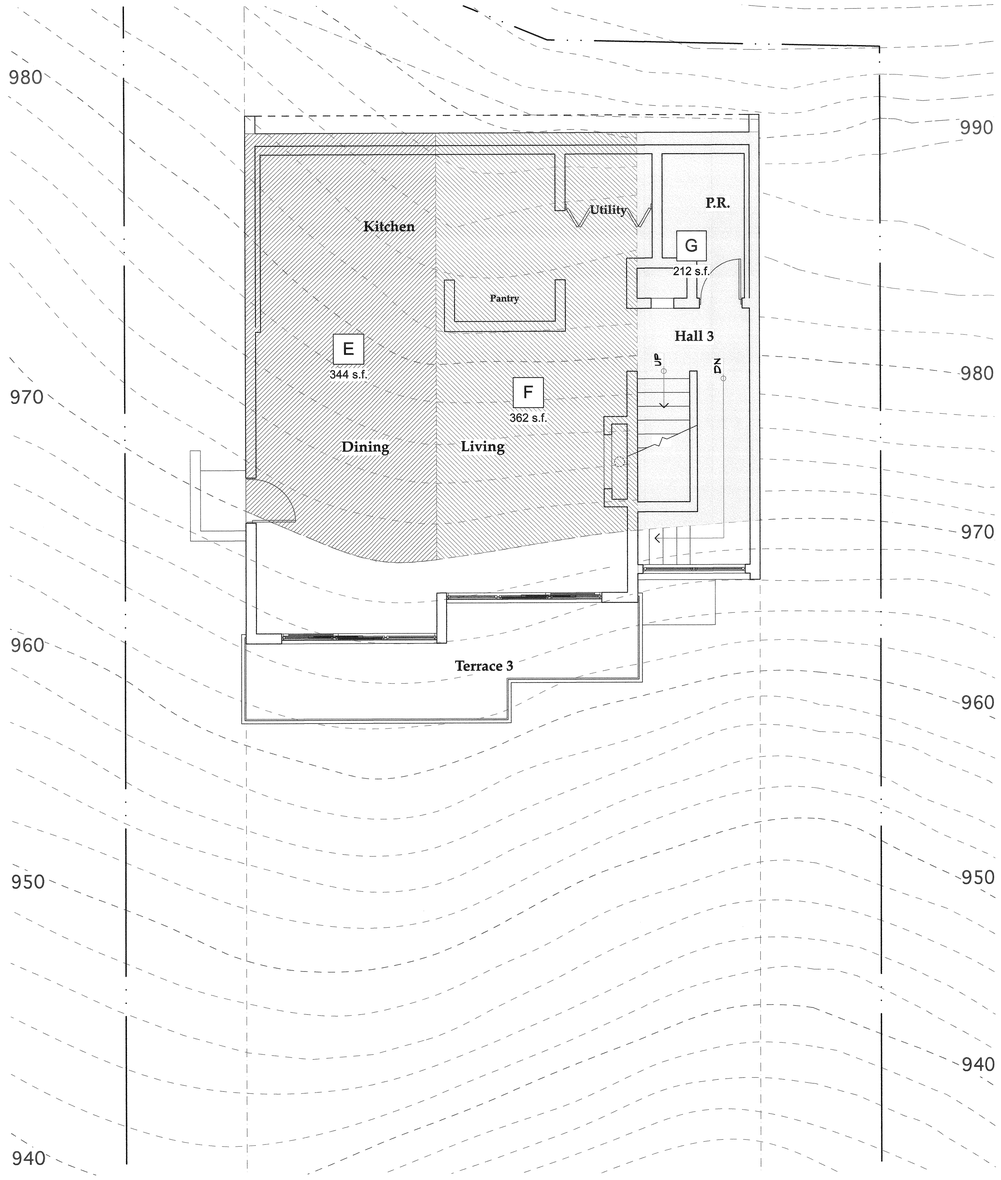
| | | |
|---|---|---|
| B | 123 s.f. x 2 ÷ 27 | = 9 $yd^3$ |
| C | 84 s.f. x 1.5 ÷ 27 | = 4.6 $yd^3$ |
| D | 82 s.f. x 2.5 ÷ 27 | = 7.6 $yd^3$ |
| E | 344 s.f. x 6 ÷ 27 | = 76.4 $yd^3$ |
| F | 362 s.f. x 7 ÷ 27 | = 93.8 $yd^3$ |
| G | 212 s.f. x 8 ÷ 27 | = 62.8 $yd^3$ |

Total Exempt = 254.2 $yd^3$

### Fill Calculation

| | | |
|---|---|---|
| 1 | 121 s.f. x 2.5 ÷ 27 | = 11.2 $yd^3$ |
| 2 | 212 s.f. x 4 ÷ 27 | = 31.4 $yd^3$ |
| 3 | 18 s.f. x 3 ÷ 27 | = 2 $yd^3$ |
| 4 | 60 s.f. ( x 1 = 60, x 5 = + 300 ) ÷ 27 | = 13.3 $yd^3$ |
| 5 | 27 s.f. x 4 ÷ 27 | = 4 $yd^3$ |

Total Fill = 61.9 $yd^3$




## Grading Calculation (Lower Level)

### Cut, Fill & Export Calculation

• Total Cut ( 21 $yd^3$ ) + Total Fill ( 61.9 $yd^3$ ) + Pool (N/A) = 82.9 $yd^3$ < 250 $yd^3$ ( Max. Allowed )

• Total Cut ( 21 $yd^3$ ) + Total Exempt Cut ( 254.2 $yd^3$ ) = 275.2 $yd^3$ ( Total Project Cut )

• Total Project Cut ( 275.2 $yd^3$ ) - Total Fill ( 61.9 $yd^3$ ) = 213.3 $yd^3$ ( TO EXPORT ) < 250 $yd^3$ ( Max. Allowed )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# Grading Calculation

1806 Crisler Way - HOUSE 97

CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL
CHECKED BY DC
APPROVED BY RA

REVISIONS
NUMBER DATE BY

DATE ISSUED 3-16-15

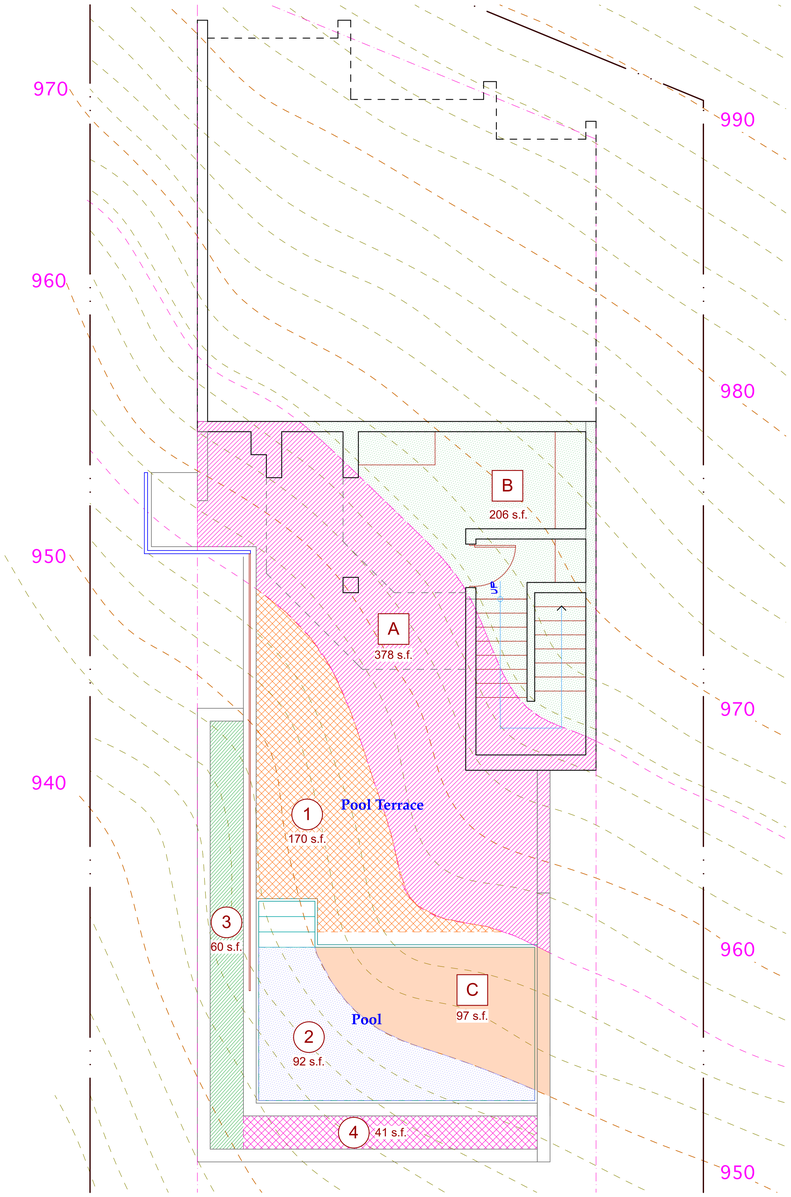
DATE PRINTED 3-16-15

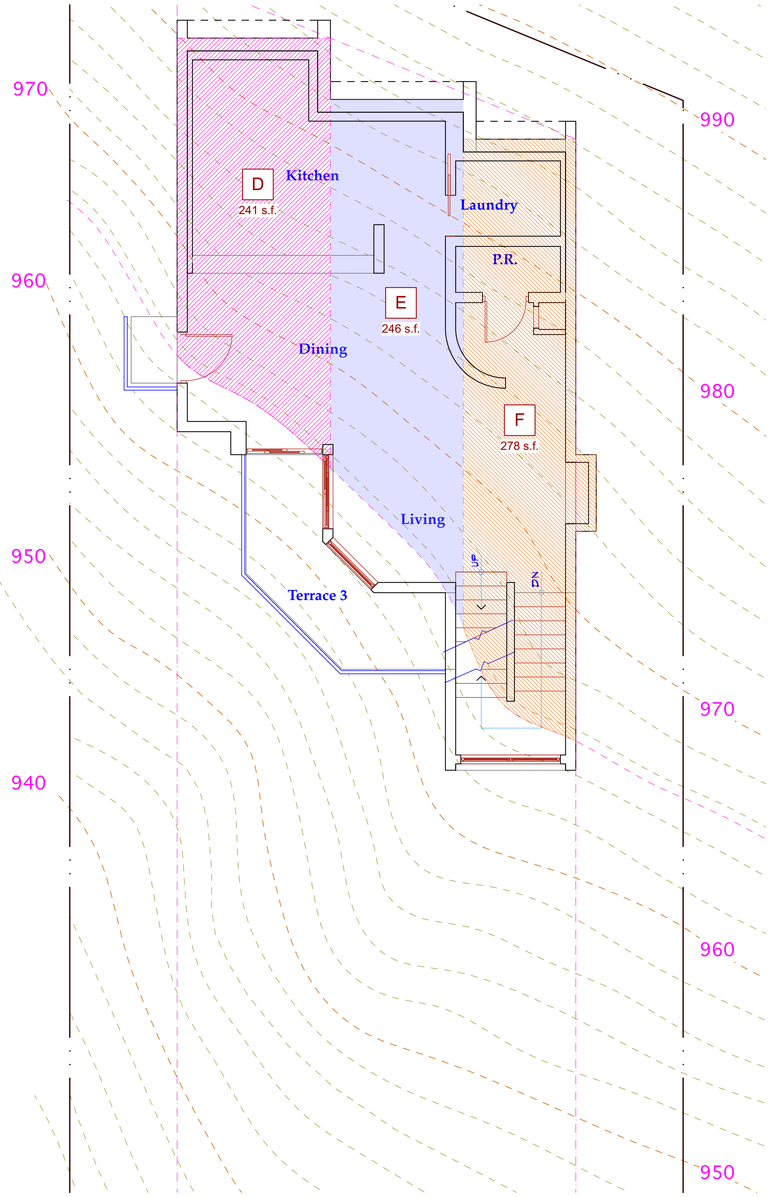
PROJECT REF. NUMBER

A-8

SHEET NUMBER 97

RT | JUN 05 2015




## Grading Calculation (Pool Level)

Scale : 1/4" = 1'-0"

### Cut Calculation

A  293 s.f. x 4 ÷ 27 = 37.9 yd$^3$

- Exempted Areas (Under House Outline) :

B  290 s.f. x 2.5 ÷ 27 = 32.2 yd$^3$

C  97 s.f. x 1.25 ÷ 27 = 5.3 yd$^3$

D  241 s.f. x 6.5 ÷ 27 = 5.8 yd$^3$

E  246 s.f. x 6 ÷ 27 = 54.6 yd$^3$

F  278 s.f. x 7.25 ÷ 27 = 74.5 yd$^3$

Total Exempt = 224.6 yd$^3$

### Fill Calculation

1  170 s.f. x 2.5 ÷ 27 = 15.7 yd$^3$

2  92 s.f. x 3 ÷ 27 = 10.2 yd$^3$

3  60 s.f. x 2.5 ÷ 27 = 5.5 yd$^3$

4  41 s.f. x 2 ÷ 27 = 3 yd$^3$

Total Fill = 34.4 yd$^3$

## Grading Calculation (Lower Level)

### Cut, Fill & Export Calculation

- Total Cut (37.9 yd$^3$) + Total Fill (34.4 yd$^3$) + Pool (N/A) = 72.3 yd$^3$ < 250 yd$^3$ ( Max. Allowed )
- Total Cut ( 43.4 yd$^3$ ) + Total Exempt Cut ( 224.6 yd$^3$ ) = 268 yd$^3$ ( Total Project Cut )
- Total Project Cut (268 yd$^3$) - Total Fill (34.4 yd$^3$) = 233.6 yd$^3$ ( TO EXPORT ) < 250 yd$^3$ ( Max. Allowed )

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# Grading Calculation

1800 Crisler Way - HOUSE 98
CAC Development
1504 South Flower Street
Los Angeles, California 90015

DRAWN BY S.HAL
CHECKED BY DC
APPROVED BY RA

REVISIONS
NUMBER DATE BY

DATE ISSUED 10-30-15
DATE PRINTED 10-30-15

PROJECT REF. NUMBER

A-8

SHEET NUMBER 98

# Exhibit H

# Zoning Administrator's Interpretation

CITY OF LOS ANGELES
CALIFORNIA

ROBERT JANOVICI
CHIEF ZONING ADMINISTRATOR

ASSOCIATE ZONING ADMINISTRATORS
GARY BOOHER
PATRICIA BROWN
R. NICOLAS BROWN
ANIK CHARRON
EMILY J. GABEL-LUDDY
DANIEL GREEN
LOURDES GREEN
DAVID KABASHIMA
ALBERT LANDINI
LINN WYATT

ANTONIO VILLARAIGOSA
MAYOR

DEPARTMENT OF
CITY PLANNING
CON HOWE
DIRECTOR

OFFICE OF
ZONING ADMINISTRATION
200 N. SPRING STREET, 7TH FLOOR
LOS ANGELES, CA 90012
(213) 978-1318
FAX: (213) 978-1334
www.lacity.org/PLN

August 23, 2005

Interested Parties

Department of Building and Safety

CASE NO. ZA 2005-5630(ZAI)
ZONING ADMINISTRATOR'S INTERPRETATION
CITYWIDE
Driveways to Required Parking Spaces for Single-Family Dwellings on Downsloped Lots Not Subject to the 3.5-foot Height Limit Within the Required Front Yard

Notwithstanding Section 12.21-A,17(a)(3) of the Los Angeles Municipal Code, raised driveways to access required parking spaces for single-family dwellings on downsloped lots may be constructed within the required front yard provided that:

- The driveway does not exceed 20 feet in width.
- The driveway and any safety rail or fence thereon do not exceed 3-1/2 feet above the adjacent paved portion of the street with additional height appropriate to account for the slope of the driveway. The height shall be measured from the highest point of the street where the driveway meets the paved portion of the street after any required improvement or widening.
- This ZAI does not supercede the provisions of any specific plans.

Section 12.21-A,2 of the Los Angeles Municipal Code provides in pertinent part as follows:

> "2. Other Uses Determined by Administrator - The Administrator shall have authority to determine other uses, in addition to those specifically listed in this Article, which may be permitted in each of the various zones, when in his judgement, such other uses are similar to and no more objectionable to the public welfare than those listed.... The Zoning Administrator shall also have the authority to interpret zoning regulations when the meaning of the regulation is not clear, either in general or as it appears to a specific property or situation.... The Zoning Administrator shall also have authority to adopt general interpretations determining the proper application of the yard regulations to groups of lots located in hillside districts or affected by common problems."

This provision has also been interpreted to permit resolution of conflicts between disparate sections of the Code and to provide clarity where ambiguity exists.

Over the last few years, much of the housing development within the City has been infill development of vacant lots, particularly lots within the hillside areas. Property values, supply of vacant land and building technology have made these hillside lots feasible for building.

Downsloping lots fronting on substandard hillside streets have a particular problem relative to the driveway from the street to the garage. As the driveway proceeds from the street to the dwelling garage the subject property grade continues to slope down while the driveway continues at the same level as the street as it bridges the street to the garage over the downsloping grade. Section 12.22-C,20 does not provide for these driveways as allowable projections in a front yard and further, Section 12.22-A,17(a)(3) prohibits raised porches, platforms or landing places. This problem is exacerbated by many of these streets not being fully improved so that the height of the driveway and safety rail are often over-in-height even before the property line due to the downslope of the unimproved portion of the street dedication.

The Department of Building and Safety, since 1993, has allowed a maximum projection of 3-1/2 feet, including guard rails measured above adjacent grade. However, this is not enough to accommodate most of these driveways.

It is not the intent of the Code to prohibit legitimate access to a dwelling nor to require a special entitlement just to have that access when there are no issues of public, health, safety or welfare nor issues of light, air or view corridors. These are situations where the driveways and safety rail/fences are approximately 3-1/2 feet above the street and, if they were located on level terrain would be consistent with the Code requirements. However, due to the downslope grade of the lot they may technically be 10 to 15 feet in height. Many of these have been permitted by adjustments pursuant to Section 12.28 of the Los Angeles Municipal Code and generally have not involved any legitimate planning issues.

Therefore, I hereby determine that raised driveways to required parking spaces for single-family dwellings on downsloped lots are in conformance with the purpose and intent of the zoning regulations and will be permitted provided that:

- The driveway does not exceed 20 feet in width.
- The driveway and any safety rail or fence thereon do not exceed 3-1/2 feet above the adjacent street with additional height appropriate to account for the slope of the driveway. The height shall be measured from the highest point of the street where the driveway meets the paved portion of the street after any required improvement or widening.
- This ZAI does not supercede the provisions of any specific plans.

ROBERT JANOVICI
Chief Zoning Administrator
Telephone No. (213) 978-1318

RJ:DK:lmc

# Exhibit I

# Street Plan and Profile

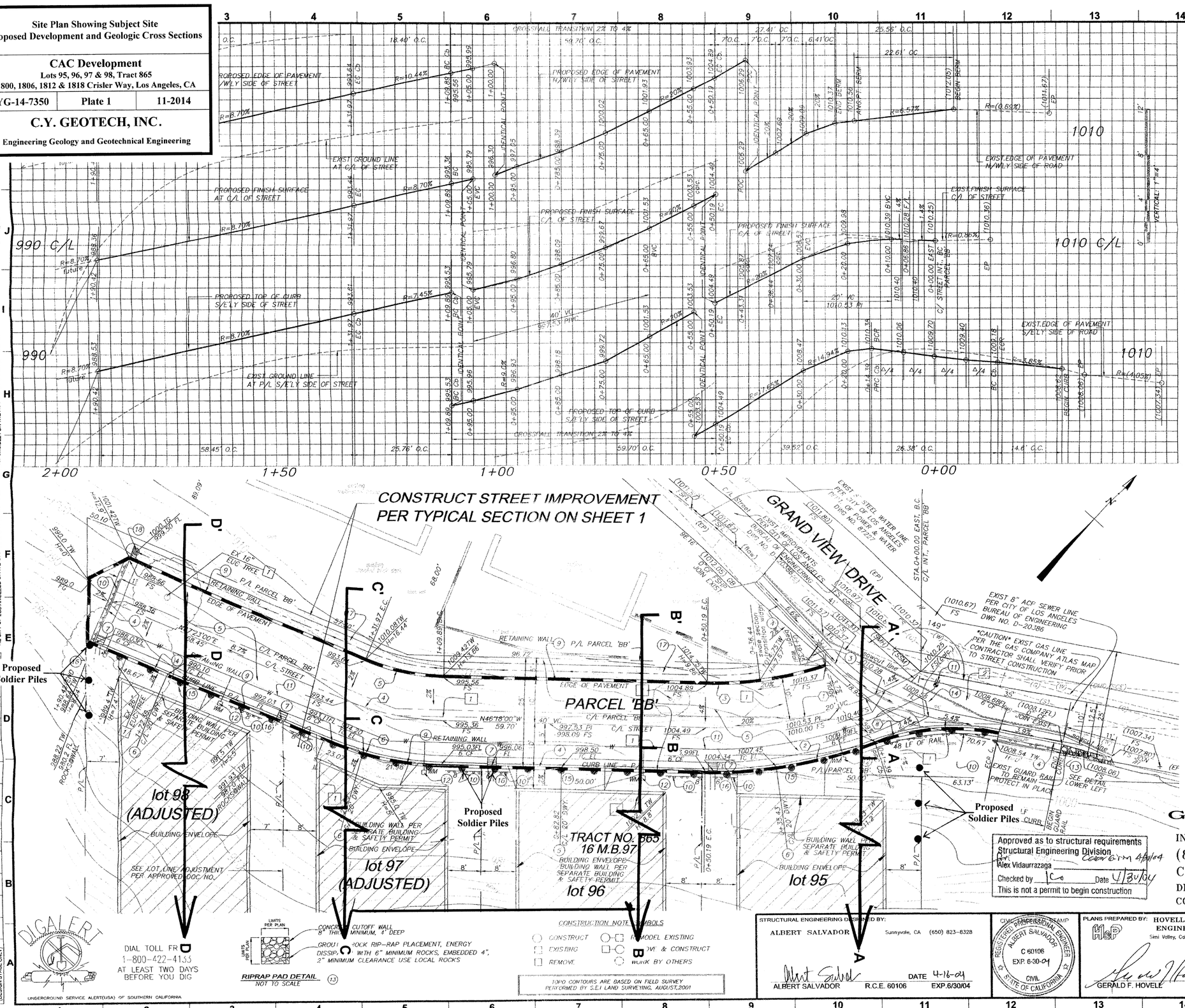
**Site Plan Showing Subject Site**
**Proposed Development and Geologic Cross Sections**

**CAC Development**
Lots 95, 96, 97 & 98, Tract 865
1800, 1806, 1812 & 1818 Crisler Way, Los Angeles, CA

| CYG-14-7350 | Plate 1 | 11-2014 |
|---|---|---|

**C.Y. GEOTECH, INC.**

Engineering Geology and Geotechnical Engineering




CONSTRUCTION NOTES:

1. EXIST. WALLS, TREES, FENCES, AND GROUND COVER WITHIN LIMITS OF CONSTRUCTION ARE TO BE REMOVED
2. ADJUST EXIST.WATER METER TO FINISH SURFACE PER DWP STANDARD PLATE NO.18, AS NEEDED
3. EXIST STREET LIGHT AND OVERHEAD WIRING TO BE RELOCATED PER CITY OF LOS ANGELES BUREAU OF STREET LIGHTING STANDARDS.
4. CONSTRUCT 6" CONC CURB WITH 24" GUTTER PER CITY OF LOS ANGELES STD. PLAN S-410-2, TYPE 'C' INTEGRAL CURB AND GUTTER
5. CONSTRUCT 4" A.C. PAVEMENT ON 6" CRUSHED MISC. BASE COMPACTED TO A MIN.OF 90% MAX.DRY DENSITY, SUBGRADE TO BE COMPACTED TO A MINIMUM OF 95% MAX. DRY DENSITY, 24" MIN, WEED KILL AT BASE, FINAL STRUCTURAL SECTION TO BE DETERMINED BY SOILS ENGINEERS RECOMMENDATION
6. CONSTRUCT RESIDENTIAL DRIVEWAY PER CITY OF LOS ANGELES STD. PLAN S-440-3, CASE II, X=3', Y=4'
7. CONSTRUCT 3.5' WIDE CURBSIDE GRATING CATCH BASIN PER CITY OF LOS ANGELES, BUREAU OF ENGINEERING STANDARD S-354-0, SINGLE GRATE, V=4', T=6"
8. CONSTRUCT 6" AC BERM, PER CITY OF LOS ANGELES STANDARD PLAN S-412-0
9. CONSTRUCT RETAINING WALL BY SEPARATE PERMIT TOP OF WALL ELEVATIONS PER PLAN, SHEET 5
10. CONSTRUCT METAL BEAM GUARD RAILING 2' FROM EDGE OF PAVEMENT PER BUREAU OF ENGINEERING STANDARD PLAN S-462-2, WITH REFLECTIVE MARKERS PER BUREAU OF ENGINEERING STD PLAN S-460.0
11. INSTALL 8" (SDR-35) CL.150, PVC WATER LINE 5' E/O CENTERLINE PER CITY OF LOS ANGELES-DWP STD. SPECS. LATEST EDITION, JOIN EXIST WATER LINE IN GRANDVIEW DR. CONTRACTOR TO VERIFY HORIZONTAL & VERTICAL LOCATION PRIOR TO INSTALLATION OF NEW WATER LINE, BY SEPARATE PERMIT
12. INSTALL 2" WATER SERVICE LINE WITH 1&1/2" METER PER CITY OF LOS ANGELES-DWP STND. SPECS., BY SEPARATE PERMIT
13. INSTALL GROUTED ROCK RIP-RAP PLACEMENT, ENERGY DISSIPATOR WITH 6" MINIMUM ROCKS, EMBEDDED 4", 2" MAXIMUM CLEARANCE USE LOCAL ROCKS, SEE DETAIL HEREON & SHEET 1
14. CONSTRUCT TYPICAL INTERSECTION GUTTER PER BUREAU OF ENGINEERING STD PLAN S-410-2
15. CONSTRUCT CONCRETE CAISSONS PER STRUCTURAL ENGINEERS SPECIFICATIONS SEE DETAILS ON SHEET 4
16. INSTALL 8" PVC (SDR35) DRAINAGE PIPE, LENGTH=5' REMOVE BLOCK AT BASE OF WALL AS NEEDED FOR PIPE
17. CONSTRUCT 3' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 5
18. INSTALL DRAIN INLET & PIPE PER DETAIL A, SHEET 1

CURVE DATA

| | D | R | L | T |
|---|---|---|---|---|
| 1 | 31°57'12" | 90' | 50.19' | 25.76' |
| 2 | 22°38'44" | 100' | 39.52' | 20.02' |
| 3 | 19°38'00" | 80' | 27.41' | 13.84' |
| 4 | 21°05'00" | 60' | 22.08' | 11.07' |
| 5 | 21°05'00" | 50' | 18.39' | 9.36' |
| 6 | 21°05'00" | 70' | 25.76' | 13.03' |
| 7 | 129°57'40" | 10' | 22.68' | 21.43' |
| 8 | 32°50'13" | 50' | 28.66' | 14.73' |
| 9 | 26°47'46" | 150' | 70.35' | 35.83' |

Approved as to structural requirements
Structural Engineering Division
By: Alex Vidaurrazaga
Checked by _____ Date 4/30/04
This is not a permit to begin construction

STRUCTURAL ENGINEERING DESIGNED BY:
ALBERT SALVADOR Sunnyvale, CA (650) 823-8328
ALBERT SALVADOR R.C.E. 60106 EXP.6/30/04 DATE 4-16-04

CIVIL ENGINEER STAMP: REGISTERED PROFESSIONAL ENGINEER ALBERT SALVADOR C 60106 EXP. 6-30-04 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY: HOVELL & PILARSKI ENGINEERING, INC.
Simi Valley, California 805/ 522-1900
GERALD F. HOVELL R.C.E. 33118 EXP.6/30/06 DATE 4/19/04

CIVIL ENGINEER STAMP: REGISTERED PROFESSIONAL ENGINEER GERALD HOVELL No. 33118 Exp. 6/30/2006 CIVIL STATE OF CALIFORNIA

GEOMATRIX, INC.

IN CONNECTION WITH BUILDING PERMIT
(8350) GRAND VIEW DRIVE &,
CRISLER WAY S/W CORNER
DESIGN PERMIT BD-401611
CONSTRUCTION PERMIT BC

CITY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
GARY LEE MOORE, P.E. CITY ENGINEER
ACCEPTED BY :
PLAN CHECKER DATE
DATE: BY:
V NO. REVISIONS:
WORK ACCEPTED
SERIAL NO.
INDEX NO. D-#
B - PERMITS BD-401611
LA DPW ENGINEERING Serving the Present; Designing the Future
CRKS CITY ENGINEER DATE
VERTICAL CONTROL: PER ARCHITECT PLANS
HORIZONTAL CONTROL: PER ARCHITECT PLANS
SHEET TITLE: STREET PLAN & PROFILE
PROJECT: 8350 GRNADVIEW DR. & CRISLER WAY S/W CORNER
ADDRESS:
PROJECT NO. CXXXXX
DRAWING NO. 2
SHEET 2 OF 6 SHEETS

REVISION DATES (DESIGN STAGE ONLY)

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

Sheet Version 2.01

# JMBM Comment Letter – June 19, 2018

APPENDIX O

JMBM Jeffer Mangels Butler & Mitchell LLP

jmbm.com

Benjamin M. Reznik
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bmr@jmbm.com

1900 Avenue of the Stars, 7th Floor
Los Angeles, California 90067-4308
(310) 203-8080 (310) 203-0567 Fax
www.jmbm.com

75529-1

June 19, 2018

**VIA E-MAIL (Jack.Chiang@lacity.org)**

Mr. Jack Chiang
Associate Zoning Administrator
City of Los Angeles, Department of City Planning
200 N. Spring Street, Room 1020
Los Angeles, CA 90012

Re: **1800, 1806, 1812 and 1818 Crisler Way**
Case No(s): ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD & ZA-2015-4149-ZAD
ENV Case No. ENV-2015-4131-MND (A-F)
**Hearing Date:** May 22, 2018

Dear Mr. Chiang:

This office represents the homeowners of 1698 and 1694 Marmont Avenue, two single-family homes located at the terminus of Marmont Avenue, and immediately below the very steep hillside lots that the applicant in the above referenced case numbers proposes to develop. On May 11, 2018, our office submitted a letter to you raising concerns about this Project's building permits and development plans as analyzed in the Project's April 2018 Mitigated Negative Declaration ("MND"). The letter explained that, since the Project plans do not comply with the Los Angeles Municipal Code ("LAMC") and are not otherwise vested, the MND could not have accurately analyzed or described the Project's impacts. This means that the MND must be withdrawn, or revised, so that it either (i) analyzes a revised Project that complies with the LAMC, or (ii) details the *other* approvals that will be required to build the Project as currently designed (i.e., variance approvals, further zoning administrator approvals, etc.). As a result of this issue, the MND, as it is currently drafted, fails to fully analyze and describe the Project. In addition to this concern over the accuracy of the MND's project description, the MND also includes an incomplete and/or insufficient analysis of Project's significant and unmitigated environmental impacts. Pursuant to the mandates of the California Environmental Quality Act ("CEQA"), the Project cannot proceed forward without the preparation of an Environmental Impact Report ("EIR").

As we noted at the hearing, where there exists "substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment," an EIR must be prepared. (CEQA Guidelines, § 15063, subd. (b)(1); *City of*

*Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1421 (An EIR is required whenever "substantial evidence in the record supports a 'fair argument' significant impacts or effects may occur.") In this context, substantial evidence "means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (CEQA Guidelines, § 15384, subd. (a).) Substantial evidence includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts" (*Id.* subd. (b)), but not "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment." (*Id.* subd. (a).)

After reviewing the MND's findings and conclusions, as well as the voluminous comments and letters submitted to the Zoning Administrator in relation to this MND, it is clear that substantial evidence supports a fair argument that this Project will have significant impacts on the environment. One very obvious significant impact is highlighted in the MND's noise findings. (*See* MND Appendix E, "Noise Impact Analysis" prepared by Giroux and Associates.) The first page of the study notes that "[n]oise levels above 70 dB CNEL are considered normally unacceptable except in unusual circumstances." Table 1 further illustrates this point, and explains that noise levels exceeding 75 dB CNEL are "***clearly unacceptable***" when occurring adjacent to residential single family homes. (*Id.* at p. 2.) The study then later admits that the construction noise for this Project will substantially exceed these "clearly unacceptable" levels, stating that the Project's "[c]onstruction noise is maximally anticipated to be 89 dBA exterior and 59 dBA at interior of the closest residence..." (*Id.* at p. 8.) It then admits that "because of terrain constraints," typical sound wall mitigation measures are not feasible. (*Id.* at p. 12.) This is precisely the type of an unmitigated impact for which CEQA requires the preparation of an EIR, and unquestionably constitutes substantial evidence supporting a fair argument that the Project will cause a significant effect on the environment.

We also identified several other impacts that were not adequately analyzed in the MND. For example, the MND documents fail to describe or detail any construction related activity or impacts likely to occur on or around Marmont Avenue. Although the Project developer explained during the hearing that the Project would not include construction on Marmont Avenue, the Project's plans suggest otherwise. Specifically, the Project plans show that the new homes will be connected to the City's municipal sewer system through a new sewer connection that will run from Marmont Avenue to the Project site. The MND does not include any analysis of this construction work and/or activity. Moreover, the MND fails to adequately consider the potential for runoff, landslides, and dust-related problems that are likely to impact downslope properties, especially in light of the site's very unique and dangerous topographic conditions. Instead of analyzing the risks in the context of the site's particular topography, the MND relies on standard building code mitigation measures, general air emission models, and other standard construction practices which cannot adequately address the true risks associated with the Project's construction. These are issues which must be analyzed in an EIR.

In addition to these issues, we also hereby incorporate by reference the May 21, 2018 letter submitted by the Channel Law Group – a copy of which is attached hereto as **Exhibit A** – which details a multitude of errors, omissions, and problems with the MND's analysis and findings, and also constitutes substantial evidence in support of a fair argument that an EIR is required. Based on the foregoing, we urge the Zoning Administrator to (i) deny the applicant's request on the basis that the building plans are not in conformance with the LAMC, or, in the alternative, (ii) require the preparation of an EIR to properly analyze the Project's impacts on the environment. Thank you for your consideration.

Sincerely,

BENJAMIN M. REZNIK and
DANIEL FREEDMAN of
Jeffer Mangels Butler & Mitchell LLP

cc: Emma Howard, Senior Planning Deputy, Council District 4.
Aidan O'Brien MD, President, Concerned Citizens of Kirkwood Bowl Foundation.
Jamie Hall, Esq., Channel Law Group.

# Envicom Response dated January 22, 2019 to JMBM Letter

APPENDIX P

January 22, 2019

City of Los Angeles
Department of City Planning
200 North Spring Street
Los Angeles, CA 90012

Attn: Mr. Jack Chiang, Associate Zoning Administrator (via email: jack.chiang@lacity.org)

Subj: **1800, 1806, 1812, and 1818 Crisler Way Residences Project**
**(Case No: ENV-2015-4131-MND ZA Case Nos: ZA-2015-4125-ZAD, ZA-2015-4130-ZAD, ZA-2015-4146-ZAD, and ZA-2015-4149-ZAD)**

Dear. Mr. Chiang,

This letter provides responses to the **Comment Letter** from Jeffer Mangels, Butler, & Mitchell (JMBM) dated June 19, 2018. A copy of the comment letter with a numbering of the individual comments is provided in **Attachment 1**. Envicom Corporation (Envicom) previously provided a Response to Comments Letter dated June 19, 2018, addressing concerns raised in JMBM's initial comment letter dated May 11, 2018. This Response to Comments Letter is provided in **Attachment 2**.

**COMMENT LETTER 4 - JMBM DATED JUNE 19, 2018**

**Comment 4-1**

The commenter references a previously submitted comment letter, dated May 11, 2018, stating the Mitigated Negative Declaration (MND) should be withdrawn or revised as the Project plans do not comply with the Los Angeles Municipal Code (LAMC). Envicom addressed these comments in an earlier response to comment letter dated June 19, 2018, provided in Attachment 2. As noted therein, the Applicant filed complete entitlement applications for the proposed Project on November, 12, 2015, and is subject to the Ordinance regulations in effect at that time (Ordinance 181,624 and 182,110). As stated in Section 41 of the Baseline Hillside Ordinance (No. 184,802) that became effective on March 10, 2017, "Any such project shall be subject to the regulations that were in effect on the date on which the application was filed." The previously approved Project plans are correctly based on LAMC regulations (Ordinance 181,624 and 182,110) in effect at the time the complete entitlement applications were filed, fees paid, and plans approved. The Project Description in the revised MND contains additional details regarding off-site improvements and construction plans for additional analysis of impacts and the mitigation of potentially significant impacts to less than significant levels in compliance with the California Environmental Quality Act (CEQA).

**Comment 4-2**

The commenter states there is substantial evidence to support a fair argument that the Project will have significant impacts to the environment. As shown under each of the environmental topic areas in the MND, project impacts can be reduced to less than significant through design features, compliance with regulatory requirements, and mitigation measures provided in the MND. Given that potentially-significant impacts can be reduced to less than significant, the Project does not require an Environmental Impact Report (EIR).

**Comment 4-3**

The commenter states that the noise findings within the MND constitute substantial evidence to support a fair argument the Project would have a significant impact on the environment. The MND discusses noise impacts in Section XII, Noise, and is based on the Noise Impact Analysis prepared by Giroux & Associates provided in Appendix J of the MND. The statement "noise levels above 70 decibel (dB) Community Noise Equivalent Level (CNEL) are considered normally unacceptable except in unusual circumstances" is an excerpt from the broader context of a discussion of noise/land use compatibility guidelines from the Noise Element of the City General Plan. The source material for Table 1 of the Noise Impact Analysis is Exhibit I of the Noise Element. Exhibit I shows these non-binding guidelines as "Guidelines for Noise Compatible Land Use" that pertain to permanent noise sources for the purpose of long-term land use planning, such as assessing operational airport noise on residential areas. The purpose of these guidelines is to guide land use compatibility planning decisions regarding permanent noise sources, not the regulation of short-term temporary noise due to construction activity which is regulated through the LAMC. In the context of land use planning, the commenter's statement that noise levels exceeding 75 dB CNEL are "clearly unacceptable" when occurring adjacent to residential single-family homes pertains to permanent operational noise sources such as airports or high-volume freeways proximate to noise-sensitive uses.

As noted in the Noise Impact Analysis, LAMC Section 112.05 (Ordinance 161,573) provides the appropriate threshold of significance for temporary construction equipment noise that routinely takes place in the Project vicinity, namely, powered equipment or powered hand tools. LAMC Section 112.05 prohibits the use of any powered equipment or powered hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction machinery in or within 500 feet of a residential zone; however, the above noise limitation does not apply where compliance is technically infeasible. As defined in LAMC Section 112.05, "technically infeasible" means that the noise limitation of 75 dBA at a distance of 50 feet cannot be complied with despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment.

The Noise Impact Analysis found, due to the hillside location, the use of typical sound walls as barriers would not be feasible. Table 4.12-1 of the MND disclosed the maximum level of reasonably anticipated construction noise as 82 dBA at 20 feet from a paver or roller. This was not an unmitigated impact, the revised MND provides mitigation measure NOI-1 requiring specified construction equipment to be retrofitted with an industrial grade muffler, or muffler of similar capacity, capable of reducing engine noise by at least 15 dBA. The MND also provided NOI-2 limiting the permissible hours of construction to those hours specified in the Project description, requiring construction equipment and supply haul routes to avoid conflicts with noise-sensitive land uses, to the extent feasible, and requiring the establishment of construction staging areas to minimize impacts to adjacent residences where feasible. Implementation of NOI-1 would reduce the loudest construction equipment to less than 75 dB, the appropriate construction noise standard specified by LAMC Section 112.05. Therefore, the implementation of mitigation measures would reduce noise impacts to less than significant and would not require the preparation of an EIR.

**Comment 4-4**

The commenter states there were other impacts, such as construction related activity, or impacts on or around Marmont Avenue the MND failed to describe or detail. The Project description in the MND detailed proposed construction-related activity with details on how parking and equipment staging would be handled during the first two months in Table 3-5, Project Construction Schedule - Site Preparation and Grading. The MND provided a breakdown of the specific construction activities, estimated duration, approximate number of workers, and crew parking locations in Table 3-6, Project Construction Schedule- Home Construction. The

language of the MND the City published in April 2018 addressed impacts on or around Marmont Avenue, including construction related activity for connection to the City's existing municipal sewer system, under topic XVIII., Utilities and Services Systems. The MND the City published in April 2018 stated "Project sewer flows would then connect to the existing lines under Marmont Ave. These proposed sewer infrastructure improvements to update or expand the sewer lines in the Project vicinity would be limited to trenching, excavating and backfilling the sewer lines beneath the public right-of-way. Such construction activities would be localized in nature and would generally involve temporary partial lane closures of short duration typically lasting a few days to a few weeks." Therefore, the MND the City published in April 2018 did include an analysis of the construction activity related to the installation of a connection to the City's municipal sewer system under Marmont Avenue.

The revised MND includes more detailed descriptions of off-Site Improvements and potential impacts caused by installation of the sewer connection that would run from the Project site south toward Marmont Avenue. The Construction Site Plan figure clearly illustrates proposed on and off-Site improvements, including construction site safety features, and is provided in Attachment 3.

The commenter states the MND fails to adequately consider potential runoff, landslides, and dust-related problems likely to impact downslope properties. The MND considers the potential for runoff in Section IX., Hydrology and Water Quality, as surface water runoff from the Project site would continue to be collected on the Site and directed towards existing storm drains in the Project vicinity that have adequate capacity to convey flows. The MND noted that the proposed Project would be required to implement stormwater Best Management Practices (BMPs) to retain or treat the runoff from a storm event and two existing City-maintained storm drain catch basins are located south of the Site on Marmont Avenue that connect to an existing storm drain leading away from the Project site along Marmont Avenue. The MND also stated that Project would install a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope during construction. The potential for runoff was found to have a less than significant impact based on BMPs and compliance with regulatory requirements.

The MND considered landslide potential in Section VI. Geology and Soils, as the Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. In a geology report dated September 10, 2012, Geomatrix updated the static and seismic gross slope stability analysis, due to an updated requirement for the use of a seismic coefficient in the seismic slope stability analysis. The analysis in 2012 indicated a factor of safety of 1.814 for static slope stability, exceeding the minimum code requirement of 1.5 and a factor of safety of 1.260 for seismic slope stability, exceeding the minimum code requirement of 1.0. Furthermore, based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. For informational purposes, the geology report prepared by C.Y. Geotech dated June 8, 2018, performed an additional seismic slope stability analysis using an update seismic coefficient to meet 2017 regulations. This analysis indicted a factor of safety of 1.129 which still exceeds the minimum code requirement. As concluded in the June 8, 2018, geology report by CY Geotech, the potential impacts of landslide for the Project should be considered a less than significant impact.

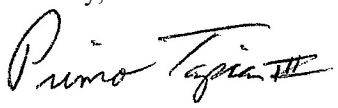
Dust-related issues are discussed in Section III, Air Quality as construction contractors would be required to comply with existing SCAQMD and City regulations pertaining to the control of fugitive dust. The Project would be required by existing regulations to comply with Rule 403 to control fugitive dust during Project

construction. Rule 403 requires spraying water on exposed soils during grading (typically 2-3 times daily) effectively stabilizing soils, preventing dust, and reducing the impacts of dust related issues to less than significant. The determinations reached in the MND regarding the above issues were based on the incorporation of mitigation measures and regulatory compliance measures within the context of each issue area of the Initial Study. The impact analysis considered the site's topography and conclusions of previously-approved technical reports by professional geologists. When warranted, project-specific mitigation measures were applied to reduce impacts to less than significant. As the potentially significant impacts can be reduced to less than significant, an EIR is not required.

**Comment 4-5**

Commenter incorporates the comment letter from Channel Law Group Dated May 21, 2018, by reference that Envicom responded to in a Responses to Comments letter dated June 19, 2018 provided in Appendix N of the Expanded Initial Study and Mitigated Negative Declaration. As noted, the previously-approved Project plans are correctly based on LAMC regulations (Ordinance 181,624 and 182,110) in effect at the time the complete entitlement applications were filed, the fees paid, and the plans approved. Where the Project would result in potentially-significant impacts, the MND provides project-specific mitigation measures to reduce impacts to less than significant. Given these impacts can be reduced to a less than significant level, an EIR is not required.

Sincerely,



Primo Tapia
Vice President

**VIA ELECTRONIC MAIL**

cc: Ms. Darlene Navarrete, Senior Administrative Clerk (darlene.navarrete@lacity.org)
cc: Ms. Mindy Nguyen, Central Project Planning Division (mindy.nguyen@lacity.org)
cc: Mr. Jason Hernández, Planning Assistant (jason.hernandez@lacity.org)

**ATTACHMENTS:**

Attachment 1 - JMBM Comment Letter dated June 19, 2018
Attachment 2 – Response to Comments Received During the Public Review Period
Attachment 3 - Construction Site Plan

# ATTACHMENT 1

## JMBM Comment Letter dated June 19, 2018

# ATTACHMENT 2

## Response to Comments Received During the Public Review Period

# ATTACHMENT 3

## Construction Site Plan

# Zoning Administrator Communication Letter dated July 31, 2018

APPENDIX Q

LISA M. WEBBER
INTERIM CHIEF ZONING ADMINISTRATOR

ASSOCIATE ZONING ADMINISTRATORS
JACK CHIANG
HENRY CHU
THEODORE L. IRVING
ALETA D. JAMES
FRANKLIN N. QUON
FERNANDO TOVAR
DAVID S. WEINTRAUB
MAYA E. ZAITZEVSKY

# CITY OF LOS ANGELES
CALIFORNIA

ERIC GARCETTI
MAYOR

DEPARTMENT OF
CITY PLANNING

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July 31, 2018

Robert Anderson (A)
CAC Development
18169 Knoll Hill,
Granada Hills, CA 91344

Isaac Cohen and Andrea Cohen
Family Trust and Aaron Cohen (O)
1504 Flower Street,
Los Angeles, CA 90015

Erika Iverson (R)
Rosenheim & Associates, Inc.
21600 Oxnard Street, Suite 630
Woodland Hills, CA 91367

CASE NO. ZA-2015-4125-ZAD,
ZA-2015-4130-ZAD,
ZA-2015-4146-ZAD,
ZA-2015-4149-ZAD
**COMMUNICATION**
1800, 1806, 1812, 1818 N. Crisler Way
Hollywood Planning Area
Zone : R1-1-HCR
D. M. : 148-5A173, 150A173
C. D. : 4
CEQA : ENV-2017-4131-MND
Legal Description: Lot Nos. 95, 96, 97, and 98,Tract 798

On May 22, 2018, the Zoning Administrator conducted a public hearing to consider the following four Zoning Administrator's Determination (ZAD) applications for four new single family homes in considering the following requests:

1) The consideration of a Mitigated Negative Declaration (MND) pursuant to California Environmental Quality Act (CEQA) Guidelines, Section15074(b).

2) Pursuant to Los Angeles Municipal Code (LAMC) Section 12.24 X 28(a)(7)(ii), four ZADs to allow the construction, use and maintenance of four new three-story single family dwellings on four lots that do not have vehicular access from a street improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the boundary of the hillside area as required by LAMC Section 12.21 C10(i)(3).

At the May 22, 2018, public hearing, neighboring property owners and local residents of the Kirkwood Bowl Neighborhood provided testimony in opposition to the project, objecting primarily on the following grounds; inadequacy of the environmental clearance, specifically the MND that was prepared in April 2018, cumulative impacts to the neighborhood as there are 17 other proposed single family projects, soil stability, construction impacts, damage to public infrastructures, noise and air quality impacts, and emergency access impact due to the narrow width and the deteriorating condition of public streets. Neighboring property owners and local residents consistently stated that there are constant construction

activities in the neighborhood. Roads are often blocked by construction related vehicles, thus the situation creates traffic hazards and congestions. Frequent traffic trips generated by heavy trucks for earth export and cement also broke several aging water pipes and gas pipes underneath roadways resulting in floods that eroded hillsides and damaged private properties. Stakeholders argued that the project would result in unmitigated environmental impacts. Photos of collapsed roadways and construction sites, including a map showing multiple locations of water main and gas line break, along with numerous proposed construction sites were submitted to the City.

Aside from the comments provided by residents of "Kirkwood Bowl" neighborhood, residents located at the downslope along Marmont Avenue also provided new testimonies, voicing that the applicant did not properly analyzed the construction in regard to, but not limited to, air quality due to dust settlement to lower elevation, potential landslide and run off due to construction or the operation of the homes, or the construction impact of connecting sewer main located downhill. Bel Air – Beverly Crest Neighborhood Council and Council District four also recommended that projects be denied as proposed. Generally, the content of the testimonies heard in the May 22, 2018, public hearings for the subject four single family projects on Crisler Way, is similar to statements heard in the May 9, 2017, April 24, 2018, hearings for the construction of four other single family projects located on Grand View Drive and Cole Crest Drive with similar ZAD requests.

The City, as the lead agency for the proposed project, is required to consider the potential environmental projects generated by these other four projects, together with the proposed four new homes on Crisler Way, as prat of the cumulative impact analysis. Based on a review of the information contained in the administrative record, public testimonies, and the draft MND, evidence submitted by project opponents, and applicant's response to comments, the Zoning Administrator has determined that the application, as currently prepared, does not contain sufficient information to evaluate the proposed project. Specifically, the MND fails to analyze the scope of on-going projects and their impacts cumulatively as a part of the assessment, and the project description and assessment needs to include all work in the Marmont Neighborhood at the lower elevation and potential impacts that may result.

The Initial Study/Mitigated Negative Declaration (IS/MND) prepared for this project identifies potentially significant effects particularly in the impact categories of biological resources, transportation/traffic, mandatory findings of significance, hazards and hazardous materials, and noise. Furthermore, based on the evidence and testimony that has been provided with respect to the proposed project, the Zoning Administrator has determined that there is a potential of significant impacts attributable to the project in other impact categories not identified in the IS/MND, namely utilities/service systems and public services, and geology/soils.

Based on Staff's review of the IS/MND, the mitigation measures set forth in the IS/MND are insufficient and include deferred or inadequate mitigation measures to address the scope of potential impacts associated with the project. As the lead agency, the City shall decide whether an EIR or Negative Declaration will be required for the project (CEQA Guidelines Section 15367). Moreover, CEQA Guidelines Sections 15130 and 15355 recognizes the significance of analyzing cumulative impacts, which acknowledges that "the individual

effects may be changes resulting from a single project or a number of separate projects", and "can result from individually minor but collectively significant project taking place over a period of time."

In light of the forgoing, the Zoning Administrator has determined that the applicant must revise the IS/MND to include other on-going projects within the immediate vicinity and how these projects with the proposed project would cumulatively impact the surrounding neighborhoods, precise project descriptions, and expand the review to evaluate the project's potential environmental impacts on the surrounding public infrastructures and emergency access, and propose precise and comprehensive mitigation measures. The revised expanded Initial Study, to be prepared by a third-party consultant at the applicant's expense, shall incorporate the CEQA impact categories listed above, as well as the specific concern outlined below. Revisions to the expanded Initial Study shall be reviewed by Staff and the Zoning Administrator. Upon Staff's review of the revised expanded Initial Study, the Zoning Administrator will make a determination at that time as to whether the preparation of a MND or a focused Environmental Impact Report (EIR) is appropriated for the proposed project. Pursuant to CEQA Guidelines Section 15153, the City "may employ a single EIR to describe more than one project, if such projects are essentially the same in terms of environmental impact." Thus, the City reserves the right to require that the applicant work with the other Adjacent Projects to prepare single EIR following review of the revised expanded Initial Study.

The following analyses shall be included in the revised expanded Initial Study, but not limited to:

1) An assessment of the existing water main and gas main condition and impacted by the construction vehicle trips and whether "smaller capacity" concrete trucks would be able to traverse the substandard streets without deteriorating existing infrastructure;

2) An analysis regarding whether the use of smaller capacity trucks was factored into trip generation calculation since smaller trucks presumably hold less than 10 cubic yards;

3) Traffic study of the project including an assessment to address choke points from Laurel Canyon Boulevard, Kirkwood Drive, Yucca Trail, Grand view Drive, and Cole Crest Drive, and the temporary road closures and the impact on traffic patterns;

4) Off-site geotechnical and hydrological reports to address the potential for landslides and other runoff issues related to hazards presented by street collapses and water main breaks to show whether or not breakages are related to "heavy equipment vehicles" and construction activity;

5) Cumulative impact analysis regarding the immediate "Kirkwood Bowl" and "Marmont" neighborhoods with other on-going and proposed single family projects;

6) Address and respond to comments from Mr. Jamie Hall, Channel Law Group, LLC, dated May 21, 2018, and from Mr. Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP, dated June 19, 2018, attached to this letter.

To that end, the Zoning Administrator directs the Applicant to prepare an expanded Initial Study for the project, which CEQA Guidelines Section 15378 defines as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment", including a cumulative impacts analysis under CEQA Guidelines Sections 15130 and 15355.

Pursuant to Section 19.00 of the LAMC, Case Nos. ZA-2017-4125-ZAD, ZA-2017-4130-ZAD, ZA-2017-4146-ZAD, ZA-2017-4149-ZAD have been placed on hold pending submittal of the following:

- An expanded Initial Study with enforceable mitigation measures.
- BTC receipt for the mailing of the new hearing notice; and,
- Updated radius map and labels.

The case file will be retained by the Office of Zoning Administration under the care of the following:

200 North Spring Street, Room 763
Los Angeles, CA 90012
(213)978-1318

A second public hearing will be scheduled and noticed after receipt of all of the required materials.

JACK CHIANG
Associate Zoning Administrator

JC:dh

cc: Councilmember David E. Ryu
Fourth District
Bel Air – Beverly Crest Neighborhood Council
Laurel Canyon Association/ "Kirkwood Bowl" Neighborhood
(Jamie Hall, Channel Law Group, LLP)
"Marmont" Neighborhood
(Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP)

Attachment: Comments from Mr. Jamie Hall, Channel Law Group, LLC, May 21, 2018, and from Mr. Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP, June 19, 2018.

JMBM Jeffer Mangels Butler & Mitchell LLP

jmbm.com

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75529-1

June 19, 2018

**VIA E-MAIL (Jack.Chiang@lacity.org)**

Mr. Jack Chiang
Associate Zoning Administrator
City of Los Angeles, Department of City Planning
200 N. Spring Street, Room 1020
Los Angeles, CA 90012

Re: **1800, 1806, 1812 and 1818 Crisler Way**
Case No(s): ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD & ZA-2015-4149-ZAD
ENV Case No. ENV-2015-4131-MND (A-F)
**Hearing Date:** May 22, 2018

Dear Mr. Chiang:

This office represents the homeowners of 1698 and 1694 Marmont Avenue, two single-family homes located at the terminus of Marmont Avenue, and immediately below the very steep hillside lots that the applicant in the above referenced case numbers proposes to develop. On May 11, 2018, our office submitted a letter to you raising concerns about this Project's building permits and development plans as analyzed in the Project's April 2018 Mitigated Negative Declaration ("MND"). The letter explained that, since the Project plans do not comply with the Los Angeles Municipal Code ("LAMC") and are not otherwise vested, the MND could not have accurately analyzed or described the Project's impacts. This means that the MND must be withdrawn, or revised, so that it either (i) analyzes a revised Project that complies with the LAMC, or (ii) details the *other* approvals that will be required to build the Project as currently designed (i.e., variance approvals, further zoning administrator approvals, etc.). As a result of this issue, the MND, as it is currently drafted, fails to fully analyze and describe the Project. In addition to this concern over the accuracy of the MND's project description, the MND also includes an incomplete and/or insufficient analysis of Project's significant and unmitigated environmental impacts. Pursuant to the mandates of the California Environmental Quality Act ("CEQA"), the Project cannot proceed forward without the preparation of an Environmental Impact Report ("EIR").

As we noted at the hearing, where there exists "substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment," an EIR must be prepared. (CEQA Guidelines, § 15063, subd. (b)(1); *City of*

*Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1421 (An EIR is required whenever "substantial evidence in the record supports a 'fair argument' significant impacts or effects may occur.") In this context, substantial evidence "means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (CEQA Guidelines, § 15384, subd. (a).) Substantial evidence includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts" (*Id.* subd. (b)), but not "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment." (*Id.* subd. (a).)

After reviewing the MND's findings and conclusions, as well as the voluminous comments and letters submitted to the Zoning Administrator in relation to this MND, it is clear that substantial evidence supports a fair argument that this Project will have significant impacts on the environment. One very obvious significant impact is highlighted in the MND's noise findings. (*See* MND Appendix E, "Noise Impact Analysis" prepared by Giroux and Associates.) The first page of the study notes that "[n]oise levels above 70 dB CNEL are considered normally unacceptable except in unusual circumstances." Table 1 further illustrates this point, and explains that noise levels exceeding 75 dB CNEL are "***clearly unacceptable***" when occurring adjacent to residential single family homes. (*Id.* at p. 2.) The study then later admits that the construction noise for this Project will substantially exceed these "clearly unacceptable" levels, stating that the Project's "[c]onstruction noise is maximally anticipated to be 89 dBA exterior and 59 dBA at interior of the closest residence..." (*Id.* at p. 8.) It then admits that "because of terrain constraints," typical sound wall mitigation measures are not feasible. (*Id.* at p. 12.) This is precisely the type of an unmitigated impact for which CEQA requires the preparation of an EIR, and unquestionably constitutes substantial evidence supporting a fair argument that the Project will cause a significant effect on the environment.

We also identified several other impacts that were not adequately analyzed in the MND. For example, the MND documents fail to describe or detail any construction related activity or impacts likely to occur on or around Marmont Avenue. Although the Project developer explained during the hearing that the Project would not include construction on Marmont Avenue, the Project's plans suggest otherwise. Specifically, the Project plans show that the new homes will be connected to the City's municipal sewer system through a new sewer connection that will run from Marmont Avenue to the Project site. The MND does not include any analysis of this construction work and/or activity. Moreover, the MND fails to adequately consider the potential for runoff, landslides, and dust-related problems that are likely to impact downslope properties, especially in light of the site's very unique and dangerous topographic conditions. Instead of analyzing the risks in the context of the site's particular topography, the MND relies on standard building code mitigation measures, general air emission models, and other standard construction practices which cannot adequately address the true risks associated with the Project's construction. These are issues which must be analyzed in an EIR.

In addition to these issues, we also hereby incorporate by reference the May 21, 2018 letter submitted by the Channel Law Group – a copy of which is attached hereto as **Exhibit A** – which details a multitude of errors, omissions, and problems with the MND's analysis and findings, and also constitutes substantial evidence in support of a fair argument that an EIR is required. Based on the foregoing, we urge the Zoning Administrator to (i) deny the applicant's request on the basis that the building plans are not in conformance with the LAMC, or, in the alternative, (ii) require the preparation of an EIR to properly analyze the Project's impacts on the environment. Thank you for your consideration.

Sincerely,

BENJAMIN M. REZNIK and
DANIEL FREEDMAN of
Jeffer Mangels Butler & Mitchell LLP

cc: Emma Howard, Senior Planning Deputy, Council District 4.
Aidan O'Brien MD, President, Concerned Citizens of Kirkwood Bowl Foundation.
Jamie Hall, Esq., Channel Law Group.

# Channel Law Group, LLP

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Suite 300
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CITY PLANNING DEPT.
ZONING ADMINISTRATION

JULIAN K. QUATTLEBAUM, III
JAMIE T. HALL **
CHARLES J. McLURKIN

*ALSO Admitted in Colorado
**ALSO Admitted in Texas

May 21, 2018

**VIA ELECTRONIC MAIL**

Darlene Navarrete, Senior Administrative Clerk
Mr. Jack Chiang, Zoning Administrator
Mr. Jason Hernandez, Planning Assistant
City of Los Angeles Department of City Planning
200 North Spring Street
Los Angeles, CA 90012
jason.hernandez@lacity.org
darlene.navarrete@lacity.org

**RE: ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ZA-2015-4125-ZAD, ENV-2015-4131-MND**

Dear Mr. Chiang and Mr. Hernandez:

According the page 3 of the Mitigated Negative Declaration (MND) for the proposed project:

> The proposed Project consists of the construction, use, and maintenance of four (4) single-family residences, retaining walls, and swimming pools on four (4) contiguous vacant lots numbered 95 through 98 fronting a Substandard Hillside Limited Street, Crisler Way, that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area. Therefore, the Project would provide a 185-linear foot extension of Crisler Way off of the existing Grand View Drive for access to the residences.

The lots for the four single-family homes do not have current sewer connections, and according to page 106 of the MND, "(b)ased on the configuration of sewer lines serving the project site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118

(#201501511325)" as indicated on the Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015 for the project, prepared by Robert Anderson, Architect. "Project sewer flows would then connect to the existing lines under Marmont Avenue." The project thus requires offsite improvements in the form of the Crisler Way extension and infrastructure improvements such as a new sewer line. The four single-family homes, the extension of Crisler Way and the required infrastructure improvements are connected actions that must be fully addressed in the same environmental document, as required by California Environmental Quality Act (CEQA) Guidelines 15003(h). As demonstrated in this comment letter, the City has not fully complied with this requirement.

Furthermore, as detailed in this comment letter, the City is improperly processing the proposed project using an MND. This letter demonstrates that the proposed project is not eligible for an MND and that an Environmental Impact Report (EIR) must be prepared for the project, in conformance with the requirements of the CEQA. Given the potential for significant impacts, which are not mitigated and may not be mitigatible, as well as the potential for cumulative impacts, an EIR is required for the project. The standard for when an EIR is required is articulated in CEQA Guidelines Section 15064(f)(1), which states:

> . . . if a lead agency is presented with a fair argument that a project **may** have a significant effect on the environment, the lead agency **shall** prepare an EIR **even though** it may also be presented with other substantial evidence that the project will not have a significant effect.

This letter, along with other comment letters being provided by residents and upcoming hearing testimony, will provide the City with a fair argument supported by substantial evidence that the project may result in significant adverse impacts, triggering the need for an EIR.

Defects in the existing MND, the substantial evidence supporting a fair argument that the proposed project will have a significant impact and that an EIR is required for the project, and the numerous ways that the City has not complied with the requirements of CEQ are detailed below.

## I. Violation Of CEQA Guidelines Section 15063(d)(2) – Inadequate Description Of The Environmental Setting

There are a number of unusual circumstances in the project vicinity that increase the potential for the proposed project to result in significant impacts. These existing conditions, which are part of the environmental setting, are not adequately described or considered when evaluating the potential of the project as proposed to result in significant impacts.

*I.a.* *Inadequate Description of Existing Crisler Way*

Page 6 of the MND explains that:

> The project site is located along a to-be constructed extension of Crisler Way south of existing residences on the south side of Grand View Drive. The Project includes a 185-linear foot extension of Crisler Way, a Substandard Hillside Limited Street that is not improved to a roadway width of 20 feet and which does not have a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area as required by the LAMC.

However, the MND fails to describe the existing condition of Crisler Way. It is unclear from the description in the MND whether or not Crisler Way currently exists in a substandard form or unpaved form, and its existing roadway width. The potential for impacts is very different if the project merely requires a limited widening of Crisler Way, or if it requires construction of a street that currently does not exist.

In addition, the MND fails to adequate describe existing conditions along the proposed Crisler Way alignment. The environmental document for the project needs to identify both the improved and unimproved portions of Crisler Way in the project vicinity. The environmental document needs to make clear that Crisler Way in the project vicinity is currently a paper road, meaning that it exists only on paper, as shown in **Figure 1a and 1b**. The existing roadway terminates at approximately 1746 Crisler Way. The environmental document needs to explain not only the length of the Crisler Way extension included as part of the project, but to explain what the full length is, of the unimproved portion of Crisler Way from approximately 1746 Crisler Way to the proposed connection with Grand View Drive (Grand View) at approximately 8350 Grand View, and the number of lots along the unimproved alignment. This is important to an understanding of the potential growth-inducing impacts of the proposed project.

The environmental document also needs to indicate that Crisler Way would be constructed on a steep undeveloped hillside, and provide information on the nature of existing slopes and soils along the proposed Crisler Way alignment. As shown in **Figure 1b** and **Figure 2a and 2b** and **Figure 3**, the Crisler Way extension would be constructed on the side of a steep hill and would connect to Grand View Drive at 8350 Grand View, just east of the home at 8354 Grand View Drive. The MND fails to provide existing slope information along the proposed Crisler Way alignment or to provide the reader with a clear sense of the geography and topography of the area.

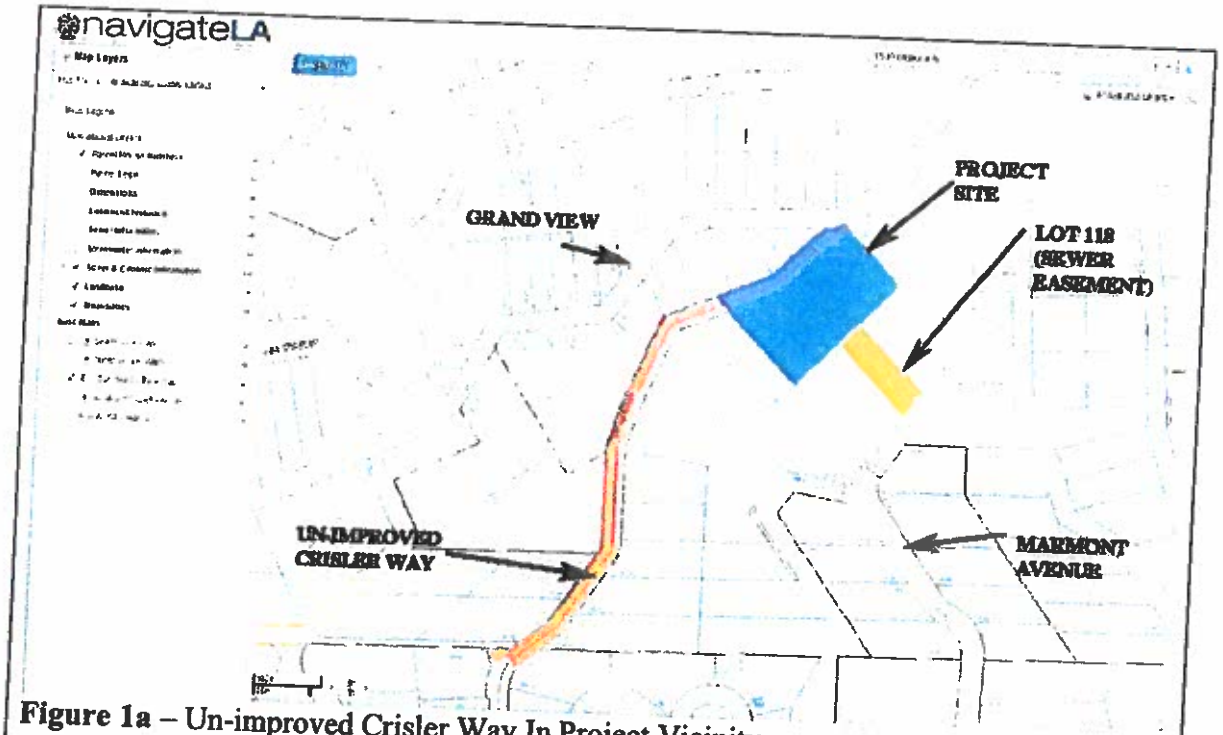



**Figure 1a** – Un-improved Crisler Way In Project Vicinity




**Figure 1b** – Steep Slope From Crisler Way terminus to Grand View Drive at Crest of Hill

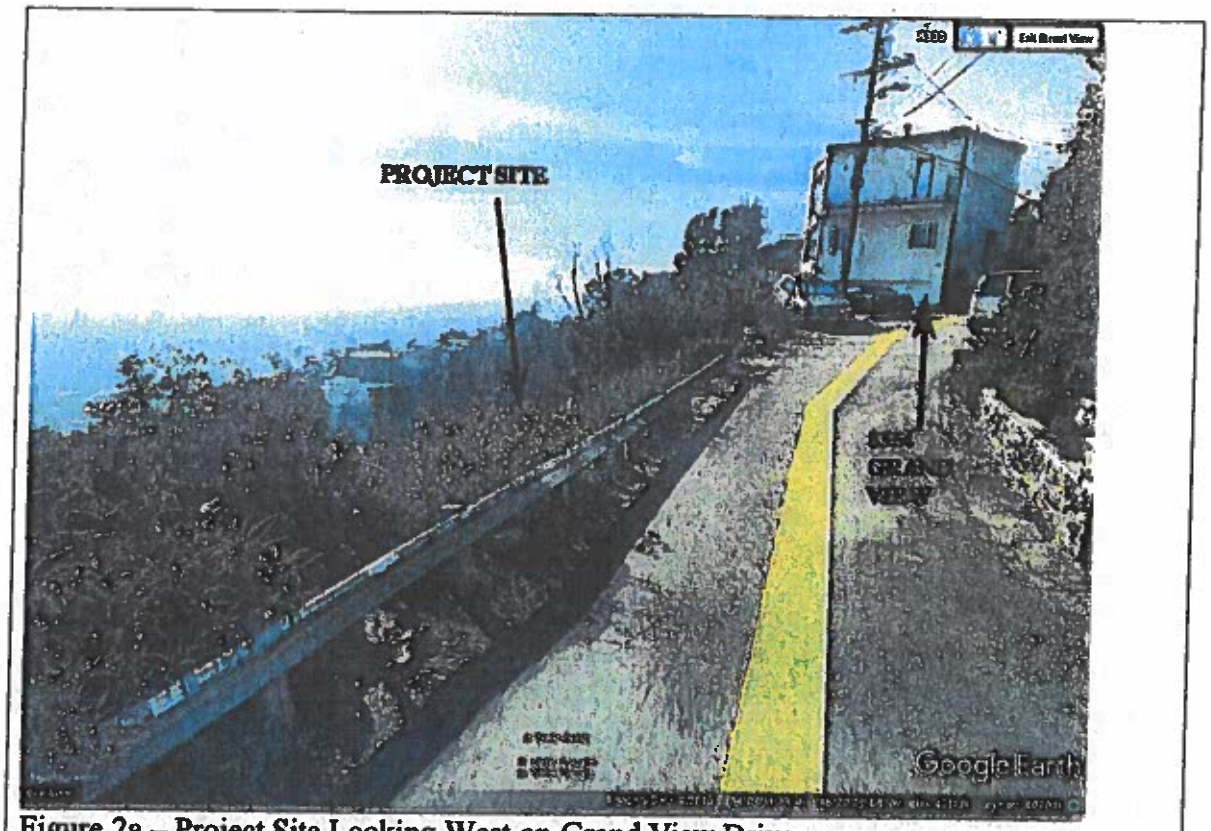



Figure 2a – Project Site Looking West on Grand View Drive




Figure 2b – View North Showing Start of Crisler Way Extention Just East 8354 Grand View, Grand View Drive, Marmont Avenue and Existing Terminus of Crisler Way

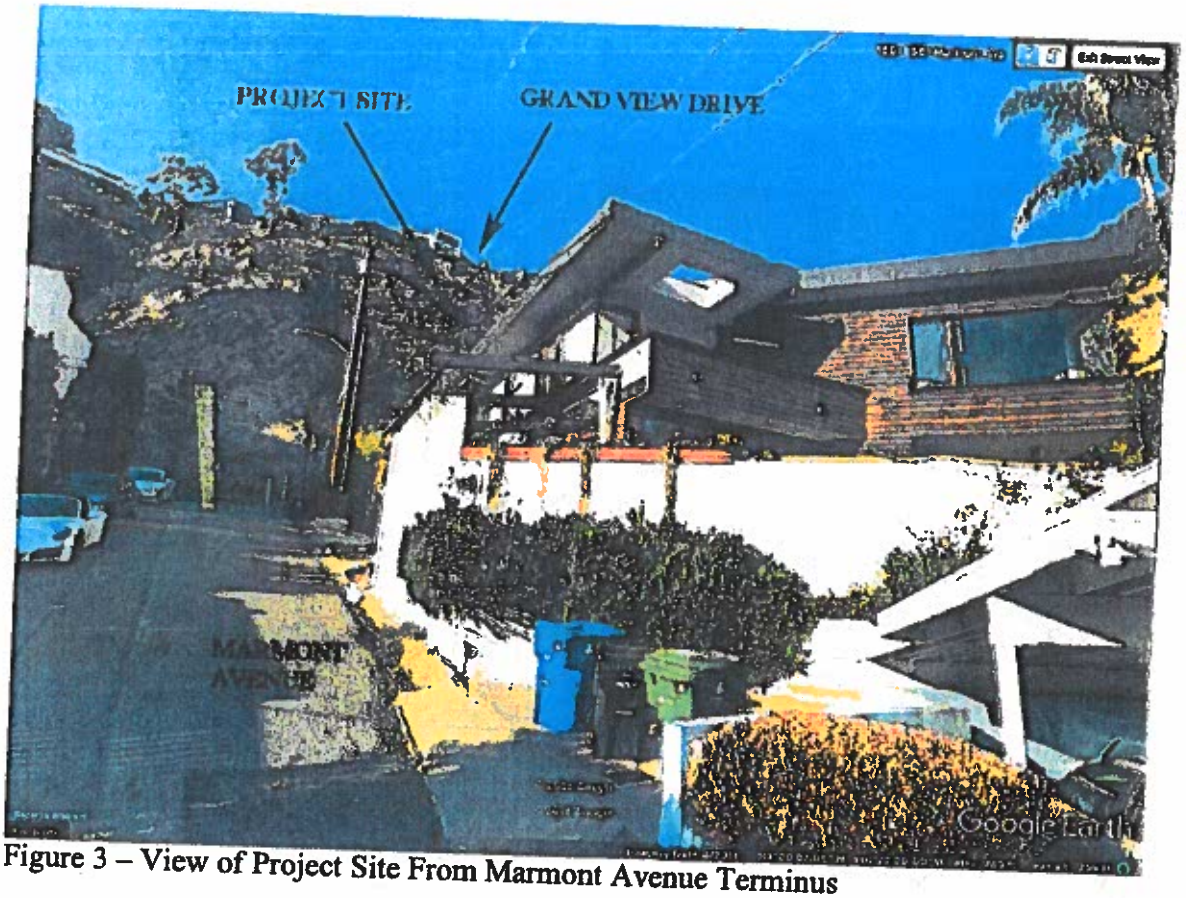


Figure 3 – View of Project Site From Marmont Avenue Terminus

*I.b.* *Inadequate Description of Marmont Avenue Conditions and Existing Sewer Infrastructure*

The proposed project would extend sewer lines to connect to the existing line (green) in Marmount Avenue via Lot 118. The environmental document for the project needs to fully describe conditions on Marmont Avenue, including the location and capacity of sewer lines and wyes, and the fact that Lot 118 is located on a paper street, as shown in **Figure 4**. The environmental document needs to include a figure, like **Figure 4**, showing the location of the project in relation to Lot 118 and existing sewer infrastructure. This information is necessary to an understanding of likely impacts associated with sewer line construction and connection and the number of connections the project may be required to provide, which should also be explained in the environmental document for the proposed project.

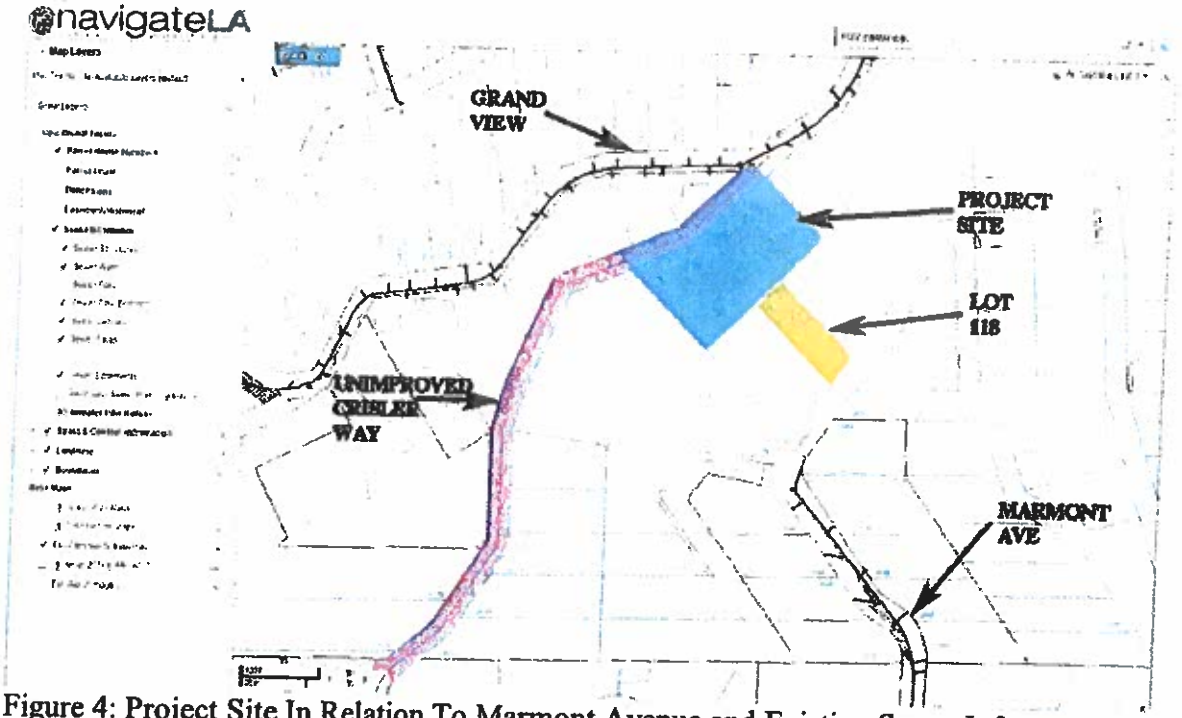


Figure 4: Project Site In Relation To Marmont Avenue and Existing Sewer Infrastructure

*I.c.* *Inadequate Description of Grand View Drive Access, A Substandard Street With Existing Condition Issues*

Page 8 of the MND provides a discussion of "site access and street improvements." The discussion notes that Grand View Drive is a Substandard Hillside Limited Street, but fails to provide any information on the actual width of Grand View Drive in the project vicinity. This information should be included to provide a reader with a fuller understanding of roadway safety issues. The environmental document should explain not only that Grand View Drive is identified by the City as a Substandard Roadway, but also should explain that existing roadway widths are between 10-14 feet.

In addition, the environmental document should address the location and number of roadway failures along potential access roads to the project site, including Grand View Drive. Not only is Grand View Drive narrow, it has existing condition issues. As explained in a report prepared by LandPhases Inc., Consulting Engineering Geologists (12/2/16), entitled *Engineering Geologic Memorandum, Recommended Mitigation Of The Existing Wood Retaining Wall Supporting The Downslope Side Of The City Street At The Subject Property, 8301 Grand View Drive, Hollywood Area, City Of Los Angeles, California*:

> As discussed in the referenced engineering geologic report by LP, dated August 22, 2016, a wood retaining wall is present along the western margin of Grand View Drive located immediately to the east and upslope of the subject property. The wood retaining wall is approximately 4 to 5 feet high, consists of vertical wood posts with horizontal lagging, and is providing lateral support of the downslope (west) edge of the street. Based on our recent site

observations, the existing wood retaining wall shows signs of deflection and undermining. There is also visible evidence of settlement of the portion of the City street located adjacent to the wall, as well as evidence of past attempts (most likely by Public Works) to mitigate the undermining and settlement by the infilling of ground cracks and undermining voids with cement and asphalt. Furthermore, it should be noted that the use of a wood retaining wall in the City of Los Angeles is considered a "non-conforming" condition as these types of retaining walls are subject to weathering, insect infestation, decay, pre-mature failure, and often lack proper engineering and foundation support.

Based on the findings of our engineering geologic study, the existing wood retaining wall is not performing adequately, is considered non-conforming, and constitutes a stability hazard to the City street and subject property.

This is not the only portion of Grand View Drive with condition issues. Grand View Drive has experienced a failure at 8461 Grand View Drive as a result of rain-related erosion, as shown in **Figure 5**.

Furthermore, as shown in **Figure 6**, there have been a number of roadway failures in the project area. The generation of possible project construction traffic on a roadway with these types of condition issues is an unusual circumstance with the potential to result in significant roadway and other infrastructure impacts.

I.d. *Failure to Describe Project's Location in an Area That Has Experienced Infrastructure Failures*

As shown in **Figure 6**, the project site is located in an area that has experienced an unusual amount of infrastructure failure in the form of street collapses (3), water main breaks (24), and gas line breaks (7). For example, there was a roadway failure at 8461 Grand View Drive (resulting from a microburst in approximately 2014). The project area has experienced a number of hydrant and pipeline failures. See, for example, the hydrant failure described in **Attachment A**. There is reason to suspect that these failures are due to both heavy equipment vehicles from construction activity and the area's geological conditions. As a result of damage to the roadway and underlying utilities, the City has had to incur substantial repair costs (see **Attachment B**). This is an unusual circumstance. As a result, project construction methods and vehicles have the potential to contribute to additional infrastructure failures, which is a potentially significant impact of the proposed project that is not addressed in the MND.

Figure 5: Photos Showing Grand View Drive Failure At 8461 Grand View Drive

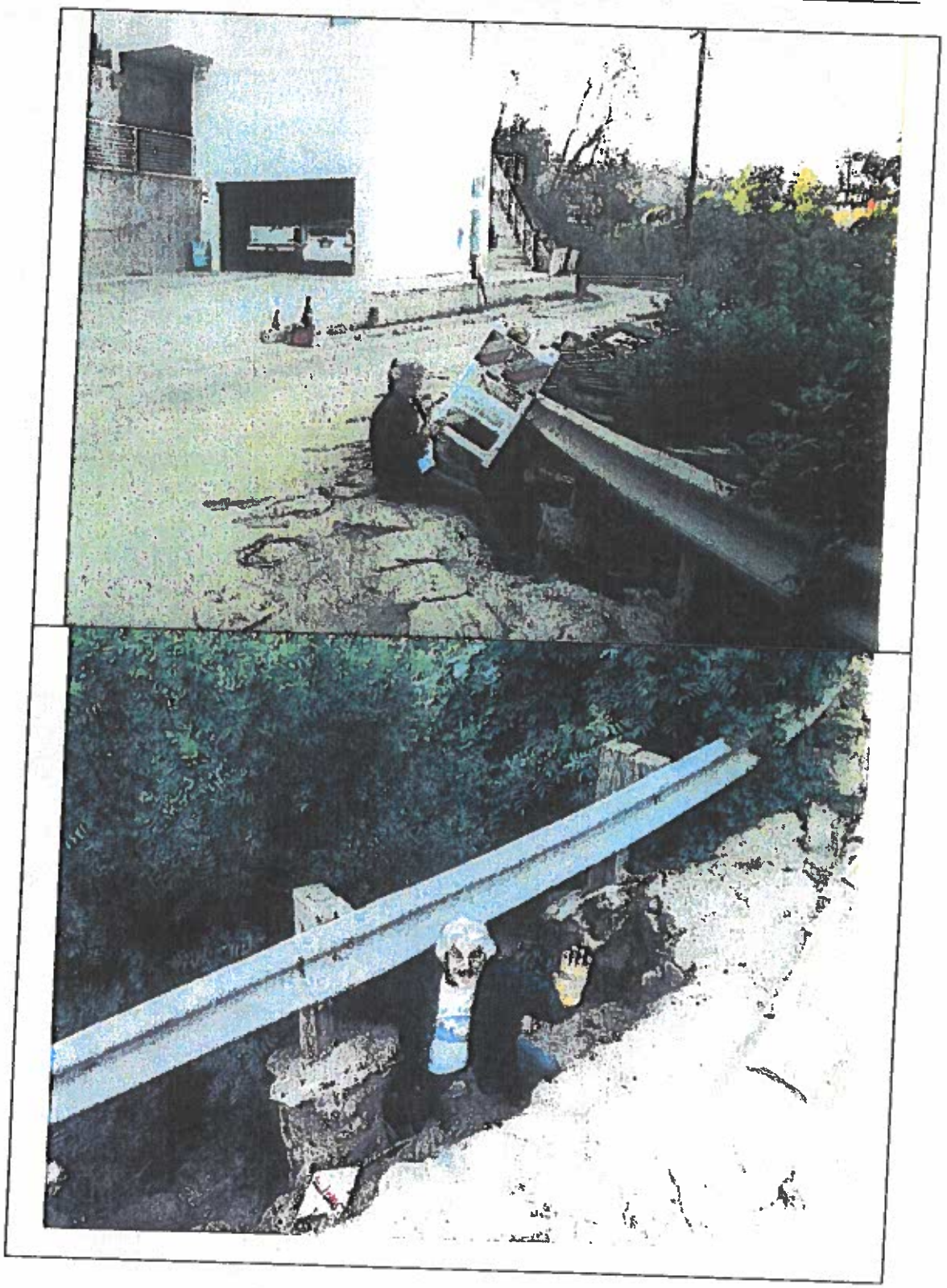
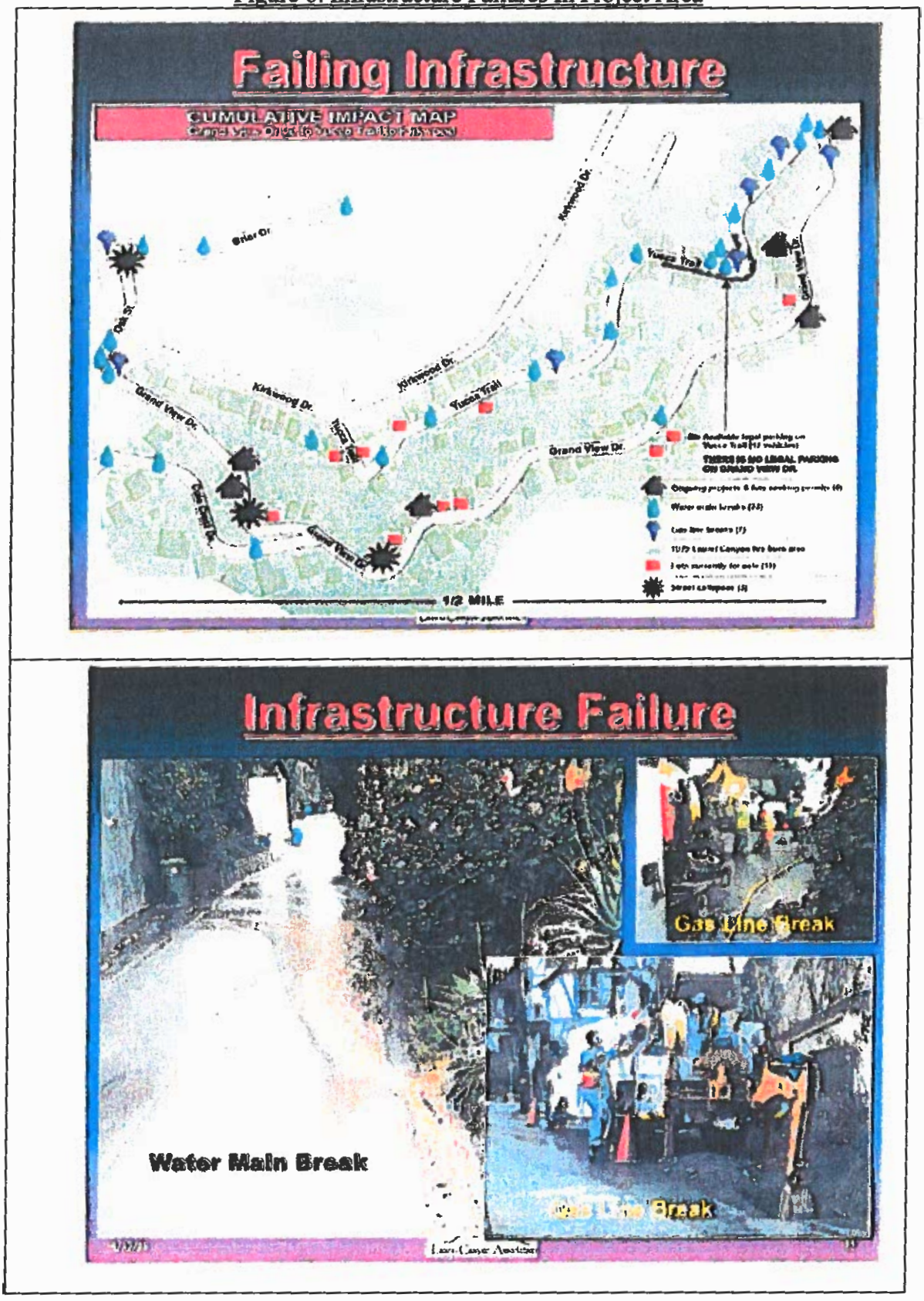


Figure 6: Infrastructure Failures In Project Area



I.e. *Failure to Describe Roadway Weight Restrictions In Project Area*

Grand View Drive and Yucca Trail currently have a weight restriction of 6,000 pounds. This is not mentioned in the MND for the project or in the Traffic Analysis for the Construction Phase included in Appendix F. This restriction is intended to limit damage to these substandard roadways. Weight restrictions on likely access routes are an unusual circumstance and indicative of the potential for project construction traffic to result in significant project impacts in the form of increased roadway and infrastructure failures.

Normal concrete weights about 4,000 lb. per cubic yard. Lightweight concrete weighs about 3000 lb. per cubic yard. If a truck is carrying 10 cubic yards of normal concrete, then the weight of the concrete is approximately 40,000 lb. The truck will weigh approximately 26,000 lb. for a total of 66,000 lb.[1] This is substantially more than the 6,000 pound weight restriction. Project construction vehicles often weigh substantially more than 6,000 pounds (see **Attachment C**). So, restricting the weight of construction vehicles is likely infeasible, and there is therefore the potential for unmitigated impacts to local roadways resulting from construction vehicles. In the absence of mitigation requiring the applicant to post a Construction Damage Bond for any damage incurred along the roadways accessed by project construction and delivery vehicles, the potential for costly impacts remains. (See **Attachment B** for bids to repair recent damage to Grand View Drive).

I.f. Inadequate Description of Site Access Limitations

As shown in the following figures, access to the proposed Crisler Way spur roadway is limited, and is taken off of Laurel Canyon. As shown in **Figure 7(a)** the proposed project is in essence located along a narrow loop road. The Grand View area is essentially a cul-de-sac within a cul-de-sac, as shown in **Figure 7(b)**. The limited entry and exit routes to the project site and Kirkwood Bowl area and the narrow streets result in the potential for project traffic to interfere with residential and emergency access to the area. Construction vehicle access routes are likely to be limited by sharp turns, narrow widths, and hillside grades affecting the choice of routes. **Figure 7(a)** shows the route to the site recommended in the Traffic Analysis in MND Appendix F. As can be seen from **Figure 7(a)** construction vehicles would need to make a sharp right hand turn from narrow Grand View Drive to turn onto Crisler Way, to access the project site, which may not be feasible for trucks and large equipment. The need for a sharp turn into and out of the project site area is not described in the Traffic Analysis contained in **Attachment F** to the MND. An understanding of the roadway configuration and proximity to neighboring uses is important to assessing the potential for construction-related impacts of the project. Although the MND and MND Appendix F did acknowledge that roadways serving the project site are narrow in width and have sharp curves in places, the environmental

[1] www.tx-taca.org/members/files/2011/07/Concrete-and-cement-faq.pdf

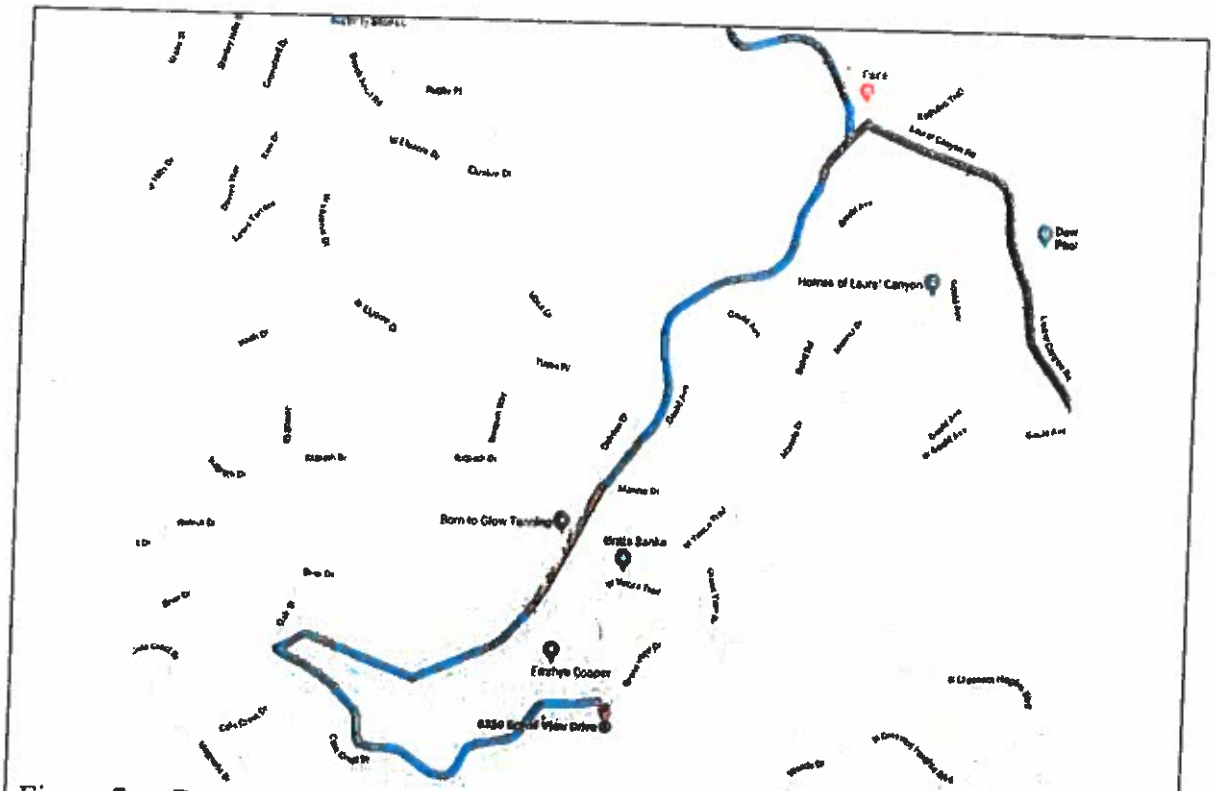


Figure 7a – Route to Project Site From Laurel Canyon Via Traffic Route B - Kirkwood Drive and Grand View Drive – Note Need For Sharp Right Hand Turn to Access Site

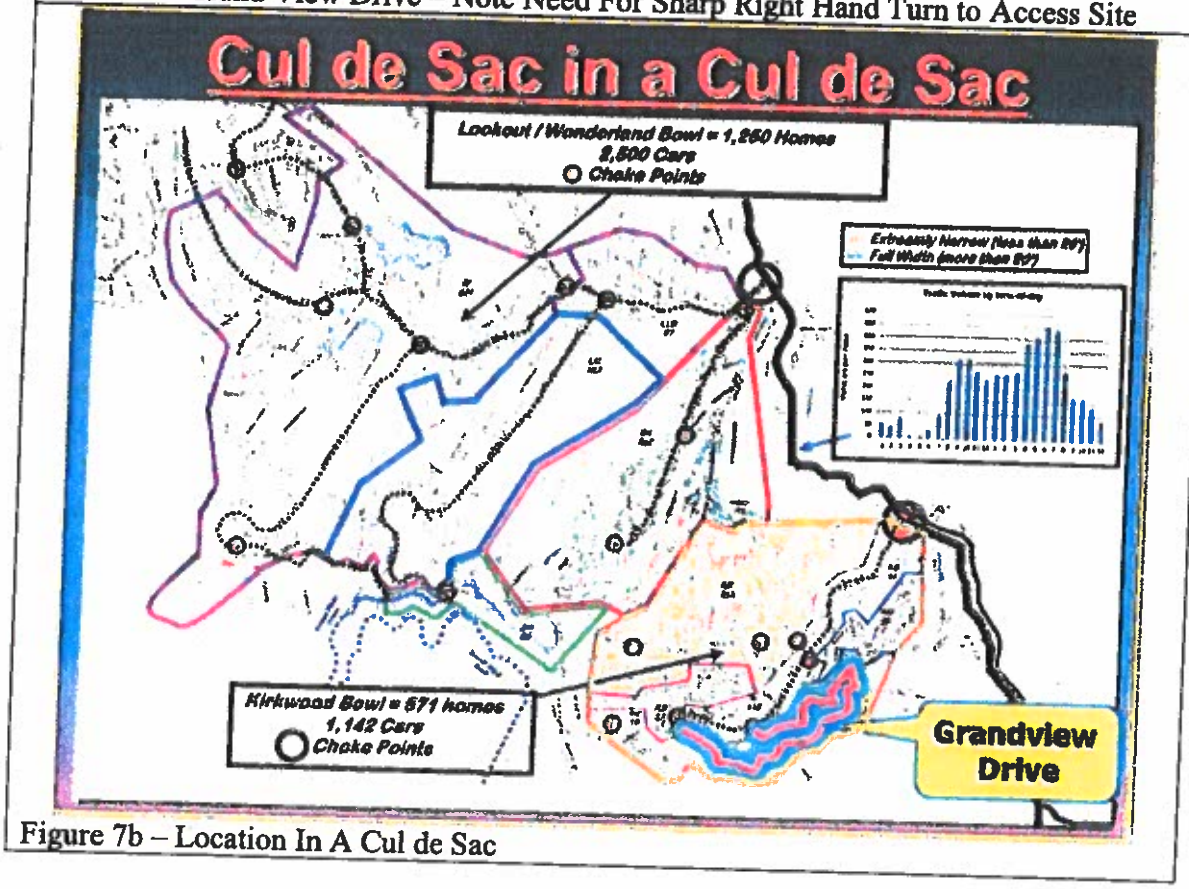



Figure 7b – Location In A Cul de Sac

document fails to provide sufficient information regarding roadway conditions and access issues, or provide a map showing the recommended routing showing the Crisler Way turn. As a result the analysis of the potential for traffic impacts is underestimated and the potential for impacts remains, as detailed in Section V of this comment letter.

*I.g.* *Inadequate Description of Existing Slope Conditions*

As shown in **Figures 2 and 3**, the project site is located on a steep slope. The MND does indicate, on page 43, that as: "noted in the LADBS Approval Letter, the project site is located below the proposed extension of Crisler Way at the top of an approximately 200-foot high average slope gradient of about 40 degrees with localized areas steeper than 1:1 slope." This is the only substantive description of existing slope conditions in the area and is very non-specific as to the location of slopes, particularly slopes of 1:1. The environmental document for the project needs to include a copy of the slope analysis. In addition, the quoted language from the MND does not identify slopes along the proposed extension of Crisler Way; the description is only of the area "below the proposed extension of Crisler Way." The MND is deficient in its description of geotechnical conditions for the whole site (Crisler Way extension and single-family lots). This is evidence of the MND's failure to analyze the whole of the action.

I.h. *Inadequate Description of Very High Fire Severity Zone Conditions in Project Area and Fire History*

The property has been officially mapped in a "Very High Fire Hazard Severity Zone" due to its location in a fire-prone hillside area of the City. It is identified as such in the City's ZIMAS system and on the Parcel Profile Reports for the project site. The City has defined the "Very High Fire Hazard Severity Zone" as follows:

> "Any area within the City of Los Angeles that poses a significant threat of fire from adjoining natural brush hillside areas and which is determined by the following factors: topography, infrastructure, fire protection, population density, types of construction, weather, existing fire codes and ordinances, and fire history." LAMC Section 57.202.

The City's Zone Information and Map Access System ("ZIMAS") describes the Very High Fire Hazard Severity Zone as follows:

> "Lands designated by the City of Los Angeles Fire Department pursuant to Government Code 51178 that were identified and recommended to local agencies by the Director of Forestry and Fire Protection based on criteria that includes fuel loading, slope, fire weather, and other relevant factors. These areas must comply with the Brush Clearance Requirements of the Fire Code. The Very High Fire Hazard Severity Zone (VHFHSZ) was first established in the City of Los Angeles in 1999 and replaced the older 'Mountain Fire District' and 'Buffer Zone.'"

While the MND recognizes that the project is located in a Very High Fire Severity Zone, it fails to note that the project is located in the general area burned by the 1979 Kirkland Bowl Fire, as shown in **Figure 8** which is developed from the information contained in **Attachment D**. This figure shows the locations of the houses that burned in the Kirkland Fire (red), the project (yellow) and other cumulative project in the Kirkland Bowl area (blue). In fact the home at 8350, the approximate address of the proposed turnoff from Grand View Drive to the Crisler Way extension burned in the Kirkland Bowl Fire which is why there is not a home at this location. The MND needs to not only identify that the project is in a Very High Fire Severity Zone, but also should disclose that the project site burned in the Kirkland Bowl fire and discuss the conditions that exacerbated fire damage in the area. Failure to adequately discuss fire risks in the project area has resulted in a failure to adequately identify emergency access and response impacts of the proposed project.

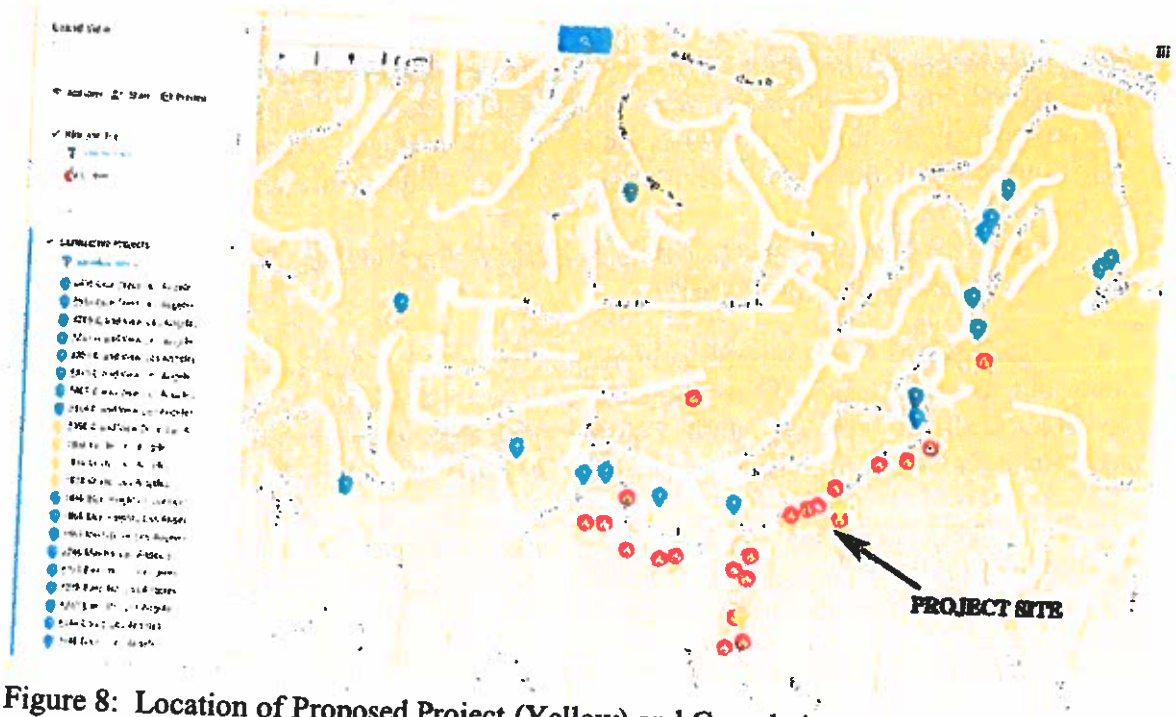



Figure 8: Location of Proposed Project (Yellow) and Cumulative Projects (Blue) In Relation To Homes That Burned In Kirkland Fire (Red)

## II. Violation of Public Resources Code 21167.2(c) and/or CEQA Guidelines Section 15150 – Failure to Make All Cited Documents Readily Accessible to the Public

Because important technical studies and projects plans were not included in the MND, we were forced to have someone go downtown and go through the project files. However, not all of the information sought was available in the project files, which lacked, for example, the geotechnical studies, storm water drainage plan, sewer plans, and Crisler Way plans and associated documents. See **Attachment E**, which contains emails with planning staff in which we were directed to chase around City Hall to different departments to obtain the requested studies. As a result, our ability to review

the MND and project has been compromised. The fact that information about the project as a whole was not in the project file is demonstrative of the fact that the MND fails to analyze the whole of the action. Concerned citizens should not be forced to take time off work to go downtown to review the project file in order to obtain the information necessary to understand the proposed project.

## III. Violation Of CEQA Guidelines Sections 15063(D)(1) And 15071 – Inadequate, Incomplete And/Or Inaccurate Project Description

### *III.a. Inadequate Description of Required Permits*

Page 1 of the MND indicates that:

> The Applicant is requesting approvals and permits from LADBS and other municipal agencies for construction activities including, but not limited to, grading and construction of the single-family residences and improvements to Crisler Way in accordance with the LAMC.

The MND fails to identify the specific permits required/sought and the other municipal agencies required to grant such permits. The MND permit discussion fails to identify the permits and agreements required for off-site services and utilities and the required timing of such permits relative to project approval.

### III.b. *Inadequate Description of Crisler Way Extension*

The MND fails to provide an adequate description of the Crisler Way extension and the nature and type of construction required. In 2015 the Department of Public Works inappropriately issued a B Permit for this roadway extension, without first conducting required CEQA review. An appeal of the B-permit issuance was filed, which the City never heard, and the B-permit expired on January 12, 2018, as shown in **Attachment F**.[2] As shown in **Attachment F**, the roadway extension includes storm drains, which are not addressed or described in the MND. As explained in **Attachment G** – Appeal to Board of Public Works of CEQA Determination for B Permit No. BR402571 (Public Resources Code Section 21151(c)), dated July 2, 2015 from Channel Law, the plans submitted as part of the B Permit application show that the Crisler Way extension would require up to 30 caissons and two large retaining walls. A marked up screenshot of the plans is provided in **Figure 9**.

[2] Available at: https://engpermits.lacity.org/bpermits/common/final_permit.cfm?ref_no=8910

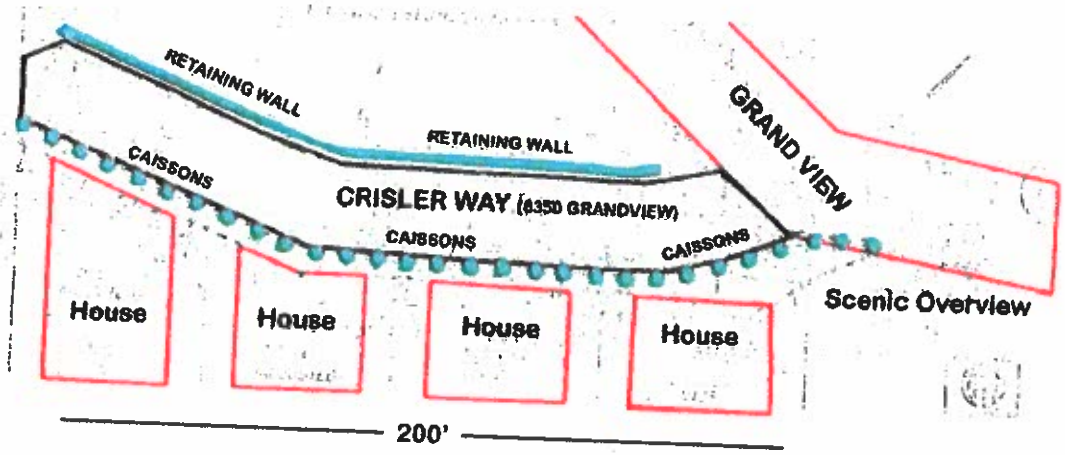



Figure 9: Crisler Way Extension

The MND project description fails to provide a description of the design of the proposed Crisler Way extension, and the nature of included/required public services and utilities. The environmental document for the project must disclose the location of all storm drain facilities included for Crisler Way and indicate the location of the connection to the greater storm drain system. The MND also fails to indicate whether the Crisler Way extension will be a public or private street. As a result of the lack of adequate project description, the MND analysis of potential project impacts is fatally flawed, since the air quality, noise and other technical studies fail to fully address potential impacts associated with the design and construction of this roadway.

III.c. *Inadequate Description of Proposed Sewer Connection*

The MND indicates that Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325)" as indicated on the Stormwater Drainage Plan, Sheet Number A-1.1, dated 3-12-2015 for the project, prepared by Robert Anderson, Architect. "Project sewer flows would then connect to the existing lines under Marmont Avenue." (See **Figure 4** for an understanding of the location of Lot 118 in relation to the project site). However, the MND fails to adequately identify all of the required easements for the project and the location and number of sewer wyes required for the project. In addition, the environmental document for the project must identify if the installation of the new sewer line results in requirement to provide wyes or other sewer facilities to adjacent unserved parcels. Furthermore, the MND should identify the routing of the sewer lines from each of the single-family homes, and the depth and length of trenching required for installation and connection to existing facilities. In the absence of this information, the analysis of potential project impacts is fatally flawed, since the air quality, noise and other technical studies fail to fully address potential impacts associated with the design and construction of required sewer facilities.

III.d. *Inadequate Description of Required Infrastructure*

Page 85 of the MND indicates, as part of the discussion of fire protection impacts, that: "the Project design features the installation of a new fire hydrant at the intersection of Crisler Way and Grand View Drive so the proposed residences would be located within 300 feet of a fire hydrant, and entrances to the residences would be within 150 feet of an improved edge or approved fire lane to reduce potential fire hazards." However, this is not included in the project description and the MND provides no information on existing water lines, their capacity and the construction activity required to install the new hydrant. As a result there are the potential for air quality, noise, and emergency and residential access impacts that are not addressed in the MND.

The MND fails to disclose that the Crisler Way extension is required to include storm drains (see **Attachment F**). In addition, the MND fails to explain how and where the storm drains will be connected to existing storm drain facilities and the capacity of such facilities. As a result, the discussion of potential infrastructure impacts in the MND is fatally flawed.

III.e. *Inadequate Description of Los Angeles Municipal Code Requirements*

Page 9 of the MND indicates that the project is located in a hillside area, but fails to note that the project is subject to the City's Hillside Development Standards or to describe applicable standards and analyze the project's consistency with those standards.

III.f. *Inadequate Description of Proposed Single-Family Homes*

The MND includes Figure 3, which shows the footprint of the four proposed single-family dwellings, but the MND lacks figures showing project elevations, or other typical project plan sheets. The environmental document for the project should include a full set of project plans as well as visual simulations for the project. This information is necessary in order to more fully understand the project in relation to existing topography, the nature of project grading and construction, and to allow members of the public to verify the project's consistency with Los Angeles Municipal Code (LAMC) requirements. Given the missing information in the MND, we were forced to have someone go downtown and go through the project files. Based on the plan information obtained, it does not appear that the project is consistent with the requirements of the Baseline Hillside Ordinance, as discussed more fully in Section V of this comment letter. Concerned citizens should not be forced to take time off work to go downtown to review the project file in order to obtain the information necessary to understand the proposed project.

III.g. *Failure to Describe Required Retaining Walls*

The MND makes reference in a number of places to the fact that the proposed project requires the construction of retaining walls, but never provides information on the number, location and heights of such retaining walls. This information is necessary in order to assess whether the project complies with the City's Hillside Development

Standards/Baseline Hillside Ordinance. According to the September 19, 2012 Geotechnical Report for the project at page 5, the project includes:

> Retaining walls to 6 to 21 feet high are proposed along the *uphill* side of the proposed private street. Pile-supported retaining walls from 5 to 7-1/2 feet high are proposed along the downslope side of the proposed street. The new proposed construction plans provide specific information concerning the construction of four hillside residences and swimming pools on the subject property. Retaining walls associated with the construction of the individual residences are proposed up to 22 feet high. Retaining walls used to create the level rear yard areas are proposed up to 12 feet high.

III.h. *Inadequate and Inaccurate Grading Summary*

The MND on page 8 indicates that total grading for Crisler Way amounts to 789 cubic yards (cy) of fill obtained from cuts for construction of the four houses, and that the amount of cut and fill precisely balances. The following back-of-the-envelope calculation of likely earth movement for roadway construction is based on the limited project information for the Crisler Way portion of the project obtain from the Bureau of Engineering. Based on this calculation, it is unlikely that the grading information in the MND is correct and that cut and fill amounts will precisely balance. The MND should include the grading plan for the project as a whole, including roadway construction and the trenching required for sewer, storm drain and fire hydrant installation.

| Road | | | |
|---|---|---|---|
| ( 29 ) 3' dia piles @ 36' | 189 | cy | |
| 10" pocket wall between 3' piles | 84 | cy | |
| road slope cut 25' x 16' h( foot& wall up | 1556 | cy | |
| road pavement & recomp bottom | 486 | cy | part dirt comes back |
| Dirt volume front set back 5'x22'x210' | 855 | cy | dirt comes back |
| | | | |
| total road | 3170 | | |

In addition, the MND fails to include a grading staging plan to demonstrate that earth volumes removed from the residential parcels will be immediately used for roadway construction. Given the steep slopes in the area, and the lack of places to store earth, it is likely that earth may need to be stored off-site, pending use as fill. The MND fails to account for this, or to provide the information necessary for an independent verification of cut and fill balancing claims. The MND does indicate that a staging area will be created on lot 95, but fails to indicate if the associated grading/pad configuration is temporary or permanent and sufficient for both parking, staging and dirt. From the information available, it appears that that the MND understates project cut and fill requirements. Associated impacts (air quality, traffic) are also likely understated.

*III.i.* *Inadequate Description of Site Preparation and Grading*

Table 3-5 in the MND provides an estimate of the duration of various construction activities. The Table fails to note, with the exception of Stage 4 – creation of temp. 10 ft. wide road on Crisler Way, install security fence – whether the cited activity is associated with roadway or single-family home construction.

III.j. *Inadequate Description of Construction Parking and Equipment Staging*

Page 10 of the MND states that complete on-site parking will be available within two month of construction following the creation of a staging area on Lot 95. However, the MND fails to indicate how parking and equipment staging will be handled during the first two months. Similarly, page 11 of the MND indicates:

> The Applicant expects to be able to achieve "off Grandview Parking" within two months of starting construction by providing an on-site location for construction parking and equipment staging on lot #95, the first lot adjacent to Grand View Drive. Lot #95 contains an unused building foundation from a prior structure that will provide flat surface area for temporary construction parking and staging. During construction, crews will use the extension of Crisler Way as a temporary parking and equipment staging area to avoid parking and staging on Grand View Drive.

This implies that on Grand View parking will occur during the first two month of project construction. This would result in significant residential and emergency access impacts, given the narrow width of Grand View Drive in the project vicinity.

Given the roadway width and likely construction methods, it is unclear whether project construction can be accomplished without any staging on Grand View Drive. As detailed in **Attachment G**, residents in the area experienced very real impacts as a result of the way construction was conducted at 8401 Grand View Drive and the need for construction equipment to be staged from the street, as shown in **Figures 10(a) and 10(b)**, which depict the type of equipment used during pile drilling and installation.

As can be seen from these photos, and given that the project similarly may require drilled pile foundations and currently has no land for construction staging in the first few months of construction activity (see **Figures 2 and 3**), it is likely that construction equipment will be used which can not quickly be moved in the event of an emergency, or to allow residents to access their homes and that for some portion of project construction activity will occur from Grand View Drive. The extreme slope of the parcels, combined with the narrow width of the existing streets, and the possible lack of existing staging area on the project site are unusual circumstance with the potential to result in construction-traffic related impacts if not properly mitigated.

**Figures 10(a) and 10(b)** also illustrate the problem construction equipment may have making a sharp right turn from Grand View Drive onto Crisler Way. A sharp right



Figure 10 (a) and (b): Construction at 8401 Grand View Drive Blocking Roadway

hand turn would be required if project traffic is to avoid Yucca Trail, as shown in **Figure 7(a)**. The narrow roadway, combined with the need for a sharp turn to access the project site is an unusual circumstance with the potential to increase the likelihood of accidents and roadway blockages which would be significant impacts of project construction.

III.k. *Inadequate Description of Project Equipment*

Table 3-7 lists the assumed equipment fleet for project construction, which includes during site preparation, 1 bobcat, 1 grader, 1 tractor/loader/backhoe and during construction 1 rough terrain fork lift, 1 forklift, 1 bobcat, 1 tractor/loader/backhoe. However, project construction required the drilling of 36" solider piles and installation of steel cages and concrete piles. This typically involves drilling rigs and cranes (See **Figure 10**). However, this type of equipment is not included in Table 3-7 or assumed in the noise analysis for the project. In addition, construction will require cement trucks and other haul vehicles which need to been included in the construction fleet. Given roadway constraints in the area, the environmental document needs to provide information on the size and weight (loaded and unloaded) of vehicles and equipment used for construction that must be transported to the site. This information if necessary to demonstrate that the use of lighter, smaller construction vehicles is actually feasible, as assumed in the analysis of construction impacts to local roadways, and that such vehicles will comply with weight restrictions along the project route, or the potential for impacts remains.

III.l. *Inadequate Description of Temporary Street Closures*

As detailed on page 12 of the MND, it is anticipated that construction activities may necessitate temporary lane closures on streets adjacent to the project site on an intermittent basis. Given roadway constraints in the project area, any lane or street closures would have the potential to result in significant emergency and residential access impacts.

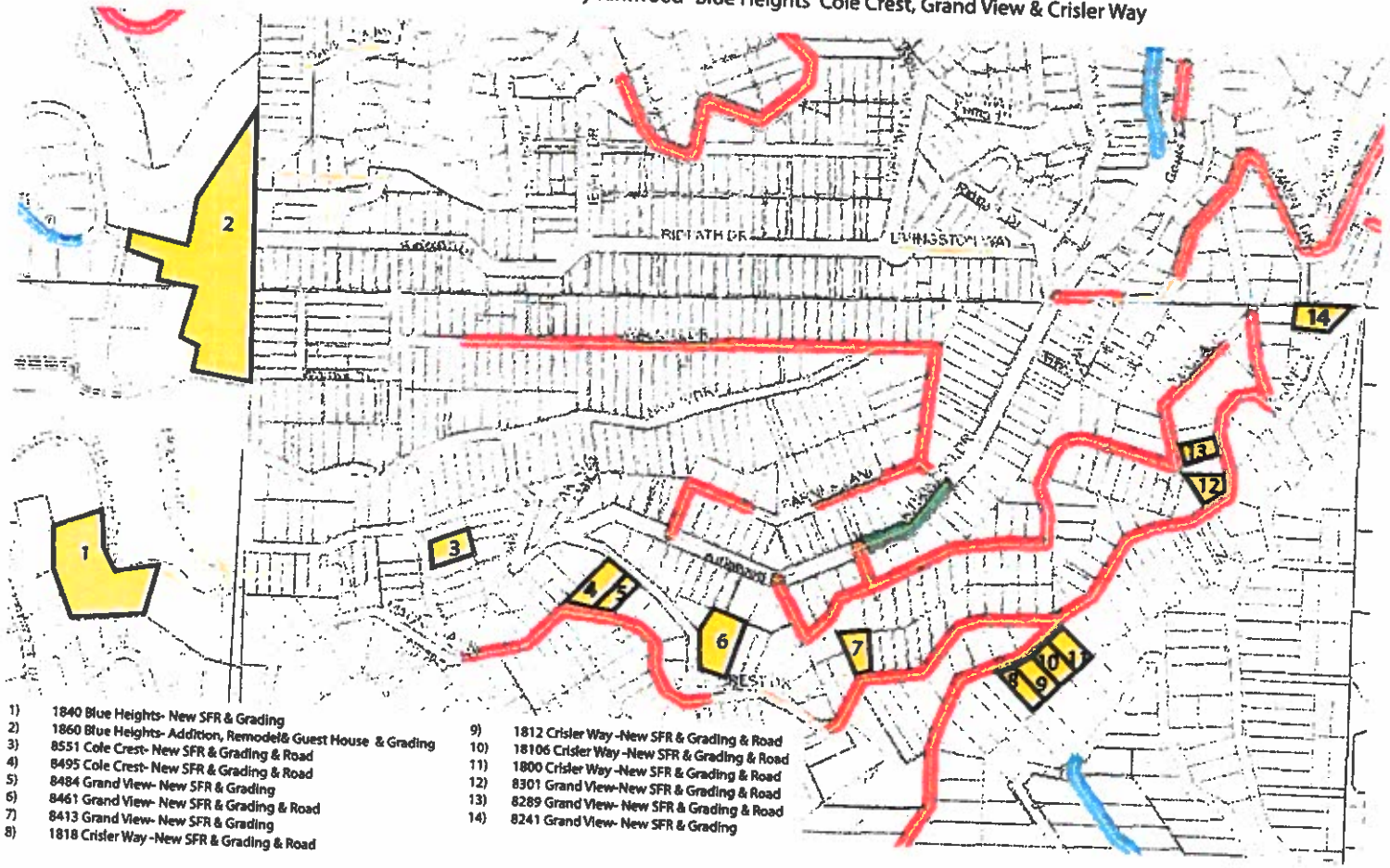
III.m. *Inadequate Cumulative Projects List*

The cumulative projects list includes only eight projects, however, there are additional cumulative projects in the vicinity which need to be addressed in the analysis, as shown on **Figure 11**, and listed in recent MND's from the City, including those for 8301 Grand View Drive, 8495 Cole Crest and 8551 Cole Crest, including:

- 1840 Blue Heights
- 1860 Blue Heights
- 8484 Grand View Drive

The MND analysis thus underestimates the potential for cumulative impacts, including traffic, emergency access, air quality, and noise impacts.

Figure 11 – Cumulative Projects In The Area



## IV. Violation of CEQA Guideline Section 15003(h) – Failure to Consider The Whole Of The Action

Although the MND recognizes that the Crisler Way extension is part of the project, the MND fails to adequately describe the Crisler Way extension, or to adequately analyze the potential impacts of Crisler Way construction. Similarly, the MND fails to adequately describe required sewer, storm drain, fire hydrant, drainage, and other required improvements, or to adequately analyze the potential impacts of such improvements. For example, it does not appear that the grading figures provided in the MND include the trenching required for sewer infrastructure installation on and off-site, and the MND fails to address storm drains and associated drainage for Crisler Way.

## V. Violation of CEQA Guidelines Section 15358 – Failure to Address Growth-Inducing Effects

A key purpose of CEQA is to identify the environmental effects, or impacts of a proposed project, as explained in CEQA Guidelines Section 15002. As explained in CEQA Guidelines Section 15358, impacts include the potential growth inducing effects of a project:

**15002. GENERAL CONCEPTS**

(a) Basic Purposes of CEQA. The basic purposes of CEQA are to:

(1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.

(2) Identify the ways that environmental damage can be avoided or significantly reduced.

(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

**15358. EFFECTS**

"Effects" and "impacts" as used in these Guidelines are synonymous.

(a) Effects include:

(1) Direct or primary effects which are caused by the project and occur at the same time and place.

(2) Indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Growth-inducing effects occur when a project extends infrastructure to an undeveloped area removing a barrier to future development. For example, in *City of Antioch v. City Council of the City of Pittsburg* (1st Dist. 1986) 187 Cal.App.3d 1325, the court explained that "[c]onstruction of the road way and utilities cannot be considered in isolation from the development it presages." (Id. At p. 1335). This project will extend both a roadway and infrastructure such as sewer lines and storm drains into an area that is not developed, and may thus encourage future completion of the remaining Crisler Way gap, and development along Marmont Way. The City needs to address the potential for growth-inducing impacts to result from the proposed project in the environmental document for the project.

## VI. Violation Of CEQA Guidelines Section 15063, 15064 And 15070(A) – Lack Of Substantial Evidence Supporting Impact Judgments In The Initial Study and Violation of CEQA Guidelines Section 15063(C)(3)(A) – Failure to Identify Significant Impacts of the Project

### *VI.a. Aesthetics*

| I AESTHETICS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☒ | ☐ | ☐ | ☐ |
| b) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☒ | ☐ | ☐ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As noted on page 17 of the MND: "Scenic vistas are generally described in two ways: panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, or feature of interest)." "Views of the project site are available from neighboring residential properties along Grand View Drive, Crisler Way, Hillside Avenue, Hillside Way, Marmont Ave and from distant mid-city locations." Currently residences are located on the ridgeline of the hillside on Grand View Drive. Unlike the existing residential neighborhood along Grand View Drive, the proposed project would be constructed on the side of the undeveloped hillside, as shown in **Figures 2b and 3**. The proposed project therefore has the potential to affect a scenic vista, and degrade the existing natural character of the site. In addition, the proposed project would introduce a new light source on a prominent and visible slope. The potential for light and glare impacts therefore exists.

The MND fails to provide project elevations or visual simulations to show that aesthetic impacts would be less than significant. Given that the proposed project would introduce new roadway and residential uses on an undeveloped hillside slope, there is the potential for significant aesthetic impacts. The MND does not provide substantial evidence to the contrary.

On page 18 the MND argues that the project's impact on the existing visual character of the area would be less than significant, in part because: "The proposed building heights would not conflict with LAMC height restrictions." This is not true. Based on the project plans contained in the project file at City Hall, the height of 1800 Crisler would be 46 feet (high point 1004.5', low point 958.5'), 1806 Crisler would be 45 feet, 1812 Crisler would be 55 feet in height (high point 1020', low point 965') and 1818 Crisler Way would be 46 feet in height (high point 1020', low point 974'). See **Figures 12, 13, 14 and 15**.

According to page 14-15 of the 2011 *Baseline Hillside Ordinance A Comprehensive Guide to the New Hillside Regulations,* Section 4. Height Limits, the following maximum height limits apply:

Table 3
Maximum Height of Structures (in feet)

| Height Districts | R1 | RS | RE9 | RE11 | RE15 | RE20 | RE40 | RA |
|---|---|---|---|---|---|---|---|---|
| When the roof of the uppermost story of a building or structure or portion thereof has a slope of 25% or greater, the maximum height for said portion of building or structure thereof shall be as follows: | | | | | | | | |
| 1, 1L, & 1VL | 33 | 33 | 33 | 36 | 36 | 36 | 36 | 36 |
| 1XL | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 1SS | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| When the roof of the uppermost story of a building or structure or portion thereof has a slope of less than 25%, the maximum height for said portion of building or structure thereof shall be as follows: | | | | | | | | |
| 1, 1L, & 1VL | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 30 |
| 1XL | 28 | 28 | 28 | 30 | 30 | 30 | 30 | 30 |
| 1SS | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |

The residential lots included in the proposed project are zoned R1-1, which would allow for a maximum height of 33 feet with a roof slope of 25% of greater. The proposed single-family homes included in the proposed project exceed these heights. Section 4b of the *Comprehensive Guide* does allow the zoning administrator to allow structure of up to 45 feet:

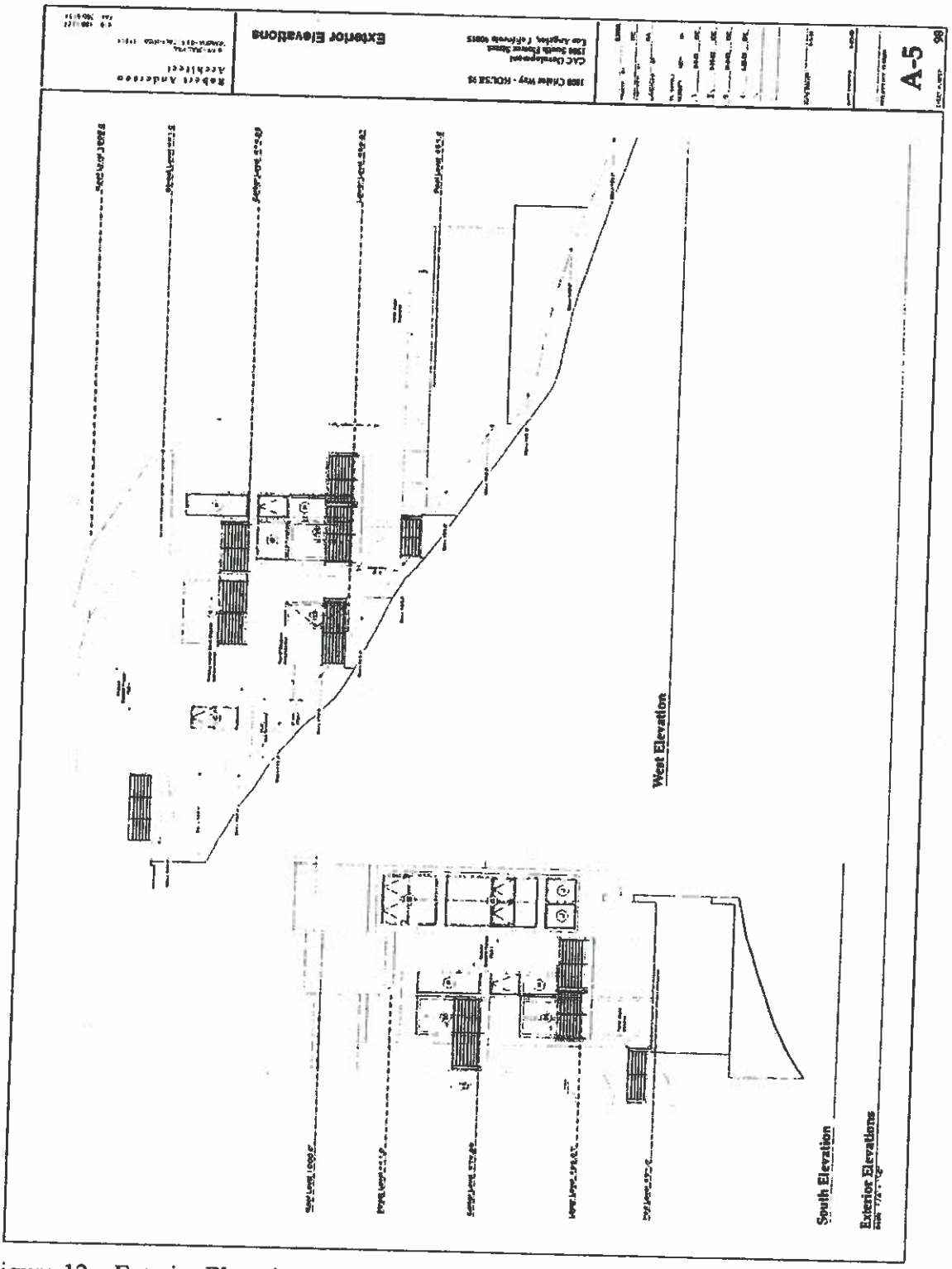



Figure 12 – Exterior Elevation 1800 Crisler Way

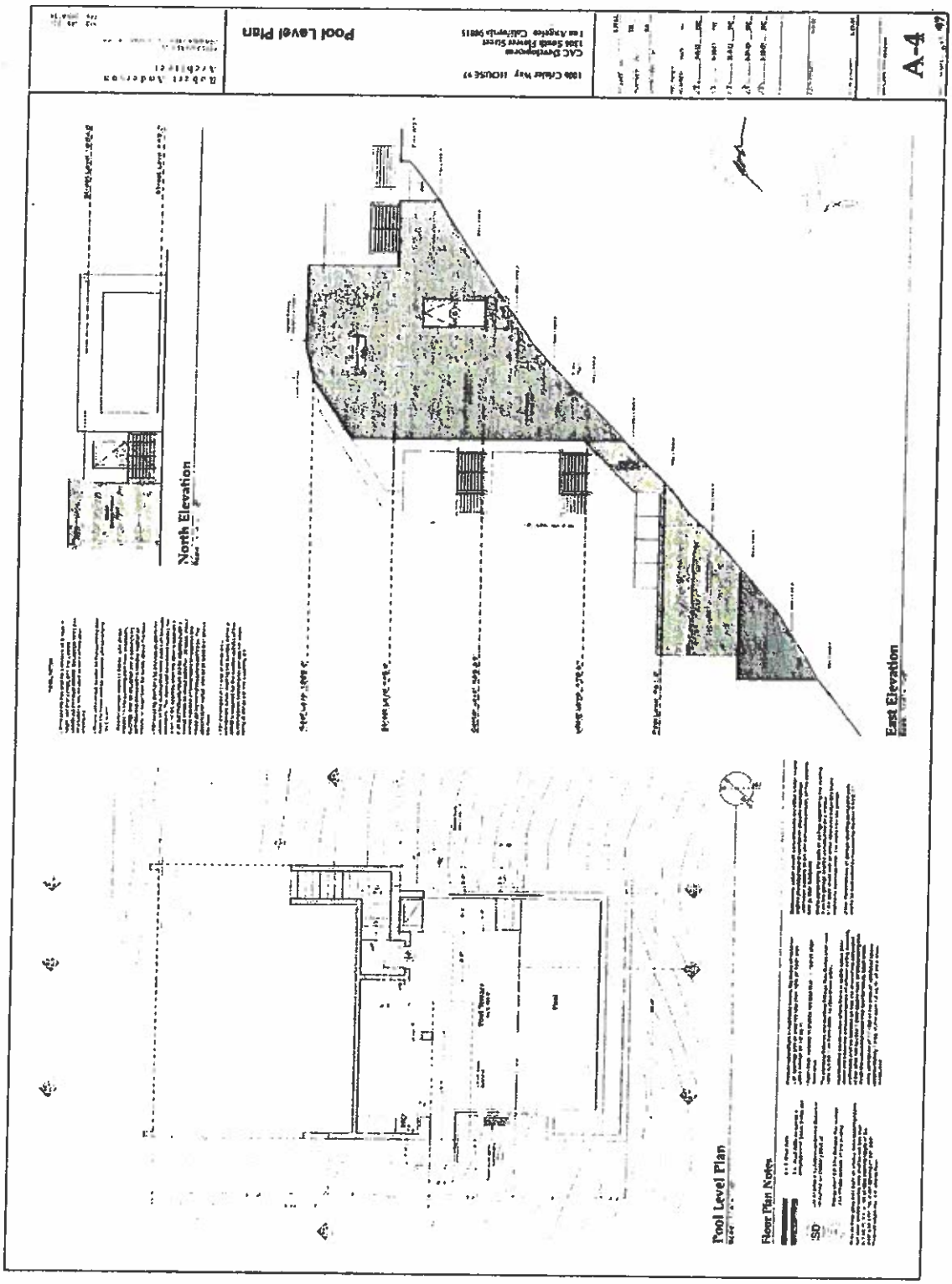



Figure 13 – Elevation 1806 Crisler Way

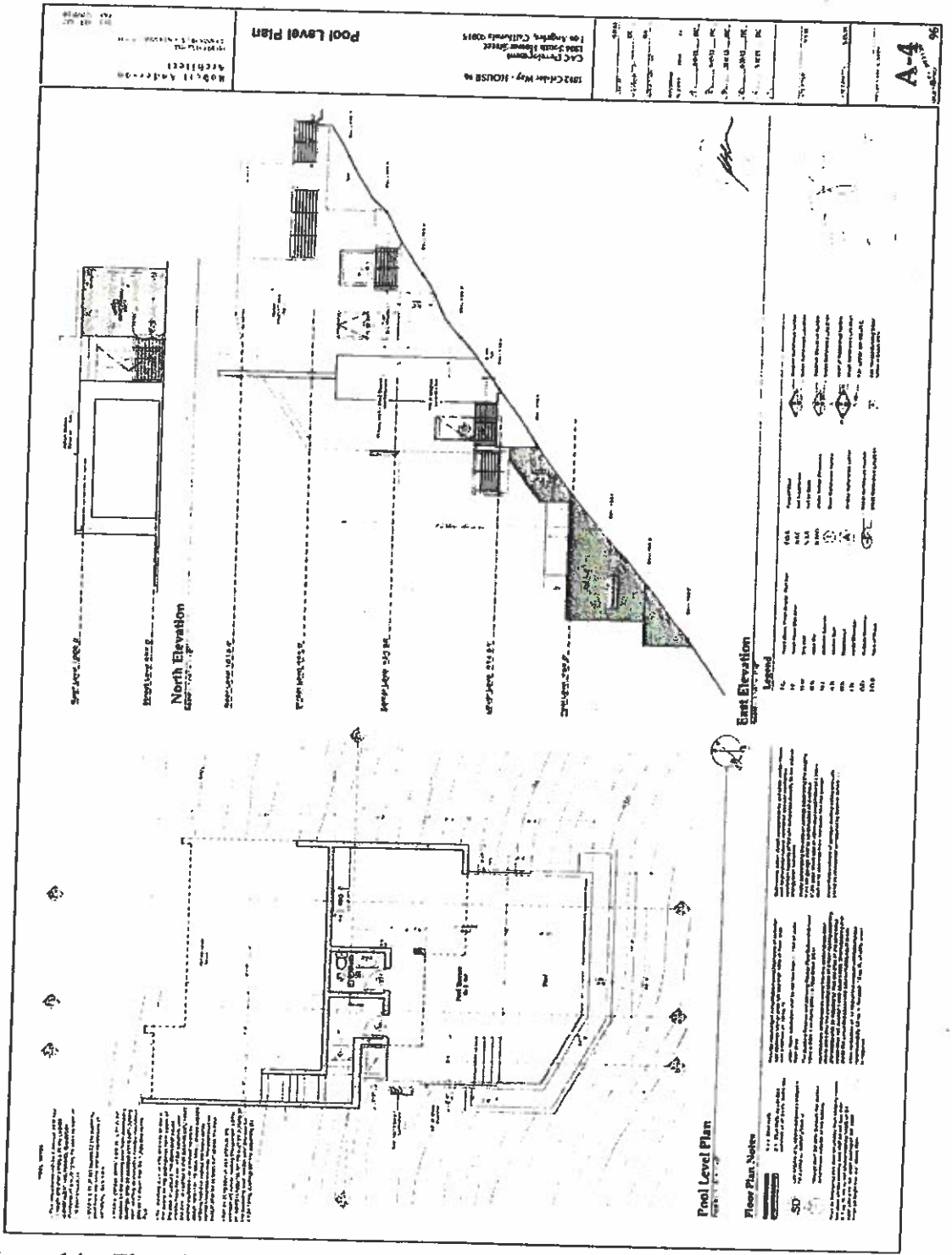



Figure 14 – Elevation 1812 Crisler Way

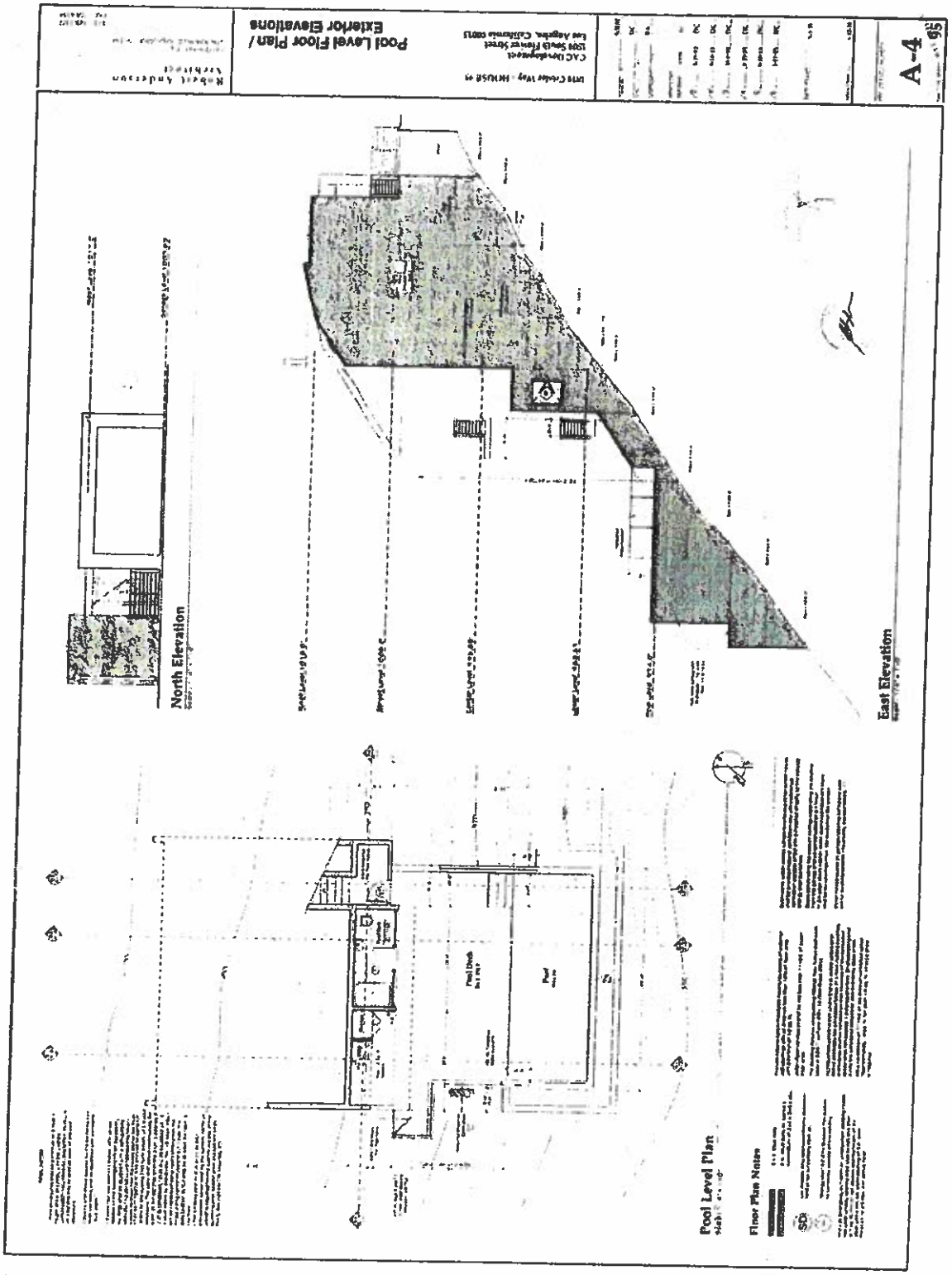
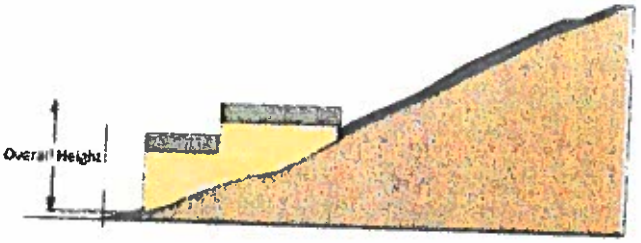



Figure 15 – Elevation 1818 Crisler Way

**b. *Zoning Administrator's Authority.*** *[§ 12.21 C.10.(d)(2) of the LAMC ]*
A Zoning Administrator may allow Structures which exceed the maximum envelope height requirements of Table 5 – Maximum Height of Structures; however, the increase in height may not result in a Building or Structure which exceeds an overall height of 45 feet, pursuant to the authority and procedures established in Section 12.24 X.28 of the LAMC.

The overall height shall be measured from the lowest Elevation point within 5 horizontal feet of the exterior walls of a Building or Structure to the highest Elevation point of the roof Structure or parapet wall.




However, at least three of the proposed single-family homes exceed the allowable height limits, in violation of the Baseline Hillside Ordinance that was adopted in response to the proliferation of out-of-scale development in hillside areas and to protect the hillsides. The excessive height of the proposed single-family homes and the violation of the Baseline Hillside Ordinance standards further supports the project's potential to result in significant aesthetic impacts.

*VI.b. Biological Resources – Wildlife Corridor*

| IV **BIOLOGICAL RESOURCES** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☒ | ☐ | ☐ | ☐ |
| b) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☒ | ☐ | ☐ | ☐ |
| c) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

The Santa Monica Mountains Conservancy (Conservancy) was established by the California State Legislature in 1980 via the Santa Monica Mountains Conservancy Act. The proposed project is located within the Santa Monica Mountains Zone. The Zone was also established by the Legislature via the Santa Monica Mountains Conservancy Act, which is codified at Section 33001 et. seq. of the Public Resources Code (PRC). PRC Section 33001 states as follows:

> The Legislature hereby finds and declares that the Santa Monica Mountains Zone, as defined in Section 33105 , is a unique and valuable economic, environmental, agricultural, scientific, educational, and recreational resource that should be held in trust for present and future

> generations; that, as the last large undeveloped area contiguous to the shoreline within the greater Los Angeles metropolitan region, comprised of Los Angeles and Ventura Counties, it provides essential relief from the urban environment; that it exists as a single ecosystem in which changes that affect one part may also affect all other parts; and that the preservation and protection of this resource is in the public interest.

So, the Legislature itself declared that the Santa Monica Mountains Zone is a *unique* and *valuable* environmental resource that provides essential relief from the urban environment and noted the importance of the connectivity of the system. The Santa Monica Mountains Conservancy Act goes on to say the following:

> . . .in the absence of a governmental mechanism to perform such evaluations, piecemeal development projects were occurring within the zone which resulted in the irreplaceable loss of open space and recreational resources, in the physical and biological deterioration of air, land, and water systems within the zone, and adversely affected regional life-support systems, including fish and wildlife, therefore being harmful to the needs of the present and future population of the region.

The Legislature further declared in PRC Section 33008 that:

> (a) The Legislature finds and declares that there are existing problems of substandard lots, incompatible land uses, conflicts with recreational use, and inadequate resource protection which, in some cases, cannot be addressed in a feasible manner by local government exercise of the police power or federal land acquisition as part of the Santa Monica Mountains National Recreation Area, and that it is necessary to enact the provisions of this division as a complement to the full exercise of the police power by local governments and the acquisition of lands by the federal government for the Santa Monica Mountains National Recreation Area.
> (b) The Legislature further finds and declares that the people of the State of California have an interest in the protection of resources and the use of lands acquired or managed by the conservancy pursuant to this division, and that the conservancy in carrying out its duties pursuant to this division acts on behalf of the State of California.

The Conservancy is thus the chief State planning agency for the Santa Monica Mountains. As noted in the MND, the proposed project is located within a designated wildlife corridor on the Santa Monica Mountains Conservancy's Eastern Santa Monica Mountain Habitat Linkage Planning Map (2017) adopted via Resolution No. 17-01 on January 23, 2017 by the Conservancy. Resolution No. 17-01 states in part:

> WHEREAS, the eastern Santa Monica Mountains habitat linkage between the San Diego (405) freeway and Griffith Park is of regional scientific significance; and

WHEREAS, the subject habitat linkage system and the Mulholland Drive Scenic Corridor are a cultural treasure for the City of Los Angeles; and

WHEREAS, the efficacy of the subject habitat linkage system could be severed by new fencing on just one or two residential parcels; and

WHEREAS, the subject habitat linkage system has never been comprehensively mapped and such mapping is essential to adequately assess the impacts of proposed development projects; and

WHEREAS, a Habitat Linkage Planning Map for the Eastern Santa Monica Mountains adopted by the Santa Monica Mountains Conservancy as the principal State planning agency for the area is beneficial to the City of Los Angeles Department of Planning's efforts to maintain habitat connectivity; and

WHEREAS, the Los Angeles City Council (Koretz) adopted a motion to designate the subject area as a Regional Wildlife Habitat Linkage Zone in the Municipal Code and for the Planning Department to work in consultation with the Santa Monica Mountains Conservancy, the Mulholland Design Review Board, and Citizens for Los Angeles Wildlife (CLAW) to prepare an ordinance to create a Wildlife Corridor in the eastern area of the Santa Monica Mountains; and

WHEREAS, the proposed Eastern Santa Monica Mountains Habitat Linkage Planning Map represents an initial comprehensive step to delineate the majority of habitat blocks and connecting wildlife corridors between the 405 and 101 freeways for planning, conservation, and environmental impact analysis purposes;

*Therefore Be It Resolved,* That the Santa Monica Mountains Conservancy hereby:

1. FINDS that the proposed action is consistent with the *Santa Monica Mountains Comprehensive Plan*.
2. ADOPTS the proposed Eastern Santa Monica Mountains Habitat Linkage Planning Map (Version January 2017).

As noted on page 38 of the MND, the proposed project is located within Habitat Block No. 57 of the Eastern Santa Monica Mountains Habitat Linkage Planning Map adopted by the Santa Monica Mountains Conservancy, and that "the linkage could be affected by Project construction and operation (e.g., night time lighting and noise)." However, the MND dismisses the project's potential to result in significant impacts to the wildlife corridor because:

Project construction and operation activities would primarily occur during the daytime hours as specified in the LAMC, limiting the potential noise

> and lighting impacts during the nighttime hours when most wildlife species likely to traverse the area would be active. As such, significant direct and/or indirect impacts to wildlife corridors and habitat connectivity are not anticipated. Thus, the construction and operation of the proposed residences and extension of Crisler Way would not substantially interfere with migratory corridors or impede wildlife movement and impacts to wildlife corridors and habitat linkages would be less-than-significant, no avoidance or mitigation measures are recommended.

The MND thus ignores the impact on the wildlife corridor and habitat linkage block of replacement of open space and habitat on the project site with four single-family residences, a roadway and associated infrastructure. The MND also ignores potential growth-inducing and cumulative impacts of the project on the wildlife corridor and habitat linkage acreage. **Figure 16** illustrates the amount of open space potential removed from the wildlife corridor and habitat linkage block as a result of the proposed project. In the absence of a restrictive covenant on a portion of the project site for wildlife movement purposes the potential for impacts to an important habitat linkage/wildlife corridor in the Santa Monica Mountains remains.

The MND also attempts to diminish the project's potential impacts to the wildlife corridor by making use of the significance threshold on page C-6 of the City's 2006 L.A. CEQA Thresholds Guide, as stated on page 37 of the MND:

> Based on the criteria established in the L.A. CEQA Thresholds Guide, a project would normally have a significant impact on biological resources if it could result in the interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species.

However, the City's CEQA Thresholds were not formally adopted by the City per CEQA Guidelines 15064.7(b), and since the threshold in question is less protective of the environment than the language in the CEQA Guidelines Initial Study Checklist provided above, the more protective language should prevail. Furthermore this threshold guide, which was published in 2006, predates the SMMC map, and fails to recognize the larger connectivity needs of Santa Monica Mountain habitat as articulated by the State of California in the Santa Monica Mountains Conservancy Act. Project impacts remain significant and unmitigated.

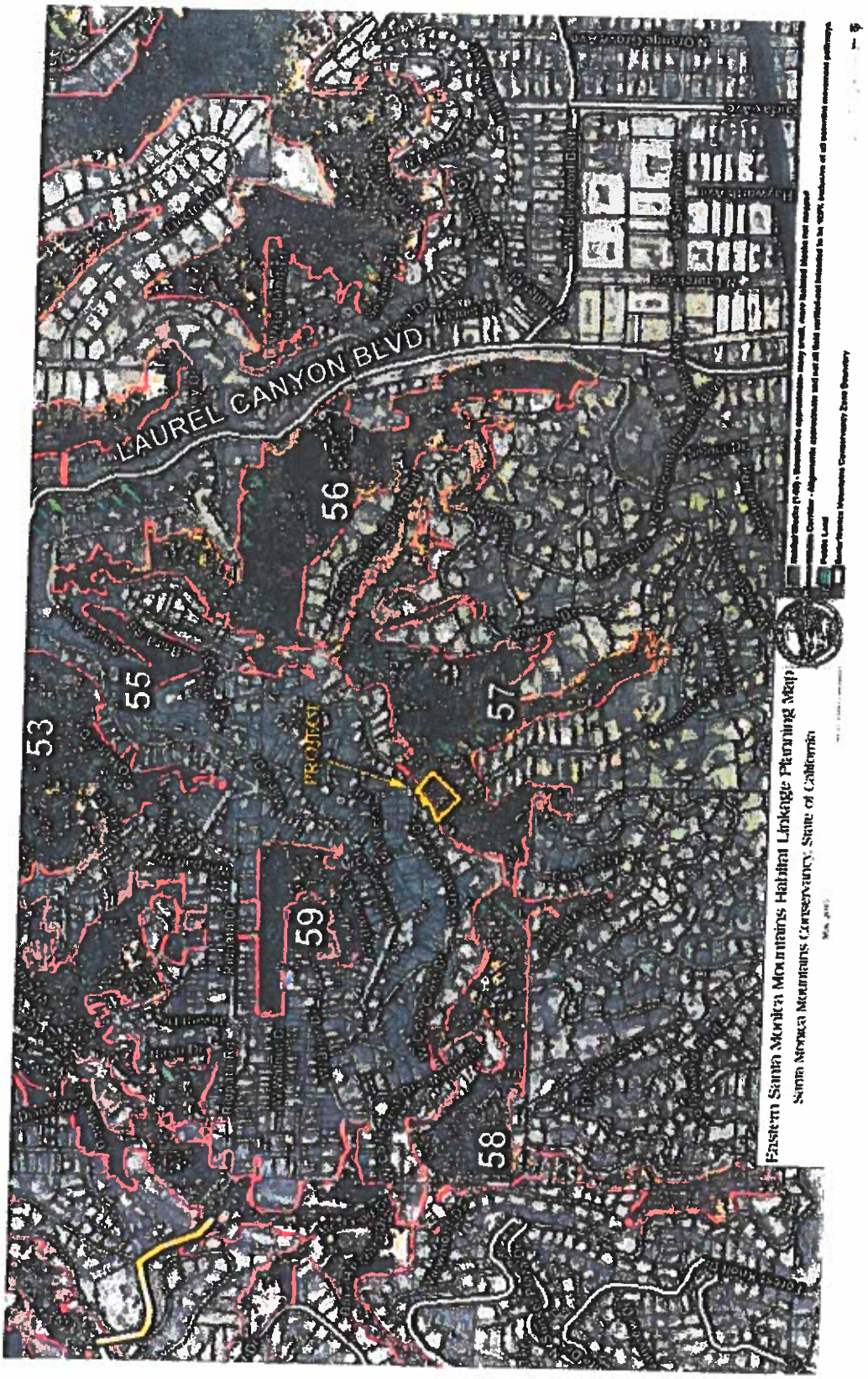



Figure 16 – Location of Project Within SMMC Habitat Linkage Area

*VI.c. Geology and Soils*

| VI GEOLOGY AND SOILS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| iv) Landslides? | ☒ | ☐ | ☐ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgements**:

According to ZIMAS and page 45 of the MND: "The LADBS Approval Letter and the State of California's Seismic Hazards Zones map for the Hollywood Quadrangle indicates that portions of the Site are located within areas subject to earthquake-induced landslides." We have not been able to review the current geotechnical reports for the project as a whole, since the geotechnical reports for the project are not in the project file (see **Appendix E**). We were only able to obtain a copy of the September 19, 2012 Soils and Geology Report (PG1091) and associated Correction Letter. We are therefore unable to verify that impacts would be reduced to a level considered less than significant.

According to page 46 of the MND:

The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. Additionally, site grading plans are required to be reviewed and approved by the Los Angeles Department of Building and Safety, as well as incorporate site-specific recommendations of a soils engineer for stabilization of soils to address potential landslide hazards. While the subject site is located within a hillside area, the potential for impacts would be further reduced with the following Regulatory Compliance Measure (RCM) RC-GEO- 3 which, requires the Applicant to submit a Geology and Soils Report to the Department of Building and Safety for review. The Building and Safety, Grading Department issued a Soils Approval Letter dated April 14, 2015 (Log Reference Letter dated April 10, 2015 (Log Reference #79258-02) with conditions that must be complied with during the site development.

> Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development.

The MND is deficient because is fails to provide information on the remedial grading, retaining walls, and conventional and/or drilled-pile foundations required for the project or to identify the required conditions/mitigations specified in the report. In addition, it is unclear whether the 2015 geotechnical report for the project addressed the project as a whole, since it appears that the B-permit for Crisler Way and the permits for the four single-family dwellings, which were issued June 8, 2015, were processed separately. As noted on page i of the MND:

> The proposed residences were previously permitted by the Los Angeles Department of Building and Safety (LADBS); however, subsequent to the issuance of the building permits, LADBS issued a Notice to Stop Construction and Notice of Intent to Revoke the building permits because the project site fronts a Substandard Hillside Limited Street that is not fully improved and the Applicant had not obtained the requisite approvals as required by Los Angeles Municipal Code (LAMC) Sections 12.24 X.28(a)(7)(i) and (ii).

The MND fails to indicate whether any changes have been made to the proposed project, from the project that the City mistakenly issued permits for in 2015, and thus it is unclear whether the 2015 geotechnical report and the 2015 Geology and Soils Report Approval Letter address the project as currently proposed. According to page 46 of the MND:

> Based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the **2014 City of Los Angeles Building Code**. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. The LADBS Approval Letter found these reports to be acceptable, provided that the Project complies with the conditions specified therein during site development. Therefore, in conjunction with the above RCM, impacts related to soil instability would be less-than significant. (Emphasis added).

Although the project applications for each of the four single-family homes were filed in November of 2015, they were not accepted for review until March of 2017, as shown in **Attachment H**. Projects submitted after January of 2017 are subject to the

2017 Building Code. Since the applications were not accepted for review until March of 2017, the projects should arguably be subject to the 2017 building code and the approval letter may not be accurate. In the absence of a clear and complete project description, public access to the geotechnical, soils and grading reports, and a determination of whether the project is subject to the 2017 building code, the potential for soil stability impacts remains. In addition, as noted in MND Appendix D: "The subject lots are located below the proposed Crisler Way at the top of an approximately 200 foot high average slope gradient of about 40 degrees with localized areas steeper than 1: 1. The earth materials at the subsurface exploration locations consist of up to 2 feet of uncertified fill underlain by silty sand natural residual soils and granite bedrock." Therefore the potential for grading and construction to result in the loss of topsoil also remains potentially significant.

*VI.d. Hazards and Hazardous Materials*

| VIII **HAZARDS AND HAZARDOUSMATERIALS** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☒ | ☐ | ☐ | ☐ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As discussed earlier in this comment letter, the proposed project is located in a High Fire Severity area on a site that previously burned in the Kirkwood Bowl Fire (see **Figure 8**) in an area is characterized by very narrow roadways. Maintenance of roadway and emergency access is a very important issue for residents along these narrow streets. Both Yucca Trail and Grand View Drive are substandard streets of limited width. (See MND Appendix F).

As noted in the City of Los Angeles's analysis of the Kirkwood Bowl/Laurel Canyon fire (see **Attachment D**) which destroyed 23 homes, including 14 on Grand View Drive and three on Crisler Way, partially ruined another five structures, and caused an estimated $4 million in damages in 1979:[3]

> The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

[3] City of Los Angeles Department of Fire, Analysis of Greater Alarm Operations, 9-16-79, page 1-2.

> The primary reasons for the structure losses were high temperatures for the previous two weeks, low humidity, wind from the south-southwest, 10 to 12 knots, delayed alarm, wood siding, structures built on ridges, with minimal brush clearance, and the fire starting at the base of a very steep slope (approximately 70 degrees), covered with dense brush. With all of these conditions combined, the fire swept up the slope, exposing the houses on three ridges, where the houses sustained almost total destruction.

As further explained by the Los Angeles Fire Department, factors that contributed to the magnitude of the fire damage and inhibiting the emergency response included:[4]

> Narrow streets, some practically inaccessible to fire apparatus, coupled with hordes of sightseers, residents and numerous teams from the news media, clogged the streets with autos and foot traffic. This condition prevailed throughout the height of the incident and hampered our operations severely.

The City is thus in the process of cumulative recreating the factors that interfered with the emergency response and evacuation.

Access to the project site via the recommended route (Route B) will require construction equipment to make a sharp right-hand turn from Grand View Drive onto Crisler Way, and a sharp left-hand turn when leaving the site, as shown in **Figure 17**. It is unclear whether this routing is even feasible. The alternate route would require the use of Yucca Drive, described in MND Appendix F as a narrow roadway which varies in width between 10 and 15 feet with a narrow sharp turn (more than 90 degrees) where Yucca Trail transitions to Grand View Drive.

The MND acknowledges that project construction will result in temporary or partial street closures due to construction activity (MND page 58). As shown in **Figure 7**, site access in the area is limited. As discussed earlier in this comment letter, the MND fails to indicate where construction staging will take place during the first two months of the project, and during the drilling of roadway caisson. It is therefore likely that large construction equipment may block Grand View Drive during at least several months of project construction and that the MND has not adequately described significant street closure and emergency access impacts of the project.

[4] City of Los Angeles Fire Department, Activities During the Laurel Canyon Bush Fire, page 2.

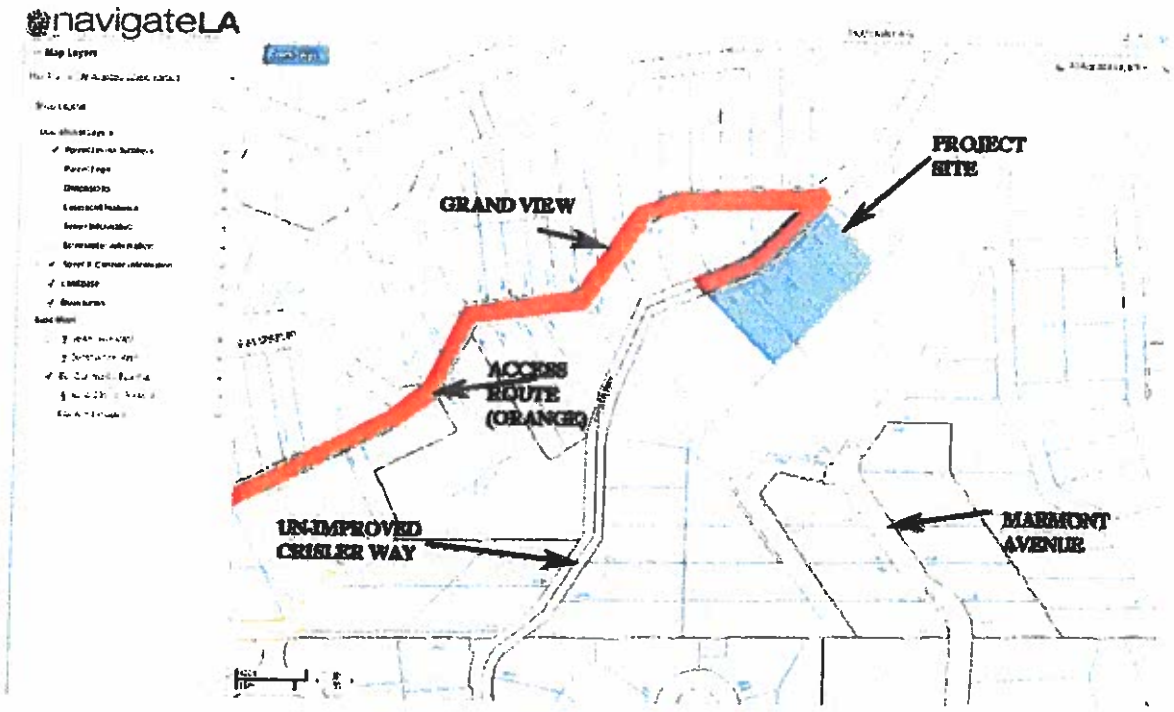



Figure 17 – MND Recommended Access Route B

The MND includes two mitigation measures to address emergency access impacts that are identified in the MND as potentially significant:

**MM HAZ-1 Hillside Construction Staging and Parking Plan**

The Construction Staging Plan shall include, but not be limited to: identifying where all construction materials, equipment, machinery, and vehicles will be stored on-site and/or out of the public right-of-way of Crisler Way through the grading and construction phases of the project; and identifying the proposed locations of all on-site and off-site staging areas for construction delivery vehicles. This plan shall also include the following:

- No construction equipment or material shall be permitted to be **stored** within the public right-of-way.
- Delivery drivers for construction materials shall be required to follow the designated travel plan.
- Truck traffic directed to the project site for the purpose of delivering materials, construction-machinery, or removal of graded soil shall be limited to off-peak traffic hours, **Monday through Friday** only. No truck deliveries shall be permitted on Saturdays, Sundays, or City Holidays.

- All deliveries during construction shall be coordinated so that only one vendor/delivery vehicle is at the site at one time, and that a construction supervisor is present at such time.
- A radio operator shall be on-site to coordinate the movement of material and personnel, in order to keep the roads open for emergency vehicles, their apparatus, and neighbors.
- A minimum of two flag persons are required. One flag person is required at the entrance to the project site and one flag person at the next intersection along Grand View Drive.
- Truck crossing signs are required within 300 feet of the exit of the project site in each direction.
- The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by grading, and at all times shall provide reasonable control of dust caused by wind.
- No person shall perform grading within areas designated "hillside" unless a copy of the permit is in the possession of a responsible person and available at the site for display upon request.
- The applicant shall identify a construction manager and provide a telephone number for any inquiries or complaints from residents regarding construction activities. The telephone number shall be posted at the site readily visible to any interested party during site preparation, grading and construction.
- The Construction Parking Plan shall identify where all contractor, subcontractor, and laborers will park their vehicles so as to prevent blockage of two-way traffic on streets in the vicinity of the construction site.
- During all phases of site development, all construction vehicle parking and queuing related to the project shall be in substantial compliance with the approved Construction Staging and Parking Plans, to the satisfaction of the Department of Building and Safety and the Department of Transportation.

**MM HAZ-2 Emergency Evacuation Plan**

Prior to the issuance of a building permit, the applicant shall develop an emergency response plan in consultation with the Fire Department. The emergency response plan shall include but not be limited to the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments.

Mitigation Measure MM HAZ-1 would allow delivery and soil removal activity Monday through Friday. On page 94 of the MND it states that:

The Applicant has also committed to the following design features to avoid or minimize potential traffic impacts on the surrounding neighborhood.

- Construction crews will not work on Saturdays.

- The contractor will shuttle workers to the project site in a van to avoid construction traffic and parking on Grand View Drive.
- Until the on-site construction staging area on Lot #95 is created, construction crews will not work on Thursdays, trash collection days.

Why are these measures not included in MM HAZ-1 to ensure that they are requirements?

Mitigation Measure MM HAZ-1 only prohibits construction equipment and materials from being stored in the public right-of-way. It does not prohibit use of the equipment from the public right-of-way or prohibit street closures that would impede emergency access. Mitigation Measure MM HAZ-2: emergency Evacuation Plan is meaningless if heavy equipment is blocking Grand View Drive. None of the Mitigation Measures prohibit construction staging or equipment use from Grand View Drive. The potential for significant emergency access and fire-related impacts remains.

In addition, the MND fails to recognize and address the hazards posed to nearby properties from project construction. As detailed in the letter by Aidan O'Brien, M.D., contained in **Attachment I**, Dr. O'Brien's property was extensively damaged during construction of 8401 Grand View including damage from machines crashing into the house. The property at the junction of Kirkwood and Grand View was damaged when a mobile crane crashed into it. Construction resulted in street damage from Kirkwood to that site that has never been properly repaired. In addition, residents suffered numerous lengthy street closures.

Not only did residents suffer these impacts, but there were multiple episodes of objects on the steep project site falling on downslope properties. This resulted in one resident, Hanna Melzer, moving away due to safety fears. As described by Ms. Melzer in an email to the City dated July 1, 2006 and included in **Attachment I**:

> I can't stay in my back yard or open my doors and windows because stones and pieces of asphalt will be rolling down from the road deterioration. The wire fences that Mr. Smith put up "for protection" will not protect my family and my house since he is storing metal pieces and debris not even on his property but in-between his property and 8383 Grandview. I do have experience of stones rolling down from Mr. Smith's area down to my property, hitting my house and my deck where minutes before my children were playing basketball with their playdate.

The MND for the proposed project fails to recognize the hazards posed by construction on steep slopes. As shown in **Figures 12-15**, the project site contains extreme slopes. The environmental document for the proposed Project fails to recognize these potential construction-related hazards or to provide mitigation to reduce impacts to a level considered less than significant. There is no mitigation requiring a compensation fund be established for repairs and injuries suffered by residents as a result of project construction. There are no mitigations that would insure the safe storage of construction materials on site, or safe use of construction vehicles. The MND on page 46 states that the project "would also install a temporary debris fence at the bottom of the property to catch soil and debris that might slip down the slope," but this has not been made a requirement of the project, and the required design and strength of the fencing needed to

catch heavy rolling objects has not been analyzed or addressed in the MND. The potential for construction hazards remains Potentially Significant.

**Cumulative Impacts** – The MND provides no mitigation for cumulative access impacts associated with the construction of the proposed project and the cumulative projects listed in the MND and this comment letter. The MND indicates that site preparation and grading will take approximately 50 weeks and 15 months for home construction for a total construction time of almost 2¼ years. Given the volume of cumulative projects and time required for construction, given site challenges in this area, it is highly likely that more than one project would be undergoing construction at the same time. There are no provisions for ensuring that no concurrent development occurs, or for addressing the combined access impacts of multiple construction projects occurring at the same time along these very narrow roadways. The potential for cumulative access impacts remains.

*VI.e. Land Use and Planning - Violation Of CEQA Guidelines Section 15063(D)(5) – Failure To Include A Discussion Of Project's Consistency With Applicable Land Use Controls*

| X **LAND USE AND PLANNING** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

The MND lacks any real discussion of the project's consistency with existing zoning, and the City's the Baseline Hillside Ordinance. LAMC 12.21.C.10-4 provides that the maximum height for hillside single-family home developments in this zone is 33 feet. As detailed in Section VI.a. of this comment letter, the proposed single-family homes appear to exceed the height limitations for projects subject to the Baseline Hillside Ordinance.

As noted on page 69 of the MND: "Per LAMC requirements, the Project is required to improve Crisler Way to a roadway width of 20 feet to provide a vehicular access route from an improved street with a 20-foot wide continuous paved roadway to the boundary of a designated Hillside Area." However, the Project is requesting a Zoning Administrator's Determination to allow the construction, use, and maintenance of a new three-story single family residence on a lot which does not have vehicular access from a 20-foot wide continuous paved roadway from the driveway apron to the boundary of the hillside area as otherwise required by LAMC Section 12.21 C.10(i)(3)." In addition, the project and MND fail to address whether the project provides the required right-of-way width, in addition to the roadway width of 20 feet, and thus whether proposed Crisler

Way is consistent with the LADOT Complete Streets Manual which is Chapter Nine of the Los Angeles Mobility Plan.

As noted in Section III.g. of this comment letter, according to the September 19, 2012 Geotechnical Report for the project at page 5, the project includes:

> Retaining walls to 6 to 21 feet high are proposed along the *uphill* side of the proposed private street. Pile-supported retaining walls from 5 to 7-1/2 feet high are proposed along the downslope side of the proposed street. The new proposed construction plans provide specific information concerning the construction of four hillside residences and swimming pools on the subject property. Retaining walls associated with the construction of the individual residences are proposed up to 22 feet high. Retaining walls used to create the level rear yard areas are proposed up to 12 feet high.

The number and height of retaining walls appear to exceed what is allowed by the City's Retaining Walls In Hillside Areas, Ordinance No 176,445 LAMC 12.21(C)8, which specifies that:

> Retaining walls are subject to the following restrictions:
>
> (a) A maximum of one free standing vertical or approximately vertical retaining wall may be built on any lot with a maximum height of 12 feet as measured from the top of the wall to the lower side of the adjacent ground elevation. However, as shown in the diagram below, a maximum of two vertical or approximately vertical walls or portions of a wall can be built if they comply with the following:
>
> (i) The minimum horizontal distance between the two walls is three feet,
>
> (ii) Neither of the two walls exceed a height of 10 feet measured from the top of each wall to the lower side of the adjacent ground elevation at each wall, and
>
> (iii) In no case shall the height of a wall located in a required yard exceed the height allowed by Section 12.22 C.20.(f) of this Code.

In addition, the height of the driveway bridges appear to be higher than 3'6" in violation of LAMC 12.21A17(a)(3). There would appear to be substantial evidence in the record that the project as proposed is not consistent with existing zoning, despite the lack of adequate analysis in the MND.

*VI.f. Noise*

| XII NOISE | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project result in:* | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☒ | ☐ | ☐ | ☐ |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | ☒ | ☐ | ☐ | ☐ |
| c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

As noted on page 8 of Appendix E of the MND for the proposed project, the Noise Impact Analysis:

- "In the absence of any shielding, noise level at the closest outdoor recreational use would exceed the City of Los Angeles suggested construction noise level of 75 dB."

- "A typical building with single pane windows can reduce noise levels by 25 dB with the windows closed (U.S. Environmental Protection Agency (EPA), 1974). However, most modern homes are constructed with dual paned windows which can afford up to a 30 dB noise reduction with closed windows. Therefore, the expected indoor noise level at the closest residence with closed windows would be approximately 59 dB during grading and approximately 52 dB during construction. For indoor noise environments, the highest noise level that permits relaxed conversation with 100 percent intelligibility throughout the room is 45 dB. Speech interference is considered to be highly intrusive when normal conversation is precluded at 3 feet, which occurs when ambient noise levels substantially exceed 60 dB. An interior noise level of 59 dB at indoor locations would maintain a barely acceptable interior noise environment with closed dual paned windows. In some cases, this noise reduction could be maintained only on a temporary basis, since it requires that windows remain closed at all times assuming homes have air conditioning."

- "Because the project is located on a hillside, noise barriers such as sound curtains would not be feasible."

- "Construction noise is maximally anticipated to be 89 dBA exterior and 59 dBA at interior of the closest residence north of the project site when roadway construction equipment operates near the closest receptor locations during grading activities. After grading the worst case noise levels would decrease to 82 dB exterior and 52 dB interior. As discussed, because of the steep slope, a sound

curtain could not be utilized for mitigation. Therefore, construction noise may occasionally be audible and the following significance thresholds could be exceeded."

The MND on page 9 concludes that the proposed project would result in the following significant noise impacts:

> Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use.
>
> - "There is a minimal separation distance between the site and the nearest residential use, construction noise levels could potentially exceed exterior noise levels by more than 10 dB. Because the project on a steep slope, there is no reasonable means to mitigate construction noise (e.g. fences or temporary barriers) to less than this threshold."
>
> Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
>
> - As noted above, even with quiet suburban background noise levels construction noise could potentially exceed ambient noise levels by 5 dB for more than 10 days in a three month period. Again, reasonable means of construction noise mitigation such as a temporary fence would not be feasible because the adjacent sensitive uses are at a higher elevation than the project site.

The Noise Analysis for the proposed project thus identifies significant noise impacts resulting from project construction activities. The estimate of the magnitude of construction noise impact in the Noise Analysis may be understated because it assumes that existing homes in the project vicinity have dual paned window. No evidence is provided in the MND that potentially impacted homes have dual paned windows. Impacts would be 5dB greater for homes without dual paned windows.

On page 75, the MND concludes that through "compliance with regulatory requirements limiting construction noise, including the limitations specified in LAMC Chapter XI, Noise Regulation (Section 112.05) and Chapter IV, Public Welfare (Section 41.40), and the implementation of MM NOI-1 and MM NOI-2, construction noise impacts would be reduced to less-than significant." However, as noted on page 12 of the Noise Study in MND Appendix E:

> The noise limitation of the Los Angeles Municipal Code **does not apply where compliance is technically infeasible**. Technically infeasible means that the noise standard cannot be met despite shields, sound barriers and/or other noise reduction devices or technique during the operation of equipment. For this project, because of terrain constraints, it would not be

feasible to construct a temporary soundwall that would block noise to homes at a higher elevation.

There has been no showing in the MND that compliance with Municipal Code requirements is technically feasible. Similar to the City's Municipal Code, the two mitigation measures for significant noise impacts included in the MND also contain an infeasibility out:

> **MM NOI-1** The use of powered construction equipment or powered hand tools that produce a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction machinery is prohibited **to the extent feasible**.
>
> **MM NOI-2 Increased Noise Levels (Grading and Construction Activities)**
>
> To reduce the impact of temporary construction noise on adjacent residences, the Project shall comply the following measures:
> - Construction activities shall be limited to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. Construction is not permitted on any national holiday or on any Sunday.
> - Construction equipment and supply haul routes shall avoid conflicts with noise sensitive land uses **to the extent feasible** through scheduling and points of access.
> - Construction staging areas shall be established to minimize impacts to adjacent residences **where feasible**.

Existing regulatory requirements and the noise mitigation measures contained in the MND have not been shown to require compliance with noise standards or to be feasible. The potential for significant noise impacts therefore remains.

**Cumulative Impacts** – The MND fails to adequately address the potential cumulative noise impacts that could result from simultaneous construction of the project and one or more of the cumulative projects. The MND indicates that site preparation and grading will take approximately 50 weeks and 15 months for home construction for a total construction time of almost 2¼ years. Given the length of project construction and proximity of cumulative projects in the areas, the potential for a significant unmitigated cumulative noise impact during construction remains.

*VI.g. Public Services*

| XIV PUBLIC SERVICES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services? | | | | |
| a) Fire protection? | ☒ | ☐ | ☐ | ☐ |
| b) Other public facilities? | ☒ | ☐ | ☐ | ☐ |

As detailed in Section VI.d. of this comment letter, the propose project has the potential to interfere with emergency access which may result in a significant unmitigated impact on fire protection during project construction. The proposed project would also introduce new residential uses on a parcel that has already burned. The potential for fire protection impacts remains.

The MND fails to analyze the project's potential impacts on other public services such as sewer and water. The proposed project will result in the construction of sewer lines and connections, and a new fire hydrant. The MND fails to analyze the potential impacts of these components of the project on existing capacity. In addition, the MND fails to analyze the potential impacts of the installation of a new fire hydrant on the hydrant system in the project vicinity, which has experienced a number of failures. In the absence of such an analysis, the potential for impacts remains.

As detailed in Section I.d. of this comment letter, the project area has been experiencing a number of infrastructure failures, due in part to existing geotechnical conditions and the use of local roadways for transport of heavy construction equipment and materials. The Traffic Analysis for the proposed project included as Appendix F to the MND on page 8 tacitly acknowledges the potential for project construction vehicles to damage local roadways by suggesting the following mitigation measures:

5. Smaller capacity concrete trucks (less than 10-yard capacity) should be used for transporting foundation materials to the Project site.

9. Require the applicant to repair any damage to the pavement structure and curbs along the construction route between Laurel Canyon Boulevard and the Project site. Inspection and video of the roadway should be completed prior to the construction project in order to document existing conditions. Upon completion of the construction project, the roadway should then be inspected to document any damage to the roadway.

10. Given the length of the construction period (24 months), periodic inspection and maintenance should be performed along the access

route to the site to address any roadway deterioration due to construction traffic.

Given the project's potential to damage the pavement structure in the project area, the project also has the potential to increase other infrastructure failures in the area. The MND fails to acknowledge these potential impacts or to provide mitigation for such infrastructure failure impacts should they occur as the result of the project or the project's contribution to cumulative development in the area.

**Cumulative Impacts** – The MND does not adequately address the potential fire service/emergency service impacts of simultaneous construction of more than one project along Yucca Trail and Grand View Drive, and the likely impacts on emergency response times (including police) during construction. In addition, the potential for construction work to spark a fire has not been adequately analyzed. The MND does not address the question of at what point additional hillside development in the Kirkwood Bowl area will necessitate the addition of police or fire facilities in order to maintain response time standards.

The MND does not adequately address the potential cumulative impacts of heavy vehicles on both the roadway and other infrastructure. The potential for cumulative infrastructure impacts remains.

*VI.h. Transportation and Traffic*

| XVI TRANSPORTATION/TRAFFIC | | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| *Would the project:* | | | | | |
| a) | Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, | ☒ | ☐ | ☐ | ☐ |
| d) | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☒ | ☐ | ☐ | ☐ |
| e) | Result in inadequate emergency access? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

MND page 93 states that:

Project construction would require crew worker vehicles and trucks during site preparation. The addition of these vehicles into the neighborhood street system could contribute to temporary traffic increases in the Project vicinity for the approximate 24-month duration of construction. However, to reduce the temporary impact of construction traffic in the neighborhood, the construction contractor has **voluntarily** agreed to

shuttle work crew members to the site in a van to avoid parking on the adjacent street."

However, the MND does not include a mitigation measure requiring the applicant to shuttle workers to the site and there is therefore no guarantee that this voluntary measure will be implemented. The potential for worker-related construction traffic remains.

Page 95 of the MND states that the project would: "establish an on-site construction parking and equipment staging area on Lot #95 to allow for no parking on Grand View Drive **within two months** after beginning construction." In addition, use of Grand View Drive for construction vehicle parking until the staging area on Lot #95 is operational is allowed by Mitigation Measure MM TRA-3. As written, this indicates use of Grand View Drive for at least the first two months of the project. Similarly MND page 94 states that by: "establishing an on-site construction staging area on Lot #95, the Project would allow for complete off Grand View Drive parking within two months following the beginning of construction." There remains the potential for significant impacts to the narrow roadway system in the area during the two months before on-site construction staging is established on Lot #95. Furthermore, no analysis is provided in the MND to demonstrate that the staging area on Lot#95 is adequate for project storage and parking needs, or that, given the narrow widths of Grand View Drive and Crisler Way, that during site preparation and grading construction vehicles will have adequate access and turning capacity. Table 3-5 indicates that a 10 ft. wide road will be created on Crisler Way starting in week 7 of site preparation and grading, but does not indicate when the roadway will be expanded to 20 feet in width. The potential for operational impacts during construction remains. (See also discussion in Section VI.d.) Therefore, the contention in the MND that construction traffic impacts would be less-than-significant is invalid. The potential for significant access impacts on Grand View Drive remains.

MND page 94, under Temporary Street Closures indicates that:

> Construction activities may necessitate temporary lane closures on streets adjacent to the project site on an intermittent basis for utility relocations/hook-ups, delivery of materials, and other construction activities as required. However, equipment and material staging would be organized to **remain on site to the maximum extent possible** and deliveries and material pick up would be organized **in the most efficient manner possible** to reduce temporary construction traffic impacts on the neighborhood and surrounding community.

However, the MND fails to characterize the degree to which equipment and material staging would remain on-site, verse occur from Grand View Drive, other than to say this would occur **to the maximum extent feasible**, or to explain how deliveries and material pick up would be organized **in the most efficient manner**. The potential for significant access impacts on Grand View Drive remains.

As acknowledged on page 97 of the MND:

> The Traffic Report found that construction traffic between Laurel Canyon Boulevard and the project site has the potential to affect safety and access for roadway users given the roadway widths and curvatures. As recommended, Project construction traffic would follow Access Route B to avoid narrow roadway widths and sharp curves on Yucca Trail. Nevertheless, the introduction of construction vehicles and equipment on narrow roadways with sharp curves along Access Route B could create temporary hazardous roadway conductions. (sic)

No mitigation measure is provided in the MND requiring the use of Access Route B. The MND and Traffic Study for the project contained in MND Appendix F document the potential safety hazards associated with Access Route A, which uses Kirkwood Drive to Yucca Trail to Grand View Drive to Crisler Way. The potential safety hazards associated with the recommended access route, Access Route B are not fully addressed in the MND. Access Route B would use Kirkwood Drive to Grand View Drive to Crisler Way. The need for a sharp turn into and out of the project site area (see **Figures 7 and 17** in this comment letter) is not described in the Traffic Analysis contained in Attachment F to the MND or shown on MND Appendix F Figure 4. The potential for the configuration of the intersection of Crisler Way and Grand View Drive to result in the potential for safety hazards both during construction when vehicles, are making a sharp turn onto and off of Grand View Drive at this location, and during operation, has not been properly analyzed, given the MND's and Traffic Study's recommendation of this routing for project traffic. There is potential for significant hazards associated with this design feature, which has not been addressed in the MND. This is a potentially significant impact of the proposed project.

The following inadequate mitigation measures are provided in the MND to address potentially significant project traffic and traffic safety impacts:

> **MM TRA-1** To minimize construction traffic and roadway hazards associated with the construction access route, which include sharp curves and narrow roadway widths, the project proponent shall provide a mechanism to inform area residents potentially affected by construction traffic prior to the commencement of construction activities. Relevant project information must include, but would not be limited to, the expected duration of the construction project, the weekdays during which construction is expected, hours of construction, and the amount of construction traffic expected. The project proponent must also post temporary signage along the construction access route and at the project site with a hotline number for residents affected to voice problems associated with construction traffic.

Mitigation MM TRA-1 merely requires the applicant to inform residents about construction traffic, but does nothing to prevent the impacts of such traffic. In addition, as written, the mitigation measure merely requires the provision of a hotline number for

residents to voice problems. However, the measure in no way requires the project applicant to address those problems.

> **MM TRA-2** To minimize construction traffic and roadway hazards along the access route, the project proponent shall prepare a construction traffic control plan conforming to City of Los Angeles requirements. The Traffic Control Plan must detail the placement of warning signs, traffic control personnel needed, and assurance the size of trucks anticipated can adequately maneuver along the designated access route. The Traffic Control Plan must also provide for the use of flagmen along Grand View Drive to facilitate deliveries as necessary.

Mitigation Measure MM TRA-2 fails to state what will happen if it can not be shown that project trucks can adequately maneuver along the designated access route, or to require the analysis to consider the turn from Grand View Drive to Crisler Way. The mitigation measure must be written to show that construction permits will not be granted if the truck sizes are too large for safe maneuvering of the designated access route, to require the truck fleet in the Traffic Control Plan is actually is used, and to provide penalties for use of vehicles larger than specified in the Traffic Control Plan. The measure should also provide for review and comment on the Traffic Control Plan by local residents, prior to Plan approval.

> **MM TRA-3** To minimize construction traffic and roadway hazards along the access route, the project proponent must, **to the extent feasible**, schedule trucks transporting construction materials and equipment to and from the construction site to arrive or depart outside of the morning and afternoon peak commuter periods. Morning peak commuter periods are defined as 7:00 A.M. to 9:00 A.M. and afternoon peak commuter periods are defined as 4:00 P.M. to 6:00 P.M. **To the extent feasible**, the project proponent shall use smaller capacity concrete trucks with equal to or less than 10 cubic yards for transporting foundation materials to and from the site.

Measure MM TRA-3 is meaningless since it includes the language "to the extent feasible" thus providing no real restriction. The measure must be re-written to remove the "to the extent feasible" language and to make the voluntary prohibition on construction work on Thursday (trash day) prior to provision of adequate off-site parking and storage area, mandatory. In addition, the mitigation measure must prohibit the use of any type of truck weighing more than the existing weight restrictions for Grand View Drive and Yucca Trail.

> **MM TRA-4** To minimize construction traffic and roadway hazards along the access route, the project proponent shall prohibit construction vehicle parking on neighborhood roads once the vehicle and equipment staging area on Lot 95 is operational.

Measure MM TRA-4 would thus allow for parking of construction vehicles on neighborhood roads prior to Lot 95 being operational, thereby allowing for potentially significant access impacts during this period.

> **MM TRA-5** To repair potential physical damage to the roadways along the construction access route, the project proponent shall inspect and video record the existing condition of the pavement and curbs along the construction route between Laurel Canyon Boulevard and the project site prior to construction. To address roadway deterioration due to construction traffic during construction, the project proponent shall periodically inspect and **reasonably maintain** the roadway along the construction access route. Upon completion of construction, the project proponent shall inspect and document damage to the construction access route.

MM TRA-5 is written as if it is almost a voluntary measure. There is no requirement to submit the video record of pre and post-project roadway conditions to the City for review, and no mechanism for the City to mandate specific repairs. The measure calls for the applicant to reasonably maintain the roadway, but provides no standards for what constitutes reasonable maintenance. The measure requires upon completion of the project that the applicant inspects and documents damage to the construction access route, but not that the report be submitted to the City or the damage repaired. In addition, the measure fails to require the applicant post bond to ensure funding for the repair of all damage to any infrastructure or property.

The mitigation measures provided fails to insure that access impacts will be less than significant. The potential for access impacts remains. The mitigation measures provided fail to ensure that damage to local infrastructure will be mitigated to a level that is less than significant.

The potential for the proposed project to result in inadequate emergency access has also been documented in Section VI.d. and VI.g. of this comment letter.

**Cumulative Impacts** – The MND fails to address the ability of the existing roadways to handle the impact on traffic generation from cumulative development both during construction and operation. While these trip generation numbers are small, so too is the capacity of the existing street system. The potential for cumulative impacts to both access and infrastructure remains.

*VI.i. Utilities and Service Systems*

| XVIII **UTILITIES AND SERVICE SYSTEMS** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |

| XVIII UTILITIES AND SERVICE SYSTEMS | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments**:

As shown in **Figure 4**, the project site is not currently served by existing sewer facilities and will be required to construct new sewer lines and wyes. Based on the need for a sewer line/storm drain easement on Lot 118, the applicant may be required to provide wyes for lots along the new sewer line. The MND fails to address or describe this issue.

According to page 106 of the MND:

The Project area is served by a network of sewer lines located beneath major streets that convey sewage from the Site and surrounding residences to Hyperion. As part of pre-construction, detailed gauging and evaluation will be needed as part of the permitting process to identify a specific sewer connection point for the project site. Though existing regulations established in the City of Los Angeles Sewer Allocation Ordinance (No. 166060), LA Sanitation does not make a determination of sewer capacity until the Los Angeles Department of Building and Safety has established that the proposed Project's plans and specifications are acceptable for plan check. . .

The Applicant will be required to submit a Sewer Capacity Availability Request (SCAR) to verify the anticipated sewer flows and points of connection and to assess the condition and capacity of the sewer lines receiving additional sewer flows from the proposed Project. If the Bureau of Sanitation determines the sewer system has insufficient capacity to serve the proposed Project, the developer may be required to replace or build new sewer lines to a point in the sewer system with sufficient capacity to accommodate the proposed Project's increased flows. Based on the configuration of sewer lines serving the project site, the Project's sewer flows would be routed down slope by a proposed sewer line within an eight (8) foot wide sewer/storm drain easement on Lot 118 (#201501511325). Project sewer flows would then connect58 to the existing lines under Marmont Ave. . .

These proposed sewer infrastructure improvements to update or expand the sewer lines in the Project vicinity would be limited to trenching, excavating and backfilling the sewer lines beneath the public right-of-way. Such construction activities would be localized in nature and would

generally involve temporary partial lane closures of short duration typically lasting a few days to a few weeks.

Given that LA Sanitation has apparently not made a determination of sewer capacity and the applicant has apparently not submitted a Sewer Capacity Availability Request, and the MND fails to demonstrate the existence of adequate sewer capacity, the potential for sewer-related impacts thus remains. In addition, it is unclear that the project's analysis of air quality, noise and traffic impacts have addressed impacts associated with sewer construction, in the required analysis of the project as a whole.

The MND fails to address the construction and operation of the storm drains included in the design of the Crisler Way extension. The MND fails to explain where and how these storm drains will be connected to the larger storm drain system and if that system has adequate capacity to handle the flows from the new storm drains included in the roadway design. In the absence of such an analysis, the potential for impacts remains.

The MND fails to address the potential for project and cumulative construction traffic to increase the incidences of infrastructure failure along the project access routes. Given the number of infrastructure failures in the area (see Section I.d. of this comment letter), and the substandard roadways in the area, there is the potential for project construction traffic to result in significant infrastructure impacts and the project to contribute to significant cumulative infrastructure impacts in the form of damage to the systems. Measure TRA-5 does not address impacts to infrastructure other than the roadway. The potential for significant project and cumulative impacts to infrastructure systems in the area remains.

VI.j. *Mandatory Findings of Significance*

| XVIV MANDATORY FINDINGS OF SIGNIFICANCE | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Does the project:* | | | | |
| a) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☒ | ☐ | ☐ | ☐ |
| b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☒ | ☐ | ☐ | ☐ |

**Explanation of Checklist Judgments:**

Cumulative development has the potential to result in significant emergency access, transportation impacts, and utility impacts as detail above. Issue XVIV.b., therefore, remains Potentially Significant. An EIR is therefore required for the project.

Project and cumulative development has the potential to result in significant emergency access, transportation impacts, and public service and utility impacts as detailed above, which will adversely effect human beings either directly or indirectly. Issue XVIV.c., therefore, remains Potentially Significant. An EIR is therefore required for the project.

## VII. Violation Of CEQA Guidelines Section 15070(B)(1) – Lack Of Evidence Mitigation Measures Would Avoid The Effects Or Mitigate Effects To The Point Where Clearly No Significant Effects Would Occur

As detailed in Section VI of this letter, the MND lacks any real demonstration that project mitigations would reduce impacts to a level considered less than significant. It is impossible to judge whether impacts are mitigated to the point where "clearly no significant effects would occur." In addition, as detailed in this comment letter, a number of the mitigation measures are infeasible or ineffective as written and the potential for impacts thus remains.

## VIII. Violation Of CEQA Guidelines Section 15070(B)(1) - Infeasible Mitigation Measures

Potentially infeasible mitigation measures and mitigation measure which will not reduce impacts to a level which is less than significant are included in the MND, as detailed above in Section VI of this comment letter. Given the presence of infeasible and ineffective mitigations, the potential for significant unmitigated impacts remains.

## IX. Violation Of CEQA Guidelines Section 15074(D) – Legitimate Concerns Regarding Enforcement Of Mitigation Measures

The City has received numerous comments throughout the project review process for various projects in hillside areas regarding the City's inadequate enforcement of mitigation measures. The City's ability to enforce mitigation measures and standard conditions of approval has been shown to be problematic for other projects on substandard streets in hillside areas. See for example the hearing audio transcript from the Central Area Planning Commission Regular Meeting of Tuesday, September 8, 2015, 4:30 P.M. regarding a project on Stanley Hills Drive. Issues of enforcement are repeatedly discusses on Track 3 of the tape of the hearing. (See **Attachment J** for links to the audio). In particular, Planning Department indicates on Track 3 at minute 46:00-49:30 that they are not responsibility for mitigation monitoring.

The wording of MND mitigations evidences no progress on this issue. To address Citizen concerns we would suggest that the following elements be included in each mitigation measure:

- Required action
- Timing of Required Action
- Party responsible for implementation of the required action (with a phone list of all parties for all mitigation measures to be provided to residents prior to issuance of first permits)

- Party responsible for monitoring compliance with the required action (with a phone list of all parties for all mitigation measures to be provided to residents prior to issuance of first permits)
- The specification that future permits will not be issued if compliance with the measure is not met (for example a statement that: the occupancy permit for the project shall not be issued until compliance is demonstrated to the satisfaction of (the applicable City Department head)
- A specified fine for failure to comply with the specified timing
- A specified fine for per day or per occurrence violations documented by the public, the City Department head's contact information for submission of violation documentation, and the nature of documentation required for per day and per occurrence violation events.
- A requirement that the applicant pays for police or fire presence during key construction activities that might result in temporary street blockage.

Residents on Grand View Drive have already experienced inadequate City enforcement of mitigations applied to past projects on the street, as detailed in **Attachments I and J**.[5] In the case of construction of 8401 Grand View Drive, not only did the City provide inadequate mitigation enforcement, but on "April 2, 2012, the Department of Building and Safety (("LADBS") issued a notice to the property owner to immediately stop all work in progress after it was found that the Department of City Planning erred in signing-off on the building permits for the addition and the swimming pool, as detailed in the ZAD for Case No. ZA-2012-1026(ZAA)(ZAD)." Given the City's failure to follow up on violations during the construction of 8401 Grand View Drive and the City's improper issuance of building permits on Grand View Drive, residents have very real concerns about the ability of the City to ensure that mitigations intended to reduce impacts will be enforced.

This concern is exacerbated by the fact that the City has not provided a Mitigation Monitoring Plan for the project for public review.

## X. Violation Of CEQA Guidelines Section 15064(H) Failure to Adequately Address Cumulative Impacts

As detailed in Section VI, the MND fails to adequately address the potential for the project to contribute to significant cumulative impacts in the project area. Not only does the City need to prepare an EIR to address the potentially significant impacts of the project, the City needs to prepare an EIR to address the potential cumulative impacts of the project. As noted in the CEQA Guidelines:

[5] See also Channel 4 News video at: https://www.youtube.com/watch?v=QJXbfFJmSaw

15355. CUMULATIVE IMPACTS

"Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
(a) The individual effects may be changes resulting from a single project or a number of separate projects.
(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

15064 DETERMINING THE SIGNIFICANCE OF THE ENVIRONMENTAL EFFECTS CAUSED BY A PROJECT

(h) (1) When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The MND contains a list of projects that may potentially be constructed in this neighborhood in the near-term. Several additional projects have been identify in recent environmental documents for projects in the area, as explained in Section III.m. This represents a significant amount of construction. Given the unique street constraints of the area, it is questionable whether the area can tolerate this level of sequential or cumulative development. Cumulative projects will exacerbate the potential impacts described in Section VI of this comment letter resulting in cumulatively considerable impacts. In addition, cumulative development will contribute to ongoing traffic and emergency access and safety concerns by increasing the population in the area subject to high fire risk and by making emergency evacuations more time consuming and difficult.

The City's on-going practice of permitting construction and increasing the density of development along a ridgeline oo steep hillside slope in a high fire severity area on what is essentially a one-way street is both a highly questionable practice and a potential source of liability for the City. Based on the plans available for these cumulative projects, they would appear to represent exactly the type of development cited by the Los Angeles City Fire Department as contributing to the severity of the Kirkwood Bowl/Laurel Canyon Fire – i.e. structures built in close proximity to each other, on ridge

tops with very steep slopes coming right up to foundations, on very winding narrow streets, with single ingress and egress.[6]

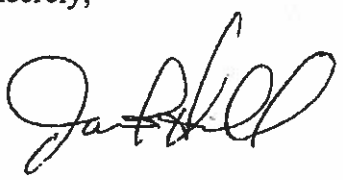
**XI. Violation Of CEQA Guidelines Section 15074(D) And Guidelines Section 15070(B)(2) – There Is Substantial Evidence In The Record That The Project As Revised May Have A Significant Effect On The Environment**

There is substantial evidence in the record that the project will result in significant project and cumulative impacts. As detailed in this letter the MND fails to provide substantial evidence that impacts can clearly be reduced to a level considered less than significant. In contrast, a fair argument supported by substantial evidence has been presented that the potential for significant impacts remains.

**XII. Conclusion – The City Of Los Angeles Has Violated CEQA Guidelines Section 15073.5(D) – An EIR Is Required When There Is Substantial Evidence That The Project May Have A Significant Impact.**

This comment letter demonstrates an EIR is required for the project. The lead agency has been presented with a fair argument that the project may have a significant effect on the environment, that the existing analysis and mitigation measures are inadequate, and that the project would result in a cumulatively considerable contribution to cumulative impacts. An EIR for the project is, therefore, required.

Sincerely,



Jamie T. Hall

ATTACHMENTS

A. Hydrant Failure
B. Roadway Repair Cost Example
C. Weight of Construction Vehicles
D. Information on the Kirkland Fire
E. Emails With City Staff Documenting Information Not Included In Project File
F. Expired B-Permit
G. Letter From Channel Law – Appeal To Board of Public Works of CEQA Determination for B-Permit No BR402571 (Public Resources Code Section 21151(c)
H. Case Planning Information For the Four Single-Family Residences
I. Resident Testimony Regarding Harm From Similar Past Projects
J. Audio Links, Central Area Planning Commission Meeting, September 8, 2015

[6] See Fire analysis by Los Angeles Fire Department in Attachment D.

# Exhibit A

LOCAL / L.A. Now

# Hollywood Hills neighborhood awakens to mudslide after hydrant ruptures



Mud fills the street on Hillside Avenue in the Hollywood Hills after a broken fire hydrant sent debris and mud onto a number of streets including Hillside and Franklin avenues and Kings and Queens Roads. (Mel Melcon / Los Angeles Times)

By Veronica Rocha · Contact Reporter

MAY 18, 2016, 9:07 AM

A ruptured fire hydrant triggered a mudslide Wednesday in a Hollywood Hills neighborhood and caused delays along a stretch of Sunset Boulevard.

The fire hydrant burst about 12:30 a.m. in the 8400 block of Grand View Drive, according to Kim Hughes, spokeswoman for the Los Angeles Department of Water and Power. It is unclear whether the fire hydrant was struck or malfunctioned.

Water and debris flowed downhill into streets and buried the driveways of some homes in thick mud.

DWP crews shut off water to the hydrant to stop the leak.

See the most-read stories this hour >>

Crews are working with fire officials to restore water to the area and clean up the debris.

Meanwhile, the Los Angeles County Sheriff's Department has advised drivers to avoid Sunset between King and Queens roads in West Hollywood due to heavy traffic and ongoing cleanup efforts.

A broken hydrant also sent a flood of water and mud onto Coldwater Canyon Boulevard in Studio City on Friday. A motorist had crashed into the hydrant.

veronica.rocha@latimes.com

**For breaking news in California, follow VeronicaRochaLA on Twitter.**

**ALSO**

**Person on 10 Freeway in West Covina is killed by hit-and-run driver**

**Nanny fights off would-be kidnapper who tried to snatch a stroller with a baby**

**Giant space shuttle tank arrives in L.A. by sea**

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**This article is related to:** Avalanches and Landslides

# Exhibit B

# CITY ENGINEER'S ESTIMATE

**City of Los Angeles - Department of Public Works - Bureau of Engineering**
**Emergency Geotechnical/Structural Construction Services Project**
**Grand View Drive Bulkhead**
**W.O. No. E1907365**

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | JOHN S. MEEK COMPANY, INC. | | PPC CONSTRUCTION, INC. | | CALSA ENGINEERING COMPANY | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization (General Requirements, Sections 01292 and 1721) | LS | | | $11,775.00 | | $11,500.00 | | $33,400.00 | | $27,500.00 |
| 2 | Allowance for Differing Site Conditions (General Requirements, Sections 01212 and 01253) | LS | | | $23,630.00 | | $23,630.00 | | $23,630.00 | | $23,630.00 |
| 3 | Allowance for Utility & Service Line Relocation or Permanent Support (General Requirements, Section 01212) | LS | | | $20,000.00 | | $20,000.00 | | $20,000.00 | | $20,000.00 |
| 4 | Traffic Control | LS | | | $3,000.00 | | $13,000.00 | | $7,000.00 | | $1,800.00 |
| 5 | Clearing and grubbing, prior to grading slope | EA | 400 | $3.00 | $1,200.00 | $3.50 | $1,400.00 | $10.00 | $4,000.00 | $16.00 | $6,400.00 |
| 6 | Drill 8 holes ea. 36" diameter x 41 ft deep, for Soldier Beams | LF | 328 | $300.00 | $98,400.00 | $63.00 | $20,664.00 | $105.00 | $34,440.00 | $134.00 | $43,952.00 |
| 7 | Supply 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $150.50 | $49,364.00 | $106.00 | $34,768.00 | $130.00 | $42,640.00 |
| 8 | Install 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $48.50 | $15,908.00 | $32.00 | $10,496.00 | $50.00 | $16,400.00 |
| 9 | Supply, pump and place concrete for embedded portion of soldier beams | CY | 51 | $135.00 | $6,885.00 | $352.00 | $17,952.00 | $324.00 | $16,524.00 | $255.00 | $13,005.00 |
| 10 | Supply, pump and place slurry for cantilevered portion of soldier piles | CY | 20 | $135.00 | $2,700.00 | $130.00 | $2,600.00 | $190.00 | $3,800.00 | $470.00 | $9,400.00 |
| 11 | Excavation for lagging and backdrain, including sawcut and removal of AC, haul-away and dispose | CY | 40 | $85.00 | $3,400.00 | $190.00 | $7,600.00 | $200.00 | $8,000.00 | $325.00 | $13,000.00 |
| 12 | Supply 8" x 1'-6" x 8 ft long pre-cast lagging panels | EA | 30 | $450.00 | $13,500.00 | $542.00 | $16,260.00 | $770.00 | $23,100.00 | $530.00 | $15,900.00 |
| 13 | Install 8" x 1'-6" x 8 ft long precast lagging panels | EA | 30 | $175.00 | $5,250.00 | $385.00 | $11,550.00 | $407.00 | $12,210.00 | $238.00 | $7,140.00 |
| 14 | Place 24" wide drain consisting of 3/4" rock wrapped in geofabric filter, at backside of lagging, geofabric and hydroauger array, prior to backfilling | CY | 10 | $100.00 | $1,000.00 | $275.00 | $2,750.00 | $330.00 | $3,300.00 | $768.00 | $7,680.00 |
| 15 | Construct fill in lifts, certified 90% min. relative compaction | CY | 32 | $110.00 | $3,520.00 | $113.00 | $3,616.00 | $175.00 | $5,600.00 | $220.00 | $7,040.00 |
| 16 | Erosion control groundcover hydro-mulch with native seed mix per building code | SF | 700 | $3.00 | $2,100.00 | $2.40 | $1,680.00 | $5.00 | $3,500.00 | $4.40 | $3,080.00 |
| 17 | Supply and install metal-beam vehicular guardrail per Standard Plan S-462, Type 2 | LF | 82 | $120.00 | $9,840.00 | $158.50 | $12,997.00 | $141.00 | $11,562.00 | $195.00 | $15,990.00 |
| 18 | Construct AC pavement 6" - 8" thick with 12" CMB | SF | 175 | $28.00 | $4,900.00 | $22.00 | $3,850.00 | $22.00 | $3,850.00 | $50.00 | $8,750.00 |
| 19 | Construct AC Berm (curb) at edge of pavement | LF | 50 | $40.00 | $2,000.00 | $44.50 | $2,225.00 | $50.00 | $2,500.00 | $114.00 | $5,700.00 |
| **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | | **$295,100.00** | | **$238,546.00** | | **$261,680.00** | | **$289,007.00** |
| | | | | | | { Low } | -19.16% | { Low } | -11.32% | { Low } | -2.06% |

# CITY ENGINEER'S ESTIMATE

**City of Los Angeles - Department of Public Works - Bureau of Engineering**
**Emergency Geotechnical/Structural Construction Services Project**
## Grand View Drive Bulkhead
**W.O. No. E1907365**

| ITEM | DESCRIPTION | UNIT | QTY | CITY ENGINEER'S ESTIMATE | | CLARK CONTRACTING CORPORATION | | BALFOUR CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization (General Requirements, Sections 01292 and 1721) | LS | | | $11,775.00 | | $11,775.00 | | $11,775.00 |
| 2 | Allowance for Differing Site Conditions (General Requirements, Sections 01212 and 01253) | LS | | | $23,630.00 | | $23,630.00 | | $23,630.00 |
| 3 | Allowance for Utility & Service Line Relocation or Permanent Support (General Requirements, Section 01212) | LS | | | $20,000.00 | | $20,000.00 | | $20,000.00 |
| 4 | Traffic Control | LS | | | $3,000.00 | | $4,800.00 | | $5,090.00 |
| 5 | Clearing and grubbing, prior to grading slope | EA | 400 | $3.00 | $1,200.00 | $10.00 | $4,000.00 | $11.00 | $4,400.00 |
| 6 | Drill 8 holes ea. 36" diameter x 41 ft deep, for Soldier Beams | LF | 328 | $300.00 | $98,400.00 | $185.00 | $60,680.00 | $429.00 | $140,712.00 |
| 7 | Supply 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $174.00 | $57,072.00 | $141.00 | $46,248.00 |
| 8 | Install 8 Soldier Beams (ea. 41 ft long) - W24X117 | LF | 328 | $125.00 | $41,000.00 | $131.00 | $42,968.00 | $207.00 | $67,896.00 |
| 9 | Supply, pump and place concrete for embedded portion of soldier beams | CY | 51 | $135.00 | $6,885.00 | $370.00 | $18,870.00 | $271.25 | $13,833.75 |
| 10 | Supply, pump and place slurry for cantilevered portion of soldier piles | CY | 20 | $135.00 | $2,700.00 | $150.00 | $3,000.00 | $212.75 | $4,255.00 |
| 11 | Excavation for lagging and backdrain, including sawcut and removal of AC, haul-away and dispose | CY | 40 | $85.00 | $3,400.00 | $240.00 | $9,600.00 | $192.75 | $7,710.00 |
| 12 | Supply 6" x 1'-6" x 8 ft long pre-cast lagging panels | EA | 30 | $450.00 | $13,500.00 | $475.00 | $14,250.00 | $901.00 | $27,030.00 |
| 13 | Install 6" x 1'-6" x 8 ft long precast lagging panels | EA | 30 | $175.00 | $5,250.00 | $315.00 | $9,450.00 | $112.00 | $3,360.00 |
| 14 | Place 24" wide drain consisting of 3/4" rock wrapped in geofabric filter, at backside of lagging, geofabric and hydroauger array, prior to backfilling | CY | 10 | $100.00 | $1,000.00 | $650.00 | $6,500.00 | $435.00 | $4,350.00 |
| 15 | Construct fill in lifts, certified 90% min. relative compaction | CY | 32 | $110.00 | $3,520.00 | $205.00 | $6,560.00 | $141.50 | $4,528.00 |
| 16 | Erosion control groundcover hydro-mulch with native seed mix per building code | SF | 700 | $3.00 | $2,100.00 | $3.00 | $2,100.00 | $1.25 | $875.00 |
| 17 | Supply and install metal-beam vehicular guardrail per Standard Plan S-462, Type 2 | LF | 82 | $120.00 | $9,840.00 | $141.00 | $11,562.00 | $138.00 | $11,316.00 |
| 18 | Construct AC pavement 6" - 8" thick with 12" CMB | SF | 175 | $28.00 | $4,900.00 | $45.00 | $7,875.00 | $59.25 | $10,368.75 |
| 19 | Construct AC Berm (curb) at edge of pavement | LF | 50 | $40.00 | $2,000.00 | $100.00 | $5,000.00 | $11.50 | $575.00 |
| | **TOTAL ESTIMATED CONSTRUCTION COST:** | | | | **$295,100.00** | | **$319,692.00** | | **$407,952.50** |
| | | | | | | **{ High }** | **8.33%** | **{ High }** | **38.24%** |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | MIKE PRLICH AND SONS, INC. | | JOHN S. MEEK COMPANY, INC. | | CLARKE CONTRACTING CORPORATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization per THE General Requirements, Section 01292 (combined bundled projects) | LS | | | $ 28,000.00 | | $ 28,000.00 | | $ 28,000.00 | | $ 28,000.00 |
| 2 | **Allowance for Differing Site Conditions per the General Requirements, Sections 01212 and 01253 (combined bundled projects)** | LS | | | $ 30,000.00 | | $ 30,000.00 | | $ 30,000.00 | | $ 30,000.00 |
| 3 | Traffic control and signs (combined bundled projects) | LS | | | $ 8,000.00 | | $ 30,000.00 | | $ 11,000.00 | | $ 15,000.00 |
| 4 | Clearing and grubbing, including demo and disposal of interfering existing timber, asphalt and concrete (combined bundled projects) | LS | | | $ 7,000.00 | | $ 43,000.00 | | $ 41,800.00 | | $ 17,000.00 |
| | **Grand View Drive Bulkhead (8460)** | | | | | | | | | | |
| 5 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 180 | $ 70.00 | $ 12,600.00 | $ 85.00 | $ 15,300.00 | $ 41.00 | $ 7,380.00 | $ 50.00 | $ 9,000.00 |
| 6 | Drill five 36" diameter holes, 28' deep | LF | 140 | $ 140.00 | $ 19,600.00 | $ 100.00 | $ 14,000.00 | $ 212.50 | $ 29,750.00 | $ 195.00 | $ 27,300.00 |
| 7 | Supply, pump, and place concrete for 14' deep embedded portion of soldier beam | CY | 19 | $ 400.00 | $ 7,600.00 | $ 120.00 | $ 2,280.00 | $ 500.00 | $ 9,500.00 | $ 350.00 | $ 6,650.00 |
| 8 | Supply, pump, and place slurry backfill for upper 14' portion of soldier beam | CY | 19 | $ 300.00 | $ 5,700.00 | $ 90.00 | $ 1,710.00 | $ 115.00 | $ 2,185.00 | $ 100.00 | $ 1,900.00 |
| 9 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 10 | $ 300.00 | $ 3,000.00 | $ 300.00 | $ 3,000.00 | $ 257.00 | $ 2,570.00 | $ 700.00 | $ 7,000.00 |
| 10 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 180 | $ 270.00 | $ 48,600.00 | $ 90.00 | $ 16,200.00 | $ 76.70 | $ 13,806.00 | $ 80.00 | $ 14,400.00 |
| 11 | Furnish four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 170.00 | $ 19,040.00 | $ 152.00 | $ 17,024.00 | $ 95.00 | $ 10,640.00 | $ 175.00 | $ 19,600.00 |
| 12 | Install four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 100.00 | $ 11,200.00 | $ 72.00 | $ 8,064.00 | $ 87.00 | $ 9,744.00 | $ 75.00 | $ 8,400.00 |
| 13 | Furnish one Hollow Structural Section (HSS) 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 28' long | LF | 28 | $ 460.00 | $ 12,880.00 | $ 125.00 | $ 3,500.00 | $ 700.00 | $ 19,600.00 | $ 600.00 | $ 16,800.00 |
| 14 | Install one HSS 20x12x1/2" soldier beam, 28' long | LF | 28 | $ 150.00 | $ 4,200.00 | $ 36.00 | $ 1,008.00 | $ 105.00 | $ 2,940.00 | $ 90.00 | $ 2,520.00 |
| 15 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 36 | $ 750.00 | $ 27,000.00 | $ 835.00 | $ 30,060.00 | $ 675.00 | $ 24,300.00 | $ 520.00 | $ 18,720.00 |
| 16 | Reinstall existing metal beam guardrail with new Type 1 posts (Standard Plan S-462-2) | LF | 60 | $ 200.00 | $ 12,000.00 | $ 35.00 | $ 2,100.00 | $ 138.00 | $ 8,280.00 | $ 190.00 | $ 11,400.00 |
| 17 | Supply and install new metal beam guardrail with new Type 1 posts (Standard Plan, S-462-2) | LF | 30 | $ 200.00 | $ 6,000.00 | $ 100.00 | $ 3,000.00 | $ 250.00 | $ 7,500.00 | $ 200.00 | $ 6,000.00 |
| 18 | Asphalt Concrete (AC) pavement 8" thick over 12" thick CMB | SF | 500 | $ 28.00 | $ 14,000.00 | $ 28.00 | $ 14,000.00 | $ 25.00 | $ 12,500.00 | $ 49.00 | $ 24,500.00 |
| 19 | Supply and install AC berm (10" high per modified Standard Plan 412) | LF | 50 | $ 110.00 | $ 5,500.00 | $ 50.00 | $ 2,500.00 | $ 45.00 | $ 2,250.00 | $ 90.00 | $ 4,500.00 |
| 20 | Hydromulch with seed mix / vegetative plantings | SF | 1,200 | $ 4.00 | $ 4,800.00 | $ 2.50 | $ 3,000.00 | $ 3.00 | $ 3,600.00 | $ 1.25 | $ 1,500.00 |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | MIKE PRLICH AND SONS, INC. | | JOHN S. MEEK COMPANY, INC. | | CLARKE CONTRACTING COPRORATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| | Grand View Drive Bulkhead (8417) | | | | | | | | | | |
| 21 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 150 | $ 70.00 | $ 10,500.00 | $ 85.00 | $ 12,750.00 | $ 41.00 | $ 6,150.00 | $ 50.00 | $ 7,500.00 |
| 22 | Drill four 36" diameter holes, 22' deep | LF | 88 | $ 140.00 | $ 12,320.00 | $ 120.00 | $ 10,560.00 | $ 254.50 | $ 22,396.00 | $ 225.00 | $ 19,800.00 |
| 23 | Supply, pump, and place concrete for 11' deep embedded portion of soldier beam | CY | 12 | $ 400.00 | $ 4,800.00 | $ 100.00 | $ 1,200.00 | $ 500.00 | $ 6,000.00 | $ 350.00 | $ 4,200.00 |
| 24 | Supply, pump, and place slurry backfill for upper 11' portion of soldier beam | CY | 12 | $ 300.00 | $ 3,600.00 | $ 90.00 | $ 1,080.00 | $ 150.00 | $ 1,800.00 | $ 100.00 | $ 1,200.00 |
| 25 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 24 | $ 300.00 | $ 7,200.00 | $ 300.00 | $ 7,200.00 | $ 257.00 | $ 6,168.00 | $ 700.00 | $ 16,800.00 |
| 26 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 150 | $ 270.00 | $ 40,500.00 | $ 90.00 | $ 13,500.00 | $ 76.70 | $ 11,505.00 | $ 80.00 | $ 12,000.00 |
| 27 | Furnish three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 140.00 | $ 9,240.00 | $ 170.00 | $ 11,220.00 | $ 106.00 | $ 6,996.00 | $ 210.00 | $ 13,860.00 |
| 28 | Install three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 100.00 | $ 6,600.00 | $ 90.00 | $ 5,940.00 | $ 127.00 | $ 8,382.00 | $ 175.00 | $ 11,550.00 |
| 29 | Furnish one HSS 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 22' long | LF | 22 | $ 655.00 | $ 14,410.00 | $ 137.00 | $ 3,014.00 | $ 760.00 | $ 16,720.00 | $ 600.00 | $ 13,200.00 |
| 30 | Install one HSS 20x12x1/2" soldier beam, 22' long | LF | 22 | $ 150.00 | $ 3,300.00 | $ 46.00 | $ 1,012.00 | $ 110.00 | $ 2,420.00 | $ 90.00 | $ 1,980.00 |
| 31 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 28 | $ 750.00 | $ 21,000.00 | $ 900.00 | $ 25,200.00 | $ 685.00 | $ 19,180.00 | $ 520.00 | $ 14,560.00 |
| 32 | Reinstall existing metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 35 | $ 200.00 | $ 7,000.00 | $ 50.00 | $ 1,750.00 | $ 225.00 | $ 7,875.00 | $ 255.00 | $ 8,925.00 |
| 33 | Supply and install new metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 10 | $ 200.00 | $ 2,000.00 | $ 200.00 | $ 2,000.00 | $ 665.00 | $ 6,650.00 | $ 415.00 | $ 4,150.00 |
| 34 | AC pavement 8" thick over 12" thick CMB | SF | 480 | $ 28.00 | $ 13,440.00 | $ 30.00 | $ 14,400.00 | $ 25.00 | $ 12,000.00 | $ 49.00 | $ 23,520.00 |
| 35 | Supply and install AC berm (8" high per Standard Plan 412) | LF | 60 | $ 90.00 | $ 5,400.00 | $ 40.00 | $ 2,400.00 | $ 65.00 | $ 3,900.00 | $ 90.00 | $ 5,400.00 |
| 36 | Hydromulch with seed mix / vegetative plantings | SF | 840 | $ 4.00 | $ 3,360.00 | $ 2.50 | $ 2,100.00 | $ 3.00 | $ 2,520.00 | $ 1.25 | $ 1,050.00 |
| | **TOTAL ESTIMATED CONSTRUCTION COST:** | | | **$** | **451,390.00** | **$** | **383,072.00** | **$** | **418,007.00** | **$** | **429,885.00** |
| | | | | | | {Low} | -15.14% | {Low} | -7.40% | {Low} | -4.76% |

City of Los Angeles - Department of Public Works - Bureau of Engineering

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | FPC CONSTRUCTION, INC. | | ENVIRONMENTAL CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| 1 | Mobilization per THE General Requirements, Section 01292 (combined bundled projects) | LS | | | $ 28,000.00 | | $ 28,000.00 | | $ 25,000.00 |
| 2 | **Allowance for Differing Site Conditions per the General Requirements, Sections 01212 and 01253 (combined bundled projects)** | **LS** | | | **$ 30,000.00** | | **$ 30,000.00** | | **$ 30,000.00** |
| 3 | Traffic control and signs (combined bundled projects) | LS | | | $ 8,000.00 | | $ 15,800.00 | | $ 30,000.00 |
| 4 | Clearing and grubbing, including demo and disposal of interfering existing timber, asphalt and concrete (combined bundled projects) | LS | | | $ 7,000.00 | | $ 9,600.00 | | $ 95,000.00 |
| | **Grand View Drive Bulkhead (8460)** | | | | | | | | |
| 5 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 180 | $ 70.00 | $ 12,600.00 | $ 151.00 | $ 27,180.00 | $ 200.00 | $ 36,000.00 |
| 6 | Drill five 36" diameter holes, 28' deep | LF | 140 | $ 140.00 | $ 19,600.00 | $ 125.00 | $ 17,500.00 | $ 300.00 | $ 42,000.00 |
| 7 | Supply, pump, and place concrete for 14' deep embedded portion of soldier beam | CY | 19 | $ 400.00 | $ 7,600.00 | $ 345.00 | $ 6,555.00 | $ 1,200.00 | $ 22,800.00 |
| 8 | Supply, pump, and place slurry backfill for upper 14' portion of soldier beam | CY | 19 | $ 300.00 | $ 5,700.00 | $ 189.00 | $ 3,591.00 | $ 600.00 | $ 11,400.00 |
| 9 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 10 | $ 300.00 | $ 3,000.00 | $ 220.00 | $ 2,200.00 | $ 200.00 | $ 2,000.00 |
| 10 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 180 | $ 270.00 | $ 48,600.00 | $ 200.00 | $ 36,000.00 | $ 200.00 | $ 36,000.00 |
| 11 | Furnish four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 170.00 | $ 19,040.00 | $ 83.00 | $ 9,296.00 | $ 100.00 | $ 11,200.00 |
| 12 | Install four W24X84 steel soldier beam, grade 50, 28' long ea. | LF | 112 | $ 100.00 | $ 11,200.00 | $ 69.00 | $ 7,728.00 | $ 100.00 | $ 11,200.00 |
| 13 | Furnish one Hollow Structural Section (HSS) 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 28' long | LF | 28 | $ 460.00 | $ 12,880.00 | $ 447.00 | $ 12,516.00 | $ 200.00 | $ 5,600.00 |
| 14 | Install one HSS 20x12x1/2" soldier beam, 28' long | LF | 28 | $ 150.00 | $ 4,200.00 | $ 283.00 | $ 7,924.00 | $ 100.00 | $ 2,800.00 |
| 15 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 36 | $ 750.00 | $ 27,000.00 | $ 953.00 | $ 34,308.00 | $ 1,500.00 | $ 54,000.00 |
| 16 | Reinstall existing metal beam guardrail with new Type 1 posts (Standard Plan S-462-2) | LF | 60 | $ 200.00 | $ 12,000.00 | $ 150.00 | $ 9,000.00 | $ 100.00 | $ 6,000.00 |
| 17 | Supply and install new metal beam guardrail with new Type 1 posts (Standard Plan, S-462-2) | LF | 30 | $ 200.00 | $ 6,000.00 | $ 236.00 | $ 7,080.00 | $ 100.00 | $ 3,000.00 |
| 18 | Asphalt Concrete (AC) pavement 8" thick over 12" thick CMB | SF | 500 | $ 28.00 | $ 14,000.00 | $ 20.00 | $ 10,000.00 | $ 20.00 | $ 10,000.00 |
| 19 | Supply and install AC berm (10" high per modified Standard Plan 412) | LF | 50 | $ 110.00 | $ 5,500.00 | $ 90.00 | $ 4,500.00 | $ 50.00 | $ 2,500.00 |
| 20 | Hydromulch with seed mix / vegetative plantings | SF | 1,200 | $ 4.00 | $ 4,800.00 | $ 1.50 | $ 1,800.00 | $ 2.00 | $ 2,400.00 |

# Grand View Drive (8417) Bulkhead Extension and Grand View Drive (8460) Bulkhead

## W.O. Nos. E1907589 and E1907677

| DETAILED RESULTS | | | | CITY ENGINEER'S ESTIMATE | | PPC CONSTRUCTION, INC. | | ENVIRONMENTAL CONSTRUCTION, INC. | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | DESCRIPTION | UNIT | QTY. | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL | UNIT PRICE | ITEM TOTAL |
| | **Grand View Drive Bulkhead (8417)** | | | | | | | | |
| 21 | Excavation in front and back of bulkhead, for lagging installation and removal of damaged asphalt pavement, and haul-away | CY | 150 | $ 70.00 | $ 10,500.00 | $ 151.00 | $ 22,650.00 | $ 200.00 | $ 30,000.00 |
| 22 | Drill four 36" diameter holes, 22' deep | LF | 88 | $ 140.00 | $ 12,320.00 | $ 193.00 | $ 16,984.00 | $ 450.00 | $ 39,600.00 |
| 23 | Supply, pump, and place concrete for 11' deep embedded portion of soldier beam | CY | 12 | $ 400.00 | $ 4,800.00 | $ 345.00 | $ 4,140.00 | $ 1,000.00 | $ 12,000.00 |
| 24 | Supply, pump, and place slurry backfill for upper 11' portion of soldier beam | CY | 12 | $ 300.00 | $ 3,600.00 | $ 189.00 | $ 2,268.00 | $ 600.00 | $ 7,200.00 |
| 25 | Supply and install 3/8" pea gravel fully wrapped in non-woven fabric | CY | 24 | $ 300.00 | $ 7,200.00 | $ 220.00 | $ 5,280.00 | $ 200.00 | $ 4,800.00 |
| 26 | Place backfill in lifts, compact to 90% minimum relative compaction | CY | 150 | $ 270.00 | $ 40,500.00 | $ 200.00 | $ 30,000.00 | $ 200.00 | $ 30,000.00 |
| 27 | Furnish three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 140.00 | $ 9,240.00 | $ 85.00 | $ 5,610.00 | $ 100.00 | $ 6,600.00 |
| 28 | Install three W21X62 steel soldier beam, grade 50, 22' long each | LF | 66 | $ 100.00 | $ 6,600.00 | $ 94.00 | $ 6,204.00 | $ 100.00 | $ 6,600.00 |
| 29 | Furnish one HSS 20x12x1/2" soldier beam including 3/4" plate and fabrication per details A8 and A12 on plan sheet S-3, 22' long | LF | 22 | $ 655.00 | $ 14,410.00 | $ 447.00 | $ 9,834.00 | $ 100.00 | $ 2,200.00 |
| 30 | Install one HSS 20x12x1/2" soldier beam, 22' long | LF | 22 | $ 150.00 | $ 3,300.00 | $ 283.00 | $ 6,226.00 | $ 100.00 | $ 2,200.00 |
| 31 | Supply and install 8"x1'-6"x8'-0" precast reinforced concrete lagging panels | EA | 28 | $ 750.00 | $ 21,000.00 | $ 953.00 | $ 26,684.00 | $ 1,500.00 | $ 42,000.00 |
| 32 | Reinstall existing metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 35 | $ 200.00 | $ 7,000.00 | $ 206.00 | $ 7,210.00 | $ 100.00 | $ 3,500.00 |
| 33 | Supply and install new metal beam guardrail with new Type 1 posts (STD. S-462-2) | LF | 10 | $ 200.00 | $ 2,000.00 | $ 461.00 | $ 4,610.00 | $ 100.00 | $ 1,000.00 |
| 34 | AC pavement 8" thick over 12" thick CMB | SF | 480 | $ 28.00 | $ 13,440.00 | $ 20.00 | $ 9,600.00 | $ 20.00 | $ 9,600.00 |
| 35 | Supply and install AC berm (8" high per Standard Plan 412) | LF | 60 | $ 90.00 | $ 5,400.00 | $ 80.00 | $ 4,800.00 | $ 80.00 | $ 4,800.00 |
| 36 | Hydromulch with seed mix / vegetative plantings | SF | 840 | $ 4.00 | $ 3,360.00 | $ 1.50 | $ 1,260.00 | $ 2.00 | $ 1,680.00 |
| | **TOTAL ESTIMATED CONSTRUCTION COST:** | | | **$** | **451,390.00** | **$** | **443,938.00** | **$** | **642,680.00** |
| | | | | | | **{ Low }** | **-1.65%** | **{ High }** | **42.38%** |

# Exhibit C

CASE CONSTRUCTION

# 580N EP

**BACKHOE LOADER**

***TIER 4 FINAL CERTIFIED***



## ENGINE

| | |
|---|---|
| Model | FPT F5HFL463D |
| Emissions Certification | Tier 4 Final |
| Type | Diesel 4-stroke, Turbocharged |
| Cylinders | 4 |
| Bore/Stroke | 3.90 x 4.33 in (99 x 110 mm) |
| Displacement | 207 in³ (3.4 L) |
| Fuel injection | Direct, high pressure common rail – HPCR |
| Fuel | Diesel |
| Engine speeds* | RPM |
| Rated speed – full load | 2200 |
| Low idle | 900 – 1000 |
| High idle – no load | 2330 – 2430 |
| Horsepower @ 2200 RPM: | |
| Gross | 74 hp (55 kW) |
| Net w/ viscous fan** | 72 hp (54 kW) |
| Net | 68 hp (51 kW) |
| Maximum torque @ 1400 RPM: | |
| Gross | 233 lb·ft (316 N·m) |
| Net w/ viscous fan | 228 lb·ft (310 N·m) |
| Net | 220 lb·ft (298 N·m) |
| Torque rise at rated speed | 35% +/- 5% |
| Radiator: | |
| Core type | Square wave |
| Core size area | 486 in² (3 145 cm²) |
| Rows of tubes | 5 |
| 39" fan: | |
| Style | 7 blade suction |
| Diameter | 19.65 in (499 mm) |
| Ratio | 1.1:1 |
| Pump operating angle ratings: | |
| Side to side | Rated 35° |
| Fore and aft | Rated 35° |
| Oil filtration | Replaceable, full flow spin on |

NOTE: *Meets federal emission regulations.
**Viscous fan available as DIA w/ High Ambient Kit.

## DRIVETRAIN

Transmission – standard:
4F-4R Power Shuttle Synchromesh Transmission manual gear shift, fully synchronized

| Gear ratios | Forward/Reverse |
|---|---|
| 1st | 5.603/4.643 |
| 2nd | 3.481/2.884 |
| 3rd | 1.584/1.313 |
| 4th | 0.793/0.657* |

| Travel speeds | Forward mph (kph) | Reverse mph (kph) |
|---|---|---|
| 1st | 3.5 (5.6) | 4.2 (6.8) |
| 2nd | 5.5 (8.9) | 6.6 (10.6) |
| 3rd | 11.8 (19.0) | 14.1 (22.7) |
| 4th | 21.3 (34.3) | 25.5 (41.0) |

| | |
|---|---|
| Torque converter ratio | 3.2 |
| Differential lock | On-the-go push-button activation |
| Front 4WD/Rear axle: | |
| Differential ratio | 2.2/2.75 |
| Planetary hub ratio | 6.0/6.4 |
| Total reduction ratio | 13.3/17.6 |

Service brakes:
Individually applied, power assisted, hydraulically actuated, maintenance-free, self-adjusting, outboard mounted, wet disc, 2 per side.
Total disc area 384 in² (0.25 m²)

| | |
|---|---|
| Parking brakes | Trans Mounted spring-applied hydraulic release – SAHR |

NOTE: Travel speeds at 2293 engine RPM specified: w/ 19.5 L x 24.0 tires. Speeds decrease w/ 17.5 L x 24.0 rear tires.

## ELECTRICAL

| | |
|---|---|
| Voltage | 12 Volts, negative ground |
| Alternator | 120 amp |
| Battery | 850 cold-cranking amps |
| Opt. batteries – 2 | 850 cold-cranking amps |
| Power plugs – 2 | 30 amps total |

## OPERATOR ENVIRONMENT

ROPS/FOPS certified protective canopy; Rear fenders extensions; Coat hook w/ garment strap; Interior rearview mirror, convex 3.54 in (90 mm) wide x 10.83 in (275 mm) high; Non-suspension seat – 180° swivel – Vinyl; 2 in (50 mm) retractable seat belt; Cup holder/storage tray mounted on left-hand fender; Right-hand storage compartment w/ lid.

Gauges:
Engine water temperature; Converter oil temperature; Fuel level; Tachometer/ hourmeter; Voltmeter.

Warning lights:
Air cleaner restriction; Alternator; A/C high pressure; Cold start; Engine oil pressure low; Hydraulic oil filter bypass; Parking brake engagement; Low fuel; Water in fuel.

Audible alarms:
Coolant temperature; Engine oil pressure; Parking brake engagement; Shuttle engagement/seat position; Backup; Converter temperature; Particulate Matter Regeneration.

| | |
|---|---|
| Horn | Dual switched front and rear |

## OPERATING WEIGHT

**Configuration 1 – SAE Transport:**
GP Loader Bucket, 2WD, Canopy, Boom Guard, Full of Fuel, SAE Carry, Tier 4 Final Engine, Extendahoe®, 4 Stick Mech BH, Standard Transmission, 17.5 L – 24 Rear Tires, 700 lb Front Counterweight.
15,795 lb (7 164 kg)

**Configuration 2 – SAE Transport:**
GP Loader Bucket, 4WD, 2 Door Cab, AC, Boom Guard, Full of Fuel, SAE Carry, 24 in HD BH Bucket, Tier 4 Final Engine, Pilot Controls, Standard Dipper, Manual Transmission, 19.5 – 24 Rear Tires.
15,810 lb (7 171 kg)

**Add-on weights:**

| | |
|---|---|
| Cab-over canopy | 309 lb (140 kg) |
| Fabricated stabilizer pads | 141 lb (64 kg) |
| Counterweights | 700 lb (318 kg) |
| Extendahoe® | 285 lb (129 kg) |
| 4WD w/ driveshaft guard | 283 lb (128 kg) |

SELECT EQUIPMENT

BY TYPE BY INDUSTRIES

- BACKHOE LOADERS
- COMPACT TRACK LOADERS
- COMPACTION EQUIPMENT
- CRAWLER DOZERS
- EXCAVATORS
- FORKLIFTS
- MINI EXCAVATORS
- MOTOR GRADERS
- SKID STEER LOADERS
- TRACTOR LOADERS
- WHEEL LOADERS - COMPACT
- WHEEL LOADERS

10

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United States

Zip or City

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MINI EXCAVATORS FOR ALL INDUSTRIES



## CASE MINI EXCAVATORS

Looking for superior power, productivity and fast cycle times all in one application? That's exactly what you'll find with CASE mini excavators. Regardless of space constraints, these compact excavators are able to perform landscaping, utility, demolition, construction or industrial jobs that require strength without a giant footprint. Increase productivity and performance with the independent, center-swing boom allowing you to dig around stationary objects or alongside obstacles.

Sorted By: OPERATING WEIGHT

UNDER 3.5 METRIC TONS

3.5 - 4.5 METRIC TONS

CX31B



OPERATING WEIGHT
7,672 lb | 3480 kg
ENGINE POWER
23.1hp | 17.2 kW

More Details

CX36B



OPERATING WEIGHT

OVER 4.5 METRIC TONS

CX55B



OPERATING WEIGHT
11,312 lb | 5130 kg
ENGINE POWER
37.4 hp | 27.9 kW

More Details

8,554 lb | 3880 kg
**ENGINE POWER**
23.1 hp | 17.2 kW

More Details

NOT IN LIST?
TRY TO SEARCH FOR PRIOR MODELS: model

SEARCH

**WHY**
*CASE*

CASE sells and supports a full line of construction equipment around the world. Through CASE dealers, customers have access to a true professional partner—with world-class equipment and aftermarket support, industry-leading warranties and flexible financing.

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SELECT EQUIPMENT

BY TYPE BY INDUSTRIES

- BACKHOE LOADERS
- COMPACT TRACK LOADERS
- COMPACTION EQUIPMENT
- CRAWLER DOZERS
- EXCAVATORS
- FORKLIFTS
- MINI EXCAVATORS
- MOTOR GRADERS
- SKID STEER LOADERS
- TRACTOR LOADERS
- WHEEL LOADERS - COMPACT
- WHEEL LOADERS

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United States

Zip or City

SEARCH

COMPACTION EQUIPMENT FOR ALL INDUSTRIES



## CASE COMPACTOR MODELS

Leading the industry in performance level, CASE Compactors combine climbing power, high centrifugal forces and 360-degree visibility to provide you with superior productivity and power. Whether you are in need of an asphalt roller or a soil compactor, the three series compaction line offers easy operation and outstanding serviceability. Easy maintenance helps to minimize compactor downtime while maximizing your productivity from dusk to dawn.

There are a number of variables that determine the right roller for each compaction job, find out which CASE Compactor is right for you.

Sorted By: ENGINE POWER

SINGLE DRUM DOUBLE DRUM PNEUMATIC

SV208



ENGINE POWER
99 hp | 73.8 kW
OPERATING WEIGHT
15,830 lb | 7180 kg

More Details

DV23



ENGINE POWER
31 hp (23 kW)
OPERATING WEIGHT
5,400 lb (2450 kg)

More Details

P1240



ENGINE POWER
99 hp | 74 kW
OPERATING WEIGHT
20,525 lb | 9310 kg

More Details

SV210



ENGINE POWER

DV26



ENGINE POWER

99 hp | 73.8 kW
**OPERATING WEIGHT**
19,445 lb | 8820 kg

More Details

31 hp (23 kW)
**OPERATING WEIGHT**
5,842 lb (2650 kg)

More Details

SV212



**ENGINE POWER**
148 hp | 110 kW
**OPERATING WEIGHT**
25,530 lb | 11 580 kg

More Details

DV36



**ENGINE POWER**
40 hp (30 kW)
**OPERATING WEIGHT**
9,480 lb (4300 kg)

More Details

SV216



**ENGINE POWER**
148 hp | 110 kW
**OPERATING WEIGHT**
31,479 lb | 14 274 kg

More Details

DV45



**ENGINE POWER**
40 hp (30 kW)
**OPERATING WEIGHT**
10,296 lb (4670 kg)

More Details

DV202



**ENGINE POWER**
80 hp | 60 kW
**OPERATING WEIGHT**
16,226 lb | 7360 kg

More Details

DV210



**ENGINE POWER**
99 hp | 74 kW
**OPERATING WEIGHT**
22,928 lb | 10400 kg

More Details

DV208C



**ENGINE POWER**
100 hp (74.4 kW)
**OPERATING WEIGHT**
21,030 lb (9,540 kg)

More Details

DV210C



**ENGINE POWER**
100 hp (74.4 kW)
**OPERATING WEIGHT**
22,730 lb (10,310 kg)

More Details

DV213



**ENGINE POWER**
130 hp | 97 kW
**OPERATING WEIGHT**
28,718 lb | 13030 kg

More Details

NOT IN LIST?
TRY TO SEARCH FOR PRIOR MODELS: model

SEARCH

**WHY**

SELECT EQUIPMENT

BY TYPE | BY INDUSTRIES

- BACKHOE LOADERS
- COMPACT TRACK LOADERS
- COMPACTION EQUIPMENT
- CRAWLER DOZERS
- EXCAVATORS
- FORKLIFTS
- MINI EXCAVATORS
- MOTOR GRADERS
- SKID STEER LOADERS
- TRACTOR LOADERS
- WHEEL LOADERS - COMPACT
- WHEEL LOADERS

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TRACTOR LOADERS FOR ALL INDUSTRIES



## CASE TRACTOR LOADER

The CASE 570N EP (Efficient Power) Tractor Loader offers the same industry-leading performance as our 570N XT Tractor Loader, but is engineered with a maintenance-free Tier 4 Final engine. This efficient model delivers the power, speed, versatility, gradeability, outstanding reach and superior serviceability that customers have come to expect from CASE while also meeting the industry's latest emission standards with a cost-effective solution.

Sorted By: ENGINE POWER

UNDER 75HP | 76HP - 100HP | OVER 100HP

570N EP



**ENGINE POWER**
74 hp (55 kW)
**OPERATING WEIGHT**
11,134 lb (5,051 kg)

More Details

NOT IN LIST?
TRY TO SEARCH FOR PRIOR MODELS: model

SEARCH

# Exhibit D

LAFIRE.COM
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September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

F-113 REV-(3-78)

**City of Los Angeles**
**DEPARTMENT OF FIRE**

ANALYSIS OF GREATER ALARM OPERATIONS

| LOCATION: | DATE: | TIME: | PLATOON: |
|---|---|---|---|
| Laurel Canyon Brush Fire | 9-16-79 | 14:57 | A XB C |
| **TYPE OF OCCUPANCY:** | **OCCUPANCY CODE** | | **ESTIMATE LOSS** |
| Brush and Structures | 850 | | $4,000,000. |

**COMPANIES AND CHIEF OFFICERS RESPONDING:**
26-Chief Officers
76-Companies

**EVALUATION OF OPERATIONS/SUGGESTED AREAS FOR IMPROVING FUTURE OPERATIONS:**

I. SUMMARY:

This fire was of major proportions on arrival of the first Companies. I do not believe that in the last 10 years we have been faced with the degree of property loss and potential loss in the early stages of any brush fire as posed by this one.

I would estimate that at least one-half to two-thirds of the structure loss occurred before the Fire Department laid the first line. The overall losses were minimized in relation to the potential because of the overwhelming efforts by every involved member. This is not to say that every action was correct and operational improvements are needed as will be addressed under "Operational Improvements."

This Form F-113, Analysis of Emergency Operations, is a very brief overview of the fire and suggestions on how I feel we can improve our operations for future incidents. One of the best learning tools I have found from this fire is in reviewing the tape recordings of radio communications, not once, but several times.

II. CONDITIONS AFFECTING FIRE:

The topography of the fire area is comprised of steep hills, heavy brush, very winding narrow streets, with single ingress and egress, a heavy concentrations of older structures built in close proximity to each other on top of ridges. In addition, the area has a poor water distribution system.

The majority of structure loss occurred prior to the arrival of Fire Companies, or before Fire Companies could be deployed into the area. In areas where Fire Department resources became operational, minimum fire loss progressed beyond that point.

The primary reasons for the structure losses were high temperatures for the previous two weeks, low humidity, wind from the south-southwest, 10 to 12 knots, delayed alarm, wood siding, structures built on ridges, with minimal brush clearance, and the fire starting at the base of a very steep slope (approximately 70 degrees), covered with dense brush. With all of these conditions combined, the fire swept up the slope, exposing the houses on three ridges, where the houses sustained almost total destruction.

The aforementioned conditions were evident as observed by the first-responding Companies, in that the loom-up had attained an altitude of between 1,000 to 1,500 feet, and between 5 and 10 structures were involved before the first Companies arrived.

The primary reason for the losses being limited to the immediate area of involvement was the result of the coordinated efforts of all resources deployed during the emergency.

III. FIRE FACTORS

A. Major brush fire in progress on arrival of first Company with 5 to 10 structures involved.
B. Access--Very limited narrow winding streets, obstructed roadways.
C. Weather--BBI 54--Extreme, (red flag alert).
D. Structural--Older, adjacent to brush, minimal brush (clearance) built on ridge tops with very steep slopes coming right up to foundations, wood siding, large trees.
E. Water--Old systems with tuberculated mains, poor grid system, and hydrant spacing on dead-end mains.

I. OPERATIONAL IMPROVEMENTS:

These are areas, where if I had this same fire today, I would consider different actions than taken on September 16, 1979, (date of fire). I think we can all learn from this incident and hopefully will implement operational changes and thinking to equip our Command Officers to more effectively deal with this type of major fire.

A. Additional simulated training of Command Officers and staff personnel in the Incident Command System.
B. With a fire moving this fast, the Incident Commander should call for the closest Engine Companies to be sent to staging with sufficient Chief Officers and make up strike teams and deploy as needed.
C. The Incident Commander should consider setting up the Command Post at a Fire Station with adequate facilities.
D. The Incident Commander should require OCD to give him sufficient operating channels, i.e. one or two for fire ground, command, and Incident Commander to OCD.
E. The Incident Commander should name the fire as soon as possible for communication purposes. (The Laurel Canyon Fire was called five different names during its course.)
F. Better communication with helicopters must be established. Consider a Chief as air observation with a high band walkie-talkie. I could see the helicopter overhead, but had difficulty communicating.
G. Division Commanders and strike team leaders should release resources if at all possible when other Divisions are in need. You don't have to spring a whole strike team, maybe a couple of Engines will help.
H. Field Commanders need additional training in how to properly access

and address OCD.

I. Incident Commander is the only person who should contact OCD. All other Commanders should either use the fire ground or command channels.

J. All Division sedans should be equipped with outside radio speakers and transmitting capabilities for each radio head.

K. Specific persons must be assigned to monitor and communicate on designated channels. Too many radio messages were not acknowledged or had to be reported several times.

L. A Documentation Officer is very important to coordinate information and resource status.

M. Two staging areas should be considered, especially if the fire could cut off access from one end into fire areas, i.e. Laurel Canyon closed; staging at Sunset could not service north flank of fire.

N. It is important that all major changes in fire behavior, assignments, communications channels, and staging areas be announced over all operational radio channels connected with the fire.

O. That damage assessment be started while the fire is still burning, if at all possible. This may be done by strike team leaders through their respective Division Commanders.

II. CONCLUSION:

This fire, in my opinion, was handled well; and the on-line personnel, whether ground, air, staff, or resource, did their very very best. There are lessons to be learned. Some are identified in this report, and I hope more will be identified during the formal critique.

The best lessons learned or improvements identified are only worthwhile if we do something about them.

**NAME: RANK: ASSIGN:** **DATE:**
D.F. Anthony A/C Div.I-"C" 9-28-79

DIST:
COMMANDER--BUREAU OF FIRE SUPPRESSION THROUGH CHANNELS (ORIGINAL)
COMMANDER--BUREAU OF FIRE SUPPRESSION THROUGH CHANNELS (DUPLICATE)
COMMANDER--TRAINING SECTION THROUGH CHANNELS (TRIPLICATE)

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September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

LOS ANGELES DEPARTMENT

JOHN C. GERARD
CHIEF ENGINEER AND GENERAL MANAGER

October 5, 1979

| | |
|---|---|
| TO: | Bureau Commander, Bureau of Fire Suppression and Rescue |
| FROM: | Robert S. Furr, Commander, Battalion 9, "C" Platoon |
| SUBJECT: | ACTIVITIES DURING THE LAUREL CANYON BRUSH FIRE |

September 16, 1979

| | |
|---|---|
| 1503 hours | - Dispatched to Sunset and Fairfax |
| 1515 hours | - Arrived at Command Post, Sunset and Fairfax. Assigned the command function of Division "A", and directed to report to Kirkwood and Laurel Canyon Boulevard. Identity of companies working on the fire in this area was not given - no other resources were available at this time. Strike Teams requested were responding and would be sent to Division "A" as soon as available. |
| 1525 hours | - Arrived at Kirkwood and Yucca Trail (in bottom of Canyon directly below main front of fire) Established operational base at this point - Communications with S & R and I.C. through not good, seemed to be best at this point. Several structures on ridge above us and to the south were involved or exposed directly in line of travel of fire - winds at this time were mild, probably gusting from 15 to 20 M.P.H. My attempts to contact and identify the companies working on the fire, on the ridge above were unsuccessful. Messages to S & R regarding this initial size-up were not acknowledged. |
| 1535 hours | - Battalion Chief Olsen, Strike Team Leader (ST #20) reported on scene without his entire Strike Team - I directed him to take charge of the unidentified companies on the ridge and incorporate them into his Strike Team. The street that ran along the ridge was Grandview and Strike Team #20 was directed to operate in this area. This line was the head of the fire - Strike Team #20 was |

hampered in their efforts to move into position by the civilian traffic that clogged the narrow streets - Hordes of news media Personnel added to the congestion.

1545 hours

- Strike Team #20 reported that several of his companie were isolated from exposed structures on Grandview, due to high voltage power lines falling and blocking streets - He also reported a severe loss of water pressure in this area. These problems were reported to S & R and Water and Power requested on the ridge.

1555 hours

- Fire spotted on hillside behind us to the north, several structures along Kirkwood were exposed and fire was sweeping up towards other structures on the ridge.

1600 hours

- Strike Team #22 (B/C Dianitto) reported on scene - They were directed to cover the exposed structures on Kirkwood and B/C Dianitto was directed to take the balance of his team to the 8400 block of Ridpath and Brier Drive. There he placed his companies strategically to head off the fire moving toward numerous structures. Strike Team #20 was successful in containing and extinguishing this sector of the fire with a minimal loss.

1610 hours

- L.A.P.D. appeared in the Canyon with an evacuation team (four sedans) over a P.A. they were announcing that all residents were to evacuate this fire area - I stopped the team and discussed the situation with the Officer in charge. I requested that they discontinue their activities until I could contact our I.C. for confirmation. My contact with the I.C. proved they were unaware of this action. I recommended to the L.A.P.D. command to reconsider the seriousness of this action and confirm this with their C.P. They discontinued their efforts of evacuation at this point.

1620 hours

- Containment of the fire at this point was evident - some structures were still burning but lines were in position for extinguishment and aided by excellent water drops, full extinguishment was in sight- The winds had favored us throughout the fire never becoming a predominant factor.

CONCLUSIONS:

Narrow streets, some practically inaccessible to fire apparatus, coupled with hordes of sight seer, residents and numerous teams from the news media, clogged the streets with autos and foot traffic. This condition prevailed throughout the height of the incident and hampered our operations severely. Inability to put adequate companies on the fire in the initial stages was due to the method employed requesting Strike Teams from OCD. It is my opinion and certainly a confirmed policy in some areas, to call for x number of companies and x number of B/C's to a staging area in the early stages of the fire. This allows the I.C. to put the first arriving units in the most critical areas. It also provides a positive control of documentation and assignment.

It occurs to me that development of the I.C.S. was somewhat out of sequence or priority, when I was assigned a critical field command function with no identifiable resources! The segment of the first alarm companies in the area of Division "A", were not under any specific command and my efforts to rally them together was futile, attempts to identify them by number only was not accomplished for approximately 45 minutes to 1 hour.

Regardless of the difficulties encountered in organization, the companies working on the fire on Grandview and without a specific command, displayed a high degree of initiative in augmenting their water supply from swimming pools. Their aggressiveness and ingenuity played a major roll in stopping the spread of fire.

Strike Team #22 under command of B/C Dianitto was an example of <u>effectiveness</u> of our I.C.S. This team reported as a unit to my command received a briefing, were assigned a mission and under positive direction accomplished their goal. Strike Team #22 kept me informed with <u>short concise</u> radio messages regarding the needs or changing situations in his area.

| | | | |
|---|---|---|---|
| COMPANY/STATION OR UNIT COMMANDER | ASSIGN. | DIVISION COMMANDER | ASSIGN. |
| BATTALION OR SECTION COMMANDER | ASSIGN. | BUREAU COMMANDER | OPERATIONS |

F-225 - REV. 2-78

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September 16, 1979
The Kirkwood Bowl/Laurel Canyon Fire
Hollywood Hills

Los Angeles Herald Examiner, Monday, September 24, 1979

# FIRE! IN LAUREL CANYON

One of the most spectacular blazes of this year's brush-fire season occurred Sept. 16 in West Hollywood's Laurel Canyon, where a four-hour inferno destroyed 23 homes, partially ruined another five structures and caused an estimated $4 million damage. But what quickly became yesterday's news, remained a human tragedy for those left without homes or possessions.

For five days, a team of Los Angeles Herald Examiner reporters trooped from lot to lot in the charred Hollywood hills trying to record the effect of the fire on the people whose homes vanished in smoke.

Ironically, they discovered that two houses at 8280 and 8320 Grandview listed by the Los Angeles Fire Department as destroyed, in fact never existed. And, several houses that were ruined were not on any official list. Two structures listed as fatalities on Cole Crest, apparently referred to two houses at a different address.

The reporters also discovered Laurel Canyon homeowners were badly underinsured and whatever is done to rebuild the area -- with its narrow roads and limited water supply -- it will remain one of the city's most visible tinderboxes.

This report was prepared by staff writers Rudy Aversa, Ellen Futterman, Carol Gulotta, Andrew Jaffe, Robert Knowles, Sarai Ribicoff and Joel Sappell.

* * * * *

## 8464 COLE CREST DRIVE

**Lost:a 350-page book draft and an 1831 Goethe Bible**

Wolfgang Brook, 51, an executive at a bead curtain plant, and actor James Dobson were finishing a tostada lunch on their patio, enjoying a somewhat smoggy view of the city. When Brook got up to take the dishes into the kitchen he saw the flames coming from next door ... "I screamed (to Dobson) to get out." They got their dogs -- an Afghan hound and whippet -- and ran for the car in the ground-floor garage.

## 8476 COLE CREST DRIVE

**It was a wood-stone affair with a magnificent fireplace**

Jack R. Kime and George E. Hunt had lived in this view house for 15 years, according to neighbors. The house, constructed of wood and stone and built around a kidney-shaped swimming pool, they said, was designed by architect Ray Neutra. Little is known of the two men, who were not seen at the burned-out premises after the fire. At the time of the blaze, neighbors said only Hunt was inside and he was able to escape before flames engulfed the structure. No one knew if the two men would rebuild.

## 8482 COLE CREST DRIVE

At the last moment, Brook grabbed a porcelain statue and some Waterford crystal and threw them into the delta-shaped pool. They survived the holocaust. Everything else, including a 350-page draft of a book Dobson was writing and Brook's rare-book collection -- with an 1831 Goethe Bible -- was lost.

And the men had a close shave of their own. Just as they were about to leave, Brook discovered he couldn't get the automatic garage door to open, because power was out in the fire area. Several vital minutes were lost before Brook finally found the key to switch the door on to manual operation. The whole experience left both men shattered. "Insurance will never cover it," said the tired, defected Brook, picking up a pair of melted eyeglasses from the rubble around the pool,"but we'll rebuild."

### Actress lost video tapes of TV show, Warhol posters

Actress MacKenzie Phillips was on the way back from her honeymoon in Hawaii when the fire broke out. She and her husband Jeff Sessler, rushed from Los Angeles International Airport to the house, but arrived only in time to witness the still-smoldering ruins. A friend said she lost her collection of Andy Warhol posters and video tapes of the television show she costars in, "One Day at a Time." Worst of all, her pet cat, "Brains," either died in the fire or ran away.

Phillips is staying in a hotel temporarily and she is looking for a rental property to stay in during the rebuilding of her home. "I haven't been able to sleep thinking about that fireplace," she said.

One bright spot, however. Neighbors and police managed to keep her Mercedes 450 SL from being destroyed.

## 8500 COLE CREST DRIVE

### Police said he'd be arrested if he tried to save his house

Ernst Mayer had the frustration of being one of few residents away from home who reached the area possibly in enough time to save his own house from burning. The 43-year-old construction company owner saw the fire from the city at about 2:30 and immediately drove home in his Ford Mustang. Coming in from Blue Heights Drive to the west, he avoided police barricades making way for Fire Department vehicles.

Mayer rounded up eight neighborhood friends with trucks as a rescue crew. But police in the street and on his driveway kept him and his crew from the threatened property. Mayer steered the convoy up a hill for a quick escape and then tried to come back alone to rescue his pet cat, Tanya, who was locked inside the house. But, he again was stopped by a policeman.

"He told me he would arrest me if I tried to go in," remembered Mayer with obvious bitterness. "I only regret I didn't get his badge number." Mayer stood there, infuriated, watching the windows break in the fire ... then he heard the burglar alarm go off. About 5 p.m. the fire overtook the wood-frame structure, burning it to its foundation and gutting a cement-block garage and office complex below.

Besides all his office records, Mayer said he lost $20,000. worth of cameras, expensive underwater equipment and rare art brought back from overseas jobs, including a 14th-century Sukothai Buddah statue and a 2,000-book library. The cat was never found.

Mayer said he had little insurance. "The superscoopers dropped three loads on the house on the hill," he said pointing to a house that had been spared by the fire. "But nothing here until it was too late. I'm sure if we could have watered the roof and fought the blaze ourselves we could have saved this place. Instead it's gone. I told the cop (who stopped him) I had a gun inside. I was so mad, if I had got to it I might have blown his head off. It's a terrible thing standing and watching your home burn when you can still do something to save it."

Mayer said a decision about rebuilding would have to await a settlement of his insurance claims. Meanwhile, he was struggling to relocate the headquarters for his construction firm at another address.

## 8438 BRIER DRIVE

### It took 20 years to build; only $60 in coins remained

Michael Duzick, 62, a technical engineer for NBC-TV on sick leave with a back injury, was working in the back yard of his redwood home one ridge behind the fire when he saw flames on Grandview. The fire seemed as far away ... until a change of wind made it jump to Brier Drive.

Duzick saw the flames start up the hill. "It was so smoky. I'd take a breath, then hold it and water the hill, then run back for another breath," he recalled.

Two police officers tried to help by watering his roof, until the pressure dropped. "Then the police told me: "That's it. This is the end." A half-hour later, a fire truck arrived. But it was too late. A redbrick chimney and a cement stairway were all that remained of the rustic, $200,000 home. It had taken 20 years to build and all that survived was $60 in coins in a homemade wall safe.

Among the prized possessions lost in the fire: 12 hours of 60mm film on his children's travels, a 10-speaker homemade stereo system ("it sounded like Hollywood Bowl") and a collection of expensive cameras. He plans to rent a trailer and live on the property. "I don't know if I can rebuild it now," he said. "I'm too old."

## 1745 CRISLER WAY

### 'I cried and cried and cried and then collapsed'

All that was left amid the blackened rubble of Sid and Marie Loev's two-bedroom, single-story, 28-year-old house was a red-brick fireplace and a concrete front porch leading nowhere. Mrs. Loev, whose husband works as a camera salesman in Los Angeles, was dabbing at her eyes with a tattered tissue early this week, as she scanned what was once her $170,000 dream home. "We lost everything," the blond, middle-age woman said. "But we have each other...You can't buy a life."

The Loevs were at a Sunset Boulevard supermarket when they looked up and saw their street on fire. They tried to return to their hillside home, but were stopped at a police roadblock. All they could do was watch it burn from below.

## 1741 CRISLER WAY

### Wardrobe now consists of blue jeans and a T-shirt

Song writer Mike Hazlewood was lounging on the sundeck of his two-story home, listening to Stravinski's Violin Concerto in C, when he heard what sounded like "water from an open fire hydrant" gushing through the dense, dried brush on the hillside below.

But before the lanky, Englishman could peer down the steep cliff, fire was everywhere. "I couldn't believe it was happening. I had that feeling that everything was going to be OK until I saw a 50-foot-high flame devouring a home at the end of the street," he said. Though shaken, Hazlewood had the presence of mind to scoop up the manuscript of a musical he'd been working on for two years, a couple of tape recorders and then ran outside to his maroon, 1979 Cadillac Seville

## 1755 CRISLER WAY

### They scampered for safety in only a towel and a robe

Rather than brave the city's sweltering heat, Steve and Debra Karpf decided to spend Sunday in their air-conditioned bedroom, snacking and watching the Dallas Cowboys-Chicago Bears game on television. Outside, they heard what sounded like a 70-mph wind. Debra opened the drapes and saw flames. They immediately scampered for their lives -- Steve, with only a towel wrapped around his waist and Debra with a robe she threw on in a panic.

"I could actually feel the heat on my back as we ran down the street," Steve recalled. The couple said because of the smoke they did not have time to go into the downstairs area of the house and rescue their two cats. In addition to the cats, they lost two cars, including a prized

"I cried and cried and cried and then I collapsed," the stylish, retired teacher said. Besides their pet Sheltie dog, they lost a $4,000 Steinway piano, expensive camera and stereo equipment, a 1968 Barracuda parked in their two-car garage and a houseful of early American furnishings.

Loev, a stocky, rapid-talking man, said he plans to rebuild on the fire-charred site. "My wife's a little nervous about it," he said, wiping a hand over his curly hair. "But I'm not. Fires in the flatlands can be just as devastating."

parked in the garage.

As he sped away, he knew that everything else, including a $1,000 plus stereo system and a houseful of expensive French art prints, would be destroyed. "It was beautifully decorated," Hazlewood said of his view home. "Now it's a black pile of rubble." Hazlewood's wardrobe now consists only of a pair of blue jeans and a white T-shirt. Asked if he would rebuild, the ragged-looking bachelor replied: "I don't know. I just don't know."

1976 Cadillac convertible, a modest collection of antiques and a star-sapphire ring that had belonged to Karpf's grandfather.

But Karpf, who manages Nick's Fish Market restaurants, is most upset about sentimental items claimed by the flames, such as photographs of their 1978 wedding. All that was left of the towering three-bedroom house were two cinderblock walls, a fireplace and a murky, kidney-shaped swimming pool. "As each day goes by,"Karpf said, "we realize how lucky we were to get out...I guess we'll just have to start over."

## 8250 GRANDVIEW DRIVE

### She never had chance to get back inside her home

Leigh Christian and her baby, Toby, had just left home to shop at a Sunset Boulevard market when flames engulfed her one-story home. According to neighbor Don Connoley, the fire destroyed the home so quickly that the actress never had a chance to get back inside, Christian's husband, Norbert Aleaman, a film producer, was in France on business. Only a brick fireplace and the blue-and-white oval swimming pool remained of the redwood-and-glass ridgeline home.

Connoley said the couple's white Cadillac convertible burned along with the garage. The couple had another car, a Mercedes, which was not in the garage. The couple had another car, a Mercedes, which was not in the garage the day the fire broke out. A relative of the former owner of the house, Jacques A. Delepine, said it recently had been sold to a French investor, whom he declined to identify. He confirmed, however, that the new owner planned to rebuild.

Connoley speculated that Christian was lucky not to have been in the house during the fire. "It was the most incredibly scary thing," said Connoley. "But I guess Leigh was lucky not to be here."

## 8300 GRANDVIEW DRIVE

### Spiral staircase twisted like a giant dead insect

Jim Walker walked through the remains of the house he and his partner, Robert Huskinson, had been in the process of building for the past year. "There was a whole frame going 30 feet in the air," Walker said, "and now there's not more than an inch or two of ashes. The frames of the house and a guest house were gone with hardly a trace as were four 6-foot by 24-foot cantilevered wooden decks behind each house.

What remained were cinders, thousands of nails and a steel spiral staircase that had run up the center of the main house and now lay twisted out of shape on the ground, like a kind of giant multilegged dead insect. Looking at the scorched foundation, Walker laughed bitterly when he came across the words, "El Porto Construction 1978," inscribed in concrete. "When we poured the concrete, we put our name on it and we said, 'No one will ever see that again unless the house burns down.' " Walker said Huskinson had told him he wanted work on the house begun again at once.

## 8310 GRANDVIEW DRIVE

### They lost 'tons of clothes' and a new 924 Porsche

Film director Jack Frost Sanders was at a meeting at a midtown office building when he got a call from his answering service saying there was a fire near his home. The silver-haired young man ran to the roof of the office building and looked out at the hillside where his modernistic glass-and-wood home, designed by architect Raymond Neutra, literally was sandwiched by fire.

"I saw the homes on both sides go up," Sanders told a reporter later when he returned to the site. After he realized the hill was on fire, Sanders said he rushed to the bottom of the canyon, where he met his wife Nancy. The couple were prevented from going further by police and had to watch helplessly while their house burned to the ground.

"I'm convinced we could have saved it if they would have let us," Mrs. Sanders, a willowy blonde explained, when the couple returned to the site to search for mementos. She said they lost their collection of art deco furniture, including a baby grand piano, her fur coat, "tons of clothes," diamond jewelry and a new 924 Porsche.

They had planned to remodel the 1950s-vintage home, but now will have to rebuild. "It was all white-wood and glass...I guess we'll be able to start from scratch now," said a rueful Mrs. Sanders as she looked at their melted Porsche.

Pages of burned scripts were scattered around her feet. "One of the first things we did was make sure there were copies of the scripts we had in the house," said Mrs. Sanders. Only the swimming pool and patio furniture and said:"It's almost as if they're waiting for us to return."

## 8326 GRANDVIEW DRIVE

### Ceramic pots, charred plants stood askew near the lawn

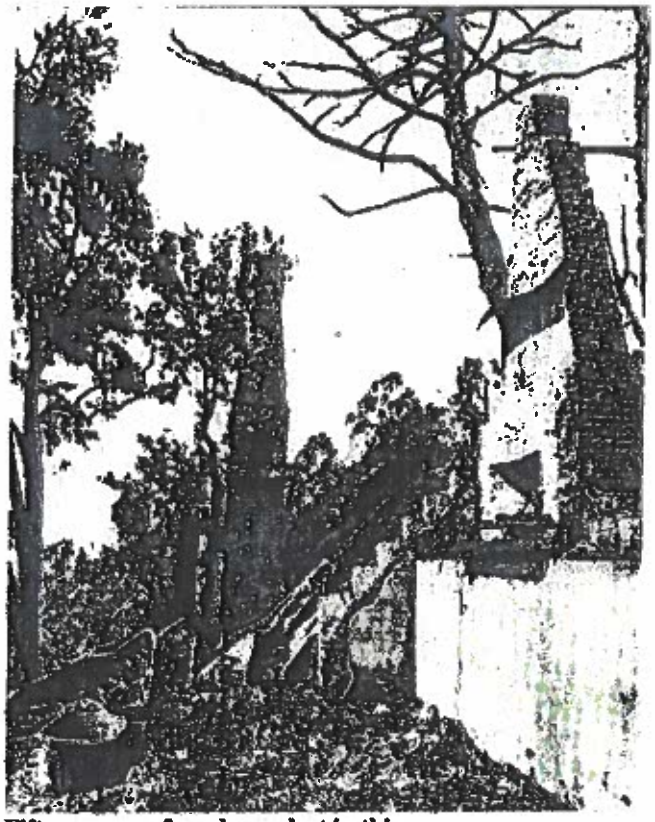
Dick Pearce, also a film director, didn't want to discuss the details of the fire which completely gutted his newly purchased, one-story home. The athletic-looking man stood with his wife in the rubble of the home they had moved into only six months ago, talking quietly to an insurance adjuster about rebuilding. As a reporter approached, he said politely: "There are things I really don't want you to hear."

Ceramic pots with charred plants stood askew on the edge of the home's ashen lawn. The blackened shell of an AMC Hornet was the only reminder of the place where a garage once stood. And all that remained of the living room was a massive, rustic wall built around a stone fireplace.

When the reporter returned, Pearce seemed too shaken to discuss the fire. He confirmed that he was out of town at the time of the blaze and asked if other residents had indicated a desire to rebuild. When told that they had, he said that was heartening. "I love it here," said the tall vacant-eyed director. "It had lots of plants, outside and inside the house."

## 8350 GRANDVIEW DRIVE

### Free-lance photographer lost 15 years of his work



**Fifteen years of work was lost in this duplex at 8350 Grandview Drive**

Free-lance photographer Phil Groves, 30, lost 15 years worth of work when the duplex he rented went up in flames. Groves was down the hill when the fire started. He tried to drive in, but police wouldn't let him through the barricades. He parked his car and began running up the steep hill, scooping up water that was draining off the hill to keep his throat wet in the acrid air.

When Groves reached the house, he and his companion, Geri Price, who had been drinking beer at a neighbor's house when the fire broke out, tried to save his portfolios, negatives and slide collection. But the fire quickly devoured the cabinlike house built in the late 1800s.

John Schweitzer, a carpenter who rented the other half of the duplex house, according to Groves, lost his power tools, a few gold coins, some handcrafted furniture and a modest collections of diamonds.

Groves, who said his work has appeared in European men's magazines, said he didn't know where he would go now. "I was only living there for three months," he said in a soft British accent. All that remained of the two-story house was a large bathtub, tipped on its side and two fireplaces.

"I lost 15 years," said Groves, sipping a beer at the undamaged house of a neighbor across the street, where he was staying temporarily, "I guess I don't have to worry about material tings anymore." He then leaned out his neighbor's window and yelled to no one in particular: "I'm free."

**8353 GRANDVIEW DRIVE**
**Musician lost rock diaries spanning 25-year period**

**8354 GRANDVIEW DRIVE**
**Former actor will rebuild; says he'll take the chance**

Rock-blues singer John Mayall's three-story home was nicknamed "The Brain Damage Club," because of the great parties thrown there. A private movie-viewing room and swimming pool built into the side of the hill made the house ideal for barbecues and parties.

Mayall and a few friends were watching a movie in the house when the blaze started. They were able to escape, but the house with a film library of 2,000 hours of video-taped movies, many valuable 16th century antiques, a pornography collection dating back to the 1800s and rock'n'roll diaries spanning 25 years, was destroyed.

All that remained was a charred foundation and a hand-painted swimming pool, littered with soot and ash. Two cars, including a restored 1958 Volvo belonging to Mayall's son Jason, melted completely in the fire.

"We used to have some great barbecues here," said a blond in clog shoes and shorts, as she looked down on the remains of the Mayall home. "People used to jump out of the third story into the swimmingpool," she added, looking at a bedroom fireplace, the only remnant of the third floor. Neighbors said he had not yet decided whether to rebuild on the property.

It was just a lazy, carefree Sunday for Skip Ludwig as he sipped and dipped at Rock Hudson's Beverly Hills pool party. Yet a dozen miles away, Ludwig's $200,000 single-story home was ablaze--a fact he didn't learn until late that night when a kindly policeman drove him past the fire blockade and up to the charred remains. "I was hoping my home was saved, but I wasn't fooling myself," the former child actor said.

The fire ruined not only his spacious two-bedroom house but also valuable collections of Victorian antiques and early-1900s carnival glass, tin-type photographs of his ancestors and countless career mementos. A friend's AMC Pacer that Ludwid was "babysitting" also was burned. Ludwig, who bought the white-and-blue house just last year, said he plans to rebuild, but he recognized the possibility fore could claim any reincarnation of his dreamhouse. "That's a chance you take living in the hills. I'll take it," he said.

## 8364 GRANDVIEW DRIVE

### Loss of family heirlooms makes owner 'just sick'

Bill Whaling was late sending in his fire-insurance payment. The hairdresser finally mailed it Saturday morning, after being told it would take four days to be processed. Sunday, fire claimed the home he has lived in for 16 years.

Whaling was in Seattle on business when disaster struck, but his roommate, Gary Harworth, said the house was destroyed within minutes. "I was sitting in the house when I realized the fire was coming up the hill," said Harworth. "I got the dog (a German shepherd, Topaz), and the pet rabbit, put them in the car and drove down the street. But when I came back up to get the valuables pot of the house, the flames had spread."

Whaling sifted through the ashes, looking for valuables. But even before he returned from Seattle, a friend, Milly Paul, came to the premises with Harworth and recovered a box of gems Whaling kept hidden under a bed. Paul, who said she had once lived in the house, told a reporter the box contained gold, silver, some watches and turquoise Indian jewelry.

On his return, friends presented Whaling with the gems and the Cadillac Harworth moved before the fire got too close. But he insisted their recovery barely made up for his losses. "I don't know," said Whaling. "I lost everything. Family heirlooms, antiques, and an entire collection of valuable paintings." Harworth said he lost an uninsured Chevrolet Camaro in the blaze. Whaling said he would have to wait to see if the insurance company would honor his late payment and make good part of the loss before deciding whether to rebuild. "I'm just sick," he said. "If I don't have fire insurance, I don't know what I'll do."

## 8370 GRANDVIEW DRIVE

### Country-rock group sleeping after show at Disneyland

At the time of the fire, Michael Riley and several other members of the country-rock group Pure Prairie League were living in the two-story,four-bedroom wood-and-glass house. They were featured at Disneyland the night before and friends said the group was still sleeping when the fire hit.

Chi Nishida, a co-owner of the house, returned to the premises later to take pictures of the damage. The owner declined to give any information about the group, which lost all their clothes, records and stereo equipment and some instruments in the fire. But she confirmed she does plan to rebuild. No member of the group was seen near the site in the days that followed the fire.

"What else can I do?" said Nishida with a shrug, picking through pieces of broken glass and fire-eaten wood that were all that remained of the structure. "I hope there won't be a next time when it comes to fire in this area."

## 8410 GRANDVIEW DRIVE

### Cadillac flattened into 2-foot-high metal pancake

For 11 years, Chuck and Ann Schneider spent their weekends building the two-story home that dominates the ridgeline where Grandview Drive runs into Cole Crest. After the blaze, only a 10-foot-high pole of twisted metal, cement hunks and other unrecognizable materials remained. A Cadillac that was in the garage when the fire struck had been flattened into a 2-foot-high pancake of melted metal by a fallen garage ceiling.

Oddly, the red-brick walls of the curved, crescent-shaped pool enclosure withstood the flames, but the glass panes which shaded light from the pool deck were shattered by the intense heat and were scattered in heaps in and around the pool.

The couple was seen in the vicinity of the fire late Sunday, but were not available for interviews later. Neighbors, who couldn't recall the Schneiders' professions, said they kept pretty much to themselves. One recalled, however, they seemed "extremely sad" about the loss. "I heard that Chuck had attended a demonstration of those superscooper planes at LAX," said one neighbor. "It's ironic and sad that those planes couldn't help him save his house.

## 8416 GRANDVIEW DRIVE

### Outdoor Jacuzzi fried, leaving cracked-cement hole

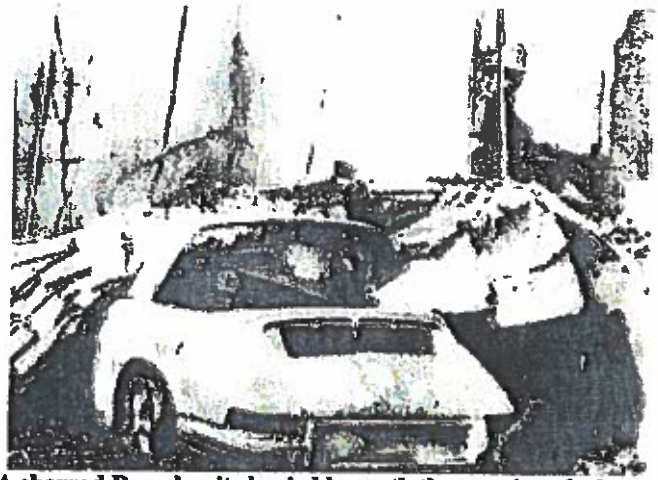
On the hill, just to the west of the Schneider home, separated by a tall, chain-link fence, stood two other homes only a few feet apart. One, overlooking the Sunset Strip at 8416, belonged to Armand Riza and Dan Bramson. The other belonged to night club impresario Elmer Valentine. Both were burned so badly it was hard to tell where one house began and the other ended. (Valentine also owned a house at 8400 which only was partially damaged).

Flames nearly melted the electric gate that protected the two homes from intruders. Neither Riza nor Bramson were available for interviews. However, it was clear from the charred debris that they were able to rescue few of their possessions.

The white tile of the main bathroom was a heap on the ground. What appeared to have been some kind of outdoor Jacuzzi overlooking the city had been fried into little more than a cracked cement hole. After the garage floor fell about 10 feet down the hill, the heat from the ashes stretched a Mercedes sport coupe into a grotesquely elongated figure, with half of its hulk still on high ground and the other part 10 feet lower. Only the three-pronged Mercedes emblem on the auto's hubcaps identified the car as a premier German make.

Standing intact in the midst of the ruins on a still-standing brick fireplace mantel was a small statue of an Inca god, its hands clasped together in prayer. Friends think Riza now is

living in another house he owns, this one in Malibu. His roommate, Dan Bramson, who runs the Universal Amphitheater, has been in New York on business, according to friends.



**A charred Porsche sits buried beneath the remains of a house owned by Elmer Valentine on 8424 Grandview Drive, but the nightclub owner is more upset about his two missing dogs.**

## 8424 GRANDVIEW DRIVE

### Whisky-a-Go-Go owner searching for bull terriers

Elmer Valentine, owner of three Sunset Boulevard nightclubs--the Whisky-a-Go-Go, the Roxy and Rainbow Room -- was visiting friends when the fire erupted Sunday. His first thoughts were for his three bull terriers. He rushed home in his chartreuse Mercedes, but couldn't get through police roadblocks.

A day later he toured the neighborhood with two weepy teen-age girls but gruffly shooed away reporters. Finally, reached by at phone at his Whisky-a-Go-Go office, Valentin explained that he had found only one dog and was heartsick.

"There is no way I can replace my house. Only ashes of it are left," the bachelor said. "I am making some plans to rebuild. But right now I'm worried about my dogs

## 8446 GRANDVIEW DRIVE

### Two little girls fearful, still frightened after ordeal

G. Greely Wells Jr. animator and free-lance artist, was doing some yard work when he spotted the fire several hundred feet down the hill. Misjudging the speed of the wind, he took time out to run back inside and call the Fire Department. Meanwhile, the fire sped to the edge of his property and he heard a friend shout for him to gather up his two daughters, Beth, 8, and Meg, 6, who were inside watching television, and get out.

The Wells family piled into neighbor Dan Weiss' car and drove into the inky smoke that now clouded their way out of the canyon.

"A neighbor (Weiss) drove through the blaze and got them safely out of the area," Wells' ex-wife, Cathleen, explained. "The girls told me the fire was all

## 8450 GRANDVIEW DRIVE

### Resident says TV crews blocked firefighters' trucks

Dan Weiss, 53, who describes himself as a home-furnishings executive, was watering shrubs and plants that border his hillside home when he smelled smoke. Weiss shares the house with fabric salesman Ron McGraw, 40, who was down the street at the time, and high school teacher Darrell Parker, 34. Weiss recalls McGraw shouting to tell him there was a fire in the area. He said he yelled back to McGraw to alert his neighbor, artist Greeley Wells, and his two daughters at 8466 and then started to organize his own escape.

Leaving the area wasn't easy for the grizzled Weiss, who had spent most of a lifetime in the neighborhood. "I've been on this hill 26 years," he said, staring gravely at the wreckage.

The three men were left with

and trying to do everything I can to find them."

Two of the missing bull terriers, Bo, and Annie, may have escaped through a dog door when the fire started. A third terrier, Maggie May, wandered over to the wasted Ernst Mayer residence, where Mayer's friends caught and returned her. Valentine said the missing dogs both were wearing yellow identification tags around their necks at the time of the fire. He declined to discuss what was destroyed in the fire.

A friend described his one-story stucco house as "lavish." Certainly it was clear from the wreckage that the house had been spacious: there was a rectangular outdoor swimming pool, a stone fireplace and a wooden deck that skirted the hill. In the garage area was the burned frame of a Porsche 924. On the front stoop, four wine bottles -- their labels and corks charred but intact -- stood next to a ceramic turtle sitting on a rock.

"He's really upset about the dogs," explained a receptionist at Whisky-a-Go-GO. "We hoped the dogs would come to the club since they are familiar with the place but so far they haven't showed up. Everything is just so upsetting."

around the car as they drove through the hills. The kids said that if (Weiss) didn't know his way out of the area, they could have been badly injured. The fire was spreading that fast." Later, she said, the girls complained of having fears about the fire, which she tried to quiet by telling them they could use it for "show and tell" at school.

The Wells' redwood home burned to the ground. Not only did he lose his house, but he also lost all of his paintings. "As it was, one of the kids left the house barefoot and all Greeley had on was red underwear and some flip-flops." Mrs. Wells said. "There was no time to grab anything, they just got out as fast as they could."

The family cat, Biscuit, was also lost in the blaze, but may have escaped through a door opening. All attempts to locate the blotchy orange, black and white cat so far have failed. Mrs. Wells said her ex-husband was staying with a friend and planned to rebuild.

nightmares. "I can't sleep at night thinking how lucky we are to be alive," Weiss added. "It all happened so fast. By the time we got to the car, there were cinders as big as your first flying through the air. I remember trying to get the car started with one hand and get the electric windows closed with the other while cinders blew in on us." He drove the car into what he called a "solid wall of black smoke" feeling his way down the narrow road.

The fire was so intense it melted McGraw's Chevy Caprice and a Datsun 240Z, owned by a woman visiting the men from Airzona. The three men didn't have time to take any of their possessions. They left in bathing suits, Weiss receiving burns down the side of one leg. An ABC television crew took pity on them and donated pants and a T-shirt. Weiss was luckier than the other two: some friend gave him a pair of Gucci loafers.

Standing in the rubble of what was left of their house -- the outline of a stone fireplace and twisted water pipes which in a mocking afterstatement, a day after the fire, were still spouting water -- Weiss and his partners were unable to say for sure whether they would rebuild. "I have nothing left," said Weiss. "I have nothing left," said Weiss. "I'll be lucky to find my grandfather's diamond ring in this mess." His only criticism: that Fire Department trucks were blocked by television cameramen who converged on the tiny street. "Twenty minutes after the fire started, they still couldn't get a truck in here," he said.

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# Exhibit E

**Jason Hernandez** <jason.hernandez@lacity.org>
Date: Tue, May 15, 2018 at 3:38 PM
Subject: Re: 1800, 1806, 1812 and 1818 Crisler Way/Case Nos. ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD and ZA-2015-4149 ZAD/ENV 2015-4131-MND (A-F): HEARING DATE: May 22, 2018
To: Jamie Hall <jamie.hall@channellawgroup.com>

Hi Jamie,

All the information Aidan copied is the material we currently have. If you need to review letters that were referenced in the Geo and Soils Approval Letter, you should speak to LADBS about those files. Furthermore, our department does not review sewer plans as it does not fall under our expertise. The plan sets that are provided to LADBS during plan check add additional plan sheets that are not subject to our review because they do not fall under our purview.

Best,

On Tue, May 15, 2018 at 2:44 PM, Jamie Hall <jamie.hall@channellawgroup.com> wrote:

Hi Jason:

Aidan O'Brien made copies of all the materials in the case file and the list of documents I e-mailed you are NOT in the case file. Yet, they are referenced in the MND. Please advise.

**Jamie T. Hall**
Channel Law Group, LLP
8200 Wilshire Blvd., Suite 300
Beverly Hills, CA 90211
Main Number: (310) 347-0050
Direct: (310) 982-1760
Fax: (323) 723-3960
Email: jamie.hall@channellawgroup.com
Website: www.channellawgroup.com

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On Tue, May 15, 2018 at 2:41 PM, Jason Hernandez <jason.hernandez@lacity.org> wrote:

Hi Jamie,

You are free to review all materials provided to us that are found in the Crisler Way case files. All the technical studies that were provided to us are those available online. Let me know when you would like to come in so I can have the case files ready for your review.

Best,

On Tue, May 15, 2018 at 1:58 PM, Jamie Hall <jamie.hall@channellawgroup.com> wrote:

Dear Jason:

We are reviewing the MND for the Project and would like to request the following documents:

-- Plans for the roadway
-- The geotechnical reports for the four houses and the roadway, including:
- Addendum Report CYG-14-7350, 3/31/15
- Dept. Correction Letter 79258-01
- Addendum Report CYG-14-7350, 11/26/2014
- Dept. Correction Letter 79258
- GeologylSoil Report PG 1091
- Approval (Lots 97 & 98) Log # 36891
- Geology/Soil Report PG1224, 9/19/2012

-- Stormwater Drainage Plan, Robert Anderson, Architect, dated 3-12-2015, including Sheet Number A-1.1
-- Hovell and Pilarski Engineering, Inc., Sewer Plan and Profile, Grandview Sewer Main, Design Permit/Construction Permit BC-401804.
-- Sewer line plans for the four houses
-- Any other technical studies or plans that aren't included as technical appendices to the MND that are available in electronic format.

Thanks,

**Jamie T. Hall**
Channel Law Group, LLP
8200 Wilshire Blvd., Suite 300
Beverly Hills, CA 90211
Main Number: (310) 347-0050
Direct: (310) 982-1760
Fax: (323) 723-3960
Email:jamie.hall@channellawgroup.com
Website: www.channellawgroup.com

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# Exhibit F

**Reference Number** 8910 **Job Address:** 8350 GRAND VIEW DR.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CLASS "B" APPLICATION / PERMIT (DESIGN PHASE)<br>ISSUED UNDER SECTIONS 62.105 TO 62.116 INCLUSIVE, LOS ANGELES MUNICIPAL CODE (SEE REVERSE HEREOF) | | | | | | | DISTRICT: WEST LA | Work Order(s) BR402571 | |
| I HEREBY REQUEST PERMISSION TO CONSTRUCT THE IMPROVEMENTS DESCRIBED BELOW UNDER PRIVATE CONTRACT AND, IF PERMISSION IS GRANTED, I AGREE TO CONSTRUCT SAME IN ACCORDANCE WITH PLANS AND/OR SPECIFICATIONS APPROVED BY THE CITY ENGINEER. I ALSO ACKNOWLEDGE THAT I HAVE REVIEWED THE GENERAL INFORMATION PRESENTED ON THE REVERSE OF THIS APPLICATION, AND AGREE TO THE PROVISIONS STATED THEREON. | | | | | | | SHEET NO. 1 OF 2 SHEETS | DATE ISSUED: 01/12/2016 | DATE EXPIRES: 01/12/2018 |
| MJR PROJECT/PROJECT: EBPER/ EBPERGEN | PROGRAM: 7804 | ENGR DIST.: E6201850 | | REIMB FLG: YES | | | DIR/INDIR: D | | |
| STREETS AND LIMITS TO BE IMPROVED (SEE CONSTRUCTION TOTALS AT RIGHT)<br>GRAND VIEW DRIVE & CRISLER WAY (S.W. CORNER)<br><br>ESTIMATED 2% Surcharge = $696.00<br>ESTIMATED 7% Surcharge = $2,436.00 | | | | | INDICATE SCOPE<br>GRADING, PAVEMENT, CURB & GUTTER, DRIVEWAY, STORM DRAINS. (DEPOSITED $3,000.00 ON 9/7/2012.) (REQUIRED INSPECTION DEPOSIT AMOUNT = $37,932.00)THIS PERMIT SUPERCEDED THE CLOSED BC401611,P-35874 WAS APPROVED PER BC401611,PAID $53,737.00 ON 02/17/2015. | | | | |
| ENGR. PLAN CHECK DEPOSIT $0.00 | Number of Trees 0 | Wells 0 | Tree Planting Fee $0.00 | District Map Number 148.5 A 175 | DIVISION INDEX | DRAINAGE MAP 470 | COUNCIL DISTRICt 5 | CONSTRUCTION ITEMS | ESTIMATED COST |
| Sandblasting Fee $0.00 | DOT Sign Deposit $0.00 | Traffic Deposit $0.00 | | PROPOSED R/W NO. | | SPECIAL REFERENCES P-35874 | | GRADING | $112,500.00 |
| CONST. - INSPECTION DEPOSIT $34,800.00 | | TOTAL FEE DEPOSIT $37,932.00 | | | | | | PAVING CURB / GUT. / SDWLK | $371,500.00 |
| TYPE OF PROJECT Street Improvement | | TOTAL BOND DEPOSIT $580,000.00 | | | | | | SEWER | $0.00 |
| IMPROVEMENT BOND NO. CAO140257 | | | | | | | | STORM DRAIN | $20,000.00 |
| LIABILITY INSURANCE NO. | | LIAB. INSUR. EXPIR. DATE | | | | | | STREET LIGHTS | $0.00 |
| PRIVATE ENGINEER HOVEL & PILARSKI | | | | | | | | TRAFFIC SIGNALS | $0.00 |
| STREET ADDRESS 4525 INDUSTRIAL ST. SUITE 4L | | | | | | | | SUBTOTAL | $504,000.00 |
| CITY SIMI VALLEY | ZIP 93062 | PHONE NO. 805-522-1900 | | | | | | + % PCF | $75,600.00 |
| OWNER (SEE REVERSE) AARON COHEN | | | | | | | | CONSTRUCTION ESTIMATE | $580,000.00 |
| STREET ADDRESS 1504 S. FLOWER ST. | | | | | | | | + % CIF | $0.00 |
| CITY LOS ANGELES | STATE CA | ZIP 90015 | | | | | | BOND ESTIMATE | $580,000.00 |
| (AREA CODE) PHONE NO. 818-335-0028 | DATE SIGNED BY APPLICANT | | | | | | | REGISTER RECEIPT VALIDATION | |
| SIGNATURE (SEE REVERSE BEFORE SIGNING) | | Job Address: 8350 GRAND VIEW DR. | | | | | | | |
| APPLICANT'S NAME (ADD TITLE IF OFFICER) ROBERT ANDERSON | | | | | | | | | |
| DISTRICT/DIVISION OFFICE | ISSUED BY: KATHLEEN HUGHEY | DIST. ENGR. Mike Patonai, P.E. | DATE | Permit Title: In conn. w/ building permit GRAND VIEW DR. (8350) & CRISLER WAY S.W. CORNER (IN CONN.W/ BLDG. PERMIT) | | | | | |
| TIME | DATE | | | | | | | | |

**Job Address:** 8350 GRAND VIEW DR.

**GENERAL INFORMATION**
This form shall be used for all Class "B" Permits. It is not necessary to repeat the STREETS AND LIMITS breakdown on **CONSTRUCTION** B-PERMITS that are preceded by checking only permits.

**1. LIABILITY INSURANCE** and performance bonds are only required for approval of construction B-Permits.

**2. OWNER-APPLICANT** must be the owner of the affected property, and must be the same as the performance bond principal. Contractors for governmental agencies under faithful performance bonds shall be entered as OWNER-APPLICANT. Applicant issued to CORPORATIONS shall be executed by the President, Vice-President, Secretary or Asst. Secretary, and the CORPORATE SEAL shall be impressed.

**3. SAFETY ORDERS**--Sec. 6500 of the STATE LABOR OR CODE requires the APPLICANT to obtain a **STATE A DIVISION OF INDUSTRIAL SAFETY (DIS) PERMIT** and a copy of **STATE INDUSTRIAL SAFETY ORDERS** BEFORE BEGINNING WORK ON ANY TRENCH OR EXCAVATION **FIVE FEET OR DEEPER** into which a person must descend. City personnel will not enter such excavations until the required permit and safety orders have been obtained and are displayed on the job site.*

**4. PCF** percentage factors apply to possible construction change orders. CIF percentage factors apply to cost increases through the life of the project. (See CONSTRUCTION ITEMS on the reverse side of this application.)

**5. PLAN CHECKING DEPOSITS** are subject to charges for blueprints, engineering, testing, traffic signal design, street lighting design, and administrative service. **CONSTRUCTION PERMIT DEPOSITS** may be charged against for blueprints, engineering, testing, surveying, inspection, administrative services, emergency light and barricade services, street tree planting and maintenance, street lighting burn tests, Street Name signs, traffic warning and regulatory signs, sandblasting and painting of traffic markings, erosion control, etc. Unused fees are refunded after closure of the permit. The applicant will be billed for unreimbursed charges (fee deficits).

**6. DESIGN OFFICE** will determine if applicant must dedicate a right of way to the City for construction purposes. The applicant shall open a right of way work order and deposit necessary fee with the REAL ESTATES SECTION, DEVELOPEMENT SERVICES DIVISION, BUREAU OF ENGINEERING.

**7. NOT MORE THAN ONE TRACT OR PARCEL MAP SHALL BE ASSIGNED TO A SINGLE B-PERMIT.**

**8. PERMITTEE SHALL STOP WORK AND CONTACT THE PERMITTING AGENCY PRIOR TO CUTTING OR EXCAVATING ANY DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK.**
**9. ANY DAMAGE TO DECORATIVE SIDEWALK, PAVEMENT, OR CROSSWALK MUST BE REPAIRED IN KIND OR RECONSTRUCTED IN KIND BY THE PERMITTEE, AS DIRECTED BY THE PERMITTING AGENCY, IN A MANNER SATISFACTORY TO THE CITY ENGINEER AND THE INSPECTOR OF PUBLIC WORKS.**

**THIS CONSTRUCTION B-PERMIT MUST BE ON THE JOB SITE AL ALL TIMES.**

**THIS PERMIT VALID ONLY IF ACCOMPANIED BY A DIS PERMIT AND SAFETY ORDERS** (SEE NOTE 3 ABOVE). DIS PERMIT MAY BE OBTAINED FROM STATE DIVISION OF

**MULTIPLE PERMITTEE ENTRIES**
Ref. No. 8910

INDUSTRIAL SAFETY, 3460 WILSHIRE BOULEVARD, LOS ANGELES. **NOTE**: GOVERNMENTAL AGENCIES AND PUBLIC UTILITIES UNDER **PUC** CONTROL **ARE EXEMPT.** PRIVATE CONTRACTORS ACTING AS PERMITTEE FOR SUCH AGENCIES **ARE NOT EXEMPT.**

NOTE: CHARGES AGAINST THE PERMIT FEE DEPOSIT WILL BE COMPILED APPROXIMATELY 6 TO 8 WEEKS AFTER THE DATE FINAL INSPECTION IS COMPLETED. THE B-PERMIT WILL BE CLOSED AND THE IMPROVEMENT BOND EXONERATED AFTER ALL PERMIT FEE CHARGES HAVE BEEN ACCUMULATED AND PAID.

# Exhibit G

# Channel Law Group, LLP

8200 Wilshire Blvd
Suite 300
Beverly Hills, CA 90211

www.channellawgroup.com

ROBERT JYSTAD
JULIAN K. QUATTLEBAUM, III
JAMIE T. HALL *
CHARLES J. McLURKIN
NATASHA ERNST**

*ALSO Admitted in Texas
**ALSO Admitted in Oregon

Writer's Direct Line: (310) 982-1760
jamie.hall@channellawgroup.com


July 2, 2015

**VIA PERSONAL DELIVERY**

City Council
via Los Angeles City Clerk
200 N. Spring Street, Room 360
MS 160-01
Los Angeles, California 90012

**Re: Appeal to Board of Public Works of CEQA Determination for B-Permit No. BR402571 (Public Resources Code Section 21151(c))**

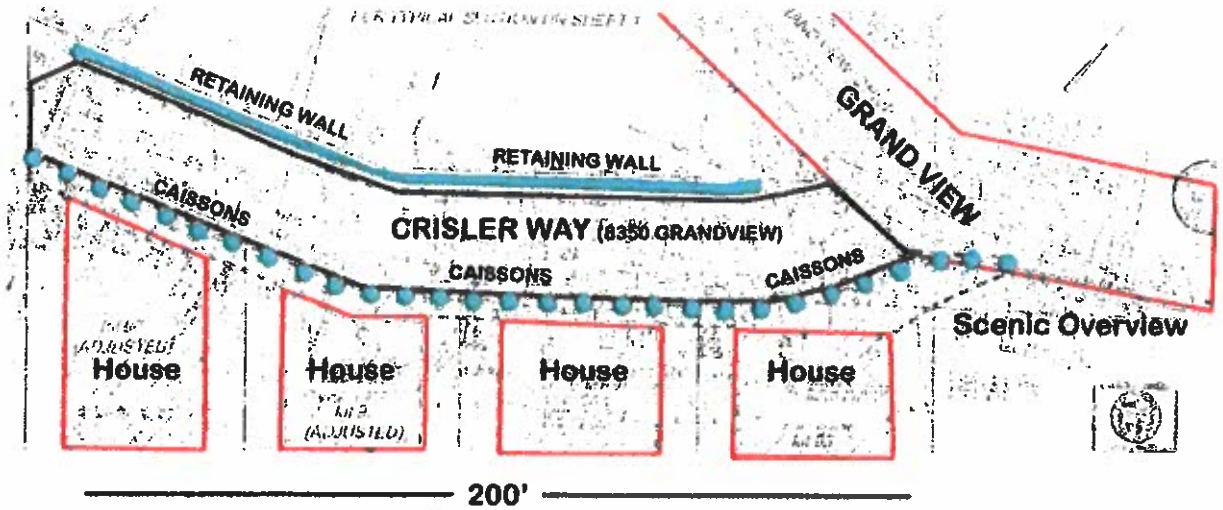
Dear Madame Clerk:

Concerned Citizens of Kirkwood Bowl ("CCKB"), an unincorporated association, hereby appeals any environmental determination (or failure to issue a determination) that has been issued for B-Permit No. BR402571 under the California Environmental Quality Act. This right to appeal is provided for via Public Resources Code Section 21151(c).

**The Project**

The City of Los Angeles Bureau of Engineering ("BOE" or "City") approved B Permit No. BR402571 on or about June 17, 2015 (hereinafter referred to as "Project."). The B-Permit would authorize the construction of a road known as "Crisler Way" – which is a "paper road." In other words, it only exists on paper. In reality, the road is part of a steep undeveloped hillside in the Hollywood Hills in a neighborhood known as the "Kirkwood Bowl." The plans submitted for B-Permit No. BR402571 demonstrate that the road would facilitate the construction of four new single-family homes. The plans also show that the road would be approximately 200 feet in length and would require up to 30 caissons and two large retaining walls. A marked up screenshot from the plans is depicted below.

The Plans




**Non-Compliance with CEQA**

The City either did not conduct any review for the Project as required by the California Environmental Quality Act ("CEQA") or erroneously determined that the Project was exempt from CEQA. The City previously determined that the *dedication* of the road was exempt from CEQA in 2006 via Ordinance No. 177533. However, the City did not approve the construction of the road at that time – only the dedication of the road. In other words, no physical change to the environment was proposed at that time. In issuing the B-Permit, the City failed to comply with the California Environmental Quality Act ("CEQA") as follows:

**1. Failure to Conduct Preliminary Review under CEQA**

The City was required to conduct a Preliminary Review to determine whether the Project was subject to CEQA before approving the B-Permit. CEQA Guidelines §15060, Pub. Resources Code § 21065. CEQA Guidelines § 15060(c) establishes a clear duty, stating "a lead agency must first determine whether an activity is subject to CEQA . . . ." However, there is no evidence in the Record that the City performed a Preliminary Review for the Project. This failure to perform a Preliminary Review constitutes failure to perform the City's duty. *Davidon Homes v. City of San Jose* (1997) 54 Cal.App.4th 106, 117 ("There is no indication that any preliminary environmental review was conducted before the exemption decision was made. The agency produced no evidence to support its decision and we find no mention of CEQA in the various staff reports. A determination which has the effect of dispensing with further environmental review at the earliest possible stage requires something more.") The City's approval of the Project, in contravention of this duty, was an abuse of discretion.

**2. Unlawful "Piecemealing"**

There are reasonably foreseeable significant environmental impacts associated with the construction of four new single-family homes on a substandard hillside road. It is clear that construction of the road at issue is intended to facilitate development. In fact the plans for the B-

Permit use the word "building envelope" and outline spaces for four new homes. New single family homes constructed on Grand View generally require a zoning permit pursuant to LAMC 12.21 A.17, namely a Zoning Administrator's Determination (or "ZAD"), public hearings, and require extensive environmental review under CEQA. For example, there are three new homes proposed on Grand View at this time and the City is conducting an Initial Study and has proposed Mitigated Negative Declarations ("MNDs") for each of these projects. *See* ZA 2014-3436-ZV ZAD (8289 Grand View), ZA 2015-718-ZAD-ZAA (8461 Grand View) and ZA-2014-2854-ZAD-ZAA (8413 Grand View). An extensive environmental critique (consisting of 100 pages) was commissioned by residents for the home located at 8413 Grand View outlining the environmental impacts of that project. The City is still evaluating this project and has not issued any approval to date. There are similar, albeit heightened, environmental concerns related to the construction of a new road and four new homes along Crisler Way. Moreover, the road that Crisler Way will connect to (Grand View Drive) contains only one entry and exit point, has extremely limited parking, and is located in a high fire hazard severity zone. In fact, the historic Kirkwood Bowl fire occurred in 1979 at this exact location and burned down numerous homes. Also, the construction of the road itself will require excavation and hauling of dirt and there is no evidence that the City has approved a hauling route, which requires notice and a public hearing. In sum, there are very real environmental impacts associated with the Project that need to be analyzed.

The failure of the City to conduct an environmental review for the Project at this stage would amount to piecemealing, which is prohibited. *Berkeley Keep Jets Over the Bay Committee v. Board of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1358 ("There is no dispute that CEQA forbids "piecemeal" review of the significant environmental impacts of a project.") CEQA contemplates consideration of environmental consequences at the "earliest possible stage, even though more detailed environmental review may be necessary later." *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1346. The requirements of CEQA cannot be avoided by piecemeal review which results from "chopping a large project into many little ones-each with a minimal potential impact on the environment-which cumulatively may have disastrous consequences." *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283–284; *City of Antioch v. City Council* (1986) 187 Cal.App.3d 1325, 1333; *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370. For example, "[w]here an individual project is a necessary precedent for action on a larger project, or commits the lead agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project." CEQA Guidelines, § 15165.

**3. Cumulative and Growth-Inducing Impacts**

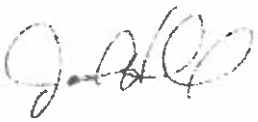
CEQA mandates that a public agency consider, among other impacts, a project's potential growth-inducing impacts. (CEQA Guidelines §15126(d), §15126.2(d); *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 368.) Here, the full improvement of this portion of Crisler Drive is likely to result in the development of at least four new homes that will be serviced by this roadway. The environmental effects of the road construction could therefore be cumulative and potentially growth-inducing.

**Conclusion**

Because the Project is not exempt from CEQA, the City should immediately issue a stop work order, conduct a public hearing and either rescind the B-Permit or require the Board of Public Works to conduct Initial Study under CEQA. *See* CEQA Guidelines § 15070(a).

If you have any questions, feel free to call me at 31-982-1760.

Sincerely,



Jamie T. Hall

# Exhibit H

# Department of City Planning

(/pdiscaseinfo/default.aspx) **Case Summary & Documents**

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4125-ZAD Search Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4125-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1800 N CRISLER ST 90069 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,221-SQUARE-FOOT, 3-STORY, 33 FEET ONE FAMILY DWELLING AND ATTACHED 2-CAR GARAGE

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,221-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]
**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES, INC.]

0 Case Documents found for Case Number: ZA-2015-4125-ZAD

| Type ↑ | Scan Date | Signed |
|---|---|---|
| No Documents were found | | |

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Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjA20 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjA20)



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(/pdiscaseinfo/default.aspx)

# Department of City Planning
# Case Summary & Documents

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4130-ZAD Search Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4130-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4130-ZAD

| Type ↑ | Scan Date | Signed |
|---|---|---|
| No Documents were found | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1806 N CRISLER WAY 90069 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33-FOOT HIGH ONE-FAMILY DWELLING WITH A TWO-CAR ATTACHED GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33FEET HIGH, ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjEx0 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjEx0)



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# Department of City Planning

(/pdiscaseinfo/default.aspx) **Case Summary & Documents**

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4146-ZAD Search Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4146-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4146-ZAD

| Type ↑ | Scan Date | Signed |
|---|---|---|
| No Documents were found | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1812 N CRISLER WAY 90046 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,653-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,653-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY 818-716-2689 [ Company:ROSENHEIM & ASSOCIATES, INC.]

View Related Cases

Permanent Link: http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjI40 (http://planning.lacity.org/pdiscaseinfo/CaseId/MjA1MjI40)



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# Department of City Planning

(/pdiscaseinfo/default.aspx) **Case Summary & Documents**

Case Number | Ordinance | Zoning Information | CPC Cards | ZA Cards

Case Number: ZA-2015-4149-ZAD Search Format: AA-YYYY-1234 Example: ZA-2011-3269 Advanced Search Help

**Case Number:** ZA-2015-4149-ZAD
**Case Filed On:** 11/12/2015
**Accepted for review on:** 03/29/2017
**Assigned Date:** 01/12/2017
**Staff Assigned:** JASON HERNANDEZ
**Hearing Waived / Date Waived :** No /
**Hearing Location:** CITY HALL
**Hearing Date / Time:** 05/22/2018 9:00 AM
**ZA Action:**
**ZA Action Date:**
**End of Appeal Period:**
**Appealed:** No
**BOE Reference Number:**
**Case on Hold?:** No

0 Case Documents found for Case Number: ZA-2015-4149-ZAD

| Type ↑ | Scan Date | Signed |
|---|---|---|
| No Documents were found | | |

**Primary Address**

| Address | CNC | CD |
|---|---|---|
| 1818 N CRISLER WAY 90046 | Bel Air-Beverly Crest | 4 |

View All Addresses

**Project Description:** CONSTRUCTION OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE IN THE HILLSIDE AREA

**Requested Entitlement:** A ZONING ADMINISTRATOR'S DETERMINATION, PURSUANT TO SECTION 12.24 X 28 OF THE LOS ANGELES MUNICIPAL CODE (LAMC), TO ALLOW THE CONSTRUCTION, USE AND MAINTENANCE OF AN APPROXIMATELY 1,710-SQUARE-FOOT, 3-STORY, 33 FEET HIGH ONE-FAMILY DWELLING AND ATTACHED 2-CAR GARAGE WHERE THE ABUTTING ROADWAY IS NOT IMPROVED TO A MINIMUM OF 20 FEET AND WHERE THE ROADWAY FROM THE DRIVEWAY APRON TO THE BOUNDARY OF THE HILLSIDE AREA IS NOT IMPROVED TO A MINIMUM WIDTH OF 20 FEET AS REQUIRED BY SECTIONS 12.21 C 10 (I) (2) AND (3), IN THE R1 ZONE.

**Applicant:** ROBERT ANDERSON [ Company:CAC DEVELOPMENT]

**Representative:** CHRISTOPHER MURRAY [ Company:ROSENHEIM & ASSOCIATES]

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# Exhibit I

Phone: (323) 650 3655
Email : apobr@yahoo.com

8382 GrandView Drive

Los Angeles

CA 90046-1918

March 25, 2015

TO: Zoning Administrator
Staff Contact Luciralia Ibarra

FROM: Aidan P. O'Brien MD

SUBJECT: ZA 2014-2854(ZAD)(ZAA)/ March 31, 2105 Hearing
Project Location 8413 GrandView Drive

**********

I have lived at 8382 GrandView Drive for 32 years.

I am deeply concerned about a proposed project at 8413 GrandView.

I wish this letter to be included in the packet for the hearing on Tuesday March 31

I did not receive a notice of the hearing even though I am within 100 feet of the project.

I object to the proposed development at 8413 on the following grounds:

**Site**

Grand View Drive is a Substandard Hillside Limited Street

At 8413 the road is 142 inches - less than 12 feet. BHO requires 20 feet.

See attached **Photo 1** with two adults lying down and they cannot do it head to foot.



PHOTO 1 – Substandard Street Width

This is at an acute bend in the road with a guardrail where it will be impossible to maintain traffic flow. **Photo 2.**

**Photo 3** is at this point on Grand View and illustrates the nature of the problem. The caterpillar occupies the whole street. This went on for over two years with construction at 8401 after we had been assured it was "temporary."

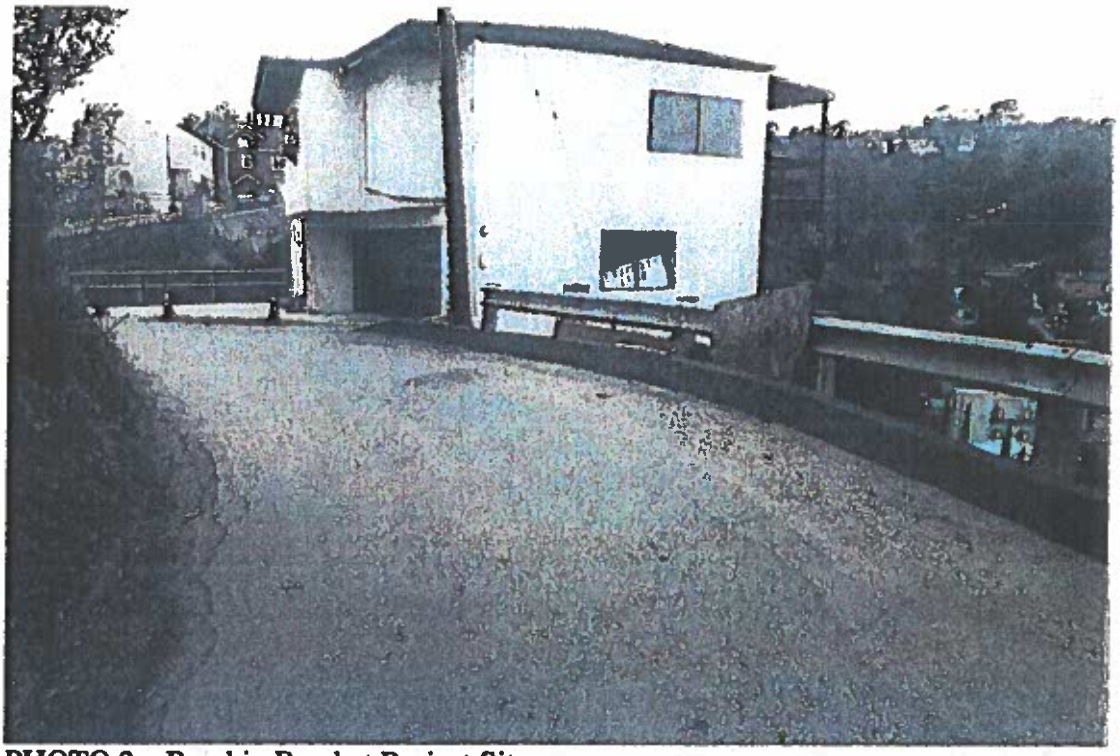


PHOTO 2 – Bend in Road at Project Site



PHOTO 3 – Construction Equipment for 8401 Grand View Blocking Street

It will result in multiple road closures such as happened at 8401.

This will divert all the traffic to Yucca where there have been so many water breaks.

**Plans**

I do not see any plans as follows:

- No plan for ingress, egress, parking or placement of trucks and equipment to eliminate or minimize disruption, damage and prevention of emergency services
- No plan for off-site storage of supplies and equipment
- No plan for staging of vehicles and heavy equipment;
- No plan for protecting the Substandard Hillside Limited Street and the structures in, on and under them from further damage
- No plan for protecting the homes of residents near the project from damage.

My own property was extensively damaged during the last construction and I was never compensated.

A recent illegal assault on the Lot at 8413 adjacent to it resulted in damage to the foundation at 8417 **Photo 4**

Plans include a swimming pool suspended from the hillside directly above the properties on Yucca Trail. Even without a swimming pool with 8401 the properties beneath suffered great danger with objects falling such that Hanna Melzer of Yucca had to leave for her own safety and has never returned.

The Initial Study and Checklist indicates "555 cubic yards of Grading and 340 cubic yards to be exported off site. With the proposed swimming pool I feel it will be way beyond that and over the BHO Limit. This is from what happened at 8401 GrandView with similar terrain when truckloads of dirt were hauled away at all hours under cover of dark

An independent slope analysis will be required to validate the height.

The geologicals will have to be redone as well as an Environmental report.

**GrandView Drive Condition**

The road is falling apart from construction at 8460 GrandView. The City has not repaired it. **Photo 5**



PHOTO 5 – Roadway Erosion and Damage.

It is costing the city far more in constant repairs to GrandView than any revenue from permits. **This makes no financial sense.**

**Cumulative Impact**

The neighborhood has profound fatigue from "Over Construction" in a delicate area.

The lot was purchased for $140,000

It is now for sale for $450,000

Redfin Quote" Seller will work with buyer in getting approval of plans."

No one has ever met the actual owner of the lot.

For such a sensitive and connected area this seems seriously wrong.

What follows is an account of a development at 8401 GrandView that went profoundly wrong

In 2004 an application was made for construction at 8401 GrandView
There was a ZA Hearing 2004-4197.

Essentially no one showed up as they did not know about it.

I was within 20 feet of the project and never informed.

By the time I figured out what was proposed it had already been greenlighted.

The consequence of this was three years of dangerous out of control events in spite of appealing to every agency.

I am Chief of Anesthesiology at a large Regional Medical Center and believe I can competently document. I have four full binders of all I describe below. We had Channel 5 News, Chief of Building and Safety and Councilmember Jack Weiss out to the site. It developed into a huge problem both politically and in terms of community action.

Construction started on April 2006 and then went on for almost three years.

**Street Damage**

Massive street damage from the Kirkwood entrance to the site. This has never been repaired properly. Costs to the City will be huge – a fraction of whatever is gotten in permits.

**Street Closures**

Between April 29 and June 14 we had seven street closures for four hours each which always went to 8 hours. The builder thereafter just closed the street whenever he wanted without notice. This resulted in huge backups along GrandView and nowhere to turn around it was chaos with many near violent incidents.

**Traffic Flow**

See the scanned item 1 is from the ZA of 2004 (Page 13) highlighted in yellow. The problems of traffic on GrandView are made abundantly clear. Quote:

*" for five minutes the staff's car was entirely blocked form exiting GrandView Drive. A van illegally parked blocking more than half the road. Additional cars pulled up behind*

*the City's car. There was no room to either go around the parked vehicle or reverse. (Topography – up slope to the south side of the road, steep downslope to the north). The van had to move, going in excess of more than 10 lots east before vehicles passed."*

Nothing on GrandView has changed and it has only gotten worse.

**Property damage.**

I had repeated damage to the front of house from machines crashing into it- walls/lamps/ poles/tile. I stopped getting it repaired.

After it was over I just did all the repairs myself and had to have the whole repainted (even though it had a recent job).

Property at junction of Kirkwood and GrandView was damaged as a mobile crane crashed into it (Excuse - It wasn't my fault. It had no brakes!). Builder had run out of money and could not repair.

**Emergency Access**

My neighbor next door Shannan Nishida at 8370 GrandView broke her leg. There was a long delay to get to her as the street was blocked and the ambulance could not get through at Yucca Trail.

**Danger**

Multiple episodes of objects failing and hear misses.

Hanna Melzer of Yucca Trail left as she felt her children's lives were in danger.
This was featured prominently on Channel 5 news.

She has never returned.

**Neighbor Distress**

8410 and 8424 sold and moved out not being able to take it anymore.
Others wanted to leave but by then the situation was so bad they could not.

**Excavation/Grading**

This was way beyond anything they stated. Large trucks would appear after 8:00pm and be loaded with dirt and removed. This was a huge source of mess and distress.

**Storage**

There is no place to store materials on GrandView. Large rolls of Reebar were all over

the sides of a 12 foot road. Equipment was stored on top of Fire Hydrants!
To store items he without authorization broke into the DWP old water tower site.

**Workers**

No parking on GrandView. Employees drove cars along the narrow street and there were constant terrifying near misses.

Hard hats were rarely worn even under cranes and caterpillars. I was scared for the workers.

**Staging / Parking**

Virtually all items of ENV V11-40 were violated.

**********

I note on February 11, 2015 a Mitigated Negative Declaration prepared by the city states:

*"will reduce any potential adverse effects to a level of insignificance".*

A Guiding item for ZA Determination is:

*"The Granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the same zone or vicinity in which the property is located."*

This project will unquestioningly:

- Be materially detrimental to the public welfare and injure property.
- Will cost the City way beyond anything acquired in permits.
- Will injure property and lives on the street.

if "... the dwelling will be a contemporary design which will blend in with the rest of the neighborhood. The side yard setback will be 9 feet on each side ... The building shall also be equipped with fire sprinklers through the house ... It will also provide a space for on coming vehicles to pull over to let them pass by. "

The proposed structure is to be built with one-story above street level. Properties located both west and east are two stories above street level. Given the surrounding topography, staff could not determine the existing height of surrounding structures along the downslope.

Given the configuration of the proposed structure, during a vehicle ingress/egress a vehicle should have a clear line-of-sight to both vehicles and pedestrians. The property is proposed to be positioned (northerly) along a downslope. Therefore, the site will not cast a shadow onto the southerly properties on an up slope. As far as the northerly downslope, the dwelling sits far enough from the property line as to not cast a shadow on abutting (northerly) properties. Light, and air will not be obstructed. Both the east and west properties on the northerly side of Grand View Drive seems to be built in a similar manner.

The applicant submitted signatures of property owners directly across Grand View Drive (up slope) and the signature for the west abutting property (vacant land).

During field investigation staff was approached by an abutting property homeowner who expressed concerns about large equipment on a 14-foot wide road, road availability for daily use, and excavating "on a steep unstable slope". Though distance toward the east may be considerable, staff found residents may utilize each exit/entry at the end of the road. With the narrow width of the road, the only turnaround are driveways. Upon completion of field investigation, for five minutes staff s car was entirely blocked from exiting Grand View Drive. A van illegally parked blocking more than half of the road. Additional cars pulled behind the City's car. There was no room to either go around the parked vehicle or reverse. (Topography--up slope on the south side of the road, steep downslope on the north). The van had to move, going in excess of more than 10 lots east before vehicles passed.

The Building and Safety referral document within the case file shows "Need "B" permit to widen street to 20 feet. Dedication required: 5.5 feet, improvement required: "B" permit street and curb, and gutter. The roadway does not contain encroachments prohibiting the passage of emergency vehicles."

FINDINGS - SECTION 12.24-X.11 (Height, Yards, Coverage, Parking)

1. **The request is in conformity with the public necessity, convenience, general welfare and good zoning practice and will be in substantial conformance with the various elements and objectives of the General Plan.**

   The Zoning Administrator Authority granted will be in conformity with the public necessity convenience, general welfare and good zoning practice.

   The involved site is located in an area of steep downslope. For this reason, room for expansion or construction is extremely limited. In order to stay within a reasonable building envelope with a minimum amount of destruction to the slope the requested zoning entitlements are required.

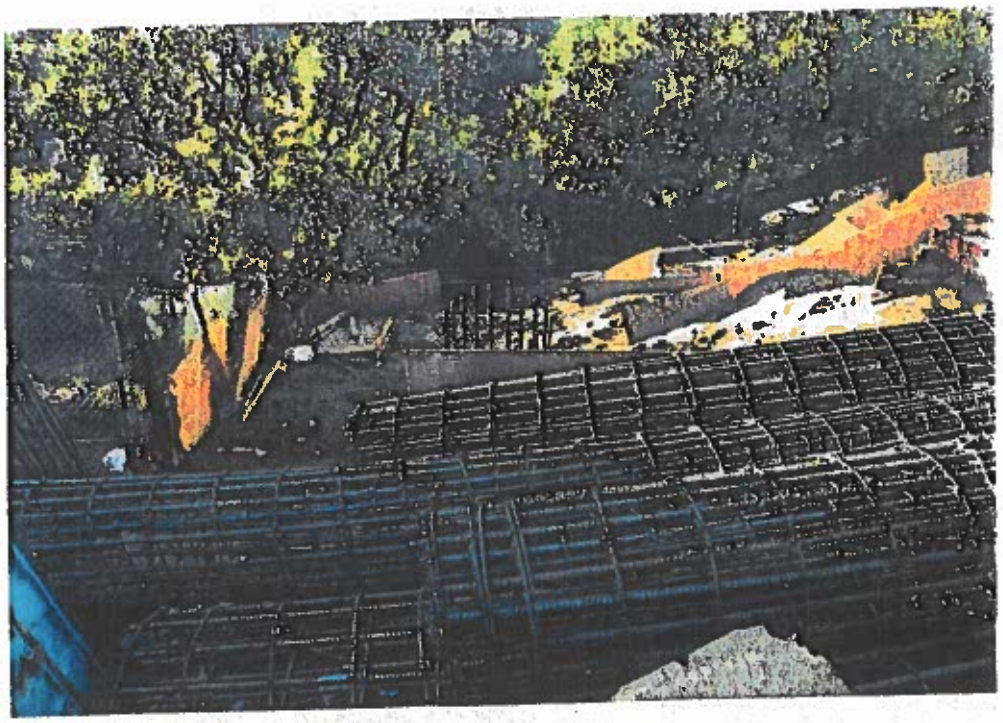
Now that you are all familiar with my home being down the hill from Mr. Smith property you might understand the DANGER and difficult situation that Mr. Smith is putting my family in ONCE AGAIN. My children are out of school for summer vacation and I find myself having to stay out of my home in the heat of the summer due to Mr. Smith unsafe conduct of building a house on his 8401 Grandview property. Not only for the street closure time which he is constantly violating. I come back home at 3pm because that is the time his street closure to use this heavy machinery ends, only to find out that he is still working from the street with heavy machinery digging, piling dirt way above his temporary retaining wall until 4:30pm. When I ask Mr. Smith for explanation, his contractor lies to me that the digger got stuck and they are waiting for a mechanic but once the dump-truck comes the digger miraculously self fixed and continues to work. How can I work things out with these people?

I can't stay in my back yard or open my doors and windows because stones and pieces of asphalt will be rolling down from the road deterioration. The wire fences that Mr. Smith put up "for protection" will not protect my family and my house since he is storing metal pieces and debris not even on his property but in-between his property and 8383 Grandview. I do have experience of stones rolling down from Mr. Smith's area down to my property, hitting my house and my deck where minutes before my children were playing basketball with their playdate. How would you feel if that child who was there was yours? I don't want to be writing you all in a few days that something terrible happened due to this negligence PLEASE prevent it NOW!!!!!!!!!!!!!!!!

This is only the small things which can roll down. keep on reading....



How about one or two of these Reebar rolling down the hill? The reebars are stored behind Mr. Smith's temporary "retaining wall"? To be more precise, they are piled OVER the "temporary retaining wall" those reebars are so massive that the ones against the wall are creating pressure against it wall. Only a few days ago on June 21, Mr. Smith told Officer Lichtenstein from Parking Enforcement that they have to continue to clear the dirt from behind the wall beyond their permit hours because "the soil creates unsafe pressure on the wall since it was piled high." When it's convenient the wall is very safe for the heavy weight of the reebars. To make the whole situation worse, Mr. Smith who is unconcerned with any safety, replaced a metal plate with a wood plate in the temporary retaining wall.....
I am not an engineer but it just does not make any sense.



what is holding that woodplate? Is it a 2"x4" board or a 2"x6" board? You can see it clearly in this picture...NOT MUCH.



I feel threatened and unsafe. I live in constant FEAR. I no longer trust Mr. Smith. He lies, he ignores basic safety rules. I feel you need to put a stop work order on Mr. Smith's activities at 8401 Grandview. A safety concious contractor who understands of the rules, regulations and follows them needs to take it over.

I can't be roaming the streets of LA with my two children because of Mr. Smith and his project I don't feel even safe to sleep at home or spend the day there. I am leaving my home until Wednesday morning since it is not a safe place for me to be but I am eagerly awaiting your answers. If you need to contact me, please call me on my cell 213 248-0452.

Thank you for taking the time to read this email and do something about it.

Hanna Melzer
8440 Yucca Trail
LA CA 90046

# Exhibit J

*Información en EspaÁol acerca de esta junta puede ser obtenida llamando al (213) 978-1300*

# COMMISSION MEETING AUDIO

**CENTRAL AREA PLANNING COMMISSION**
**REGULAR MEETING**
**TUESDAY, SEPTEMBER 8, 2015, 4:30 P.M.**
**CITY HALL, 10th FLOOR**
**200 NORTH SPRING STREET**
**LOS ANGELES, CA 90012**

**CLICK ON THE LINKS BELOW TO LISTEN TO AUDIO FROM THE MEETING**

***TO REQUEST A COPY ON COMPACT DISC, PLEASE CONTACT THE DEPARTMENT OF CITY PLANNING PUBLICATIONS AT (213) 978-1255***

1. TRACK #1

   DEPARTMENTAL REPORT

2. TRACK #2

   COMMISSION BUSINESS

   **(NOTE: Item #3 & #4 were heard together-same track)**

3. TRACK #3

   CASE: **ZA-2013-2084-ZAD-1A**
   LOCATION: **2170-2172 STANLEY HILLS DRIVE**

4. TRACK #3

   CASE: **ZA-2013-2087-ZAD-1A**
   LOCATION: **2166 STANLEY HILLS DRIVE**

5. TRACK #4

   CASE: **ZA-2014-1621-ZAD-ZAA-1A**
   LOCATION: **2104 NORTH STANLEY HILLS DRIVE**

6. TRACK #5

   CASE: **DIR-2015-1365-SPR-CDO-1A**
   LOCATION: **928-1026 SOUTH BROADWAY**

*Información en Español acerca de esta junta puede ser obtenida llamando al (213) 978-1300*

# COMMISSION MEETING AUDIO

**CENTRAL AREA PLANNING COMMISSION**
**REGULAR MEETING**
**TUESDAY, FEBRUARY 24, 2015, 4:30 P.M.**
**CITY HALL, 10th FLOOR**
**200 NORTH SPRING STREET**
**LOS ANGELES, CA 90012**

**CLICK ON THE BLUE LINKS BELOW TO LISTEN TO AUDIO FROM THE MEETING**

***TO REQUEST A COPY OF A PORTION OR THE ENTIRE MEETING ON COMPACT DISC, PLEASE CONTACT THE DEPARTMENT OF CITY PLANNING PUBLICATIONS AT (213) 978-1255***

POLICY FOR DESIGNATED PUBLIC HEARING ITEM(S): 3 and 4.
Pursuant to the Commission's general operating procedures, the Commission at times must necessarily limit the speaking times of those presenting testimony on either side of an issue that is designated as a public hearing item. All requests to address the Commission on public hearing items must be submitted prior to the Commission's consideration on the item. TIME SEGMENTS noted herein are approximate. Some items may be delayed due to length of discussion of previous items.

**To ensure that the Commission has ample opportunity to review written materials, members of the public who wish to submit written materials on agenda items should submit them to the Commission office, 200 North Spring Street, Room 272, Los Angeles, CA 900152, at least 10 days prior to the meeting at which the item is to be heard in order to meet the mailing deadline. *Note: Materials received after the mailing deadline will be placed in the official case file.***

**Day of hearing submissions (10 copies must be provided) are limited to 2 pages plus accompanying photographs, posters, and PowerPoint presentations of 5 minutes or less.**

The Commission may RECONSIDER and alter its action taken on items listed herein at any time during this meeting or during the next regular meeting, in accordance with the Commission Policies and Procedures and provided that the Commission retains jurisdiction over the case.

AGENDAS are posted for public review in the Main Street lobby of City Hall East, 200 N. Main Street, Los Angeles, California, and are accessible through the internet World Wide Web at http://www.planning.lacity.org.

**In the case of a Commission meeting cancellation, all items shall be continued to the next regular meeting date or beyond, as long as the continuance is within the legal time limits of the case or cases.**

If you challenge these agenda items in court, you may be limited to raising only those issues you or someone else raised at this public hearing, or in written correspondence on these matters delivered to this agency at or prior to the public hearing.

If you seek judicial review of any decision of the City pursuant to California Code of Civil Procedure Section 1094.5, the petition for writ of mandate pursuant to that section must be filed no later than the 90th day following the date on which the City's decision became final pursuant to California Code of Civil Procedure section 1094.6. There may be other time limits which also affect your ability to seek judicial review.

**GLOSSARY OF ENVIRONMENTAL TERMS:**
CEQA – California Environmental Quality Act
CE – Categorical Exemption
EIR – Environmental Impact Report
MND – Mitigated Negative Declaration
ND – Negative Declaration

1. **DIRECTOR'S REPORT**

   A. Items of interest.

2. **COMMISSION BUSINESS**

   A. Advanced Calendar

   B. Commission Requests

   C. Minutes of Meeting – February 10, 2015

3. **ZA-2013-2084-ZAD-1A PART2 PART3**
   **CEQA:** ENV-2013-2085-MND-REC1

   **Plan:** Hollywood
   **Council District:** 4 - LaBonge
   **Expiration Date:** 3/12/15
   **Appeal Status:** Not further appealable

   **PUBLIC HEARING**

   **LOCATION: 2170-2172 Stanley Hills Drive**

   **REQUESTED ACTION:**
   An appeal of the Zoning Administrator's decision to approve a Zoning Administrator's Determination pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit a remodeling of and an addition to two existing single-family dwellings on a lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code, and the Zoning Administrator's decision to adopt the recommendation of the Lead Agency by adopting Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

   **APPLICANT:** Ryan Noto
   Representative: David Johnson

   **APPELLANTS:** Matthew Friedman, Stanley Hills Drive Community of Neighbors, and 51 additional appellants (see attached list)

   **RECOMMENDED ACTION:**
   1. **Deny** the appeal.
   2. **Sustain** the Zoning Administrator's decision and approve:
      a. a Zoning Administrator's Determination, pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit a remodeling of and an addition to two existing single-family dwellings on a lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway

apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code.

3. **Adopt** the Findings of the Zoning Administrator.
4. **Adopt** Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**Staff:** Sue Chang (213) 978-3304

4. **ZA-2013-2087-ZAD-1A** (Heard w/ Item #3)
**CEQA:** ENV-2013-2085-MND-REC1

**Plan:** Hollywood
**Council District:** 4 - LaBonge
**Expiration Date:** 3/12/15
**Appeal Status:** Not further appealable

**PUBLIC HEARING**

**LOCATION: 2166 Stanley Hills Drive**

**REQUESTED ACTION:**
An appeal of the Zoning Administrator's decision to approve a Zoning Administrator's Determination pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit the construction, use and maintenance of a new single-family dwelling on a hillside lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code, and the Zoning Administrator's decision to adopt the recommendation of the Lead Agency by adopting Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**APPLICANT:** Ryan Noto
Representative: David Johnson

**APPELLANTS:** Ronald K. Charles, Stanley Hills Drive Community of Neighbors, and 51 additional appellants (see attached list)

**RECOMMENDED ACTION:**
1. **Deny** the appeal.
2. **Sustain** the Zoning Administrator's decision and approve:
   a. a Zoning Administrator's Determination, pursuant to Los Angeles Municipal Code Section 12.24-X,28, to permit the construction, use and maintenance of a new single-family dwelling on a hillside lot that does not have vehicular access from a street which is improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the edge of the boundary of the Hillside Area, as otherwise required by Section 12.21-C,10(i)(3) of the Municipal Code
3. **Adopt** the Findings of the Zoning Administrator.
4. **Adopt** Mitigated Negative Declaration ENV-2013-2085-MND-REC1 as the environmental clearance for this action.

**Staff:** Sue Chang (213) 978-3304

5. **PUBLIC COMMENT PERIOD**

The Area Planning Commission shall provide an opportunity in open meetings for the public to address it, on items of interest to the public that are within the subject matter jurisdiction of the Area Planning Commission. (This requirement is in addition to any other hearing required or imposed by law.) Persons making requests are encouraged to do so in writing and should submit 10 copies to the Area Planning Commission for its consideration.

**Persons wishing to speak must submit a speaker's request form *prior* to the commencement of the public comment period.**

Individual testimony within the public comment period shall be limited to five (5) minutes per person and up to ten (10) minutes per subject.

The next regular meeting of the Central, Area Planning Commission will be held at **4:30 p.m.** on **Tuesday, March 10, 2015** at

City Hall
200 North Spring Street, 10th Floor
Los Angeles, California 90012

An Equal Employment Opportunity/Affirmative Action employer

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate. The meeting facility and its parking are wheelchair accessible. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or other services may be provided upon request. To ensure availability of services, please make your request no later than three working days (72 hours) prior to the meeting by calling the Commission Executive Assistant at (213) 978-1300 or by e-mail at APCCentral@lacity.org.

# Envicom Response dated January 11, 2019 to Zoning Administration Letter

APPENDIX R

January 11, 2019

City of Los Angeles
Department of City Planning
200 North Spring Street
Los Angeles, CA 90012

Attn: Mr. Jack Chiang, Associate Zoning Administrator (via email: jack.chiang@lacity.org)

Subj: **1800, 1806, 1812, and 1818 Crisler Way Residences Project**
**(Case No: ENV-2015-4131-MND ZA Case Nos: ZA-2015-4125-ZAD, ZA-2015-4130-ZAD, ZA-2015-4146-ZAD, and ZA-2015-4149-ZAD)**

Dear. Mr. Chiang,

This letter responds to the **Communication** you sent dated July 31, 2018. A copy of your communication letter is provided in **Attachment 1**. Envicom Corporation (Envicom) provided you a Response to Comments Letter dated June 19, 2018, addressing and responding to comments from Mr. Jamie Hall, Channel Law Group LLC, dated May 21, 2018, and from Mr. Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP, dated June 19, 2018. The referenced Response to Comments Letter dated June 19, 2018, is re-attached to this letter for ease of reference in **Attachment 2**.

**ITEM 1)**

***An assessment of the existing water main and gas main condition and impacted by the construction vehicle trips and whether "smaller capacity" concrete trucks would be able to traverse the substandard streets without deteriorating existing infrastructure;***

The Los Angeles Department of Water and Power (LADWP) maintains existing water mains along the construction access route, namely, along Kirkwood Drive and Grand View Drive. LADWP uses 100 years as a basis for the expected service life for all pipes; however, some pipes can live longer. LADWP reports that existing water mains along Kirkwood Drive and Grand View Drive are a B class likelihood of failure; the pipes beneath Kirkwood were installed in 1958 and the pipes beneath Grand View were installed in 1967, therefore, these pipes are in mid-life.[1] Although a leak was reported on the Kirkwood pipe in 2015, the leak may still be subject to investigation because a fire hydrant was either sheared off by a motorist or pipe failure was due to a number of different factors such as corrosivity of the soil, condition, hillside area, or stress loading associated with the depth of the pipe. LADWP uses Likelihood of Failure Score (LFS) Criteria to assess existing water main condition. LFS scores depend on soil corrosivity, age, diameter, leak rate, max pressure, traffic loading, elevation, and location in a hillside area. The LFS Criteria assign each of these factors a weight out of 100% for assessing pipe deterioration. The LFS factors weighed most heavily in assessing pipe deterioration are soil corrosivity and age, both at 20%. Traffic loading and location in a hillside area are both weighed at 5% in the LFS Criteria.

[1] City of Los Angeles, Department of Water and Power, Environmental Engineering, Email Communication with Envicom Corporation, Dec. 6, 2018.

The Los Angeles Bureau of Sanitation (LA Sanitation) maintains the existing wastewater main along the construction access route. LA Sanitation reports that the existing condition of the 32 reaches of wastewater mains along the construction access route, from the intersection of Laurel Canyon and Kirkwood Drive to the Project Site, are in good working order and maintained on a regular basis.[2] The Southern California Gas Company (SoCal Gas) maintains existing gas main infrastructure along the construction access route. As a regulated utility, SoCal Gas maintains the existing condition of this gas main infrastructure in compliance with California Public Utilities Commission regulatory requirements for performance and safety. Specifically, as reported in the SoCal Gas *Operator Safety Plan*, the Code of Federal Regulations specifies the minimum requirements for the material selection and design of pipe and pipeline components.[3] SoCalGas' transmission and distribution pipe and facilities are designed with approved materials that have sufficient wall thickness and/or adequate protection to withstand anticipated external pressures and loads that will be imposed on the pipe after installation.[4]

The Applicant and the Applicant's foundation contractor, Rigo's Construction Inc., have confirmed "smaller capacity" concrete trucks with a capacity of six cubic yards (CY) would be used to minimize impacts to the neighborhood instead of average-sized concrete trucks with a 10 CY capacity. The Traffic Impact Analysis prepared by Associated Transportation Engineers (ATE) considered the ability of concrete trucks with a 6-8 cubic yard capacity to traverse the substandard streets. The City Department of Public Works, Bureau of Engineering, Structural Engineering Division was unable to provide the maximum load bearing capacity of Grand View Drive (Navigate LA Street No. 6222, Section ID 2318700); however, the Bureau of Street Services issues overload permits for overweight construction equipment. According to the Overload Permit Rules and Regulations, an overload permit is required for weights in excess of 40 tons.[5] The heaviest piece of construction equipment would be a loaded smaller-capacity concrete truck carrying six CY of concrete. An average loaded concrete truck weighs 33 tons.[6] As noted, average cement trucks have a mixer drum with a 10 CY capacity. Given that concrete weighs approximately two tons per one CY, one may reasonably assume a smaller capacity six CY concrete truck would weigh 25 tons, at least eight tons less than an average loaded 10 CY truck. A smaller capacity six CY concrete truck weighing 25 tons would not exceed the 40-ton threshold at which an overload permit would be required by the Department of Public Works. An average fire truck weighs between 19 and 30 tons and an average loaded garbage truck weighs 25 tons.[7] Therefore, the Project construction equipment is not reasonably expected to result in significant impacts to existing infrastructure. Nonetheless, the expanded Initial Study incorporates mitigation measures obligating the Applicant to repair deterioration in existing infrastructure due to project-related construction activity.

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[2] City of Los Angeles, Dept. of Public Works, Bureau of Sanitation, Wastewater Engineering Services Division, email correspondence with Envicom Corporation, November 28, 2018.
[3] Code of Federal Regulations, Title 49, Part 192 Subparts B, C, and D.
[4] SoCal Gas, Natural Gas System, Operator Safety Plan, page 3 of 12, 2012-2017.
[5] City of Los Angeles, Dept. of Public Works, Bureau of Street Services, Overload Permits, Permit Requirements for Overloads, https://bsspermits.lacity.org/overloads/.
[6] Pennsylvania Department of Transportation, An Official Pennsylvania Government Website, "Approximate Vehicle Weights," https://www.penndot.gov/pages/search.aspx.
[7] Pennsylvania Department of Transportation, An Official Pennsylvania Government Website, "Approximate Vehicle Weights," https://www.penndot.gov/pages/search.aspx.

**ITEM 2)**

***An analysis regarding whether the use of smaller capacity trucks was factored into trip generation calculation since smaller trucks presumably hold less than 10 cubic yards;***

The Revised Traffic Analysis includes an analysis regarding the use of smaller capacity trucks in the trip generation calculation. The Applicant indicated the size of the concrete trucks used for construction would be smaller-capacity six CY trucks and the maximum number of construction vehicle trips per day (including the worker shuttle) would be 10 trips. **Table 1, Trip Generation Estimates,** shows an estimate of the average daily trips (ADT) that would be generated on a daily basis for the Grading/Site Preparation and Home Construction phases based on this information.

**Table 1**
**Trip Generation Estimates**

| Phase | Trips per Day | |
|---|---|---|
| | Vehicles [a] | Trips [b] |
| Grading/Site Preparation | 10 | 20 ADT |
| Home Construction | 10 | 20 ADT |
| (a) Assumes delivery vehicles, worker shuttles and employee vehicles.<br>(b) Average Daily Traffic (ADT), Trips assume 1 inbound + 1 outbound trip per vehicle. | | |

As shown in Table 1, peak construction traffic is estimated at up to 20 trips per day (10 inbound trips + 10 outbound trips). The estimates shown in Table 1 assume some overlap in construction activities and are therefore overestimate the day-to-day traffic generation. Most days would experience lower trip generation because a lower number of workers and/or deliveries would be required for the Project. In summary, the use of smaller capacity trucks was factored into the trip generation calculation in the Revised Traffic Analysis provided in Appendix K of the Expanded Initial Study.

**ITEM 3)**

***Traffic study of the project including an assessment to address choke points from Laurel Canyon Boulevard, Kirkwood Drive, Yucca Trail, Grand View Drive, and Cole Crest Drive, and the temporary road closures and the impact on traffic patterns;***

Choke points are areas where the street funnels into a narrow or confined space difficult for equipment to maneuver. The Revised Traffic Analysis includes an assessment of the "choke points" located along Access Road B, which includes from Laurel Canyon Boulevard to Kirkwood Drive to Grand View Drive. As shown in Figure 5 of the Expanded Initial Study, Yucca Trail and Cole Crest Drive are not located along the Construction Access Route (Access Route B). The crucial choke points for construction traffic located along Access Road B are the turn from Kirkwood Drive to Grand View Drive and from the proposed improvement to Crisler Way onto Grand View Drive. The Traffic Study included an Autoturn Analysis to determine whether the largest piece of construction equipment, a 24-foot flatbed truck, would be able to navigate the sharp curve from Kirkwood Drive to Grand View Drive and to determine if a 24-foot flatbed truck could exit the area of the proposed improvement to Crisler Way onto Grand View Drive. The Autoturn Analysis confirmed this vehicle would be able to maneuver through these turns with a 4-point turn. Therefore, the largest piece of construction equipment, a 24-foot flatbed truck, would be able to navigate the sharp curves along the Construction Access Route.

The Traffic Impact Analysis addressed these potential choke points and recommended measures to minimize potential traffic impacts along Access Road B during the construction of the Project. Consistent with these recommended measures, the Expanded Initial Study provides Mitigation Measures TRA-1, TRA-1, TRA-3, and TRA-4 to minimize construction traffic and roadway hazards associated with the construction access route by providing temporary signage, informing potentially affected residents, preparing a traffic management plan utilizing flagmen along Grand View Drive to facilitate deliveries, scheduling transporting construction materials outside of morning and afternoon commuter periods, and prohibiting construction vehicle parking on neighborhood roads once the staging area on Lot 95 is complete. A Construction Traffic Management Plan is provided in Appendix K of the Expanded Initial Study.

The Construction Management Schedule prepared by the Applicant's Foundation Contractor, Rigo's Construction Inc., provides detailed descriptions of the size of the anticipated construction equipment consisting of mini excavators and a drilling rig with a boom which would be initially delivered and quickly transferred – the construction management schedule estimates 15 minutes for delivery – to the on-site staging area to avoid restricting access on Grand View Drive. In a worst-case scenario, on day 12, pouring six temporary shoring piles is expected to partially block up to five feet of the Grand View Drive right of way for up to three hours. A temporary and partial blockage of up to five feet of Grand View Drive would still allow cars to pass. By providing an initial and temporary on-site construction equipment staging area, the Project, by design, would avoid the need for lane or road closures on the Construction Access Route.

**ITEM 4)**

***Off-site geotechnical and hydrological reports to address the potential for landslides and other runoff issues related to hazards presented by street collapses and water main breaks to show whether or not breakages are related to "heavy equipment vehicles" and construction activity;***

The previously-prepared geotechnical reports provided in Appendix G of the Expanded Initial Study address the potential for landslides and other runoff issues. The Geologic and Soils Engineering Update Report prepared by Geomatrix Inc. dated September 19, 2012, described the granite bedrock as generally massive and lacking significant planes of structural weakness. This report concluded the massive nature of the granite bedrock is considered favorable with respect to site and slope stability. This technical report found no evidence of landsliding or mudflows on the subject property.

Section VI. Geology and Soils, of the Expanded Initial Study considers the potential for landslides. The Project design incorporates remedial grading, retaining walls, and conventional and/or drilled-pile foundations bearing on competent bedrock to minimize potential landslide hazards. As recommended by the Project geotechnical consultants, conventional and/or drilled-pile foundations bearing on competent bedrock would support the proposed structures. In a geology report dated September 10, 2012, Geomatrix updated the static and seismic gross slope stability analysis, due to an updated requirement for the use of a seismic coefficient in the seismic slope stability analysis. The 2012 analysis indicated a factor of safety of 1.814 for static slope stability, exceeding the minimum code requirement of 1.5 and a factor of safety of 1.260 for seismic slope stability, exceeding the minimum code requirement of 1.0. Furthermore, based on a review of the previously prepared Geology and Soils Reports, the LADBS Approval Letter found that these reports include an acceptable seismic slope stability analysis and satisfied the requirements of the 2014 City of Los Angeles Building Code. For informational purposes, the geology report prepared by C.Y. Geotech

dated June 8, 2018, performed an additional seismic slope stability analysis using an update seismic coefficient to meet 2017 regulations. This analysis indicted a factor of safety of 1.129 which still exceeds the minimum code requirement. As concluded in the June 8, 2018, geology report by CY Geotech, the potential impacts of landslide for the Project should be considered a less than significant impact.

As noted in response to Item 1, according to the Overload Permit Rules and Regulations, an overload permit is required for weights in excess of 40 tons.[8] The heaviest piece of construction equipment would be a loaded smaller-capacity concrete truck carrying six CY of concrete that would weigh 25 tons, at least eight tons less than an average loaded 10 CY truck. An average fire truck weighs between 19 and 30 tons and an average loaded garbage truck weighs 25 tons.[9] Therefore, the Project construction equipment is not reasonably expected to result in significant impacts to existing infrastructure. Also, as noted in response to Item 1, according to the criteria LADWP uses to assess existing water main condition, LFS scores depend on: soil corrosivity, age, diameter, leak rate, max pressure, traffic loading, elevation, and location in a hillside area. The criteria assign each of these LFS factors a weight out of 100% for assessing pipe deterioration. Traffic loading and location in a hillside area are each weighed at 5% out of the 100% in the LFS Criteria whereas soil corrosivity and age are each weighed at 20% in the LFS Criteria. Therefore, movement of the Project construction equipment is not reasonably expected to result in breakages of existing infrastructure.

**ITEM 5)**

***Cumulative impact analysis regarding the immediate "Kirkwood Bowl" and "Marmont" neighborhoods with other on-going and proposed single family projects;***

The Expanded Initial Study the City circulated in April 2018 included a cumulative impact analysis based on a related project list provided by staff in the Department of City Planning. Each cumulative impact analysis section considers the impact of the Project in connection with eight related projects, as shown in the Section 3.10, Related Projects, of the Expanded Initial Study. Given that the status of several of the related projects has changed since April of 2018, Envicom revised this cumulative impact analysis based on an updated related project list provided by staff in the Department of City Planning. The related projects analyzed include those located on the same construction access route as the proposed project, Kirkwood Drive to Grand View Drive to the proposed Project site, this related project list is also located in the Kirkwood Bowl neighborhood. The revised Expanded Initial Study includes a cumulative impact analysis for each environmental factor regarding the immediate Kirkwood Bowl neighborhoods. The existing residences in the Marmont neighborhood and any proposed single-family projects therein would access their related project sites by a different route than the proposed Project and would therefore not constitute related projects. Nonetheless, the applicant provided design features to minimize potential impacts to existing residences in the Marmont neighborhood, namely, temporary debris protection walls at the southern boundary of the proposed Project Site.

---

[8] City of Los Angeles, Dept. of Public Works, Bureau of Street Services, Overload Permits, Permit Requirements for Overloads, https://bsspermits.lacity.org/overloads/.

[9] Pennsylvania Department of Transportation, An Official Pennsylvania Government Website, "Approximate Vehicle Weights," https://www.penndot.gov/pages/search.aspx.

**ITEM 6)**

***Address and respond to comments from Mr. Jamie Hall, Channel Law Group, LLC, dated May 21, 2018, and from Mr. Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP, dated June 19, 2018, attached to this letter.***

Envicom addressed and responded to comments from Mr. Jamie Hall, Channel Law Group, LLC, dated May 21, 2018, and in a letter submitted to the Zoning Administrator via electronic delivery dated June 19, 2018. The Zoning Administrator acknowledged receipt of this response letter in an email dated June 20, 2018, and requested hard copies. Envicom transmitted six hard copies of this response letter to the Zoning Administrator on June 21, 2018. For ease of reference, this response to comments letter is re-attached to this letter in Attachment 2.

Envicom addressed and responded to comments from Mr. Daniel Freedman, Jeffer Mangels Butler & Mitchell (JMBM) LLP, dated June 19, 2018, in a response letter dated January 11, 2019 provided in **Attachment 3.**

Sincerely,

Primo Tapia
Vice President

**VIA ELECTRONIC MAIL**

cc: Ms. Darlene Navarrete, Senior Administrative Clerk (darlene.navarrete@lacity.org)
cc: Ms. Mindy Nguyen, Central Project Planning Division (mindy.nguyen@lacity.org)
cc: Mr. Jason Hernández, Planning Assistant (jason.hernandez@lacity.org)

**ATTACHMENTS:**

Attachment 1 – Zoning Administrator letter dated July 31, 2018
Attachment 2 – Response to Comments Received During the Public Review Period
Attachment 3 – Envicom Response to JMBM Letter dated June 19, 2018

# ATTACHMENT 1

## Zoning Administrator
## Letter dated July 31, 2018

LISA M. WEBBER
INTERIM CHIEF ZONING ADMINISTRATOR

ASSOCIATE ZONING ADMINISTRATORS
JACK CHIANG
HENRY CHU
THEODORE L. IRVING
ALETA D. JAMES
FRANKLIN N. QUON
FERNANDO TOVAR
DAVID S. WEINTRAUB
MAYA E. ZAITZEVSKY

# CITY OF LOS ANGELES
CALIFORNIA

ERIC GARCETTI
MAYOR

DEPARTMENT OF
CITY PLANNING

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http://planning.lacity.org

July 31, 2018

Robert Anderson (A)
CAC Development
18169 Knoll Hill,
Granada Hills, CA 91344

Isaac Cohen and Andrea Cohen
Family Trust and Aaron Cohen (O)
1504 Flower Street,
Los Angeles, CA 90015

Erika Iverson (R)
Rosenheim & Associates, Inc.
21600 Oxnard Street, Suite 630
Woodland Hills, CA 91367

CASE NO. ZA-2015-4125-ZAD,
ZA-2015-4130-ZAD,
ZA-2015-4146-ZAD,
ZA-2015-4149-ZAD
**COMMUNICATION**
1800, 1806, 1812, 1818 N. Crisler Way
Hollywood Planning Area
Zone : R1-1-HCR
D. M. : 148-5A173, 150A173
C. D. : 4
CEQA : ENV-2017-4131-MND
Legal Description: Lot Nos. 95, 96, 97, and 98,Tract 798

On May 22, 2018, the Zoning Administrator conducted a public hearing to consider the following four Zoning Administrator's Determination (ZAD) applications for four new single family homes in considering the following requests:

1) The consideration of a Mitigated Negative Declaration (MND) pursuant to California Environmental Quality Act (CEQA) Guidelines, Section15074(b).

2) Pursuant to Los Angeles Municipal Code (LAMC) Section 12.24 X 28(a)(7)(ii), four ZADs to allow the construction, use and maintenance of four new three-story single family dwellings on four lots that do not have vehicular access from a street improved with a minimum 20-foot wide continuous paved roadway from the driveway apron to the boundary of the hillside area as required by LAMC Section 12.21 C10(i)(3).

At the May 22, 2018, public hearing, neighboring property owners and local residents of the Kirkwood Bowl Neighborhood provided testimony in opposition to the project, objecting primarily on the following grounds; inadequacy of the environmental clearance, specifically the MND that was prepared in April 2018, cumulative impacts to the neighborhood as there are 17 other proposed single family projects, soil stability, construction impacts, damage to public infrastructures, noise and air quality impacts, and emergency access impact due to the narrow width and the deteriorating condition of public streets. Neighboring property owners and local residents consistently stated that there are constant construction

activities in the neighborhood. Roads are often blocked by construction related vehicles, thus the situation creates traffic hazards and congestions. Frequent traffic trips generated by heavy trucks for earth export and cement also broke several aging water pipes and gas pipes underneath roadways resulting in floods that eroded hillsides and damaged private properties. Stakeholders argued that the project would result in unmitigated environmental impacts. Photos of collapsed roadways and construction sites, including a map showing multiple locations of water main and gas line break, along with numerous proposed construction sites were submitted to the City.

Aside from the comments provided by residents of "Kirkwood Bowl" neighborhood, residents located at the downslope along Marmont Avenue also provided new testimonies, voicing that the applicant did not properly analyzed the construction in regard to, but not limited to, air quality due to dust settlement to lower elevation, potential landslide and run off due to construction or the operation of the homes, or the construction impact of connecting sewer main located downhill. Bel Air – Beverly Crest Neighborhood Council and Council District four also recommended that projects be denied as proposed. Generally, the content of the testimonies heard in the May 22, 2018, public hearings for the subject four single family projects on Crisler Way, is similar to statements heard in the May 9, 2017, April 24, 2018, hearings for the construction of four other single family projects located on Grand View Drive and Cole Crest Drive with similar ZAD requests.

The City, as the lead agency for the proposed project, is required to consider the potential environmental projects generated by these other four projects, together with the proposed four new homes on Crisler Way, as prat of the cumulative impact analysis. Based on a review of the information contained in the administrative record, public testimonies, and the draft MND, evidence submitted by project opponents, and applicant's response to comments, the Zoning Administrator has determined that the application, as currently prepared, does not contain sufficient information to evaluate the proposed project. Specifically, the MND fails to analyze the scope of on-going projects and their impacts cumulatively as a part of the assessment, and the project description and assessment needs to include all work in the Marmont Neighborhood at the lower elevation and potential impacts that may result.

The Initial Study/Mitigated Negative Declaration (IS/MND) prepared for this project identifies potentially significant effects particularly in the impact categories of biological resources, transportation/traffic, mandatory findings of significance, hazards and hazardous materials, and noise. Furthermore, based on the evidence and testimony that has been provided with respect to the proposed project, the Zoning Administrator has determined that there is a potential of significant impacts attributable to the project in other impact categories not identified in the IS/MND, namely utilities/service systems and public services, and geology/soils.

Based on Staff's review of the IS/MND, the mitigation measures set forth in the IS/MND are insufficient and include deferred or inadequate mitigation measures to address the scope of potential impacts associated with the project. As the lead agency, the City shall decide whether an EIR or Negative Declaration will be required for the project (CEQA Guidelines Section 15367). Moreover, CEQA Guidelines Sections 15130 and 15355 recognizes the significance of analyzing cumulative impacts, which acknowledges that "the individual

effects may be changes resulting from a single project or a number of separate projects", and "can result from individually minor but collectively significant project taking place over a period of time."

In light of the forgoing, the Zoning Administrator has determined that the applicant must revise the IS/MND to include other on-going projects within the immediate vicinity and how these projects with the proposed project would cumulatively impact the surrounding neighborhoods, precise project descriptions, and expand the review to evaluate the project's potential environmental impacts on the surrounding public infrastructures and emergency access, and propose precise and comprehensive mitigation measures. The revised expanded Initial Study, to be prepared by a third-party consultant at the applicant's expense, shall incorporate the CEQA impact categories listed above, as well as the specific concern outlined below. Revisions to the expanded Initial Study shall be reviewed by Staff and the Zoning Administrator. Upon Staff's review of the revised expanded Initial Study, the Zoning Administrator will make a determination at that time as to whether the preparation of a MND or a focused Environmental Impact Report (EIR) is appropriated for the proposed project. Pursuant to CEQA Guidelines Section 15153, the City "may employ a single EIR to describe more than one project, if such projects are essentially the same in terms of environmental impact." Thus, the City reserves the right to require that the applicant work with the other Adjacent Projects to prepare single EIR following review of the revised expanded Initial Study.

The following analyses shall be included in the revised expanded Initial Study, but not limited to:

1) An assessment of the existing water main and gas main condition and impacted by the construction vehicle trips and whether "smaller capacity" concrete trucks would be able to traverse the substandard streets without deteriorating existing infrastructure;

2) An analysis regarding whether the use of smaller capacity trucks was factored into trip generation calculation since smaller trucks presumably hold less than 10 cubic yards;

3) Traffic study of the project including an assessment to address choke points from Laurel Canyon Boulevard, Kirkwood Drive, Yucca Trail, Grand view Drive, and Cole Crest Drive, and the temporary road closures and the impact on traffic patterns;

4) Off-site geotechnical and hydrological reports to address the potential for landslides and other runoff issues related to hazards presented by street collapses and water main breaks to show whether or not breakages are related to "heavy equipment vehicles" and construction activity;

5) Cumulative impact analysis regarding the immediate "Kirkwood Bowl" and "Marmont" neighborhoods with other on-going and proposed single family projects;

6) Address and respond to comments from Mr. Jamie Hall, Channel Law Group, LLC, dated May 21, 2018, and from Mr. Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP, dated June 19, 2018, attached to this letter.

To that end, the Zoning Administrator directs the Applicant to prepare an expanded Initial Study for the project, which CEQA Guidelines Section 15378 defines as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment", including a cumulative impacts analysis under CEQA Guidelines Sections 15130 and 15355.

Pursuant to Section 19.00 of the LAMC, Case Nos. ZA-2017-4125-ZAD, ZA-2017-4130-ZAD, ZA-2017-4146-ZAD, ZA-2017-4149-ZAD have been placed on hold pending submittal of the following:

- An expanded Initial Study with enforceable mitigation measures.
- BTC receipt for the mailing of the new hearing notice; and,
- Updated radius map and labels.

The case file will be retained by the Office of Zoning Administration under the care of the following:

200 North Spring Street, Room 763
Los Angeles, CA 90012
(213)978-1318

A second public hearing will be scheduled and noticed after receipt of all of the required materials.

JACK CHIANG
Associate Zoning Administrator

JC:dh

cc: Councilmember David E. Ryu
Fourth District
Bel Air – Beverly Crest Neighborhood Council
Laurel Canyon Association/ "Kirkwood Bowl" Neighborhood
(Jamie Hall, Channel Law Group, LLP)
"Marmont" Neighborhood
(Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP)

Attachment: Comments from Mr. Jamie Hall, Channel Law Group, LLC, May 21, 2018, and from Mr. Daniel Freedman, Jeffer Mangels Butler & Mitchell LLP, June 19, 2018.

JMBM Jeffer Mangels Butler & Mitchell LLP

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75529-1

June 19, 2018

**VIA E-MAIL (Jack.Chiang@lacity.org)**

Mr. Jack Chiang
Associate Zoning Administrator
City of Los Angeles, Department of City Planning
200 N. Spring Street, Room 1020
Los Angeles, CA 90012

Re: **1800, 1806, 1812 and 1818 Crisler Way**
Case No(s): ZA-2015-4125-ZAD; ZA 2015-4130-ZAD; ZA-2015-4146-ZAD & ZA-2015-4149-ZAD
ENV Case No. ENV-2015-4131-MND (A-F)
**Hearing Date:** May 22, 2018

Dear Mr. Chiang:

This office represents the homeowners of 1698 and 1694 Marmont Avenue, two single-family homes located at the terminus of Marmont Avenue, and immediately below the very steep hillside lots that the applicant in the above referenced case numbers proposes to develop. On May 11, 2018, our office submitted a letter to you raising concerns about this Project's building permits and development plans as analyzed in the Project's April 2018 Mitigated Negative Declaration ("MND"). The letter explained that, since the Project plans do not comply with the Los Angeles Municipal Code ("LAMC") and are not otherwise vested, the MND could not have accurately analyzed or described the Project's impacts. This means that the MND must be withdrawn, or revised, so that it either (i) analyzes a revised Project that complies with the LAMC, or (ii) details the *other* approvals that will be required to build the Project as currently designed (i.e., variance approvals, further zoning administrator approvals, etc.). As a result of this issue, the MND, as it is currently drafted, fails to fully analyze and describe the Project. In addition to this concern over the accuracy of the MND's project description, the MND also includes an incomplete and/or insufficient analysis of Project's significant and unmitigated environmental impacts. Pursuant to the mandates of the California Environmental Quality Act ("CEQA"), the Project cannot proceed forward without the preparation of an Environmental Impact Report ("EIR").

As we noted at the hearing, where there exists "substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment," an EIR must be prepared. (CEQA Guidelines, § 15063, subd. (b)(1); *City of*

*Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1421 (An EIR is required whenever "substantial evidence in the record supports a 'fair argument' significant impacts or effects may occur.") In this context, substantial evidence "means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (CEQA Guidelines, § 15384, subd. (a).) Substantial evidence includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts" (*Id.* subd. (b)), but not "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment." (*Id.* subd. (a).)

After reviewing the MND's findings and conclusions, as well as the voluminous comments and letters submitted to the Zoning Administrator in relation to this MND, it is clear that substantial evidence supports a fair argument that this Project will have significant impacts on the environment. One very obvious significant impact is highlighted in the MND's noise findings. (*See* MND Appendix E, "Noise Impact Analysis" prepared by Giroux and Associates.) The first page of the study notes that "[n]oise levels above 70 dB CNEL are considered normally unacceptable except in unusual circumstances." Table 1 further illustrates this point, and explains that noise levels exceeding 75 dB CNEL are "***clearly unacceptable***" when occurring adjacent to residential single family homes. (*Id.* at p. 2.) The study then later admits that the construction noise for this Project will substantially exceed these "clearly unacceptable" levels, stating that the Project's "[c]onstruction noise is maximally anticipated to be 89 dBA exterior and 59 dBA at interior of the closest residence..." (*Id.* at p. 8.) It then admits that "because of terrain constraints," typical sound wall mitigation measures are not feasible. (*Id.* at p. 12.) This is precisely the type of an unmitigated impact for which CEQA requires the preparation of an EIR, and unquestionably constitutes substantial evidence supporting a fair argument that the Project will cause a significant effect on the environment.

We also identified several other impacts that were not adequately analyzed in the MND. For example, the MND documents fail to describe or detail any construction related activity or impacts likely to occur on or around Marmont Avenue. Although the Project developer explained during the hearing that the Project would not include construction on Marmont Avenue, the Project's plans suggest otherwise. Specifically, the Project plans show that the new homes will be connected to the City's municipal sewer system through a new sewer connection that will run from Marmont Avenue to the Project site. The MND does not include any analysis of this construction work and/or activity. Moreover, the MND fails to adequately consider the potential for runoff, landslides, and dust-related problems that are likely to impact downslope properties, especially in light of the site's very unique and dangerous topographic conditions. Instead of analyzing the risks in the context of the site's particular topography, the MND relies on standard building code mitigation measures, general air emission models, and other standard construction practices which cannot adequately address the true risks associated with the Project's construction. These are issues which must be analyzed in an EIR.

In addition to these issues, we also hereby incorporate by reference the May 21, 2018 letter submitted by the Channel Law Group – a copy of which is attached hereto as **Exhibit A** – which details a multitude of errors, omissions, and problems with the MND's analysis and findings, and also constitutes substantial evidence in support of a fair argument that an EIR is required. Based on the foregoing, we urge the Zoning Administrator to (i) deny the applicant's request on the basis that the building plans are not in conformance with the LAMC, or, in the alternative, (ii) require the preparation of an EIR to properly analyze the Project's impacts on the environment. Thank you for your consideration.

Sincerely,

BENJAMIN M. REZNIK and
DANIEL FREEDMAN of
Jeffer Mangels Butler & Mitchell LLP

cc: Emma Howard, Senior Planning Deputy, Council District 4.
Aidan O'Brien MD, President, Concerned Citizens of Kirkwood Bowl Foundation.
Jamie Hall, Esq., Channel Law Group.

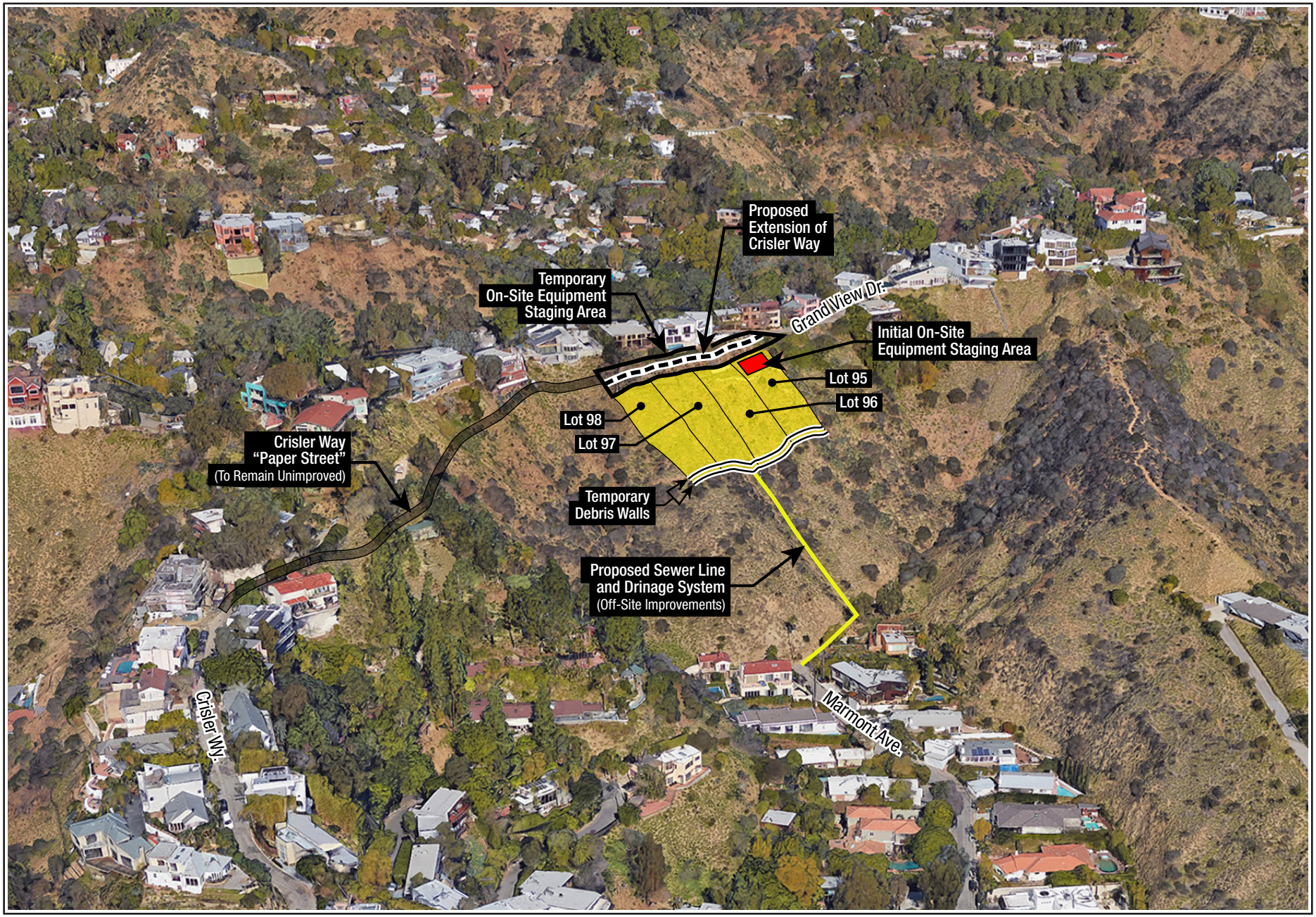
# ATTACHMENT 2

## Response to Comments Received During the Public Review Period

*To avoid duplication, please refer to Appendix N for complete Response to JMBM Comment Letter dated May 11, 2018.*

# ATTACHMENT 3

## Construction Site Plan




Aerial Source: GoogleEarth Pro, Dec. 3, 2017.



# Construction Site Plan

APPENDIX S

# Green Building Notes

**FORM GRN 1**

## STORM WATER POLLUTION CONTROL
(2017 Los Angeles Green Building Code)

Storm Water Pollution Control Requirements for Construction Activities
Minimum Water Quality Protection Requirements for All Construction Projects

**The following notes shall be incorporated in the approved set of construction/grading plans and represents the minimum standards of good housekeeping which must be implemented on all construction projects.**

Construction means constructing, clearing, grading or excavation that result in soil disturbance. Construction includes structure teardown (demolition). It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility; emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water; mechanical permit work; or sign permit work. (Order No. 01-182, NPDES Permit No. CAS004001 – Part 5: Definitions)

1. Eroded sediments and pollutants shall be retained on site and shall not be transported from the site via sheet flow, swales, area drains, natural drainage or wind.
2. Stockpiles of earth and other construction-related materials shall be covered and/or protected from being transported from the site by wind or water.
3. Fuels, oils, solvents and other toxic materials must be stored in accordance with their listing and shall not contaminate the soil nor the surface waters. All approved toxic storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of properly and shall not be washed into the drainage system.
4. Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained on the project site.
5. Excess or waste concrete may not be washed into the public way or any drainage system. Provisions shall be made to retain concrete waste on-site until it can be appropriately disposed of or recycled.
6. Trash and construction –related solid wastes must be deposited into a covered receptacle to prevent contamination of storm water and dispersal by wind.
7. Sediments and other materials shall not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the street/public ways. Accidental depositions must be swept up immediately and may not be washed down by rain or by any other means.
8. Retention basins of sufficient size shall be provided to retain storm water runoff on-site and shall be properly located to collect all tributary site runoff.
9. Where retention of storm water runoff on-site is not feasible due to site constraints, runoff may be conveyed to the street and the storm drain system provided that an approved filtering system is installed and maintained on-site during the construction duration.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.



**FORM GRN 4**

## 2017 Los Angeles Green Building Code

**MANDATORY REQUIREMENTS CHECKLIST**
**NEWLY CONSTRUCTED RESIDENTIAL BUILDINGS**
**(COMPLETE AND INCORPORATE THIS FORM INTO THE PLANS)**

Permit # _____ - _____ - _____ Date: _____

| ITEM # | CODE SECTION | REQUIREMENT | REFERENCE SHEET (Sheet # or N/A) | COMMENTS (e.g. note #, detail # or reason for N/A |
|---|---|---|---|---|
| | | **PLANNING AND DESIGN** | | |
| 1 | 4.106.2 | Storm water drainage and retention during construction | A-1.1 | Form GRN 1 |
| 2 | 4.106.3 | Grading and paving | A-1 | Site Plan |
| 3 | 4.106.4 | Electric vehicle (EV) charging | A-2 | Garage |
| 4 | 4.106.5 | Cool roof for reduction of heat island effect | A-4 | Roof Plan |
| 5 | 4.106.7 | Reduction of heat island effect for non-roof areas | A-1 | Site Plan |
| | | **ENERGY EFFICIENCY** | | |
| 6 | 4.211.4 | Solar ready buildings | A-4 | Roof Plan |
| | | **WATER EFFICIENCY & CONSERVATION** | | |
| 7 | 4.303.1 | Water conserving plumbing fixtures and fittings | A-1.1 | GRN 14 - Note # 5 / GRN 16 |
| 8 | 4.303.1.3.2 | Multiple showerheads serving one shower | A-1.1 | GRN 14 - Note # 6 / GRN 16 |
| 9 | 4.303.3 | Water submeters | A-1.1 | GRN 18R - Note # 1 |
| 10 | 4.303.4 | Water use reduction | A-1.1 | GRN 18R - Note # 2 |
| 11 | 4.304.1 | Outdoor potable water use in landscape areas | A-1.3 | Watershed Protection Plan |
| 12 | 4.304.2 | Irrigation controllers | A-1.1 | GRN 14 - # 7 / GRN 18R - #17 |
| 13 | 4.304.3 | Metering outdoor water use | A-1.1 | GRN 18R - Note # 3 |
| 14 | 4.304.4 | Exterior faucets | N/A | |
| 15 | 4.304.5 | Swimming pool covers | A-1.1 | GRN 18R - # 6 |
| 16 | 4.305.1 | Graywater ready | A-1.1 | GRN 18R - Note # 7 |
| 17 | 4.305.2 | Recycled water supply to fixtures | A-1.1 | GRN 18R - Note # 8 |
| 18 | 4.305.3.1 | Cooling towers (buildings ≤ 25 stories) | N/A | |
| 19 | 4.305.3.2 | Cooling towers (buildings > 25 stories) | N/A | |
| 20 | 4.305.4 | Groundwater discharge | A-1.1 | GRN 18R - # 11 |
| | | **MATERIAL CONSERVATION & RESOURCE EFFICIENCY** | | |
| 21 | 4.406.1 | Rodent proofing | A-1.1 | GRN 14 - Note # 9 |
| 22 | 4.407.3 | Flashing details | A-1.1 | Details |

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**FORM GRN 4**

## 2017 Los Angeles Green Building Code

| ITEM # | CODE SECTION | REQUIREMENT | REFERENCE SHEET (Sheet # or N/A) | COMMENTS (e.g. note #, detail # or reason for N/A |
|---|---|---|---|---|
| 23 | 4.407.4 | Material protection | A-1.1 | GRN 14 - Note # 10 |
| 24 | 4.408.1 | Construction waste reduction of at least 65% | A-1.1 | GRN 14 - Note # 11 |
| 25 | 4.410.1 | Operation and maintenance manual | A-1.1 | GRN 14 - Note # 12 |
| | | **ENVIRONMENTAL QUALITY** | | |
| 26 | 4.503.1 | Fireplaces and woodstoves | A-11 | Specs. |
| 27 | 4.504.1 | Covering of duct openings and protection of mechanical equipment during construction | A-1.1 | GRN 14 - Note # 14 |
| 28 | 4.504.2 | Finish material pollutant control | A-1.1 | Form GRN 11 |
| 29 | 4.504.2.1 | – Adhesives, sealants, caulks | A-1.1 | Form GRN 11 GRN 14 - Note # 15 |
| 30 | 4.504.2.2 | – Paints and coatings | | |
| 31 | 4.504.2.3 | – Aerosol paints and coatings | | |
| 32 | 4.504.2.4 | – Verification | A-1.1 | GRN 14 - Note # 16 |
| 33 | 4.504.3 | Carpet systems | A-1.1 | GRN 14 - Note # 17 |
| 34 | 4.504.3.1 | Carpet cushion | A-1.1 | GRN 14 - Note # 17 |
| 35 | 4.504.4 | Resilient flooring systems | A-1.1 | GRN 14 - Note # 18 |
| 36 | 4.504.5 | Composite wood products | A-1.1 | GRN 14 - Note # 19 |
| 37 | 4.504.6 | Filters | A-1.1 | GRN 14 - Note # 21 |
| 38 | 4.505.2.1 | Capillary break | S-2 | Foundation Plan |
| 39 | 4.505.3 | Moisture content of building materials | A-1.1 | GRN 14 - Note # 23 |
| 40 | 4.506.1 | Bathroom exhaust fans | A-2 / A-3 | Floor Plans |
| 41 | 4.507.2 | Heating and air-conditioning system design | A-1.1 | GRN 14 - Note # 26 |

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**FORM GRN 11**

## VOC AND FORMALDEHYDE LIMITS
2017 Los Angeles Green Building Code
**(Incorporate this form into the plans)**

The tables below are taken from the 2017 Los Angeles Green Building Code
Tables 4.504.1, 4.504.2, 4.504.3, 4.504.5, 5.504.4.1, 5.504.4.2, 5.504.4.3, 5.504.4.5

**VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]**
**Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds**

| COATING CATEGORY[4,5] | CURRENT LIMIT |
|---|---|
| Flat coatings | 50 |
| Nonflat coatings | 100 |
| Nonflat-high gloss coatings | 150 |
| **Specialty Coatings** | |
| Aluminum roof coatings | 400 |
| Basement specialty coatings | 400 |
| Bituminous roof coatings | 50 |
| Bituminous roof primers | 350 |
| Bond breakers | 350 |
| Concrete curing compounds | 350 |
| Concrete/masonry sealers | 100 |
| Driveway sealers | 50 |
| Dry fog coatings | 150 |
| Faux finishing coatings | 350 |
| Fire resistive coatings | 350 |
| Floor coatings | 100 |
| Form-release compounds | 250 |
| Graphic arts coatings (sign paints) | 500 |
| High temperature coatings | 420 |
| Industrial maintenance coatings | 250 |
| Low solids coatings[1] | 120 |
| Magnesite cement coatings | 450 |
| Mastic texture coatings | 100 |
| Metallic pigmented coatings | 500 |
| Multicolor coatings | 250 |
| Pretreatment wash primers | 420 |
| Primers, sealers, and undercoaters | 100 |
| Reactive penetrating sealers | 350 |
| Recycled coatings | 250 |
| Roof coatings | 50 |
| Rust preventative coatings | 250 |
| Shellacs | |
| Clear | 730 |
| Opaque | 550 |
| Specialty primers, sealers and undercoaters | 100 |
| Stains | 250 |
| Stone consolidants | 450 |
| Swimming pool coatings | 340 |
| Traffic marking coatings | 100 |
| Tub and tile refinish coatings | 420 |
| Waterproofing membranes | 250 |
| Wood coatings | 275 |
| Wood preservatives | 350 |
| Zinc-rich primers | 340 |

[1] Grams of VOC per liter of coating, including water and including exempt compounds.
[2] The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
[3] Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

**FORMALDEHYDE LIMITS[1]**
**Maximum Formaldehyde Emissions in Parts per Million.**

| PRODUCT | CURRENT LIMIT |
|---|---|
| Hardwood plywood veneer core | 0.05 |
| Hardwood plywood composite core | 0.05 |
| Particleboard | 0.09 |
| Medium density fiberboard | 0.11 |
| Thin medium density fiberboard[2] | 0.13 |

[1] Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E 1333. For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12.
[2] Thin medium density fiberboard has a maximum thickness of $\frac{5}{16}$ inches (8 mm).

**SEALANT VOC LIMIT**
**Less Water and Less Exempt Compounds in Grams per Liter**

| SEALANTS | CURRENT VOC LIMIT |
|---|---|
| Architectural | 250 |
| Marine deck | 760 |
| Nonmembrane roof | 300 |
| Roadway | 250 |
| Single-ply roof membrane | 450 |
| Other | 420 |
| **SEALANT PRIMERS** | |
| Architectural | |
| Nonporous | 250 |
| Porous | 775 |
| Modified bituminous 500 | 500 |
| Marine deck | 760 |
| Other | 750 |

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

**ADHESIVE VOC LIMIT [1,2]**
**Less Water and Less Exempt Compounds in Grams per Liter**

| ARCHITECTURAL APPLICATIONS | CURRENT VOC LIMIT |
|---|---|
| Indoor carpet adhesives | 50 |
| Carpet pad adhesives | 50 |
| Outdoor carpet adhesives | 150 |
| Wood flooring adhesive | 100 |
| Rubber floor adhesives | 60 |
| Subfloor adhesives | 50 |
| Ceramic tile adhesives | 65 |
| VCT and asphalt tile adhesives | 50 |
| Drywall and panel adhesives | 50 |
| Cove base adhesives | 50 |
| Multipurpose construction adhesives | 70 |
| Structural glazing adhesives | 100 |
| Single-ply roof membrane adhesives | 250 |
| Other adhesives not specifically listed | 50 |
| **SPECIALTY APPLICATIONS** | |
| PVC welding | 510 |
| CPVC welding | 490 |
| ABS welding | 325 |
| Plastic cement welding | 250 |
| Adhesive primer for plastic | 550 |
| Contact adhesive | 80 |
| Special purpose contact adhesive | 250 |
| Structural wood member adhesive | 140 |
| Top and trim adhesive | 250 |
| **SUBSTRATE SPECIFIC APPLICATIONS** | |
| Metal to metal | 30 |
| Plastic foams | 50 |
| Porous material (except wood) | 50 |
| Wood | 30 |
| Fiberglass | 80 |

[1] If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.
[2] For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168. http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

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**FORM GRN 14**

## 2017 Los Angeles Green Building Code
GREEN BUILDING CODE PLAN CHECK NOTES
**RESIDENTIAL BUILDINGS**

1. For each new dwelling and townhouse, provide a listed raceway that can accommodate a dedicated 208/240 volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter), shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. The panel or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE". (4.106.4.1)
2. For common parking area serving R-occupancies, the electrical system shall have sufficient capacity to simultaneously charge all designated EV spaces at the full rated amperage of the Electric Vehicle Supply Equipment (EVSE). Design shall be based upon a 40-ampere minimum branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter), shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the Los Angeles Electrical Code. (4.106.4.2)
3. Roofs with slopes < 2:12 shall have an SRI value of at least 75 or both a 3-year solar reflectance of at least 0.63 and a thermal emittance of at least 0.75. Roofs with slopes ≥ 2:12 shall have an SRI value of at least 16 or both a 3-year solar reflectance of at least 0.20 and a thermal emittance of at least 0.75. (4.106.5)
4. The required hardscape used to reduce heat island effects shall have a solar reflectance value of at least 0.30 as determined per ASTM E1918 or ASTM C1549. (4.106.7)
5. The flow rates for all plumbing fixtures shall comply with the maximum flow rates in Section 4.303.1. (4.303.1)
6. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads controlled by a single valve shall not exceed 2.0 gallons per minute at 80psi, or the shower shall be designed to only allow one showerhead to be in operation at a time. (4.303.1.3.2)
7. Installed automatic irrigation system controllers shall be weather- or soil-based controllers. (WMELO, § 492.7)
8. For projects that include landscape work, the *Landscape Certification*, Form GRN 12, shall be completed prior to final inspection approval. (State Assembly Bill No. 1881)
9. Annular spaces around pipes, electric cables, conduits, or other openings in the building's envelope at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry, or metal plates. Piping prone to corrosion shall be protected in accordance with Section 313.0 of the Los Angeles Plumbing Code. (4.406.1)
10. Materials delivered to the construction site shall be protected from rain or other sources of moisture. (4.407.4)
11. Only a City of Los Angeles permitted hauler will be used for hauling of construction waste. (4.408.1)
12. For all new equipment, an Operation and Maintenance Manual including, at a minimum, the items listed in Section 4.410.1, shall be completed and placed in the building at the time of final inspection. (4.410.1)
13. All new gas fireplaces must be direct-vent, sealed combustion type. Wood burning fireplaces are prohibited per AQMD Rule 445. (4.503.1, AQMD Rule 445)
14. All duct and other related air distribution component openings shall be covered with tape, plastic, or sheet metal until the final startup of the heating, cooling and ventilating equipment. (4.504.1)
15. Paints and coatings, adhesives, caulks and sealants shall comply with the Volatile Organic Compound (VOC) limits listed in Tables 4.504.1-4.504.3.
16. The *VOC Content Verification Checklist*, Form GRN 2, shall be completed and verified prior to final inspection approval. The manufacturer's specifications showing VOC content for all applicable products shall be readily available at the job site and be provided to the field inspector for verification. (4.504.2.4)
17. All new carpet and carpet cushions installed in the building interior shall meet the testing and product requirements of one of the following (4.504.3):
    a. Carpet and Rug Institute's Green Label Plus Program
    b. California Department of Public Health's Specification 01350
    c. NSF/ANSI 140 at the Gold level
    d. Scientific Certifications Systems Indoor Advantage™ Gold
18. 80% of the total area receiving resilient flooring shall comply with one or more of the following (4.504.4):
    a. VOC emission limits defined in the CHPS High Performance Products Database
    b. Certified under UL GREENGUARD Gold
    c. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program
    d. Meet the California Department of Public Health's Specification 01350
19. New hardwood plywood, particle board, and medium density fiberboard composite wood products used in the building shall meet the formaldehyde limits listed in Table 4.504.5. (4.504.5)
20. The *Formaldehyde Emissions Verification Checklist*, Form GRN 3, shall be completed prior to final inspection approval. (4.504.5)
21. Mechanically ventilated buildings within 1,000 feet of a freeway shall provide regularly occupied areas of the building with a MERV 13 filter for outside and return air. Filters shall be installed prior to occupancy and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. (4.504.6)
22. A 4-inch thick base of ½ inch or larger clean aggregate shall be provided for proposed slab on grade construction. A vapor barrier shall be provided in direct contact with concrete for proposed slab on grade construction. (4.505.2.1)
23. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed until it is inspected and found to be satisfactory. (4.505.3)
24. Newly installed bathroom exhaust fans shall be ENERGY STAR compliant and be ducted to terminate to the outside of the building. Provide the manufacturer's cut sheet for verification. (4.506.1)
25. Newly installed bathroom exhaust fans, not functioning as a component of a whole house ventilation system, must be controlled by a humidistat which shall be readily accessible. (4.506.1)
26. The heating and air-conditioning systems shall be sized and designed using ANSI/ACCA Manual J-2004, ANSI/ACCA 29-D-2009 or ASHRAE handbooks and have their equipment selected in accordance with ANSI/ACCA 36-S Manual S-2004. (4.507.2)

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**FORM GRN 16**

## PLUMBING FIXTURE FLOW RATES
**Residential Occupancies**
2017 Los Angeles Green Building Code
**(Incorporate this form into the plans)**

**SECTION 4.303.1**
**WATER REDUCTION FIXTURE FLOW RATES**

| FIXTURE TYPE | MAXIMUM ALLOWABLE FLOW RATE |
|---|---|
| Showerheads | 1.8 gpm @ 80 psi |
| Lavatory faucets, residential | 1.2 gpm @ 60 psi[1,3] |
| Lavatory faucets, nonresidential | 0.4 gpm @ 60 psi[1,3] |
| Kitchen faucets | 1.5 gpm @ 60 psi[2,4] |
| Metering Faucets | 0.2 gallons/cycle |
| Gravity tank type water closets | 1.28 gallons/flush[5] |
| Flushometer tank water closets | 1.28 gallons/flush[5] |
| Flushometer valve water closets | 1.28 gallons/flush[5] |
| Urinals | 0.125 gallons/flush |
| Clothes Washers | ENERGY-STAR certified |
| Dishwashers | ENERGY-STAR certified |

[1] Lavatory Faucets shall not have a flow rate less than 0.8 gpm at 20 psi.
[2] Kitchen faucets may temporarily increase flow above the maximum rate, but not above 2.2gpm @ 60psi and must default to a maximum flow rate of 1.8 gpm @ 60psi.
[3] Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.
[4] Kitchen faucets with a maximum 1.8 gpm flow rate may be installed in buildings that have water closets with a maximum flush rate of 1.06 gallons/flush installed throughout.
[5] Includes single and dual flush water closets with an effective flush of 1.28 gallons or less.
Single Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A112.19.233.2.
Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.

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**FORM GRN 18R**

## 2017 Los Angeles Green Building Code
WATER CONSERVATION NOTES - ORDINANCE #184248
**RESIDENTIAL BUILDINGS**

**PLUMBING SYSTEM**

1. Multi-family dwellings not exceeding three stories and containing 50 units or less shall install a separate meter or submeter within common areas and within each individual dwelling unit. (4.303.3)
2. Water use reduction shall be met by complying with one of the following:
   A. Provide a 20% reduction in the overall potable water use within the building. The reduction shall be based on the maximum allowable water use for plumbing fixtures and fittings as required by the Los Angeles Plumbing Code. Calculations demonstrating a 20% reduction in the building "water use baseline", as established in Table 4.303.4.1, shall be provided; or
   B. New fixtures and fittings shall comply with the maximum flow rates shown in Table 4.303.4.2, or
   C. Plumbing fixtures shall use recycled water.
   **Exception:** Fixture replacements (4.303.4)
3. New building on a site with 500 square feet or more of cumulative landscape area shall have separate meters or submeters for outdoor water use. (4.304.3)
4. Additions and alterations on a site with 500 square feet or more of cumulative landscape area and where the entire potable water system is replaced, shall have separate meters or submeters for outdoor water use. (4.304.3)
5. In other than single family dwellings, locks shall be installed on all publicly accessible exterior faucets and hose bibs. (4.304.4)
6. Provide a cover having a manual or power-operated reel system in any permanently installed outdoor in-ground swimming pool or spa in one- and two-family dwellings. For irregular-shaped pools where it is infeasible to cover 100% of the pool due to its irregular shape, a minimum of 80% of the pool shall be covered. (4.304.5)
7. Except as provided in this section, for sites with over 500 square feet of landscape area, alternate waste piping shall be installed to permit discharge from the clothes washer, bathtub, showers, and bathroom/restrooms wash basins to be used for a future graywater irrigation system. (4.305.1)
8. Except as provided in this section, where City-recycled water is available within 200 feet of the property line, water closets, urinals, floor drains, and process cooling and heating in the building shall be supplied from recycled water and shall be installed in accordance with the Los Angeles Plumbing Code. (4.305.2)
9. In new buildings of 25 stories or less, the cooling towers shall comply with one of the following:
   A. Shall have a minimum of 6 cycles of concentration (blowdown); or
   B. A minimum of 50% of the makeup water supply to the cooling towers shall come from non-potable water sources, including treated backwash. (4.305.3.1)
10. In new buildings over 25 stories, the cooling towers shall comply with all of the following:
    A. Shall have a minimum of 6 cycles of concentration (blowdown); and
    B. 100% of the makeup water supply to the cooling towers shall come from non-potable water sources, including treated backwash. (4.305.3.2)
11. Where groundwater is being extracted and discharged, develop and construct a system for onsite reuse of the groundwater. Alternatively, the groundwater may be discharged to the sewer. (4.305.4)
12. Provide a hot water system complying with one of the following (Los Angeles Plumbing Code Section 610.4.1):
    A. The hot water system shall not allow more than 0.6 gallons of water to be delivered to any fixture before hot water arrives.
    B. Where a hot water recirculation or electric resistance heat trace wire system is installed, the branch from the recirculating loop or electric resistance heat trace wire to the fixture shall contain a maximum of 0.6 gallons.
    C. Residential units having individual water heaters shall have a compact hot water system that meets all of the following:
       a. The hot water supply piping from the water heater to the fixtures shall take the most direct path.
       b. The total developed length of pipe from the water heater to farthest fixture shall not exceed the distances specified in Table 3.6.5 of the California Energy Code Residential Appendix.
       c. The hot water supply piping shall be installed and insulated in accordance with Section RA3.6.2 of the California Energy Code Residential Appendix.

**IRRIGATION SYSTEM**

12. A water budget for landscape irrigation use that conforms to the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO) is required for new landscape areas of 500 sq. ft. or more. The following methods to reduce potable water use in landscape areas include, but are not limited to, use of captured rainwater, recycled water, graywater, or water treated for irrigation purposes and conveyed by a water district or public entity. (4.304.1)

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# Green Building Notes

**CRISLER WAY- All 4 Houses**
**CAC Development**
**1504 South Flower Street**
**Los Angeles, California 90015**

DRAWN BY DC
CHECKED BY DC
APPROVED BY RA

REVISIONS
NUMBER DATE BY

DATE ISSUED **8-27-19**
DATE PRINTED **8-27-19**

PROJECT REF. NUMBER

**A-1.1**
SHEET NUMBER