SOIL MANAGEMENT PLAN

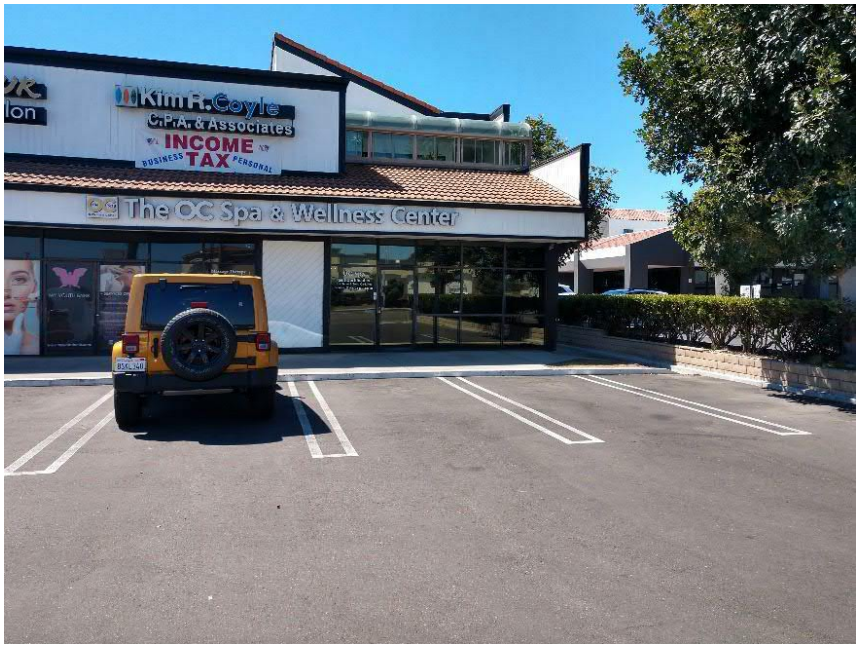
PROPOSED SENIOR LIVING DEVELOPMENT – HB

4952 AND 4972 WARNER AVENUE

HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA

October 22, 2021; Revised January 17, 2022

Terracon Project No. 60217415



Prepared for:
Hines Interests LP
Newport Beach, California

Prepared by:
Terracon Consultants, Inc.
Irvine, California

October 22, 2021
Revised January 17, 2022

Hines Interests LP
4000 MacArthur Boulevard, Suite 110
Newport Beach, California 92660

Attn: Mr. Tom Lawless
Tom.Lawless@hines.com

Re: Soil Management Plan
Proposed Senior Living Development - HB
4952 and 4972 Warner Avenue
Huntington Beach, Orange County, California
Terracon Project No. 60217415

Dear Mr. Lawless:

Terracon Consultants, Inc. (Terracon) is pleased to submit the Soil Management Plan (SMP) to be implemented during the redevelopment phases of the above referenced site. This SMP is intended as a supporting guide and does not function as a corrective action plan. It cannot be all inclusive or anticipate every future condition involving workers or construction involving onsite soils. The SMP serves as a risk management advisory to persons and contractors involved with development at the site. In the event that site conditions are encountered that differ from those observed by Terracon at the time of the subsurface investigation, and/or documented by previous consultants Terracon should be notified immediately for further evaluation of environmental conditions or human health exposure risk. Additionally, Terracon understands that the SMP will be implemented by the project General Contractor (GC) acting on behalf of Hines Interests LP, and periodically monitored by Terracon personnel during earthwork activities that may disturb impacted on-site soils.

Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Terracon Consultants, Inc.

Eric J. St. Michel
Staff Scientist

Fabio M. Minervini, P.G.
Environmental Department Manager
California Licensed Geologist

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Reliance 2
2.0 SITE BACKGROUND 2
2.1 Former Leaking Underground Storage Tank (LUST) Case 2
2.2 Summary of Previous Environmental Site Investigations 3
2.2.1 November 1993 Investigation – Kennedy Jenks 3
2.2.2 February 1994 Investigation – Kennedy Jenks 3
2.2.3 November 2002 Investigation - MACTEC Engineering and Consulting, Inc. 4
2.2.4 July 2003 Investigation - Science Applications International Corporation 4
2.2.5 April and May 2021 Investigation - Terracon Consultants, Inc. 4
3.0 SOIL MANAGEMENT PLAN PURPOSE 5
4.0 EXCAVATED SOIL CHARACTERISTICS 5
5.0 SEQUENCE OF WORK 6
6.0 NOTIFICATIONS AND PRE-EXCAVATION ACTIVITIES 6
6.1 Contractor Notification 6
6.2 Worker Education and Safety 7
6.3 Health and Safety Plan 7
6.4 Establish Site Control and Work Zones 8
6.5 Agency Notification 8
7.0 PROJECT CONTROLS 8
7.1 Dust Control Measures 8
7.1.1 Field Screening and Monitoring 9
7.1.2 Dust 9
7.1.3 Exceeding Dust and Lead Action Levels 10
7.2 Tracking Sediment Off-Site 10
7.3 Contractor Procured Substances 10
7.4 Contingency Measures and Spill Reporting 11
8.0 MANAGEMENT OF EXCAVATED SOILS 12
8.1 Soil Excavation Parameters 12
8.2 Waste Minimization 12
8.3 Changed Conditions and Soil Stockpiling 12
8.4 Stockpile Characterization, Disposal of Excess Soils 13
8.5 Soil Hauling & Disposal 14
9.0 GROUNDWATER MANAGEMENT 14
10.0 DOCUMENTATION 14
11.0 SUMMARY 15
12.0 REFERENCES 16

APPENDICES

FIGURES
TABLES
APPENDIX A Grading Plans
APPENDIX B OCHCA Case Closure
APPENDIX C Historical Site Plans Showing Sample Locations (SAIC, 2003)
APPENDIX D Historical Soil Sample Analytical Results Tables (SAIC, 2003)

SOIL MANAGENT PLAN

PROPOSED SENIOR LIVING DEVELOPMENT - HB
4951 AND 4972 WARNER AVENUE
HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA

Terracon Project No. 60217415
October 22, 2021
Revised January 17, 2022

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) has prepared this Soil Management Plan (SMP) to provide information concerning environmental site conditions and best management practices (BMPs) associated with impacted soil that may be encountered during excavation activities planned to be conducted by the General Contractor (GC), on behalf of the client, during the development of the Proposed Senior Living Development – HB at the above-referenced site (the Project). The location of the site is shown in Figure 1 on a Topographic Map, Figures 2 and 2A present a site diagram and a partial site diagram, respectively, showing soil, groundwater, and soil gas sampling locations; and Figure 3 shows the site diagram presented in Figure 2 with an overlay of the proposed senior living development.

The site is located at 4952 and 4972 Warner Avenue in Huntington Beach, Orange County, California, (Assessor Parcel Numbers [APNs]): 163-281-01 and 163-281-02 and consist of two contiguous parcels of land totaling approximately 2.80-acres. The site is improved with two buildings: an approximately 7,285-square-foot (SF) two-story multi-tenant retail building on the northeastern portion of the site, and an approximately 47,488-SF three-story multi-tenant office building located on the western and southern portions of the site. Other site improvements include asphalt-paved parking lots, landscaped areas, and utilities. The 4972 Warner Avenue building (northeast) is occupied by the OC Spa and Wellness Center, Electric Jiu Jitsui, Little Caesars (restaurant), the Colour Attic and Kim R. Goyle CPA. The 4952 Warner Avenue building is occupied by multiple offices occupied by insurance agents, travel agencies, accounting, brokerage, attorney's, therapist offices, engineering firms and financial institutions. Operations on the site consist of general administration, restaurant operations, beauty retail and recreational activities.

Terracon understands that the site buildings and parking lots will be demolished and the proposed future development of the property will include the construction of a new multi-level senior living facility underlain by a single level subterranean parking structure. The proposed structure will contain senior living units, as well as administrative/office space(s) and other amenities. As part of the planned future construction, Terracon understands that the proposed development will include significant grading activities which will require the excavation and export of soil to a depth of approximately 12 to 13 feet below ground surface (bgs) to accommodate the proposed living

facility and 1-level subterranean parking garage. The proposed grading plans are included as Appendix A.
Based on depth of excavation and the anticipated depth to groundwater beneath the site, which is estimated to occur at a depth approximately 36 feet bgs, groundwater is not expected to be encountered during the proposed site development activities. Therefore, a groundwater management plan does not appear warranted at this time, and is not included in this SMP.

1.1 Reliance

The SMP has been prepared for the exclusive use and reliance of Hines Interests LP. Reliance by any other party, except government officials, is prohibited without the written authorization of the client and Terracon. If the client is aware of additional parties that will require reliance on the scope of work and cost estimates, the names, addresses, and relationship of these parties should be provided for Terracon approval prior to the time of authorization to proceed.

Reliance on the SMP by the client and all authorized parties will be subject to the terms, conditions, and limitations under the Master Service Agreement Task Order (the Agreement), dated July 14, 2021, and executed on July 23, 2021; sections of the proposal, and the scope of work of this soil management plan. The limitation of liability defined in the Agreement is the aggregate limit of Terracon's liability to the client and all relying parties.

2.0 SITE BACKGROUND

Based on a review of historical information, the site has consisted of undeveloped and/or vacant land from as early as 1896 through 1963, when the northeastern portion of the site (4972 Warner Avenue) was developed with a service station, which was cleared by 1978. By 1978/1979, the existing three-story multi-tenant commercial office building was developed on the west and southern portions of the site and the existing two-story multi-tenant retail building was developed on the northeastern portion of the site. The site has remained relatively unchanged from the late 1970s through the present (Figure 2). Occupants on-site have consisted of various professional services, restaurants, recreational tenants, beauty salons, and medical offices.

2.1 Former Leaking Underground Storage Tank (LUST) Case

Terracon reviewed information related to the leaking underground storage tank (LUST) case for the former Chevron/Texaco Heritage Site #21-2242 (OCHCA Case No. 03UT18), which received closure under the regulatory oversight of the OCHCA, Local Oversight Program (LOP). The former Chevron/Texaco Heritage Site #21-2242 was located in the northeastern portion of the site (4972 Warner Avenue). Terracon reviewed client-provided documents, and documents obtained from the OCHCA and/or from the State of California GeoTracker database. Review of the available information included the *Case Closure Summary*, dated March 16, 2004; prepared by the OCHCA, Leaking Underground Fuel Tank Program, and issued with the *Remedial Action Completion Certificate*, dated June 1, 2004 (collectively, the OCHCA Case Closure). The OCHCA Case Closure provides a summary of the site environmental history, a list of considerations for

closure, and requirements that may apply under certain conditions. A copy of the OCHCA Case Closure is provided in Appendix B.

The OCHCA Case Closure indicates that multiple phases of assessment had been conducted at the former Chevron/Texaco Heritage Site #21-2242, dating back to 1993 and 1994, which discovered that soil and groundwater had been impacted; however, the results of the assessment were not reported to the OCHCA until 2003. The former service station received a "no further action" based on the following considerations: "The known soil contamination is limited in extent in silty clay/clayey soil to the south of the former tank area and on the edge of the southeastern dispenser at depth between 26 to 36 bgs", "The known soil contamination has not significantly impacted groundwater as evident by the groundwater results", and "The benzene levels seen in Monitoring Well 3 (MW-3), the nearest up-gradient well to the existing building, does not provide a vapor intrusion threat." However, the OCHCA concluded that as part of the site management requirements, the OCHCA must be notified if a structure is going to be placed over the area where high soil contaminants remain in place." In addition, the OCHCA indicated that "corrective action should be reviewed if the land use changes to residential".

2.2 Summary of Previous Environmental Site Investigations

2.2.1 November 1993 Investigation – Kennedy Jenks

On November 10 and 11, 1993, Kennedy Jenks advanced six soil borings (FNB-B1 through FNB-B6), at depth ranging between 21.5 and 42 feet below grade surface (bgs), and installed a groundwater monitoring well (FNB-MW1) at a bottom depth of 45 feet bgs. A total of nine soil samples and one groundwater samples were collected for laboratory analysis. The soil and groundwater samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline and diesel (TPHg and TPHd, respectively) using U.S. Environmental Protection Agency (EPA) Method 8015M, and for benzene, toluene, ethylbenzene, and xylenes (collectively, BTEX) using EPA Method 8020 (MACTEC and SAIC, 2003). Soil and groundwater sample locations are shown in detail on the Partial Site Diagram presented in Figure 2A. The source site plans showing historical soil and groundwater sample locations, and the historical data tables showing the November 1993 soil and groundwater analytical results, provided in Science Applications International Corporation (SAIC), *Site Assessment Report,* dated September 19, 2003 (SAIC, 2003); are included in Appendices C and D, respectively.

2.2.2 February 1994 Investigation – Kennedy Jenks

As a result of the findings of the November 1993 site assessment, Kennedy Jenks returned to the site to further investigate the extent of petroleum hydrocarbons in the soil. Three soil borings (FNB-7 through FNB-9) were advanced on February 2, 1994. Soil boring locations are shown in Figure 2A. Nine soil samples were analyzed for TPHg and TPHd by EPA Method 8015M, and for BTEX by EPA Method 8020 (MACTEC and SAIC, 2003). Historical sample locations and analytical results, including soil sample analytical results from the February 1994 Kennedy-Jenks investigation, are presented in Appendices C and D, respectively.

2.2.3 November 2002 Investigation - MACTEC Engineering and Consulting, Inc.

On November 12 and 13, 2002, MACTEC Engineering and Consulting, Inc. (MACTEC) advanced seven soil borings. Soil boring B-10 through B-13 were advanced to depths ranging from 46.5 to 50 feet bgs, and borings MW-2, MW-3, and MW-4 were advanced to depths ranging from 51.5 to 56.5 feet bgs and completed as groundwater monitoring wells. Soil boring and groundwater monitoring well locations are shown in Figure 2A. Soil and groundwater samples were analyzed for TPHg and TPHd by EPA method 8015M, for BTEX, methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE) tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and tetrachloroethene (PCE) by EPA Method 8260B; and for lead by EPA Method 6010B (MACTEC, 2003). A summary of soil sample analytical results is presented in Figure 4. Historical sample locations and analytical results, including the soil sample analytical results from the MACTEC November 2002 investigation, are presented in Appendices C and D, respectively.

2.2.4 July 2003 Investigation - Science Applications International Corporation

On July 29 and July 30, 2003, SAIC advanced an additional three soil borings. Boring B-14 was advanced to a depth of approximately 56 feet bgs, and borings MW-5 and MW-6 were advanced to a depth of 56.5 feet bgs and converted into groundwater monitoring wells. Soil boring and groundwater monitoring well locations are shown in Figure 2A. Based on the findings of the additional investigation, SAIC concluded that the extent of petroleum hydrocarbons impact in soil and groundwater had been defined and recommended two quarters of groundwater monitoring (SAIC, 2003). A summary of soil sample analytical results is presented in Figure 4 and a summary of the analytical results for the groundwater samples collected on March 24, 2004, is presented in Figure 5. Historical sample locations and analytical results, including the soil sample analytical results from the SAIC July 2003 investigation, are presented in Appendices C and D, respectively.

2.2.5 April and May 2021 Investigation - Terracon Consultants, Inc.

In April 2021, Terracon completed a *Phase I Environmental Site Assessment* (ESA), dated April 2, 2021 (Terracon, 2021a) and, based on the findings of the Phase I ESA, on May 5, 2021, Terrcaon conducted a *Limited Site Investigation* (LSI), report dated June 1, 2021 (Terracon, 2021b).

Terracon's May 2021 LSI evaluated the presence of TPH and/or volatile organic compounds (VOCs) in the soil and soil gas beneath the site. Terracon advanced a total of 11 borings (VP-1 through VP-10 and B-11) to a depth of approximately 15 feet bgs. Soil borings VP-1 through VP-10 were converted into vapor probes for the collection of soil gas samples. Terracon's May 2021 LSI sample locations are shown on Figures 2 and 3, and the soil and soil gas sample analytical results are summarized in Tables 1 through 3.

Laboratory analytical results for the soil samples collected from borings VP-1 through VP-10 and B-11 indicate that TPH and VOC concentrations were not detected above their respective laboratory reporting limits (RLs), with the exception of a concentration of TPH as oil range

organics (TPH-ORO), of 22 milligrams per kilogram (mg/kg), detected in a soil sample collected from boring VP-5 at a depth of 2 to 3 feet bgs (Table 1).

Laboratory analytical results for the soil gas samples collected in May 2021 from vapor probes VP-1 through VP-10 indicate that PCE, benzene, and chloroform were detected at concentrations above their respective environmental screening level (ESL) established by the San Francisco Bay Regional Water Quality Control Board (SFB-RWQCB, 2019 Rev.2). Terracon concluded that the overall distribution of VOCs in soil gas beneath the site suggests that the PCE may be originating from an off-site source located north of the property, such as the former Lewis Cleaners, formerly located to north across Warner Avenue from the site, at 4945 Warner Avenue (Terracon, 2021b). PCE was detected at its' highest concentration in the three northernmost soil gas samples, VP-8 through VP-10, located along the northern boundary of then property; and not detected above the laboratory RL of 0.21 µg/m³ in VP-3 and VP-4, located in the southern portion of the site. Soil gas sample locations are shown on Figure 2 and 3, and soil gas sample analytical results are summarized in Table 3.

In addition, Terracon's 2021 LSI report concluded that the distribution of benzene in soil gas beneath the site is not conclusive; however, it appears to occur at higher concentrations in the central and southern portions of the site (VP-3 and VP-6, Table 3), and could be potentially related to the documented release that occurred at the former on-site service station addressed at 4972 Warner Avenue (Terracon, 2021b).

3.0 SOIL MANAGEMENT PLAN PURPOSE

The purpose of this SMP is to serve as a risk management advisory to developers and contractors and assist in protecting human health and the environment by providing a proposed approach for managing known environmental conditions at the site. This SMP is intended to inform the developer, construction contractors, and site workers of conditions of potential and documented environmental impacts. This SMP documents the suggested approach for managing known environmental impacts that may be encountered during the development of the site.

4.0 EXCAVATED SOIL CHARACTERISTICS

During excavation, there is a potential to encounter residual petroleum hydrocarbon and VOCs, which if excavated in the case of soil, may result in the generation of waste that requires management and additional precautions during construction. It should be noted that, based on the depth of the proposed grading activities (up to 15 feet bgs) and an estimated depth to groundwater of approximately 39 to 46 feet bgs (Terracon, 2021a), groundwater is not anticipated to be encountered at the site. This SMP provides procedures to properly identify, segregate, manage, characterize, and dispose of hazardous and non-hazardous wastes that are incidentally generated during excavation activities. Four categories potentially apply to excavated soils:

1. **RCRA Hazardous Waste** – excavated soil with representative chemical concentrations exceeding Federal criteria when analyzed by Toxicity Characteristic Leaching Procedure (TCLP). Soil excavated from the Project site is not anticipated to fall under this category.
2. **Non-RCRA [California] Hazardous Waste** – excavated soil with representative chemical concentrations exceeding State criteria but not exceeding Federal criteria. Soil excavated from the Project site is not anticipated to fall under this category.
3. **Non-hazardous Waste** – excavated soil with representative chemical concentrations less than State and Federal criteria. Previously undocumented, localized area(s) of soil excavated from the Project site may fall under this category.
4. **Non-impacted Soil** – soil does not have chemical impacts that would require special handling or off-site disposal. It is anticipated that the vast majority of the soil excavated from the Project site will fall under this category.

5.0 SEQUENCE OF WORK

This section describes the general sequence of work, details for each activity are provided in the following sections of this document.

- Notifications and Pre-Excavation Activities:
  - Contractor Notification.
  - Worker Education Safety.
  - Preparing a Site Health and Safety Plan.
  - Agency Notification
  - Establishing work zones, site control, and staging areas.
- Dust Control
- Project Controls
- Management of Onsite Soils
- Groundwater Management
- Documentation

6.0 NOTIFICATIONS AND PRE-EXCAVATION ACTIVITIES

6.1 Contractor Notification

The GC and its subcontractors anticipated to be working at the site are hereby notified that soil that they encounter could contain concentrations of regulated substances resulting from historical operations at the site. It should be understood by contractors and site workers that the concentrations of regulated substances that may be encountered can range from generally low to in excess of regulatory levels. Impacted material encountered may not exhibit visual or olfactory

indications of impact. Exposure, and thereby potential hazard, can be reduced if certain work practices/precautions are followed. Therefore, this SMP shall be provided to the GC and its subcontractors as a general guidance document for managing contaminated soils.

6.2 Worker Education and Safety

This SMP provides information for use in complying with employer obligations such as employee right-to-know, worker safety, and other regulatory programs while providing general guidelines for reducing potential exposures of workers to environmental media having chemical impact. This SMP is not intended for direct, unmodified use by employers to protect workers. Rather, it intends to provide general considerations and procedures for modification and incorporation by employers into their existing worker safety programs. Each employer is responsible for the health and safety of its own workers. The GC and its subcontractors must inform and educate their respective workers to be alert for new or undiscovered conditions that could potentially pose risk.

6.3 Health and Safety Plan

Terracon understands that the on-site soils will be disturbed during future excavations or construction activities; therefore, proper procedures should be followed with respect to worker health and safety, and any affected soil encountered should be properly characterized, treated, and/or disposed in accordance with applicable local, state or federal regulations.

Terracon recommends that the GC and their subcontractors develop and implement independent health and safety plans (HSP) during all phases of work. Based on current analytical data, the potential contaminants of concern (COCs) may include TPH and VOCs, which should be considered in the contractors' HSPs. Additionally, Terracon recommends that the HSP be prepared by a qualified person experienced in the health and safety risks associated with the identified COCs in accordance with the Federal Occupational Safety and Health Administration (OSHA) Hazardous Waste Operators and Emergency Response (HAZWOPER) standard (29 CFR 1910.120) and Cal-OSHA standard (8 CCR 5192). The HSP shall specify administrative and engineering controls and require applicable personal protective equipment (PPE) for worker safety during each stage of the Project. The responsibility of developing and implementing a HSP for on-site workers is not the responsibility of Terracon and is outside the scope of this SMP.

Skin Protection

Contractors are responsible for identifying and providing appropriate PPE for their employees working at the site. At a minimum, it is recommended that personnel begin project activity in their standard work uniform. If obvious contamination is encountered, workers should upgrade their attire to include rubberized safety footwear or safety footwear with disposable latex covers and impermeable gloves.

Personal Hygiene

Work gloves should be worn, and hands, face, and forearms should be washed prior to eating, drinking, smoking, or using restroom facilities. Clothing soiled onsite should be laundered as soon

as possible following each workday in order to limit inadvertently carrying contaminated soils off the site. A full-body shower should be taken as soon as practical upon completion of the work shift.

Decontamination
Contractors should use brushes, shovels, etc. to conduct gross soil removal from equipment used to excavate or move impacted soils at the site. Decontamination with a high-pressure washer is recommended for equipment that has contacted obviously impacted soil.

6.4 Establish Site Control and Work Zones

A construction fence shall be installed to prevent access by unauthorized personnel and the public. If contamination is encountered, the work area shall be segregated into three work zones: Exclusion Zone (EZ), Contamination Reduction Zone (CRZ), and Support Zone (SZ). The delineation can be established with physical controls (e.g., caution tape and barriers or administratively). The EZ includes the excavation area where there is the most potential for worker exposure. The CRZ is a transition zone from EZ to the SZ, where decontamination methods will reduce the transfer of contamination from the EZ. The SZ stages support for work in the other zones.

The degree of training, administrative and engineering controls, and PPE increase from the SZ to the EZ. Hazard communication shall be implemented to notify the workers of exposure to contaminants. Only trained workers shall be allowed access to the EZ in accordance with the HSP. A site-specific work zone plan showing control zones shall be prepared if needed and inserted into the HSP.

6.5 Agency Notification

Underground features or unidentified environmental features, such as USTs, septic pits, hydraulic lift components, clarifiers, and other unknown features, which contain or are suspected of having contained hazardous substances, are identified as regulated features. As discussed herein, periodic monitoring by Terracon personnel during excavation activities will be conducted. If field observations (i.e. odors, staining) indicate the possible presence of impacted soils, Terracon should be notified for recommendations regarding any additional characterization/sampling that should be conducted. Similarly, if a regulated feature is discovered, Terracon should be notified so that appropriate regulatory agency notifications can be made.

7.0 PROJECT CONTROLS

The following control measures should be implemented during excavation.

7.1 Dust Control Measures

Dust generation can be caused by excavation, general movement of equipment throughout the site, stockpiling, and loading/transportation of export material. Fugitive / airborne dust, potentially

impacted by petroleum hydrocarbons and/or lead, can create a nuisance and/or a human health hazard for the surrounding community.

As required by the SCAQMD, the GC will be responsible for taking actions to prevent, reduce, or mitigate PM-10 emissions. A Dust Control Permit and a Dust Mitigation Plan may be required and shall consider the chemicals of concern identified in the plan. Supplemental permits may also be needed for activities such as (but not limited to) stockpiling, backfilling or crushing, etc. A complete list of the necessary supplemental permits typically is available on the SCAQMD website (http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/fugitive-dust). The GC is typically responsible for preparation of and adherence to this plan, as well as adhering to other pertinent requirements referenced.

Dust control measures should be employed during development activities at the site, including excavating, loading of waste onto trucks, and movement of equipment and vehicles; to achieve no visible emissions. These measures will include, but are not limited to, misting or spraying of water, as appropriate. In addition, personnel operating mobile equipment at the site are instructed to limit vehicle speed to reduce dust generation, low tipping of excavated loads and minimizing dropping soil from heights while loading trucks or placement of material in stock-piles, and covering of soil stockpiles should be implemented to limit the generation of visible airborne dust. Use of a water spray unit (water truck) to dampen surface materials should implemented, as appropriate, if visible dust is generated during grading activities. Construction personnel should avoid over-spraying the area to prevent runoff and muddy work surfaces. Contractors and site workers should plan their work to account for minimal soil movement.

7.1.1 Field Screening and Monitoring

Terracon recommends that a qualified environmental professional (EP) perform periodic oversight and observation during excavation activities that would disturb the existing soils located at the site, to document that the objectives of the SMP are met. If environmental conditions (similar to the examples above) are encountered during the oversight, Terracon will conduct field screening using sensory methods and a photoionization detector (PID) to detect the presence of VOCs, and sampling of the impacted materials, if necessary. Additionally, dust control measures shall be implemented by the GC, in accordance with all applicable dust control regulations of the South Coast Air Quality Management District (SCAQMD).

7.1.2 Dust

The potential routes of dust exposure to the public are ingestion, direct dermal contact, and inhalation of airborne impacted dust. Since the Project site will be secured with construction fencing to prevent entry of unauthorized personnel (including the public), ingestion and direct contact exposure of impacted soil can be eliminated as potential routes of exposure. The remaining potentially complete pathway for public exposure is inhalation of fugitive impacted dust.

Excavation activities can release particles into the air as dust that can become a nuisance or a hazard to the public. In addition, contaminants can adhere or adsorb to the dust particles, resulting in potential public exposure. Therefore, dust control measures serve to reduce the unwanted transport of airborne contamination generated with the dust during excavation activities at the Project site and potential exposure to the public.

This SMP focuses on controlling the dispersion of contaminants by controlling dust from work areas and minimizing exposed waste. The primary tool to protect the public from exposure is continuous monitoring for visible dust. The action level for dust is “no visible dust” at the site boundary.

If visible dust becomes a significant issue; i.e., visible dust is generated at levels that require a specific response (as described in Section 8.2 below) more than twice during excavation activities, the GC shall employ a real-time dust monitor such as a DUSTTRACK, or equivalent to collect data and confirm that dust impacts are not migrating outside the fence line. The action level that requires a response is 50 micrograms per cubic meter (µg/m^3) for particulate matter with a diameter of 10 micrometers or less (PM-10), as measured at the property line. Subsequent sections in this SMP will provide procedures in the event the action level is exceeded.

7.1.3 Exceeding Dust and Lead Action Levels

If the dust or air monitoring (as required in Section 7.0) indicate exceedance of the action levels set forth by the California Environmental Protection Agency (CalEPA), California Air Resources Board (CARB), Ambient Air Quality Standards, and/or SCAQMD Rule 402, Fugitive Dust (50 µg/m^3 for PM-10 and 1.5 µg/m^3 for lead in air); then dust-generating activities shall temporarily be suspended. If there are two instances of work stoppage due to lack of on-site dust control measures being instituted, upon restarting dust-generating activities, dust monitoring with a real-time dust meter shall be performed to verify that the modifications to work practices and project controls are effective.

7.2 Tracking Sediment Off-Site

Construction stabilized exits consisting of trackout control systems, such as rattle grates, pipe-grid trackout-control, and/or gravel bed trackout aprons with 3-inch diameter rock, shall be used to knock loose dirt/mud from the wheels of vehicles exiting the site. All trucks exiting the Project site shall ensure that no spillage of soil occurs off-site and minimize tracking of soil from the site. Truck drivers transporting waste shall be required to inspect the exterior of their trucks and brush off all loose soil prior to departing the site. Trucks transporting waste shall limit the load of soil to allow sufficient freeboard (i.e., 6 inches) and shall cover each load prior to leaving the Project site.

7.3 Contractor Procured Substances

Excavation subcontractor(s) may bring materials on site that may have hazardous chemicals or constituents. These materials shall be managed in accordance with this SMP and the stormwater pollution prevention plan (SWPPP). The materials shall be containerized and placed away from

drainage areas and locations where a spill or leak may result in risk to the public and the environment. Safety Data Sheets (SDSs) for each chemical shall be submitted to the site health and safety manager.

All containers, drums, and tanks shall be inspected on arrival and allowed to remain on site if the container is in good condition. All containers shall be appropriately labeled and kept closed unless the containers are opened to obtain product. Separate chemicals shall not be stored in the same container in the event they are incompatible. Secondary containment with a capacity of 110% of the volume of stored chemicals shall be provided for storage areas containing 55 gallons or more of chemicals and fuels. The containers, secondary containment, and storage areas shall be inspected weekly and maintained with good housekeeping practices through the Project duration (i.e., inspected for damage and integrity and areas kept organized, cleaned, and containers properly labeled).

A spill kit shall be kept on site to respond to a spill, leak, or other unauthorized release. The kit shall include plastic sheeting, absorbents, sand, and kitty litter. Only 40-hour trained OSHA HAZWOPER personnel shall respond to a spill. If there is immediate threat to health and safety, the local Fire Department shall be called via 911. If there is no immediate threat to health and safety, the first response shall be to contain the spill so it does not spread and then to clean it up to the extent practicable.

There is a potential for release of petroleum products from the GC's equipment or during operation or refueling. In the event of such a release, the GC shall notify the EP for collection of soil samples from the impacted soil to characterize and profile it for proper disposal, according to the procedures listed in Section 9.4 and 9.5 of this SMP.

7.4 Contingency Measures and Spill Reporting

If conditions are encountered, which present an immediate threat of injury to human health or the environment, the area shall be secured and the local Fire Department with jurisdiction in the area shall be notified. In addition, "911" shall be called to summon emergency services, if needed.

If previously unknown hazardous substances or conditions are encountered that do not present an immediate threat to human health or water quality, the GC shall immediately notify the EP, if not already on site. The area surrounding the discovery of unknown contamination shall be isolated with markings.

If a spill or discharge occurs and is reportable, the GC shall immediately notify the EP (if not already on site), the California Office of Emergency Services at (800) 852-7550, the National Response Center at (800) 424-8802, and the Huntington Beach Fire Department at (714) 536-5411. If there is an immediate fire, explosion, or health and safety threat, the Fire Department shall be notified by calling 911. Reportable spills are defined in the California Hazardous Materials Spill/Release Notification Guidance published by the State of California Governor's Office of Emergency Services (CalOES, 2014).

8.0 MANAGEMENT OF EXCAVATED SOILS

8.1 Soil Excavation Parameters

As indicated on the proposed grading plans included as Appendix B, the disturbed soil area for the proposed project encompasses the majority of site. The grading activities are proposed to extend to a depth up to approximately 15 feet bgs.

8.2 Waste Minimization

Measures should be taken to limit the volume of excess soils accumulating on the site to minimize the potential for contact between stormwater and any impacted soils identified during excavation. Excavation in areas where impact is encountered should be protected from stormwater run-off by constructing soil berms, diversionary structures, or temporary detention areas to direct water away from exposed soils.

8.3 Changed Conditions and Soil Stockpiling

Contractors should be aware of the regulatory implications of improper management or disposal of contaminated soils. If changed conditions are encountered (i.e. petroleum hydrocarbons, USTs, or obviously impacted soils), the excavated impacted soil will be stockpiled separately on plastic sheeting, covered with plastic sheeting, and secured with fiber rolls or equivalent until the EP can properly evaluate the changed conditions and/or impacted soil. Impacted environmental media shall be isolated from worker and public exposure, contained using plastic sheeting above and below, within berms to prevent migration from the pile, and secured with additional fencing if necessary, until ready for transport. Workers in physical contact with obviously impacted environmental media should have OSHA HAZWOPER training consistent with 29 CFR 1910.120.

If chemical odors, stained or saturated soils, a sheen on water in excavations, or other evidence of potential chemical contamination is encountered during excavation activities, contractors and site workers should stop work in the area of the discovery and notify the Project Superintendent, or appropriate project health and safety coordinator, and the EP for further evaluation.

The notifications for reporting discovery of contaminated soil are as follows.

- Terracon Project Manager – Eric St. Michel (Tustin, Orange County office)
  Office: (949) 864-2078
  Cell: (661) 433-5928
  E-mail: eric.st.michel@terracon.com

- Terracon Project Manager (Alternate Contact) – Fabio Minervini (Tustin, Orange County office)
  Office: (949) 383-1984
  Cell: (949) 202-7818
  E-mail: fabio.minervini@terracon.com

Subsequent to evaluation process of a changed condition discovered at the site, and in the event soil or groundwater disposal at an approved landfill disposal site is required, the following transporter and Treatment, Storage, and Disposal Facility (TSDF), for hazardous and non-hazardous soils, are recommended to be contacted by the client and/or the property owner.

- Transporter:
  Belshire Environmental Services, Inc.
  License # 2997
  25971 Towne Center Drive
  Foothill Ranch, CA 92610
  (949) 460-5200

- TSDF (Non-Hazardous Waste):
  Veola Environmental Services
  US EPA FRS ID: CAD008302903
  1704 West First Street and 107 South Motor Avenue
  Azusa, CA 91702
  (626) 334-5117

- TSDF (Hazardous Solid Waste)
  Veola Environmental Services
  US EPA FRS ID: CAD008302903
  1704 West First Street and 107 South Motor Avenue
  Azusa, CA 91702
  (626) 334-5117

- TSDF (RCRA-Hazardous Waste):
  US Ecology Nevada
  EPA ID: NVT330010000
  Highway 95, 11 Miles South of Beatty
  Beatty, NV 89003
  (800) 239-3943

Terracon understands that the soil disposal manifests are the responsibility of the owner of the property, who will be responsible for signing waste manifests of soils to be disposed off-site, if needed.

8.4 Stockpile Characterization, Disposal of Excess Soils

Terracon understands that on-site excavation will result in excess soil being generated. If impacts are identified, the impacted excavated soil may require characterization, and/or off-site disposal at an approved facility. Based on the historical knowledge of the site, the identified COCs onsite and typical waste profiling parameters, the analysis (if warranted) would likely include TPH by

Environmental Protection Agency (EPA) method 8015M, VOCs by EPA method 8260B, and California Assessment Manual (CAM) -17 metals by EPA method 6010B.

8.5 Soil Hauling & Disposal

Any impacted material observed during site grading operation will be handled in accordance with all applicable transport and disposal regulations. The soil observed to be impacted during excavation will be classification as non-hazardous or hazardous waste and an authorized transporter will be selected. The transportation of waste to the proper disposal facility will only be completed by an authorized hazardous waste handler under waste manifest, and the transport and disposal documentation will be provided in the SMP Closeout Report.

9.0 GROUNDWATER MANAGEMENT

Based on an estimated depth to groundwater beneath the site of approximately 39 to 46 feet bgs (Terracon, 2021a), groundwater is not anticipated to be encountered during earth work activities. In the event that groundwater is encountered in onsite excavations and/or stormwater coming in contact with potentially impacted soils, the water shall be managed as potentially contaminated and evaluated through chemical analysis prior to discharge and/or off-site disposal. Discharge of untested or untreated groundwater to the ground surface, storm sewer, or sanitary system is prohibited.

Construction through the SMP zone shall be sequenced to minimize the excavation areas at any given time and thereby reducing the volume of water potentially requiring management and disposal. Managing groundwater and/or stormwater that comes in contact with contaminated soils at the site shall be removed and disposed or treated in accordance with the National Pollutants Discharge Elimination Permit System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, under the State Water Resources Control Board Construction General Permit Order 2009-0009-DWQ effective July 17, 2012.

10.0 DOCUMENTATION

Upon completion of site excavation activities and receipt of any necessary laboratory analytical results and waste manifest documentation, a SMP Final Report shall be prepared that will, at a minimum, include the following:

- Field Logs and Activities Summaries – the EP shall submit activities summaries of work performed and observations upon conducting site visits.
- Photo-documentation of site activities by the EP
- Laboratory results for characterization of wastes
- Site map indicating sample locations and limits of contamination encountered, if any
- Waste profile forms
- Waste manifests for soil and water transported offsite for disposal and/or recycling

- Copies of permits required for onsite treatment and discharge of contaminated groundwater / stormwater
- Any corrections / revisions to the SMP

The SMP Final Report shall be prepared and submitted to Hines Interests LP at project completion.

11.0 SUMMARY

This document has been developed to inform Hines Interests LP, the GC on the Project and its subcontractors, and site workers of the potential for encountering contaminated environmental media during excavation activities at the site. If encountered, the concentrations of contaminants in environmental media could pose a limited health hazard to construction personnel via inhalation of contaminated dust or vapors and the accidental ingestion of soil and/or groundwater. The precautions are intended to reduce the potential for adverse health effects to personnel excavating and managing environmental media at the site. This SMP is for the limited purpose of addressing the potential for health hazards due to exposure to contaminants, if identified in environmental media. It is not intended as a comprehensive construction safety program. The GC and its subcontractors engaged in activities at the project are responsible for conducting site activities in accordance with federal, state, and local environmental and safety regulations. Additionally, Terracon understands that the SMP will be implemented by the GC acting on behalf of Hines Interests LP, and periodically monitored by Terracon personnel during excavation activities that may disturb impacted on-site soils and/or groundwater.

12.0 REFERENCES

MACTEC Engineering and Consulting, Inc. (MACTC, 2002), Site Assessment Report, ChevronTexaco Heritage Site #21-2242, 4972 Warner Avenue, Huntington Beach, California; dated January 299, 2003.

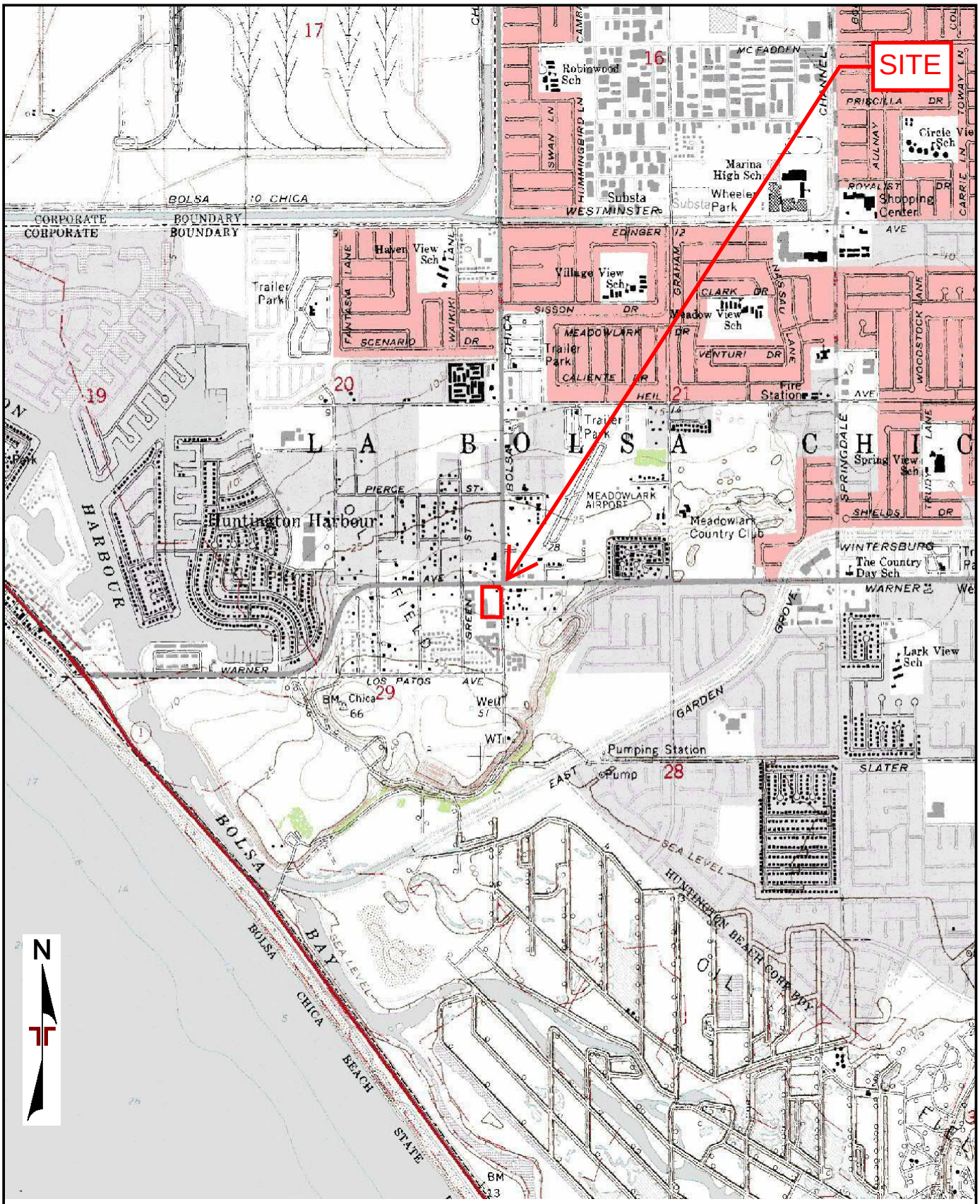
Science Applications International Corporation (SAIC, 2003), *Site Assessment Report, Chevron/Texaco Heritage Site #21-2242, 4972 Warner Avenue, Huntington Beach, California*; dated September 19, 2003

Terracon Consultants, Inc., (Terracon, 2021a) *Phase I Environmental Site Assessment*, *Proposed Senior Living Development – HB, 4952 and 4972 Warner Avenue Huntington Beach, Orange County, California 92647*; dated April 2, 2021 (Terracon Project No. 60217144).

Terracon Consultants, Inc. (Terracon, 2021b), *Limited Site Investigation, Proposed Senior Living Development – HB 4952 and 4972 Warner Avenue Huntington Beach, Orange County, California 92647*; dated June 1, 2021 (Terracon Project No. 60217228).

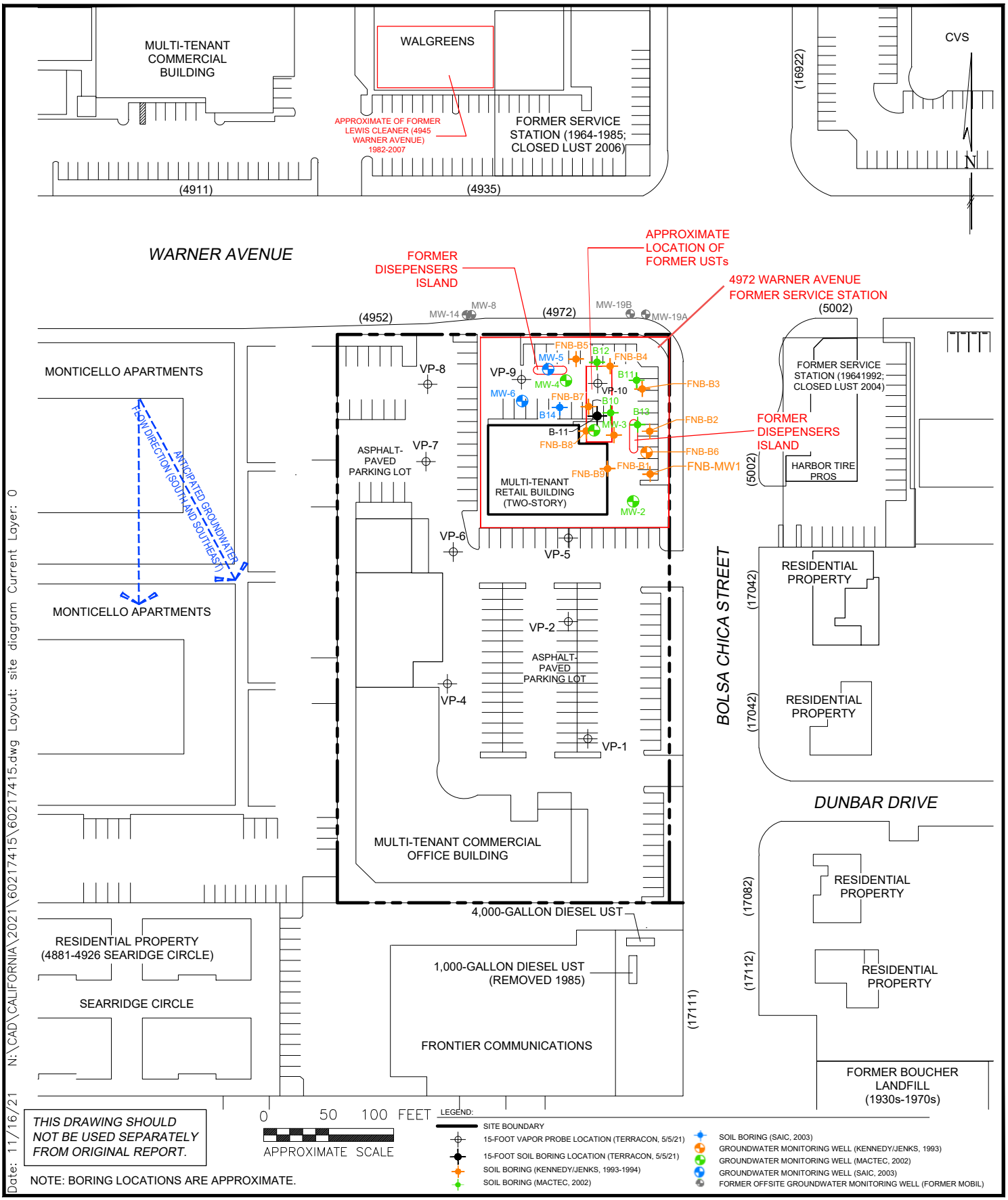
FIGURES

Figure 1 – Topographic Map
Figure 2 – Site Diagram
Figure 2A - Partial Site Diagram
Figure 3 – Site Diagram with Proposed Development Overlay
Figure 4 – Partial Site Diagram with Soil Concentrations (2002, 2003, and 2021)



TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY
QUADRANGLES INCLUDE: SEAL BEACH, CA (1/1/1981).

Project Manager: FMM	Project No. 60217228	Terracon 1421 Edinger Avenue, Suite C Tustin, California 92780-6287	TOPOGRAPHIC MAP	FIGURE
Drawn by: MMH	Scale: 1"=2,000'		PROPOSED SENIOR LIVING DEVELOPMENT - HB **4952 AND 4972 WARNER AVENUE** **HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA**	1
Checked by: JTY	File Name: N/A			
Approved by: FMM	Date: 06-01-2021			



THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.

NOTE: BORING LOCATIONS ARE APPROXIMATE.

Date: 11/16/21 N:\CAD\CALIFORNIA\2021\60217415\60217415.dwg Layout: site diagram Current Layer: 0

Project Mngr:	FMM
Drawn By:	JJD
Checked By:	FMM
Approved By:	FMM
Project No.	60217415
Scale:	AS SHOWN
Date:	11/16/21

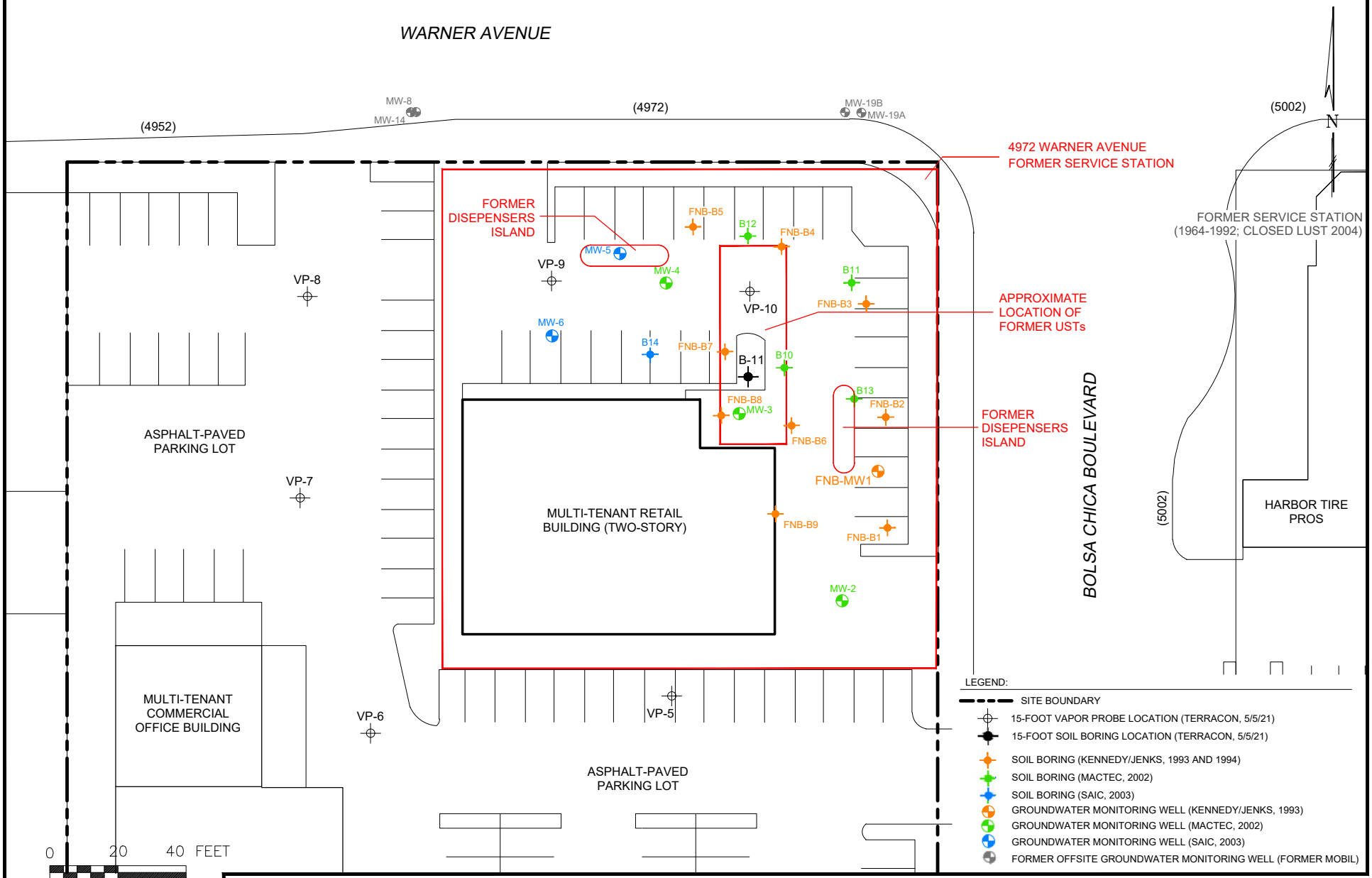
Terracon
Consulting Engineers and Scientists
1421 EDINGER AVE. STE C. TUSTIN, CALIFORNIA 92780
PH. (949) 261-0051 FAX. (949) 261-6110

SITE DIAGRAM

PROPOSED SENIOR LIVING DEVELOPMENT -HB
4952 AND 4972 WARNER AVENUE
HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA

FIGURE
2

Date: 11/16/21 N:\CAD\CALIFORNIA\2021\60217415\60217415.dwg Layout: partial site diagram Current Layer: 0



THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.

NOTE: ALL BORING LOCATIONS ARE APPROXIMATE.

Project Mngr:	FMM
Drawn By:	JJD
Checked By:	FMM
Approved By:	FMM

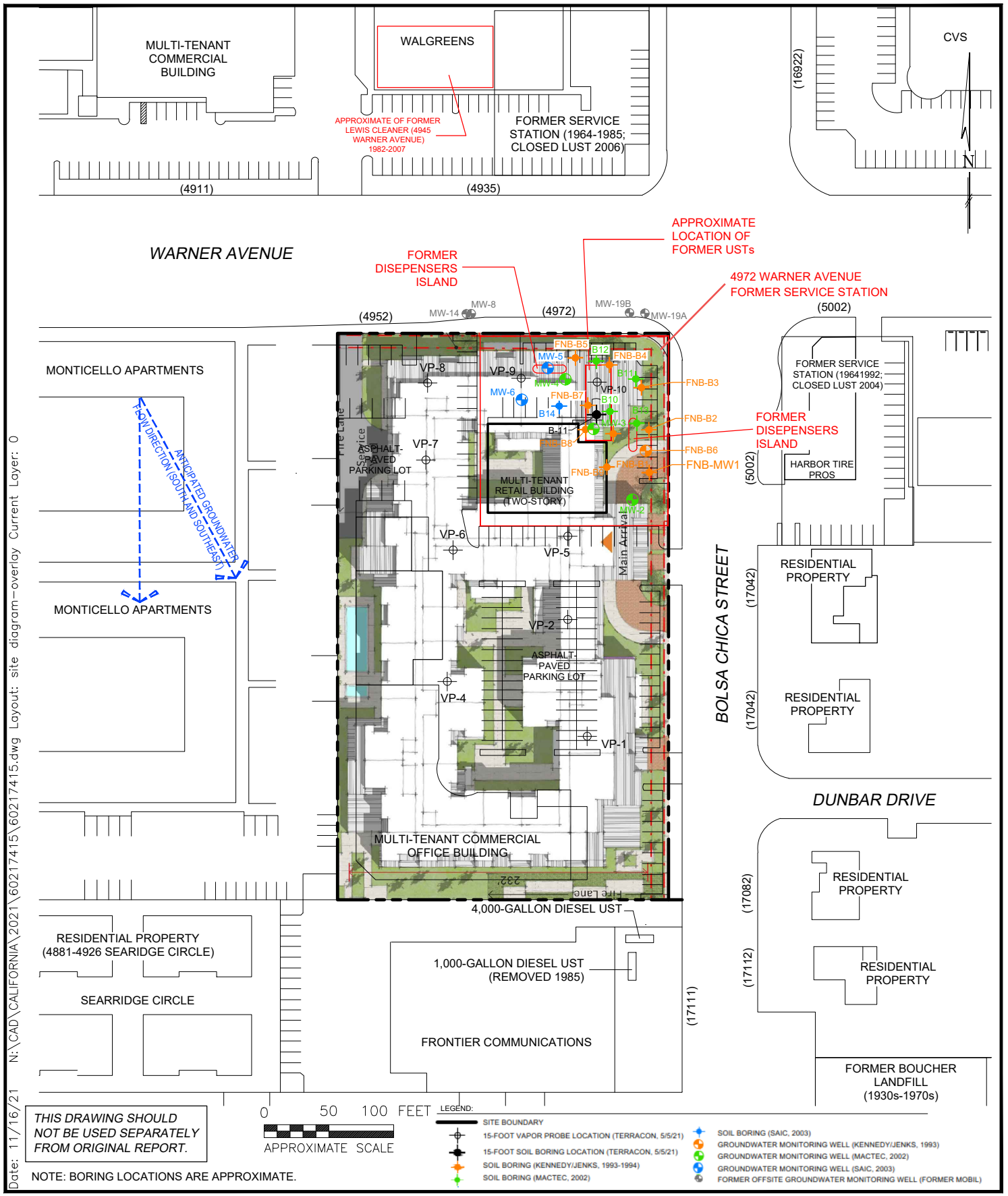
Project No.	60217415
Scale:	AS SHOWN
Date:	11/16/21

Terracon
Consulting Engineers and Scientists
1421 EDINGER AVE. STE. C TUSTIN, CALIFORNIA 97280
PH. (949) 261-0051 FAX. (949) 261-6110

PARTIAL SITE DIAGRAM

PROPOSED SENIOR LIVING DEVELOPMENT -HB
4952 AND 4972 WARNER AVENUE
HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA

FIGURE
2A



THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.

NOTE: BORING LOCATIONS ARE APPROXIMATE.

Date: 11/16/21 N:\CAD\CALIFORNIA\2021\60217415\60217415.dwg Layout: site diagram-overlay Current Layer: 0

Project Mngr:	FMM
Drawn By:	JJD
Checked By:	FMM
Approved By:	FMM
Project No.	60217415
Scale:	AS SHOWN
Date:	11/16/21

Terracon
Consulting Engineers and Scientists
1421 EDINGER AVE. STE C. TUSTIN, CALIFORNIA 92780
PH. (949) 261-0051 FAX. (949) 261-6110

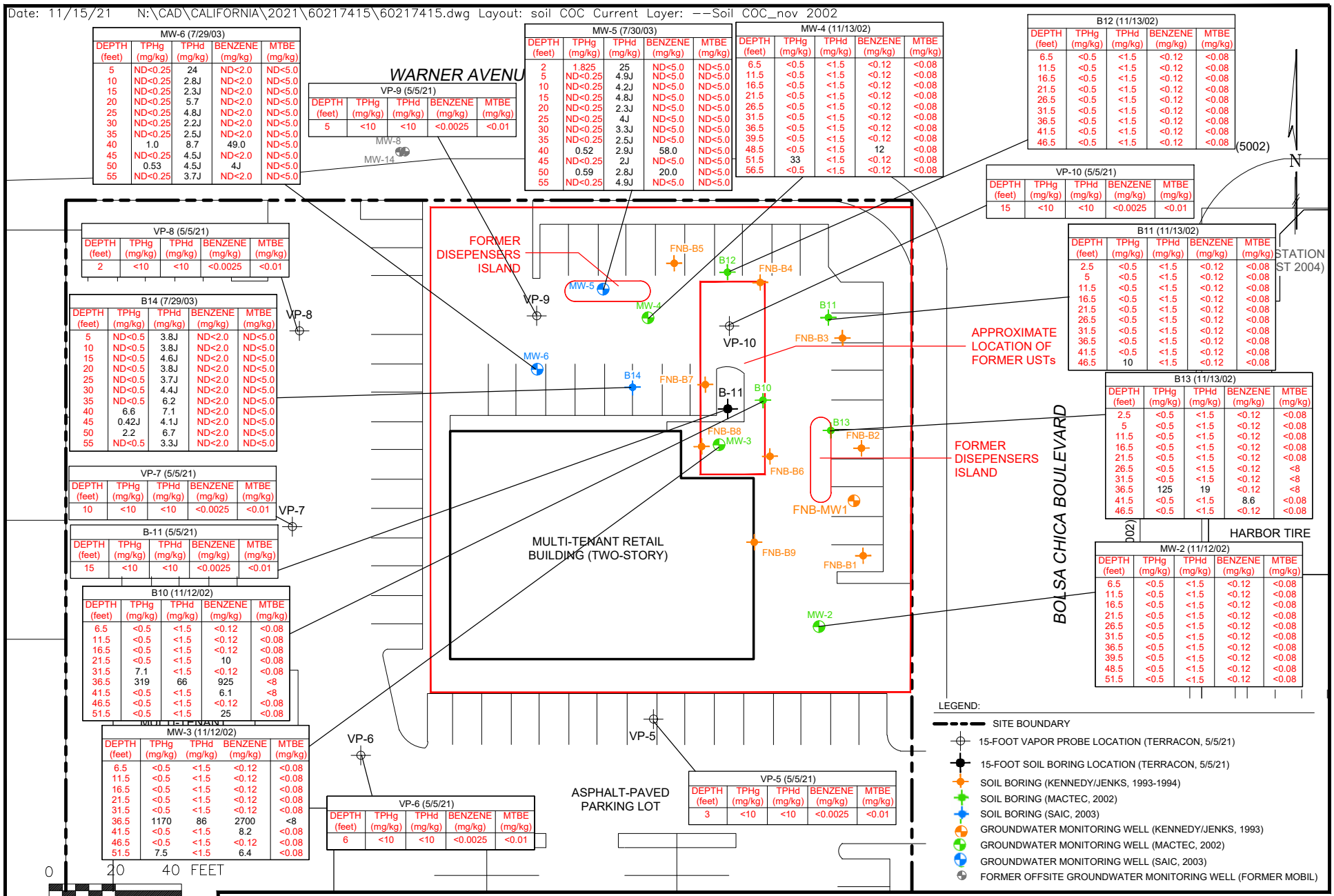
SITE DIAGRAM

WITH PROPOSED DEVELOPMENT OVERLAY

PROPOSED SENIOR LIVING DEVELOPMENT -HB
4952 AND 4972 WARNER AVENUE
HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA

FIGURE 3

Date: 11/15/21 N:\CAD\CALIFORNIA\2021\60217415\60217415.dwg Layout: soil COC Current Layer: --Soil COC_nov 2002



MW-6 (7/29/03)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
5	ND<0.25	24	ND<2.0	ND<5.0
10	ND<0.25	2.8J	ND<2.0	ND<5.0
15	ND<0.25	2.3J	ND<2.0	ND<5.0
20	ND<0.25	5.7	ND<2.0	ND<5.0
25	ND<0.25	4.8J	ND<2.0	ND<5.0
30	ND<0.25	2.2J	ND<2.0	ND<5.0
35	ND<0.25	2.5J	ND<2.0	ND<5.0
40	1.0	8.7	49.0	ND<5.0
45	ND<0.25	4.5J	ND<2.0	ND<5.0
50	0.53	4.5J	4J	ND<5.0
55	ND<0.25	3.7J	ND<2.0	ND<5.0

VP-9 (5/5/21)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
5	<10	<10	<0.0025	<0.01

MW-5 (7/30/03)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
2	1.825	25	ND<5.0	ND<5.0
5	ND<0.25	4.9J	ND<5.0	ND<5.0
10	ND<0.25	4.2J	ND<5.0	ND<5.0
15	ND<0.25	4.8J	ND<5.0	ND<5.0
20	ND<0.25	2.3J	ND<5.0	ND<5.0
25	ND<0.25	4J	ND<5.0	ND<5.0
30	ND<0.25	3.3J	ND<5.0	ND<5.0
35	ND<0.25	2.5J	ND<5.0	ND<5.0
40	0.52	2.9J	58.0	ND<5.0
45	ND<0.25	2J	ND<5.0	ND<5.0
50	0.59	2.8J	20.0	ND<5.0
55	ND<0.25	4.9J	ND<5.0	ND<5.0

MW-4 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
39.5	<0.5	<1.5	<0.12	<0.08
48.5	<0.5	<1.5	12	<0.08
51.5	33	<1.5	<0.12	<0.08
56.5	<0.5	<1.5	<0.12	<0.08

B12 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
41.5	<0.5	<1.5	<0.12	<0.08
46.5	<0.5	<1.5	<0.12	<0.08

VP-10 (5/5/21)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
15	<10	<10	<0.0025	<0.01

B11 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
2.5	<0.5	<1.5	<0.12	<0.08
5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
41.5	<0.5	<1.5	<0.12	<0.08
46.5	10	<1.5	<0.12	<0.08

VP-8 (5/5/21)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
2	<10	<10	<0.0025	<0.01

B14 (7/29/03)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
5	ND<0.5	3.8J	ND<2.0	ND<5.0
10	ND<0.5	3.8J	ND<2.0	ND<5.0
15	ND<0.5	4.6J	ND<2.0	ND<5.0
20	ND<0.5	3.8J	ND<2.0	ND<5.0
25	ND<0.5	3.7J	ND<2.0	ND<5.0
30	ND<0.5	4.4J	ND<2.0	ND<5.0
35	ND<0.5	6.2	ND<2.0	ND<5.0
40	6.6	7.1	ND<2.0	ND<5.0
45	0.42J	4.1J	ND<2.0	ND<5.0
50	2.2	6.7	ND<2.0	ND<5.0
55	ND<0.5	3.3J	ND<2.0	ND<5.0

B13 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
2.5	<0.5	<1.5	<0.12	<0.08
5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<8
31.5	<0.5	<1.5	<0.12	<8
36.5	125	19	<0.12	<8
41.5	<0.5	<1.5	8.6	<0.08
46.5	<0.5	<1.5	<0.12	<0.08

VP-7 (5/5/21)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
10	<10	<10	<0.0025	<0.01

B-11 (5/5/21)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
15	<10	<10	<0.0025	<0.01

B10 (11/12/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	10	<0.08
31.5	7.1	<1.5	<0.12	<0.08
36.5	319	66	925	<8
41.5	<0.5	<1.5	6.1	<8
46.5	<0.5	<1.5	<0.12	<0.08
51.5	<0.5	<1.5	25	<0.08

MW-2 (11/12/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
39.5	<0.5	<1.5	<0.12	<0.08
48.5	<0.5	<1.5	<0.12	<0.08
51.5	<0.5	<1.5	<0.12	<0.08

MW-3 (11/12/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	1170	86	2700	<8
41.5	<0.5	<1.5	8.2	<0.08
46.5	<0.5	<1.5	<0.12	<0.08
51.5	7.5	<1.5	6.4	<0.08

VP-6 (5/5/21)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
6	<10	<10	<0.0025	<0.01

VP-5 (5/5/21)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (mg/kg)	MTBE (mg/kg)
3	<10	<10	<0.0025	<0.01

LEGEND:

- SITE BOUNDARY
- 15-FOOT VAPOR PROBE LOCATION (TERRACON, 5/5/21)
- 15-FOOT SOIL BORING LOCATION (TERRACON, 5/5/21)
- SOIL BORING (KENNEDY/JENKS, 1993-1994)
- SOIL BORING (MACTEC, 2002)
- SOIL BORING (SAIC, 2003)
- GROUNDWATER MONITORING WELL (KENNEDY/JENKS, 1993)
- GROUNDWATER MONITORING WELL (MACTEC, 2002)
- GROUNDWATER MONITORING WELL (SAIC, 2003)
- FORMER OFFSITE GROUNDWATER MONITORING WELL (FORMER MOBIL)

THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.

NOTE: ALL BORING LOCATIONS ARE APPROXIMATE.

Project Mngr:	FMM
Drawn By:	JJD
Checked By:	FMM
Approved By:	FMM
Project No.	60217415
Scale:	AS SHOWN
Date:	11/15/21

Terracon
Consulting Engineers and Scientists
1421 EDINGER AVE. STE. C TUSTIN, CALIFORNIA 97280
PH. (949) 261-0051 FAX. (949) 261-6110

PARTIAL SITE DIAGRAM WITH SOIL CONCENTRATIONS (2002, 2003, AND 2021)

PROPOSED SENIOR LIVING DEVELOPMENT -HB
4952 AND 4972 WARNER AVENUE
HUNTINGTON BEACH, ORANGE COUNTY, CALIFORNIA

FIGURE 4

TABLES - Terracon 2021

Table 1 – Soil Sample Analytical Results - TPH & VOCs
Table 2 – Soil Sample Analytical Results - Metals
Table 3 – Soil Gas Sample Analytical Results - VOCs

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - TPH & VOCs
Proposed Senior Living Development - HB
4952 and 4972 Warner Avenue
Huntington Beach, Orange County, California 92647
Terracon Project No. 60217228

Sample I.D.	Sample Depth (feet bgs)	Sample Date	VOCs	Total Petroleum Hydrocarbons		
				TPH-GRO	TPH-DRO	TPH-ORO
			USEPA Method 8260B	USEPA Method 8015M		
			(mg/kg)			
VP-1-11	10 to 11	05/05/21	ND	<10	<10	<10
VP-2-9	8 to 9	05/05/21	ND	<10	<10	<10
VP-3-7	6 to 7	05/05/21	ND	<10	<10	<10
VP-4-3	2 to 3	05/05/21	ND	<10	<10	<10
VP-5-3	2 to 3	05/05/21	ND	<10	<10	22
VP-6-6	5 to 6	05/05/21	ND	<10	<10	<10
VP-7-10	9 to 10	05/05/21	ND	<10	<10	<10
VP-8-2	1 to 2	05/05/21	ND	<10	<10	<10
VP-9-5	4 to 5	05/05/21	ND	<10	<10	<10
VP-10-15	14 to 15	05/05/21	ND	<10	<10	<10
VP-11-15	14 to 15	05/05/21	ND	<10	<10	<10
ESLs [(1)]			**NA**	**100**	**260**	**1,600**

NOTES:

All units are in milligrams per kilograms (mg/kg)

bgs= below ground surface

USEPA = United States Environmental Protection Agency

VOCs = Volatile Organic Compounds

TPH-GRO = total petroleum hydrocarbons in gasoline carbon range (C6-C12)

TPH-DRO = total petroleum hydrocarbons in diesel carbon range (C13-C22)

TPH-ORO = total petroleum hydrocarbons in waste oil carbon range (C23-C32)

"<" = not detected above the laboratory reporting limit specified

ND = not detected above the laboratory reporting limit

NA = Not Applicable

[(1)] ESLs = Environmental Screening Levels, established by the San Francisco Bay Regional Water Quality Control Board, 2019 Rev.2

TABLE 2
SOIL SAMPLE ANALYTICAL RESULTS - METALS
Proposed Senior Living Development - HB
4952 and 4972 Warner Avenue
Huntington Beach, Orange County, California 92647
Terracon Project No. 60217228

Sample I.D.	Sample Location	Sample Depth (feet bgs)	Sample Date	Antimony	*Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	**Mercury	Molybdenum	Nickel	Selenium	Silver	***Thallium	Vanadium	Zinc
				EPA Method 6010B																
				(mg/kg)																
COMP-1	VP-3	Composite	05/05/21	<3.0	<5.0	72	<1.0	<2.0	19.0	7.2	11	4.8	<0.10	<5.0	11	<5.0	<2.0	<5.0	27	51
COMP-2	VP-4	Composite		<3.0	<5.0	26	<1.0	<2.0	5.2	2.5	5.9	<3.0	<0.10	<5.0	4.1	<5.0	<2.0	<5.0	15	14
COMP-3	VP-8	Composite		<3.0	<5.0	31	<1.0	<2.0	8.3	4.4	5.8	<3.0	<0.10	<5.0	6.5	<5.0	<2.0	<5.0	20	22
COMP-4	VP-11	Composite		<3.0	<5.0	33	<1.0	<2.0	12	4.9	7.7	8.3	<0.10	<5.0	8.2	<5.0	<2.0	<5.0	27	590
(1) ESLs (Residential)				**11**	**12***	**15,000**	**16**	**78**	**120,000**	**23**	**3,100**	**80**	**13**	**390**	**820**	**390**	**390**	**0.78**	**390**	**23,000**
(1) ESLs (Commercial)				**160**	**12***	**220,000**	**230**	**1,100**	**1,800,000**	**350**	**47,000**	**320**	**190**	**5,800**	**11,000**	**5,800**	**5,800**	**12**	**5,800**	**350,000**

NOTES:
* Background Metals = The Department of Toxic Substances Control (DTSC) established a regional background arsenic concentration in soil that can be used as a screening tool for sites throughout southern California. The term "background" collectively refers to both naturally occurring and anthropogenic concentrations in shallow soil. Statistical analysis of a large data set from school sites in Los Angeles County gave an upper-bound background arsenic concentration of 12 mg/kg. The analysis for 5 counties in southern California also gave an upper-bound background arsenic concentration of 12 mg/kg.
** Mercury analyzed using EPA Method 7470/7471
*** Thallium laboratory reporting limit is above the residential ESL of 0.78 mg/kg.
(1) ESLs for Soil established by the San Francisco Regional Water Quality Control Board, 2019 (Rev. 2)
All units are in milligrams per kilograms (mg/kg)
bgs= below ground surface
EPA = United States Environmental Protection Agency

TABLE 3
SOIL GAS SAMPLE ANALYTICAL RESULTS - VOCs
Proposed Senior Living Development - HB
4952 and 4972 Warner Avenue
Huntington Beach , Orange County, California 92647
Terracon Project No. 60217228

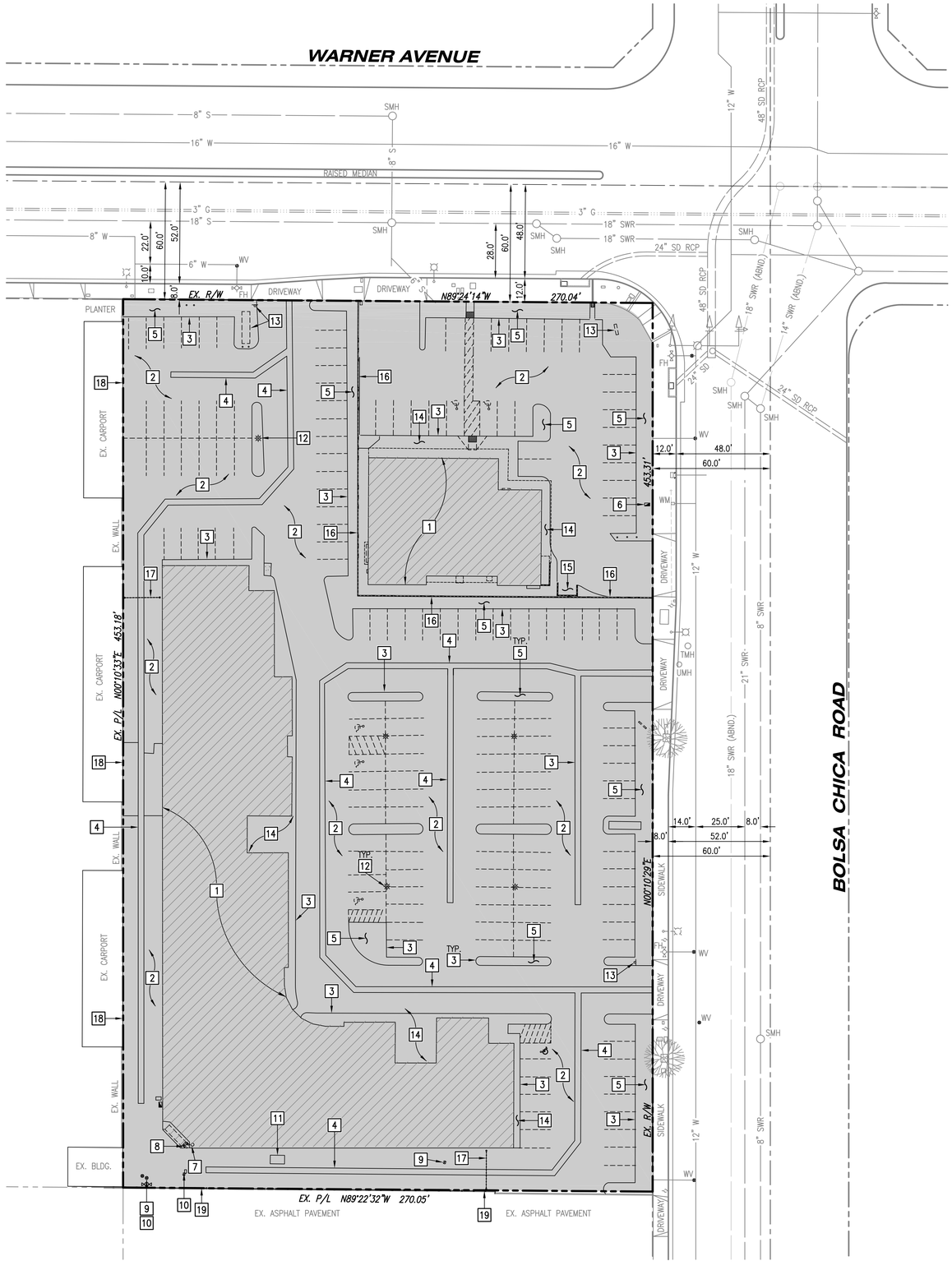
Sample I.D.	Sample Date	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Acetone	1,3-Butadiene	Carbon Disulfide	Isopropyl alcohol	Chloroform	Chloromethane	Cyclohexane	Heptane	Hexane	1,3-Dichlorobenzene	4-Ethyltoluene	Tetrahydrofuran	Styrene	1,2,4-Trimethylbenzene	2-Butanone (MEK)	Methyl isobutyl ketone	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Other VOCs	1,1-DFA (Tracer Gas)
		USEPA Method TO-15 (µg/m3)																								
15-Foot Vapor Probes																										
VP-1	05/05/21	5.9 J	<0.21	110	10	<0.22	15	<0.15	<0.46	<0.16	<0.15	5.4	12 J	<0.25	<0.25	<0.19	<0.33	22	7.6 J	3.5	11	<0.14	8.7 J	<0.085	ND	3.5
VP-2	05/05/21	21	<0.21	130	22	3.4	16	<0.15	3.8 J	<0.16	<0.15	5.5	19 J	<0.25	<0.25	<0.19	<0.33	41	23 J	7.1	21	<0.14	11	<0.085	ND	0.0
VP-3	05/05/21	<0.21	<0.21	190	6.0	13	8.9 J	<0.15	3.2 J	<0.16	4.6	31	9.5 J	1.3 J	<0.25	4.9	<0.33	56	10 J	22	190	15	42	12	ND	0.0
VP-4	05/05/21	<0.21	<0.21	96	6.3	3.5	12 J	<0.15	<0.46	<0.16	<0.15	19	12 J	<0.25	33	<0.19	9.4	88	31 J	<0.14	74	9.4	38	12	ND	7.3
VP-5	05/05/21	<19	<8.7	<17	<8.3	<11	<22	<9.4	<7.4	<12	<21	<10	<24	<15	<15	<13	<15	<11	<50	<4.9	91 J	<10	<15	<9.3	ND	0.0
VP-6	05/05/21	72	7.7	170	88	9.1	10 J	8.4	<0.46	5.9	7.8	27	8.5 J	<0.25	40	2.0 J	<0.33	120	<0.14	16	21	5.1	10	4.2 J	ND	0.0
VP-7	05/05/21	200	7.4	170	19	3.2	26	<0.15	<0.46	<0.16	<0.15	8.0	7.8 J	<0.25	50	<0.19	<0.33	180	60	7.1	8.9	<0.14	<0.20	<0.085	ND	0.0
VP-8	05/05/21	900	<0.21	100	7.1	<0.22	10 J	<0.15	<0.46	<0.16	<0.15	13	7.4 J	<0.25	25	<0.19	<0.33	91	22 J	3.7	100	7.7	27	7.9	ND	0.0
VP-9	05/05/21	860	14	120	7.1	<0.22	9.5 J	8.7	<0.46	<0.16	<0.15	<0.43	5.7 J	<0.25	11	<0.19	<0.33	52	13 J	<0.14	<0.14	<0.14	<0.20	<0.085	ND	0.0
VP-10	05/05/21	500	<0.21	91	5.1	15	8.7 J	<0.15	<0.46	<0.16	<0.15	6.9	<0.43	<0.25	13	<0.19	<0.33	59	14 J	<0.14	3.4 J	<0.14	<0.20	<0.085	ND	0.0
Environmental Screening Levels (ESLs) [1] (Tier 1 / Residential)		**15**	**16**	**1,100,000**	**NE**	**NE**	**NE**	**4.1**	**3,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**31,000**	**NE**	**170,000**	**100,000**	**3.2**	**10,000**	**37**	**3,500**	**3,500**	**NA**	**NE**
Environmental Screening Levels (ESLs) [1] (Commercial)		**67**	**100**	**4,500,000**	**NE**	**NE**	**NE**	**18**	**13,000**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**130,000**	**NE**	**730,000**	**440,000**	**14**	**44,000**	**160**	**15,000**	**15,000**	**NA**	**NE**

NOTES:
All units are in micrograms per cubic meter (µg/m^3)
1,1-DFA = 1,1-Difluoroethane
NA = not applicable
NE = not established
ND = not detected above the method detection limit
"<" = not detected above the method detection limit value specified
J = The identification of the detected analyte is accurate, the reported value is an estimated concentrations between the laboratory detection limit and reporting limit
USEPA = United States Environmental Protection Agency
VOCs = volatile organic compounds
Bold Blue Concentration- indicates concentration above residential ESL
Bold Red Concentration- indicates concentration above commercial ESL

[1] ESLs = Environmental Screening Levels, established by the San Francisco Bay Regional Water Quality Control Board, January 2019 (Rev. 2)
[2] Indicates a non-detect concentration at a laboratory reporting limit higher than the respective residential ESL.

APPENDIX A

Grading Plans



DEMOLITION NOTES

1. DEMOLISH, REMOVE AND DISPOSE OF EXISTING BUILDING, BUILDING SLABS, COLUMNS, FOOTINGS, CANOPIES, STAIRS, LIGHTING, FIXTURES, RECEPTACLES, JUNCTION BOXES, AND ALL ASSOCIATED CONDUIT AND WIRING. REMOVE ALL EXISTING ABOVE GROUND WATER & GAS LINES. DISCONNECT AND CAP ALL UTILITY SEWER, WATER, AND GAS LINE BELOW GRADE.
2. REMOVE AND DISPOSE OF EXISTING ASPHALT CONCRETE PAVEMENT.
3. REMOVE AND DISPOSE OF EXISTING CURB.
4. REMOVE AND DISPOSE OF EXISTING CONCRETE GUTTER.
5. REMOVE AND DISPOSE OF EXISTING LANDSCAPING AND IRRIGATION, COORDINATE REMOVALS WITH LANDSCAPE ARCHITECT PRIOR TO DEMOLITION.
6. REMOVE AND DISPOSE OF EXISTING BACKFLOW DEVICE.
7. REMOVE AND DISPOSE OF EXISTING FIRE DEPARTMENT CONNECTION.
8. REMOVE AND DISPOSE OF EXISTING DOUBLE CHECK DETECTOR ASSEMBLY.
9. REMOVE AND DISPOSE OF EXISTING FIRE HYDRANT.
10. REMOVE AND DISPOSE OF EXISTING WATER VALVE.
11. REMOVE AND DISPOSE OF EXISTING ELECTRICAL VAULT.
12. REMOVE AND DISPOSE OF YARD LIGHT, FOUNDATION, CONDUITS AND CONDUCTORS.
13. REMOVE AND DISPOSE OF EXISTING SIGN AND FOOTING.
14. REMOVE AND DISPOSE OF EXISTING CONCRETE WALK.
15. REMOVE AND DISPOSE OF EXISTING TRASH ENCLOSURE.
16. REMOVE AND DISPOSE OF EXISTING BLOCK WALL.
17. REMOVE AND DISPOSE OF FENCE/GATE.
18. PROTECT IN PLACE EXISTING WALL.
19. PROTECT IN PLACE EXISTING RETAINING WALL AND FENCE.

SCOPE OF WORK

1. DEMOLISH ENTIRE BUILDING AND SLAB.

TOTAL AREA OF SOIL DISTURBANCE

2.81 ACRES

GENERAL NOTES

1. ALL UTILITY LINES MUST BE PROPERLY AND SAFELY CAPPED AS NEEDED.

LEGEND

LIMITS OF ON-SITE REMOVAL

LIMITS OF BUILDING REMOVAL

TRUE NORTH

SCALE: 1"=30'

CALLISONRTKL

CallisonRTKL Inc.
333 S HOPE ST C-200
LOS ANGELES, CA 90071
PHONE - 213.333.6000

CRTKL PROJECT NO. - XXX-XXXXXX.XX

HUNTINGTON BEACH SENIOR LIVING

SIGNATURE & SEAL

ISSUE DRAWING LOG

DRAWING ISSUE LOG		
REV	DESCRIPTION	DATE
	CUP SUBMITTAL	10/15/21

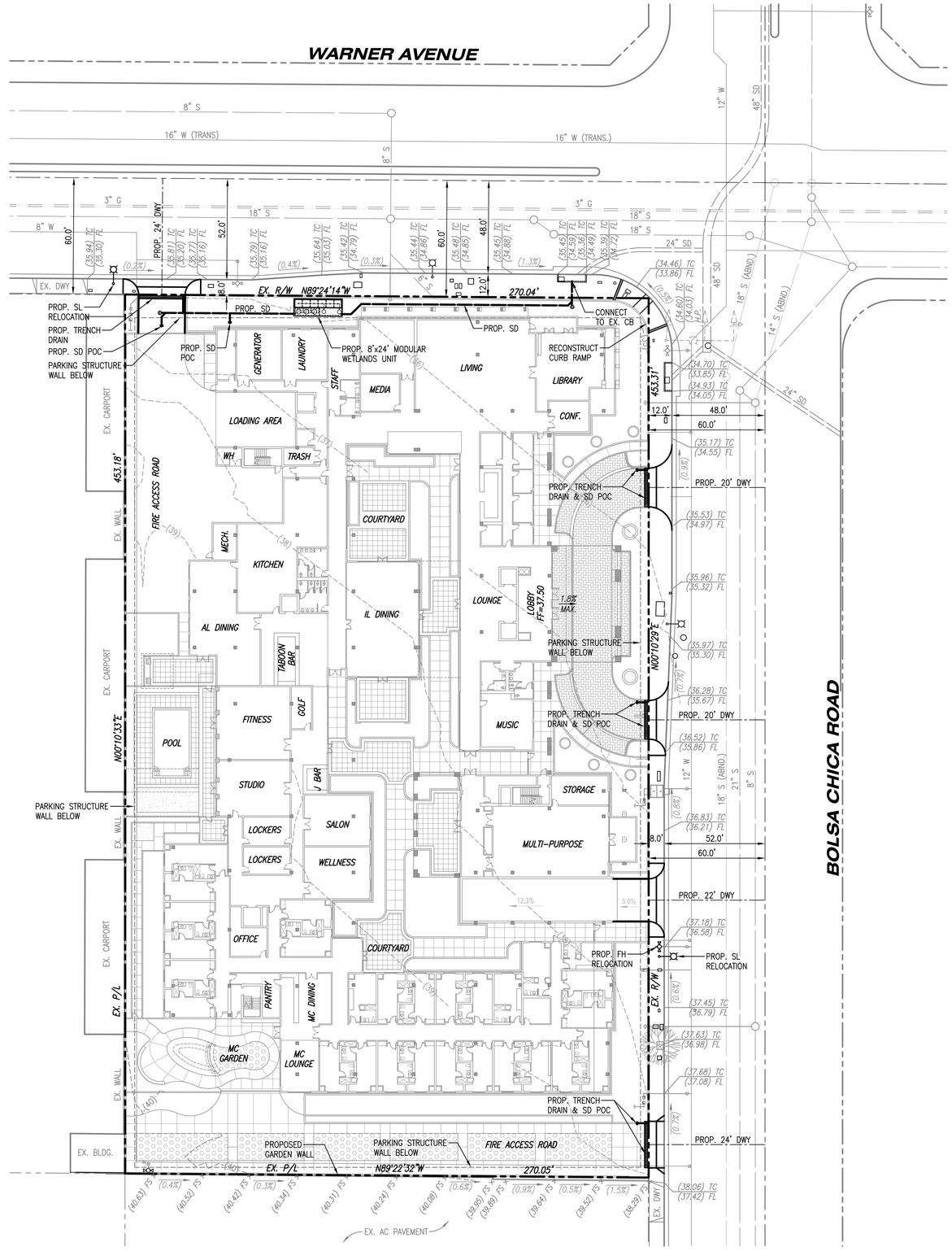
KHR ASSOCIATES
CONSULTING ENGINEERS/SURVEYORS
17530 Von Karman Avenue - Suite 200
Irvine, California 92614 Tel (949) 756-6440
CONTACTS: JAMES KAWAMURA / GABE URIBE
jkawamura@khrdesign.com / guribe@khrdesign.com

CUP SUBMITTAL

CONCEPTUAL ON-SITE DEMOLITION PLAN

C-1

© 2020 CallisonRTKL Inc.



TRUE NORTH

SCALE: 1"=30'

LEGAL DESCRIPTION

ALL THAT CERTAIN PROPERTY SITUATED IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

A PORTION OF LOT 2 IN BLOCK 20 OF TRACT NO. 86, IN THE CITY OF HUNTINGTON BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 10, PAGES 35 AND 36, MISCELLANEOUS MAPS, IN THE OFFICE OF COUNTY RECORDER OF SAID COUNTY, TOGETHER WITH THAT PORTION OF THE WEST 30.00 FEET OF BOLSA CHICA STREET ADJOINING SAID LOT ON THE EAST VACATED BY ORDER OF THE BOARD OF SUPERVISORS OF SAID COUNTY, A CERTIFIED COPY OF WHICH WAS RECORDED ON JULY 15, 1943 IN BOOK 1197, PAGE 424 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM THE INTEREST IN THAT PORTION OF SAID LAND CONVEYED TO THE CITY OF HUNTINGTON BEACH, FOR ROAD PURPOSES BY DEED RECORDED NOVEMBER 20, 1963 IN BOOK 6813, PAGE 177, OF OFFICIAL RECORDS.

CONCEPTUAL EXCAVATION QUANTITY ESTIMATE

CUT	55,000 CY
FILL	0 CY
EXPORT	55,000 CY

(BASED ON LEVEL 1 FF=37.50, LEVEL B1 FF=25.50, & 12" THICK SLAB/UNDERLAYMENT)

CALLISONRTKL

CallisonRTKL Inc.
333 S HOPE ST C-200
LOS ANGELES, CA 90071
PHONE - 213.333.6000

CRTKL PROJECT NO. - XXX-XXXXXX.XX

HUNTINGTON BEACH SENIOR LIVING

SIGNATURE & SEAL

ISSUE DRAWING LOG

DRAWING ISSUE LOG

REV	DESCRIPTION	DATE
	CUP SUBMITTAL	10/15/21

KHR ASSOCIATES
CONSULTING ENGINEERS/SURVEYORS
17530 Von Karman Avenue - Suite 200
Irvine, California 92614 Tel (949) 756-6440
CONTACTS: JAMES KAWAMURA / GABE URIBE
jkawamura@khrdesign.com / guribe@khrdesign.com

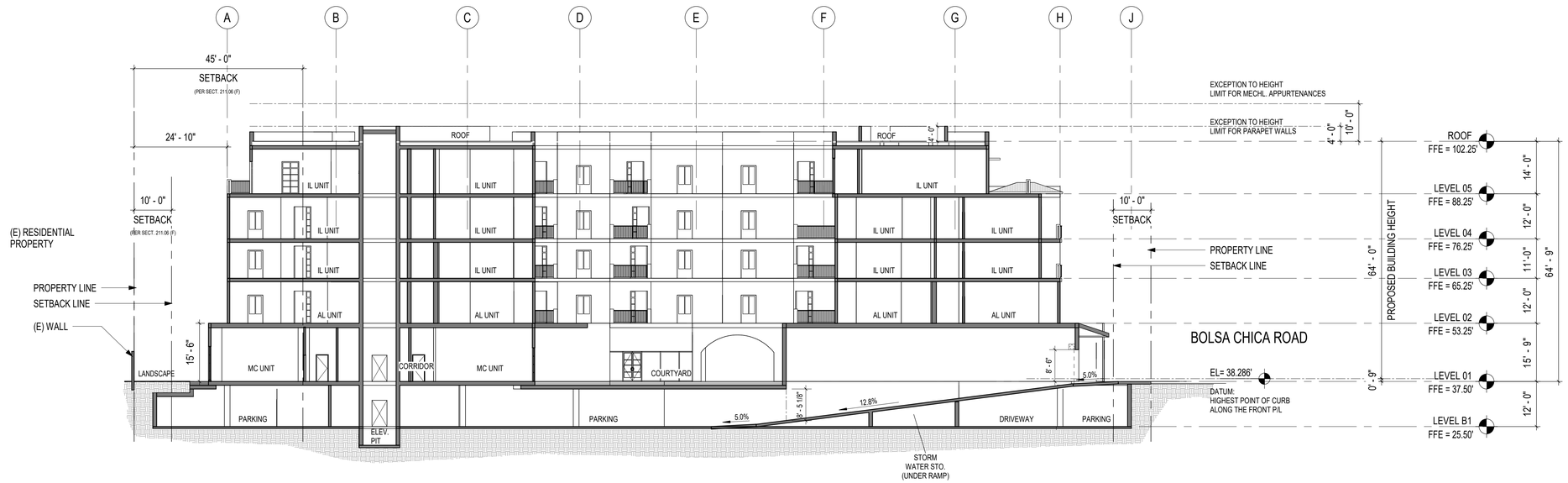
CUP SUBMITTAL

CONCEPTUAL GRADING & DRAINAGE PLAN

C-2

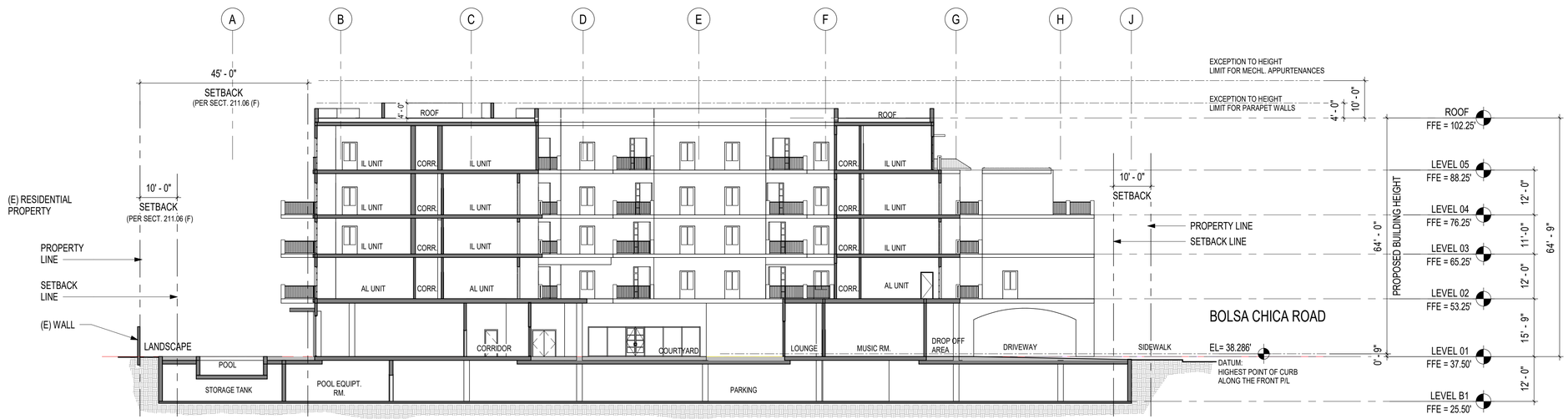
C:\Users\Gabe\KHR Associates Dropbox\R Drive\Hines\Huntington Beach\CDs\Preliminary\HHB-GRAD.dwg Oct 14, 2021 - 2:44pm

© 2020 CallisonRTKL Inc.



1 BUILDING SECTION 01

SCALE: 1/16" = 1'-0"



2 BUILDING SECTION 02

SCALE: 1/16" = 1'-0"

CALLISONRTKL

CallisonRTKL Inc.
333 S HOPE ST C-200
LOS ANGELES, CA 90071
PHONE - 213.333.6000

CRTKL PROJECT NO. - XXX-XXXXXX.XX

HUNTINGTON BEACH SENIOR LIVING

SIGNATURE & SEAL

ISSUE DRAWING LOG

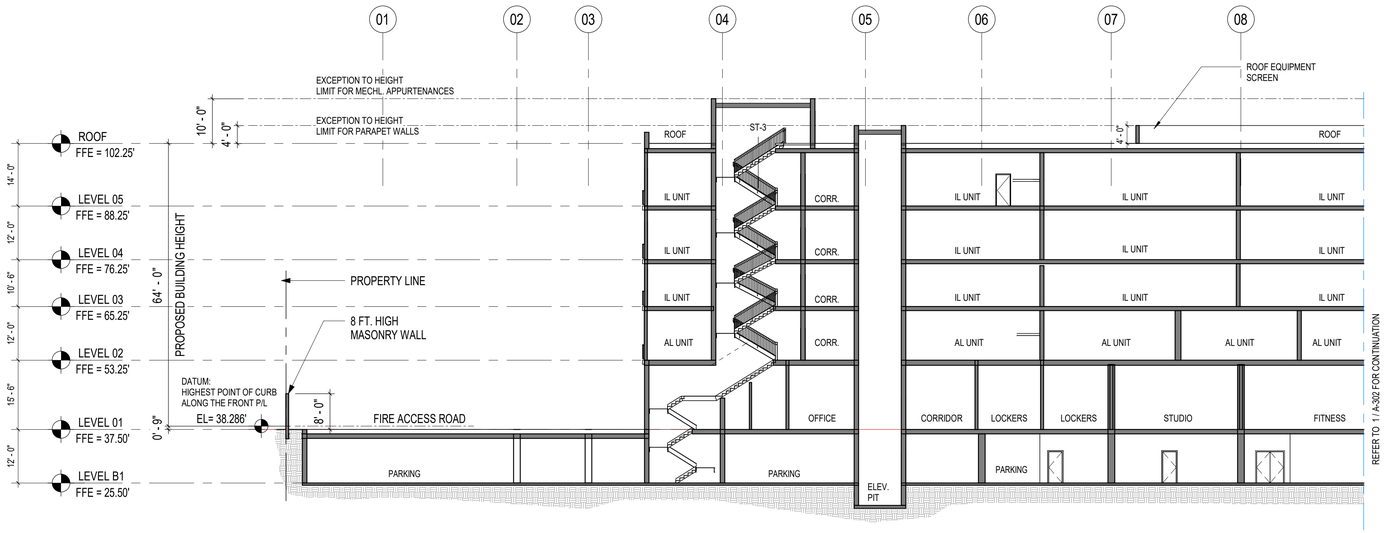
DRAWING ISSUE LOG		
REV	DESCRIPTION	DATE
	CUP SUBMITTAL	10/15/21

CUP SUBMITTAL

BUILDING SECTIONS

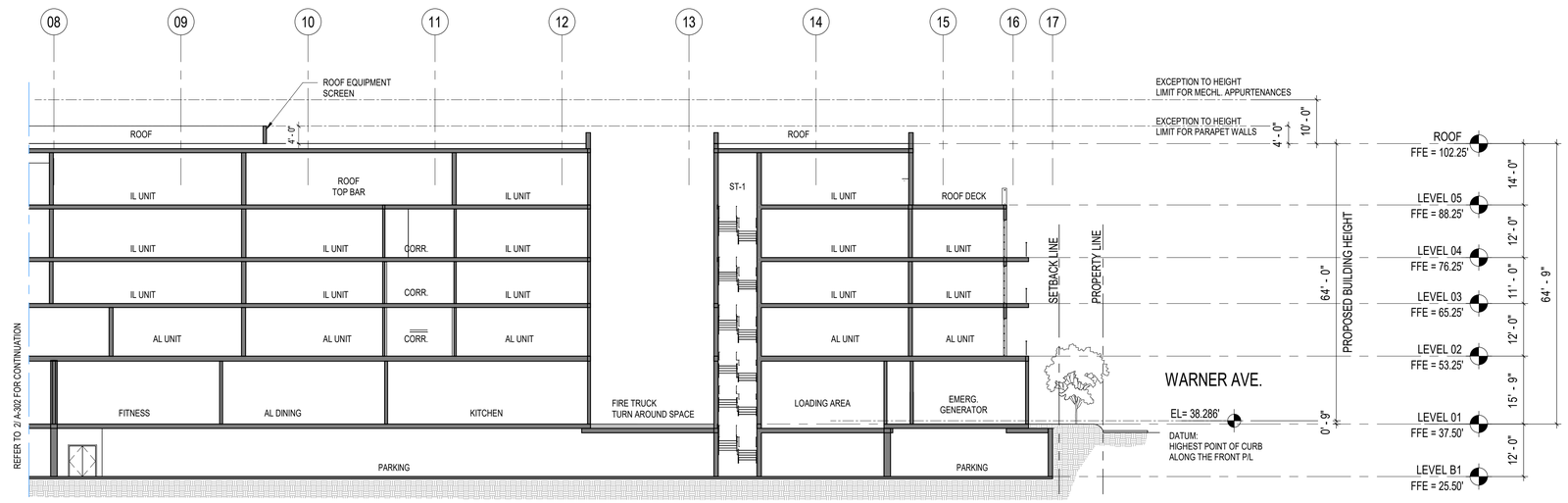
A-301

© 2020 CallisonRTKL Inc.



2 BUILDING SECTION_03

SCALE: 1/16" = 1'-0"



1 BUILDING SECTION 03

SCALE: 1/16" = 1'-0"

CALLISONRTKL

CallisonRTKL Inc.
333 S HOPE ST C-200
LOS ANGELES, CA 90071
PHONE - 213.333.6000

CRTKL PROJECT NO. - XXX-XXXXXX.XX

HUNTINGTON BEACH SENIOR LIVING

SIGNATURE & SEAL

ISSUE DRAWING LOG

DRAWING ISSUE LOG

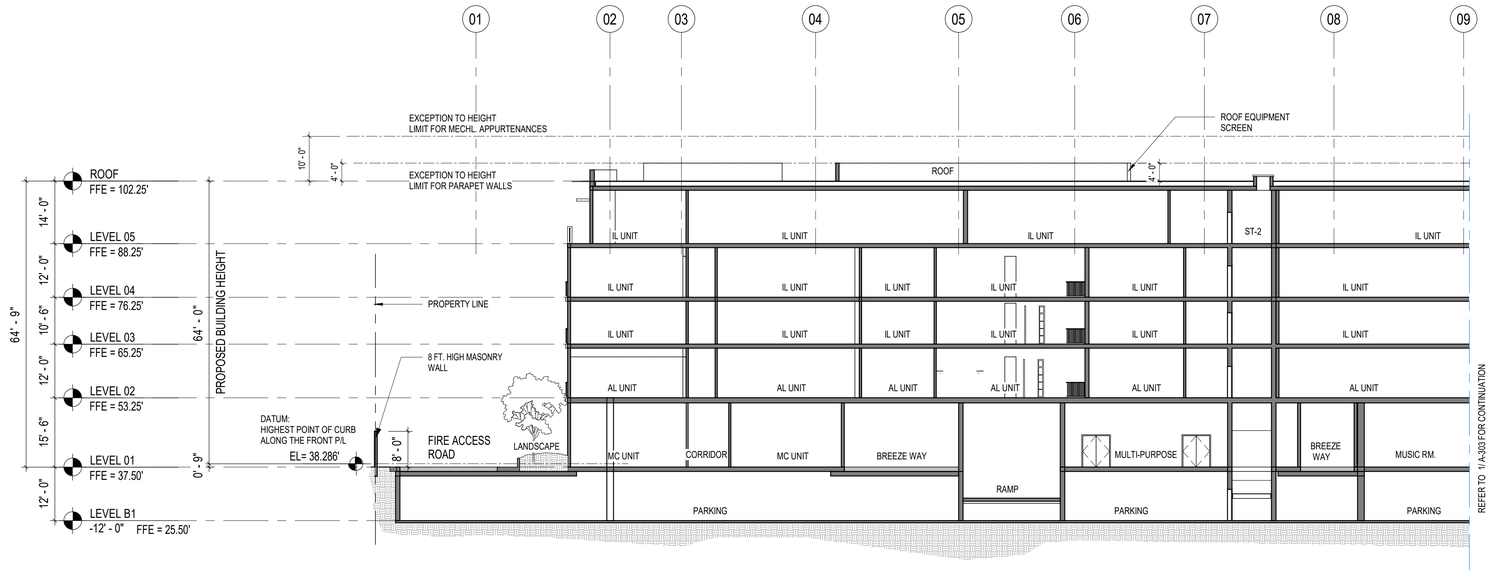
REV	DESCRIPTION	DATE
	CUP SUBMITTAL	10/15/21

CUP SUBMITTAL

BUILDING SECTIONS

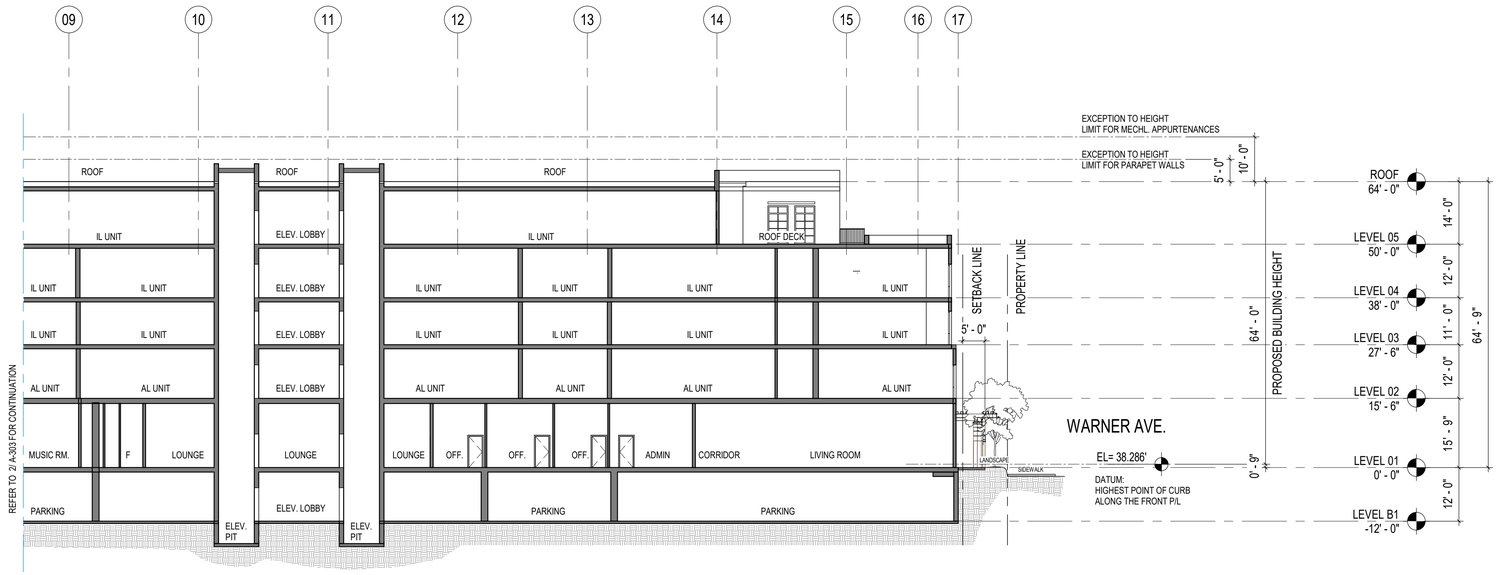
A-302

© 2020 CallisonRTKL Inc.



2 BUILDING SECTION_04

SCALE: 1/16" = 1'-0"



1 BUILDING SECTION 04

SCALE: 1/16" = 1'-0"

CALLISONRTKL

CallisonRTKL Inc.
333 S HOPE ST C-200
LOS ANGELES, CA 90071
PHONE - 213.333.6000

CRTKL PROJECT NO. - XXX-XXXXXX.XX

HUNTINGTON BEACH SENIOR LIVING

SIGNATURE & SEAL

ISSUE DRAWING LOG

DRAWING ISSUE LOG

REV	DESCRIPTION	DATE
	CUP SUBMITTAL	10/15/21

CUP SUBMITTAL

BUILDING SECTIONS

A-303

© 2020 CallisonRTKL Inc.

APPENDIX B

OCHCA Case Closure

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 972-0749
E-MAIL: environhealth@hca.co.orange.ca.us

Excellence
Integrity
Service

June 1, 2004

Natasha Molla
Chevron Environmental Management Company
145 S. State College Blvd.
Brea, CA 92822-2292

Subject: **Remedial Action Completion Certification**

Re: Underground Storage Tank (UST) Case
ChevronTexaco Heritage Site #21-2242
4972 Warner Avenue
Huntington Beach, CA 92649
OCHCA Case #03UT18

Dear Ms. Molla:

This letter confirms the completion of site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

Please contact Arghavan Rashidi-Fard of our office at (714) 667-3713 if you have any questions regarding this matter.

Sincerely,

Steven K. Wong, REHS, MPH, Director
Environmental Health Division

Attachment: Case Closure Summary

cc: Tom Mbeke-Ekanem, Santa Ana Regional Water Quality Control Board
SB 562 Database, State Water Resources Control Board
Cleanup Fund Manager, State Water Resources Control Board
Larry Honeybourne, Environmental Health
Steven Draper, SAIC Inc.
Virginia Filipan

Case Closure Summary
Leaking Underground Fuel Tank Program

I. Agency Information

Date: **March 16, 2004**

Agency Name: **Orange County Health Care Agency**	Address: **2009 East Edinger Avenue**
City/State/Zip: **Santa Ana, CA 92705**	Phone: **(714) 667-3713**
Responsible staff person: **Arghavan Rashidi-Fard**	Title: **Hazardous Waste Specialist**

II. Case Information

Site Facility Name: **ChevronTexaco Heritage Site #21-2242**		
Site Facility Address: **4972 Warner Avenue, Huntington Beach 92649**		
RB LUSTIS Case No.:	Local Case No.: **03UT18**	LOP Case No.:
Responsible Party	Address	Phone Number
Natasha Molla **Chevron Environmental Management Co**	**145 S. State College Blvd.** **Brea, CA 92822-2292**	**(714) 671-3537**

Tank No	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1	**Not Known**			
2				
3				

III. Release and Site Characterization Information

Site characterization complete? **Yes**		
Monitoring wells installed? **Yes**	Number: **6**	
Highest GW depth BGS: **40.34'**	Lowest depth: **47.67'**	
Are drinking water wells affected? **No**		
Is surface water affected? **No**	SW	
Report(s) on file? **Yes**		

Material	Amount (include Units)	Action (treatment or disposal/destination)	
Tank	**NA**		
Piping			
Soil			
Groundwater			

Case Closure Summary
Leaking Underground Fuel Tank Program

I. Agency Information

Date: **March 16, 2004**

Agency Name: **Orange County Health Care Agency**	Address: **2009 East Edinger Avenue**
City/State/Zip: **Santa Ana, CA 92705**	Phone: **(714) 667-3713**
Responsible staff person: **Arghavan Rashidi-Fard**	Title: **Hazardous Waste Specialist**

II. Case Information

Site Facility Name: **ChevronTexaco Heritage Site #21-2242**		
Site Facility Address: **4972 Warner Avenue, Huntington Beach 92649**		
RB LUSTIS Case No.:	Local Case No.: **03UT18**	LOP Case No.:
Responsible Party	Address	Phone Number
Natasha Molla **Chevron Environmental Management Co**	**145 S. State College Blvd.** **Brea, CA 92822-2292**	**(714) 671-3537**

Tank No	Size in Gal.	Contents	Closed in-Place/Removed?	Date
1	**Not Known**			
2				
3				

III. Release and Site Characterization Information

Site characterization complete? **Yes**		
Monitoring wells installed? **Yes**	Number: **6**	
Highest GW depth BGS: **40.34'**	Lowest depth: **47.67'**	
Are drinking water wells affected? **No**		
Is surface water affected? **No**	SW	
Report(s) on file? **Yes**		

Material	Amount (include Units)	Action (treatment or disposal/destination)	
Tank	**NA**		
Piping			
Soil			
Groundwater			

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

Case#: 03UT018

Date: **March 16, 2004**

III. Release and Site Characterization Information (Continued)

Contaminant	Soil (ppm)		Water (ppm)			Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After	Grab Sample		Before	After	Before	After
TPH (gas)	**6700**	**same**	**2.340**	**2.300**	**53**	MTBE	**NA**	**ND**	**ND**	**ND**
TPH (diesel)	**1200**	**same**	**.860**	**.510**	**44**	TBA	**NA**	**ND**	**.018**	**.027**
Benzene	**3.7**	**same**	**.084**	**.089**	**9.2**	DIPE	**NA**	**ND**	**ND**	**ND**
Toluene	**66.2**	**same**	**.140**	**.350**	**8.1**	TAME	**NA**	**ND**	**ND**	**ND**
Ethylbenzene	**31.5**	**same**	**.078**	**.082**	**2.2**	ETBE	**NA**	**ND**	**ND**	**ND**
Xylenes	**690**	**same**	**.217**	**.360**	**4.6**					

Comments (Depth of Remediation, etc.): **The site was operated as a gas station from 1963 to 1977. Site assessment activities consisting of nine borings and one well were conducted in 1993 and 1994 for a property transaction for a bank. Soil and groundwater contamination was detected during those site assessment activities; however, the results were not reported to this Agency until 2003 when Chevron's legal department reviewed the findings and decided further site assessment was necessary. Additional site assessment including installation of five additional wells was conducted to delineate the extent of the plume in 11-02 and 7-03. The highest soil contamination listed in the table above was detected in borings FNB-B6 and MW-3 drilled in the south end of the former tank excavation between 26 and 36 feet below grade (fbg) in borings that are approximately 20 feet apart. FNB-B6 was drilled in November 1993 while MW-3 was installed in November 2002.**

During the initial assessment in November 1993, one grab groundwater sample was collected from the worst case boring FNB-B6. The results of the grab groundwater sample are listed in the table above. The BTEX in groundwater samples collected from the six wells have been below the MCLs or Santa Ana Regional Water Quality Control Board's "low-risk" concentrations, except for toluene at 350 ppb detected in well MW-3 on in December 2003. Well MW-2 located downgradient of the MW-3 and boring FNB-B6 and former tank excavation was dry for three quarters. Results from December 2003 sampling showed 2.6 ppb benzene, 1.6 ppb xylenes, and non-detect for toluene and ethylbenzene.

No further work is recommended for the site with the following considerations:

- **The known soil contamination is limited in extent in silty clay/clayey soil to the south of the former tank area and on the edge of a southeastern dispenser at depths between 26 to 36 fbg.**
- **The known soil contamination has not significantly impacted groundwater as evident by groundwater results.**
- **The benzene levels seen in well MW-3, the nearest upgradient well to the present building, do not provide a vapor intrusion threat.**

IV. Closure

Does completed corrective action protect *existing* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does completed corrective action protect *potential* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does corrective action protect public health for current land use? **Yes**		
Site management requirements: **OCHCA must be notified if a structure is going to be place over the area where high soil contaminants remain in place.**		
Should corrective action be reviewed if land use changes? **Yes, if land use changes to residential.**		
Monitoring wells decommissioned: **No**	Number decommissioned:	Number Retained:
List enforcement actions taken:		
List enforcement actions rescinded:		

Case Closure Summary
Leaking Underground Fuel Storage Tank Program

Case#: 03UT018
Date: March 15, 2004

V. Local Agency Representative Data

Name: Arghavan Rashidi-Fard		Title: Hazardous Waste Specialist	
Signature: Arghavan Rashidi-Fard		3-22-04	Date: 3-15-04

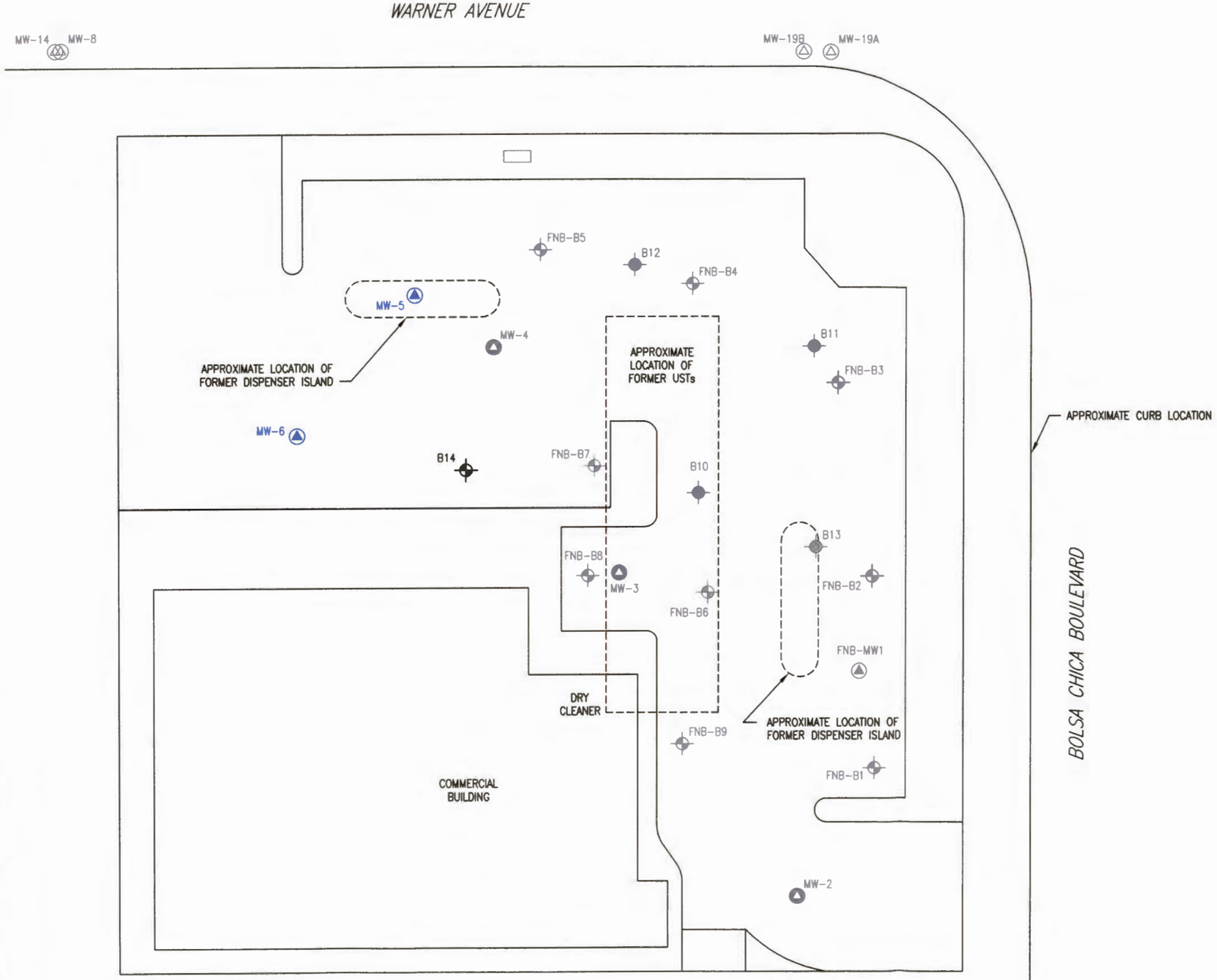
Karen V. Hosler 3/26/04

VI. RWQCB Notification

Date Submitted to RB: 3-26-04	RB Response: Concur w/ Closure	
RWQCB Staff Name: Dom Mbeke Ekanem	Title: Sanitary Engineering Associate	Date: 4/5/04
RWQCB Staff Name: Kenneth R. Williams	Title: Chief, UST Section	
Signature: Kenneth R Williams		Date: 4/5/04

APPENDIX C

Historical Site Plans Showing Sample Locations (SAIC, 2003)



EXPLANATION

- SOIL BORING (SAIC, 2003)
- GROUNDWATER MONITORING WELL (SAIC, 2003)
- GROUNDWATER MONITORING WELL (KENNEDY/JENKS, 1993)
- GROUNDWATER MONITORING WELL (MACTEC, 2002)
- OFFSITE GROUNDWATER MONITORING WELL (APPROXIMATE) (MOBIL)
- SOIL BORING (KENNEDY/JENKS, 1993-1994)
- SOIL BORING (MACTEC, 2002)

NOTE:
FORMER DISPENSER ISLAND AND UST LOCATIONS ARE APPROXIMATELY BASED ON AERIAL PHOTOS. FORMER STATION LAYOUT WAS NOT AVAILABLE.

N

APPROXIMATE
Scale 0 10 20 feet

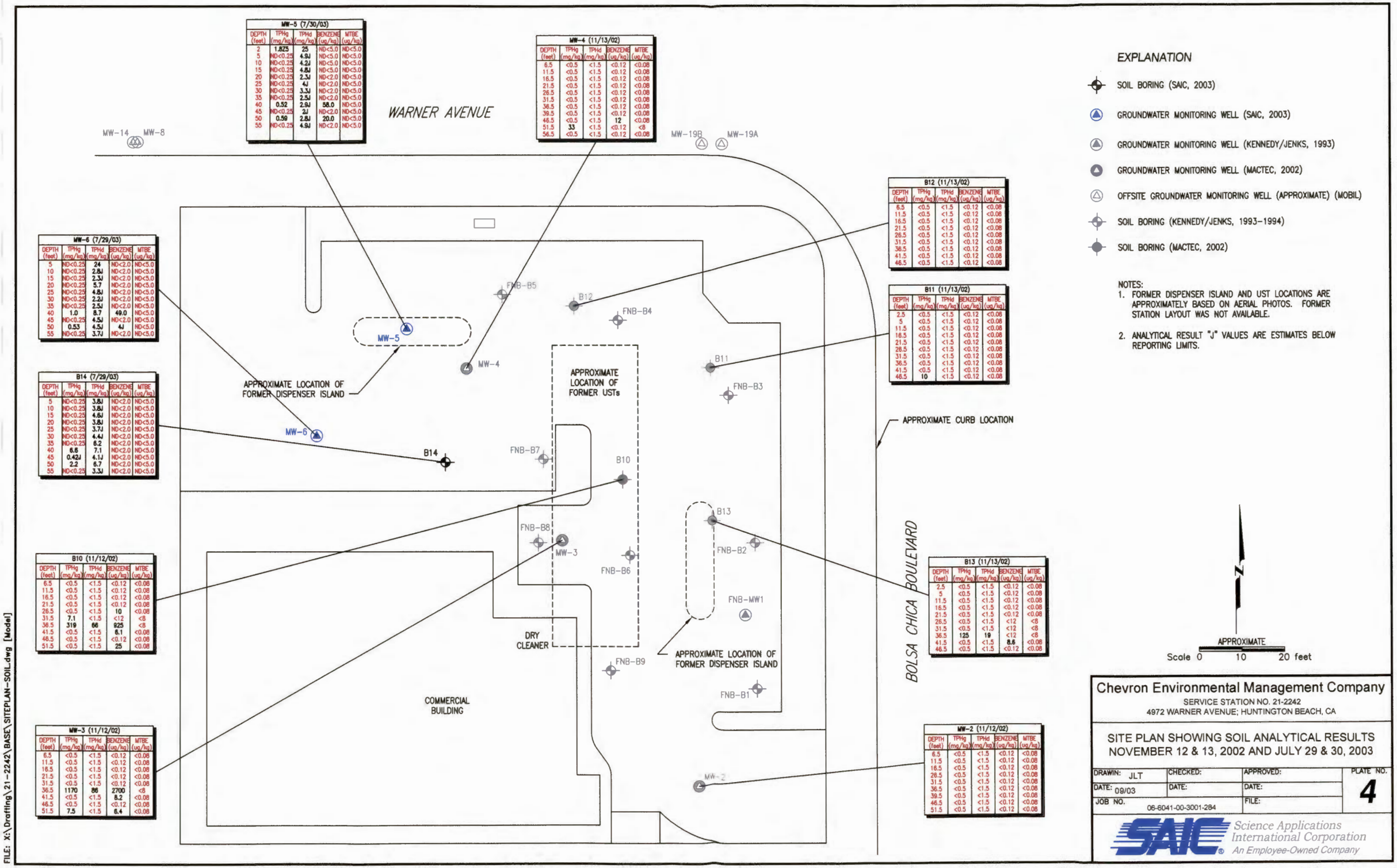
Chevron Environmental Management Company
SERVICE STATION NO. 21-2242
4972 WARNER AVENUE; HUNTINGTON BEACH, CA

SITE PLAN SHOWING SOIL BORINGS AND MONITORING WELL LOCATIONS
SEPTEMBER 8, 2003

DRAWN: JLT	CHECKED:	APPROVED:	PLATE NO. 3
DATE: 09/03	DATE:	DATE:	
JOB NO. 06-6041-00-3001-284		FILE:	

Science Applications International Corporation
An Employee-Owned Company

FILE: X:\Drafting\21-2242\BASE\SITEPLAN3-284.dwg [Model]



MW-5 (7/30/03)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
2	1.8Z5	25	ND<5.0	ND<5.0
5	ND<0.25	4.9J	ND<5.0	ND<5.0
10	ND<0.25	4.2J	ND<5.0	ND<5.0
15	ND<0.25	4.8J	ND<5.0	ND<5.0
20	ND<0.25	2.3J	ND<2.0	ND<5.0
25	ND<0.25	4J	ND<2.0	ND<5.0
30	ND<0.25	3.3J	ND<2.0	ND<5.0
35	ND<0.25	2.5J	ND<2.0	ND<5.0
40	0.52	2.9J	58.0	ND<5.0
45	ND<0.25	2J	ND<2.0	ND<5.0
50	0.59	2.8J	20.0	ND<5.0
55	ND<0.25	4.9J	ND<2.0	ND<5.0

MW-4 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
39.5	<0.5	<1.5	<0.12	<0.08
46.5	<0.5	<1.5	12	<0.08
51.5	33	<1.5	<0.12	<8
56.5	<0.5	<1.5	<0.12	<0.08

B12 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
41.5	<0.5	<1.5	<0.12	<0.08
46.5	<0.5	<1.5	<0.12	<0.08

B11 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
2.5	<0.5	<1.5	<0.12	<0.08
5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
41.5	<0.5	<1.5	<0.12	<0.08
46.5	10	<1.5	<0.12	<0.08

MW-6 (7/29/03)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
5	ND<0.25	24	ND<2.0	ND<5.0
10	ND<0.25	2.8J	ND<2.0	ND<5.0
15	ND<0.25	2.3J	ND<2.0	ND<5.0
20	ND<0.25	5.7	ND<2.0	ND<5.0
25	ND<0.25	4.8J	ND<2.0	ND<5.0
30	ND<0.25	2.2J	ND<2.0	ND<5.0
35	ND<0.25	2.5J	ND<2.0	ND<5.0
40	1.0	8.7	49.0	ND<5.0
45	ND<0.25	4.5J	ND<2.0	ND<5.0
50	0.53	4.5J	4J	ND<5.0
55	ND<0.25	3.7J	ND<2.0	ND<5.0

B14 (7/29/03)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
5	ND<0.25	3.8J	ND<2.0	ND<5.0
10	ND<0.25	3.8J	ND<2.0	ND<5.0
15	ND<0.25	4.6J	ND<2.0	ND<5.0
20	ND<0.25	3.8J	ND<2.0	ND<5.0
25	ND<0.25	3.7J	ND<2.0	ND<5.0
30	ND<0.25	4.4J	ND<2.0	ND<5.0
35	ND<0.25	6.2	ND<2.0	ND<5.0
40	6.6	7.1	ND<2.0	ND<5.0
45	0.42J	4.1J	ND<2.0	ND<5.0
50	2.2	6.7	ND<2.0	ND<5.0
55	ND<0.25	3.3J	ND<2.0	ND<5.0

B10 (11/12/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	10	<0.08
31.5	7.1	<1.5	<12	<8
36.5	319	66	825	<8
41.5	<0.5	<1.5	6.1	<0.08
46.5	<0.5	<1.5	<0.12	<0.08
51.5	<0.5	<1.5	25	<0.08

B13 (11/13/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
2.5	<0.5	<1.5	<0.12	<0.08
5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<12	<8
31.5	<0.5	<1.5	<12	<8
36.5	125	19	<12	<8
41.5	<0.5	<1.5	8.6	<0.08
46.5	<0.5	<1.5	<0.12	<0.08

MW-3 (11/12/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
21.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	1170	86	2700	<8
41.5	<0.5	<1.5	8.2	<0.08
46.5	<0.5	<1.5	<0.12	<0.08
51.5	7.5	<1.5	6.4	<0.08

MW-2 (11/12/02)

DEPTH (feet)	TPHg (mg/kg)	TPHd (mg/kg)	BENZENE (ug/kg)	MTBE (ug/kg)
6.5	<0.5	<1.5	<0.12	<0.08
11.5	<0.5	<1.5	<0.12	<0.08
16.5	<0.5	<1.5	<0.12	<0.08
26.5	<0.5	<1.5	<0.12	<0.08
31.5	<0.5	<1.5	<0.12	<0.08
36.5	<0.5	<1.5	<0.12	<0.08
39.5	<0.5	<1.5	<0.12	<0.08
46.5	<0.5	<1.5	<0.12	<0.08
51.5	<0.5	<1.5	<0.12	<0.08

EXPLANATION

- SOIL BORING (SAIC, 2003)
- GROUNDWATER MONITORING WELL (SAIC, 2003)
- GROUNDWATER MONITORING WELL (KENNEDY/JENKS, 1993)
- GROUNDWATER MONITORING WELL (MACTEC, 2002)
- OFFSITE GROUNDWATER MONITORING WELL (APPROXIMATE) (MOBIL)
- SOIL BORING (KENNEDY/JENKS, 1993–1994)
- SOIL BORING (MACTEC, 2002)

NOTES:
1. FORMER DISPENSER ISLAND AND UST LOCATIONS ARE APPROXIMATELY BASED ON AERIAL PHOTOS. FORMER STATION LAYOUT WAS NOT AVAILABLE.
2. ANALYTICAL RESULT "J" VALUES ARE ESTIMATES BELOW REPORTING LIMITS.

Chevron Environmental Management Company

SERVICE STATION NO. 21-2242
4972 WARNER AVENUE; HUNTINGTON BEACH, CA

SITE PLAN SHOWING SOIL ANALYTICAL RESULTS NOVEMBER 12 & 13, 2002 AND JULY 29 & 30, 2003

DRAWN: JLT	CHECKED:	APPROVED:	PLATE NO. 4
DATE: 09/03	DATE:	DATE:	
JOB NO. 06-6041-00-3001-284		FILE:	

Science Applications International Corporation
An Employee-Owned Company

FILE: X:\Drafting\21-2242\BASE\SITEPLAN-SOIL.dwg [Model]

APPENDIX D

Historical Soil Sample Analytical Results Tables (SAIC, 2003)

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
1st NATIONWIDE BANK - HUNTINGTON BEACH
K/J 930062.01

SAMPLE NO.	SAMPLE DATE	SAMPLING INTERVAL (feet)	REPORTED CONCENTRATIONS AND EPA ANALYTICAL METHOD					
			TPH AS GASOLINE[1] MODIFIED 8015 (mg/kg)	TPH AS DIESEL[2] MODIFIED 8015 (mg/kg)	BENZENE[3] 8020 (mg/kg)	TOLUENE[3] 8020 (mg/kg)	ETHYLBENZENE[3] 8020 (mg/kg)	XYLENES[3] 8020 (mg/kg)
FNB-B1-21.0	11/10/93	21.0 - 21.5	ND	ND	ND	ND	ND	ND
FNB-B2-21.0	11/10/93	21.0 - 21.5	ND	ND	ND	ND	ND	ND
FNB-B3-21.0	11/10/93	21.0 - 21.5	ND	ND	ND	ND	ND	ND
FNB-B4-21.0	11/10/93	21.0 - 21.5	ND	ND	ND	ND	ND	ND
FNB-B5-21.0	11/10/93	21.0 - 21.5	ND	ND	ND	ND	ND	ND
FNB-B6-21.0	11/10/93	21.0 - 21.5	ND	ND	ND	ND	ND	0.0068
FNB-B6-26.0	11/10/93	26.0 - 26.5	6,700[4]	1,200[11]	3.7[5]	26[5]	26[5]	690[5]
FNB-B7B	02/02/94	25.5 - 26.0	ND	ND	ND	ND	ND	ND
FNB-B8B	02/02/94	25.5 - 26.0	ND	ND	ND	ND	ND	ND
FNB-B9B	02/02/94	25.5 - 26.0	ND	ND	ND	ND	ND	ND
FNB-B6-31.0	11/10/93	31.0 - 31.5	110[7]	13[11]	ND[8]	6.9[8]	1.8[8]	11[8]
FNB-B7C	02/02/94	30.5 - 31.0	0.81	ND	0.055	0.016	0.013	0.078
FNB-B8C	02/02/94	30.5 - 31.0	0.56	40	0.015	0.038	ND	0.038
FNB-9C	02/02/94	30.5 - 31.0	ND	ND	ND	ND	ND	ND

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
1st NATIONWIDE BANK - HUNTINGTON BEACH
K/J 930062.01

SAMPLE NO.	SAMPLE DATE	SAMPLING INTERVAL (feet)	REPORTED CONCENTRATIONS AND EPA ANALYTICAL METHOD					
			TPH AS GASOLINE[1] MODIFIED 8015 (mg/kg)	TPH AS DIESEL[2] MODIFIED 8015 (mg/kg)	BENZENE[3] 8020 (mg/kg)	TOLUENE[3] 8020 (mg/kg)	ETHYLBENZENE[3] 8020 (mg/kg)	XYLENES[3] 8020 (mg/kg)
FNB-B6-36.0	11/10/93	36.0 - 36.5	920[9]	80[11]	4.1[10]	32[10]	14[10]	72[10]
FNB-B7D	02/02/94	36.0 - 36.5	0.98	ND	0.0098	ND	ND	0.094
FNB-B8D	02/02/94	35.5 - 36.0	13[12]	88	0.40[13]	1.3[13]	0.24[13]	1.6[13]
FNB-9D	02/02/94	35.5 - 36.0	0.58	ND	ND	0.011	ND	0.038

NOTES:

1) Quantitation Limit 0.50 mg/kg unless otherwise noted
2) Quantitation Limit 10 mg/kg unless otherwise noted
3) Quantitation Limit 0.0050 mg/kg unless otherwise noted
4) Quantitation Limit 1,900 mg/kg
5) Quantitation Limit 0.93 mg/kg
6) Quantitation Limit 19 mg/kg
7) Quantitation Limit 98 mg/kg
8) Quantitation Limit 0.98 mg/kg
9) Quantitation Limit 120 mg/kg
10) Quantitation Limit 1.2 mg/kg
11) The chromatographic pattern is not indicative of diesel fuel
12) Quantitation Limit 4.8 mg/kg
13) Quantitation Limit 0.019 mg/kg

TABLE 1
ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES
Chevron Service Station No. 21-2242
4972 Warner Avenue, Huntington Beach, California

Sample ID	Depth	Date Sampled	EPA Method 8015		EPA Method 8260B										6010B
			TPHg (mg/kg)	TPHd (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)	MtBE (µg/kg)	DIPE (µg/kg)	ETBE (µg/kg)	TAME (µg/kg)	TBA (µg/kg)	PCE (µg/kg)	Lead (mg/kg)
MW-2	6.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.13**
MW-2	11.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**1.80**
MW-2	16.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**2.67**
MW-2	26.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.26**
MW-2	31.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**6.35**
MW-2	36.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**2.06**
MW-2	39.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**11.1**
MW-2	46.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**2.91**
MW-2	51.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.03**
MW-3	6.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**13.1**
MW-3	11.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**2.97**
MW-3	16.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**2.27**
MW-3	21.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.09**
MW-3	31.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.50**
MW-3	36.5	11/12/02	**1,170**	**86**	**2,700**	**66,200**	**31,500**	**200,000**	ND<8	ND<18	ND<11	ND<14	ND<500	ND<35	**3.49**

TABLE 1
ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES
Chevron Service Station No. 21-2242
4972 Warner Avenue, Huntington Beach, California

Sample ID	Depth	Date Sampled	EPA Method 8015		EPA Method 8260B										6010B
			TPHg (mg/kg)	TPHd (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)	MtBE (µg/kg)	DIPE (µg/kg)	ETBE (µg/kg)	TAME (µg/kg)	TBA (µg/kg)	PCE (µg/kg)	Lead (mg/kg)
MW-3	41.5	11/12/02	ND<0.5	ND<1.5	**8.2**	**5.0**	**24**	**12**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.62**
MW-3	46.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	**8.1**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**7.48**
MW-3	51.5	11/12/02	**7.5**	ND<1.5	**6.4**	**5.6**	**35**	**31**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**1.01**
MW-4	6.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**7.27**
MW-4	11.5	11/13/02	ND<0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.20**
MW-4	16.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.26**
MW-4	21.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.91**
MW-4	26.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.39**
MW-4	31.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**6.04**
MW-4	36.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.05**
MW-4	39.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**13.50**
MW-4	46.5	11/13/02	ND< 0.5	ND<1.5	**12**	ND<0.16	**14**	**5**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**11.20**
MW-4	51.5	11/13/02	**33**	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	**645**	ND<8	ND<18	ND<11	ND <14	ND <500	ND<35	**2.68**
MW-4	56.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**2.50**
B-10	6.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**10.1**
B-10	11.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.92**

TABLE 1
ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES
Chevron Service Station No. 21-2242
4972 Warner Avenue, Huntington Beach, California

Sample ID	Depth	Date Sampled	EPA Method 8015		EPA Method 8260B										6010B
			TPHg (mg/kg)	TPHd (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)	MtBE (µg/kg)	DIPE (µg/kg)	ETBE (µg/kg)	TAME (µg/kg)	TBA (µg/kg)	PCE (µg/kg)	Lead (mg/kg)
B-10	16.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**7.93**
B-10	21.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**8.85**
B-10	26.5	11/12/02	ND<0.5	ND<1.5	**10**	**158**	**33**	**218**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**7.18**
B-10	31.5	11/12/02	**7.1**	ND<1.5	ND<12	**2,560**	**834**	**6,070**	ND<8	ND<18	ND<11	ND<14	ND<500	ND<35	**10.7**
B-10	36.5	11/12/02	**319**	**66**	**925**	**8,280**	**2,720**	**15,400**	ND<8	ND<18	ND<11	ND<14	ND<500	ND<35	**7.58**
B-10	41.5	11/12/02	ND<0.5	ND<1.5	**8.1**	ND<0.16	**17**	**8.8**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.77**
B-10	46.5	11/12/02	ND<0.5	ND<1.5	ND<0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.52**
B-10	51.5	11/12/02	ND<0.5	ND<1.5	**25**	ND<0.16	**68**	**70**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.66**
B-11	2.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**7.36**
B-11	5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.98**
B-11	11.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**6.80**
B-11	16.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**1.69**
B-11	21.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**1.12**
B-11	26.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**6.22**
B-11	31.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.59**

TABLE 1
ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES
Chevron Service Station No. 21-2242
4972 Warner Avenue, Huntington Beach, California

Sample ID	Depth	Date Sampled	EPA Method 8015		EPA Method 8260B										6010B
			TPHg (mg/kg)	TPHd (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)	MtBE (µg/kg)	DIPE (µg/kg)	ETBE (µg/kg)	TAME (µg/kg)	TBA (µg/kg)	PCE (µg/kg)	Lead (mg/kg)
B-11	36.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	**11**	**24**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**3.79**
B-11	41.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**13.50**
B-11	46.5	11/13/02	**10**	ND<1.5	ND< 0.12	ND<0.16	**47**	**88**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.82**
B-12	5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.56**
B-12	11.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.99**
B-12	16.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**2.06**
B-12	21.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**1.59**
B-12	26.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.59**
B-12	31.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**6.82**
B-12	36.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.49**
B-12	41.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**13.20**
B-12	46.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**10.30**
B-13	2.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**6.87**

TABLE 1
ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES
Chevron Service Station No. 21-2242
4972 Warner Avenue, Huntington Beach, California

Sample ID	Depth	Date Sampled	EPA Method 8015		EPA Method 8260B										6010B
			TPHg (mg/kg)	TPHd (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)	MtBE (µg/kg)	DIPE (µg/kg)	ETBE (µg/kg)	TAME (µg/kg)	TBA (µg/kg)	PCE (µg/kg)	Lead (mg/kg)
B-13	5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**4.85**
B-13	11.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**5.93**
B-13	16.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**1.49**
B-13	21.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**1.63**
B-13	26.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**7.07**
B-13	31.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<16	ND<12	**500**	ND<8	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<35	**2.24**
B-13	36.5	11/13/02	**125**	**19**	ND< 0.12	**1,420**	**3,490**	**13,900**	ND<8	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<35	**2.82**
B-13	41.5	11/13/02	ND< 0.5	ND<1.5	**8.60**	ND<0.16	**8.80**	ND<0.8	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**12.50**
B-13	46.5	11/13/02	ND< 0.5	ND<1.5	ND< 0.12	ND<0.16	ND<0.12	**5.90**	ND<0.08	ND<0.18	ND<0.11	ND<0.14	ND<5	ND<0.35	**7.90**

Notes:

Laboratory analysis performed by Associated Laboratories, Orange, CA
MtBE - Methyl tertiary-butyl ether
DIPE - Diisopropyl ether
ETBE - Ethyl tertiary-butyl ether
TAME - Tertiary-amyl methyl ether
TBA - Tertiary-butyl alcohol
PCE - Tetrachloroethene
TPHg - Total petroleum hydrocarbons as gasoline
TPHd - Total petroleum hydrocarbons as diesel
µg/kg - Micrograms per kilogram
mg/kg - Milligrams per kilogram
J - Trace
ND - Not Detected

P:\Projects\Chevron SAR\Orange County\21-2242\Tables\soil samples.xls

Table 1. Analytical Laboratory Results for Soil Samples
Chevron Environmental Management Company
ChevronTexaco Heritage Site No. 21-2242
4972 Warner Avenue, Huntington Beach, California

Sample ID	Depth	Date Sampled	EPA Method 8015		EPA Method 8260B													
			TPHd (mg/kg)	TPHg (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)	MtBE (µg/kg)	DIPE (µg/kg)	ETBE (µg/kg)	TAME (µg/kg)	TBA (µg/kg)	1, 2-DCE (µg/kg)	TCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	PCE (µg/kg)
MW-5	2	07/30/03	**25.0**	**1.8**	ND<5.0	ND<5.0	**9.4**	**100.0**	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	5	07/30/03	**4.9J**	ND<0.25	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	10	07/30/03	**4.2J**	ND<0.25	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	15	07/30/03	**4.8J**	ND<0.25	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	20	07/30/03	**2.3J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	25	07/30/03	**4J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	30	07/30/03	**3.3J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	**2.0**
MW-5	35	07/30/03	**2.5J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	40	07/30/03	**2.9J**	**0.52**	**58.0**	ND<2.0	**4.9J**	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**5.8**	**0.5J**	**0.38J**	ND<0.41	ND<0.49
MW-5	45	07/30/03	**2J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**7.7**	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-5	50	07/30/03	**2.8J**	**0.59**	**20.0**	ND<2.0	**37.0**	**64.0**	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**1.9**	ND<0.34	**7.6**	**1.1**	ND<0.49
MW-5	55	07/30/03	**4.9J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	**0.58J**	ND<0.41	ND<0.49
MW-6	5	07/29/03	**24.0**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	10	07/29/03	**2.8J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	15	07/29/03	**2.3J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	20	07/29/03	**5.7**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	25	07/29/03	**4.8J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	30	07/29/03	**2.2J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	35	07/29/03	**2.5J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	40	07/29/03	**8.7**	**1.0**	**49.0**	ND<2.0	**180.0**	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**12.0**	**2.6**	ND<0.35	ND<0.41	**3.2**
MW-6	45	07/29/03	**4.5J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**2.5**	ND<0.34	ND<0.35	ND<0.41	ND<0.49
MW-6	50	07/29/03	**4.5J**	**0.53**	**4J**	ND<2.0	**3.2J**	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	**0.8J**	ND<0.41	ND<0.49
MW-6	55	07/29/03	**3.7J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	5	07/29/03	**3.8J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	10	07/29/03	**3.8J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	15	07/29/03	**4.6J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	20	07/29/03	**3.8J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	25	07/29/03	**3.7J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	30	07/29/03	**4.4J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49

Table 1. Analytical Laboratory Results for Soil Samples
Chevron Environmental Management Company
ChevronTexaco Heritage Site No. 21-2242
4972 Warner Avenue, Huntington Beach, California

Sample ID	Depth	Date Sampled	EPA Method 8015		EPA Method 8260B													
			TPHd (mg/kg)	TPHg (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl benzene (µg/kg)	Total Xylenes (µg/kg)	MtBE (µg/kg)	DIPE (µg/kg)	ETBE (µg/kg)	TAME (µg/kg)	TBA (µg/kg)	1, 2-DCE (µg/kg)	TCE (µg/kg)	cis-1,2-DCE (µg/kg)	trans-1,2-DCE (µg/kg)	PCE (µg/kg)
B-14	35	07/29/03	**6.2**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	40	07/29/03	**7.1**	**6.6**	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**2.8**	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	45	07/29/03	**4.1J**	**0.42J**	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**1.0**	ND<0.34	**0.5J**	ND<0.41	ND<0.49
B-14	50	07/29/03	**6.7**	**2.2**	ND<2.0	ND<2.0	**10.0**	**14.0**	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	**0.7J**	ND<0.34	ND<0.35	ND<0.41	ND<0.49
B-14	55	07/29/03	**3.3J**	ND<0.25	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<20	ND<0.58	ND<0.34	ND<0.35	ND<0.41	ND<0.49

Notes: Laboratory analysis performed by Del Mar Analytical Laboratories, Irvine, CA
MtBE - Methyl tertiary-butyl ether
DIPE - Diisopropyl ether
ETBE - Ethyl tertiary-butyl ether
TAME - Tertiary-amyl methyl ether
TBA - Tertiary-butyl alcohol
PCE - Tetrachloroethene
1,2-DCE - 1,2-Dichloroethane
TCE - Trichloroethene
cis1,2-DCE - cis1,2-Dichloroethane
trans-1,2-DCE - trans-1,2-Dichloroethane
EPA Method 8260B - 25 other Volatile Organic Compounds all Not Detected
TPHg - Total petroleum hydrocarbons as gasoline
TPHd - Total petroleum hydrocarbons as diesel
µg/kg - Micrograms per kilogram
mg/kg - Milligrams per kilogram
J - Estimated value below reporting limt
ND - Not Detected