



State of California - Department of Fish and Wildlife
2025 ENVIRONMENTAL DOCUMENT FILING FEE
CASH RECEIPT
DFW 753.5a (REV. 01/01/25) Previously DFG 753.5a



RECEIPT NUMBER:

30 — 02/21/2025 — 0101

STATE CLEARINGHOUSE NUMBER (If applicable)

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY

CAPISTRANO UNIFIED SCHOOL DISTRICT

LEAD AGENCY EMAIL

DATE

02/21/2025

COUNTY/STATE AGENCY OF FILING

Orange

DOCUMENT NUMBER

202585000126

PROJECT TITLE

CAPISTRANO VALLEY HIGH SCHOOL MODERNIZATION PROJECT

PROJECT APPLICANT NAME

CAPISTRANO UNIFIED SCHOOL DISTRICT

PROJECT APPLICANT EMAIL

PHONE NUMBER

()

PROJECT APPLICANT ADDRESS

33122 VALLE ROAD

CITY

STATE

ZIP CODE

SAN JUAN CAPISTRANO CA

92675

PROJECT APPLICANT (Check appropriate box)

☐ Local Public Agency

☒ School District

☐ Other Special District

☐ State Agency

☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)

\$4,123.50

\$

0.00

☐ Mitigated/Negative Declaration (MND)(ND)

\$2,968.75

\$

0.00

☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW

\$1,401.75

\$

0.00

☒ Exempt from fee

☒ Notice of Exemption (attach)

☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)

\$850.00

\$

0.00

☐ County documentary handling fee

\$

50.00

☐ Other

\$

PAYMENT METHOD:

☐ Cash

☐ Credit

☐ Check

☐ Other

TOTAL RECEIVED

\$

50.00

SIGNATURE

X

Jacqui

AGENCY OF FILING PRINTED NAME AND TITLE

JACQUELINE CHABOYA, DEPUTY CLERK



**ORANGE COUNTY
CLERK-RECORDER
CEQA FILING COVER SHEET**

202585000126

FILED

February 21, 2025

HUGH NGUYEN

CLERK - RECORDER

By [Signature]
Deputy clerk

30-2/21/2025-0101

Complete and attach this form to each CEQA Notice filed with the County Clerk-Recorder

TYPE OR PRINT CLEARLY

Project Title

CAPISTRANO VALLEY HIGH SCHOOL MODERNIZATION PROJECT

Check Document being Filed:

- ☐ Environmental Impact Report (EIR)
- ☐ Mitigated Negative Declaration (MND) or Negative Declaration (ND)
- ☒ Notice of Exemption (NOE)
- ☐ Other (Please fill in type):

**FILED IN THE OFFICE OF THE ORANGE
COUNTY CLERK-RECORDER ON**

February 21, 2025

Posted for 30 **days**

DEPUTY 475

Filing fees are due at the time a Notice of Determination/Exemption is filed with our office. For more information on filing fees and No Effect Determinations, please refer to California Code of Regulations, Title 14, section 753.5.

FILED

FEB 21 2025

HUGH NGUYEN, CLERK-RECORDER

BY: _____

DEPUTY

CEQA: California Environmental Quality Act

NOTICE OF EXEMPTION

To: ☒ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: Capistrano Unified School District

33122 Valle Road

San Juan Capistrano, CA 92675

☒ County Clerk
County of Orange County

601 N. Ross Street

Santa Ana, CA 92701

Capistrano Valley High School Stadium Modernization Project
Project Title

26301 Via Escolar
Project Location - Specific

Mission Viejo
Project Location - City

Orange
Project Location - County

The District proposes to construct three academic buildings; relocate six full-size storage containers and three half-sized storage containers; redevelop parking-lot #1-C; replace the stadium bleachers, stadium lighting, PA system, fire hydrant, and scoreboard; the track will be resurfaced, damaged areas will be patched, repainted and stripped, and aluminum covers will be installed on the two long jump sandpits, and surrounding area; install new fencing, gates, a flagpole, parking signage, a bike rack, and ornamental landscaping (proposed project). The proposed project is discussed in more detail below.

The proposed project will demolish the existing three academic buildings (a restroom, snack shop, and SDGE building), two basketball courts, parking lot #1-C, a shade structure, bleachers, flagpole, stadium light poles, stadium PA system poles, planters and planter wall, a wooden booth, fencing, gates, fire hydrant, 16 trees, and landscape areas; and relocate six full-sized and three half-sized storage containers.

The proposed project would construct three buildings (Building L, K and M). The existing restroom building and existing snack shop building will be replaced with Buildings L and K. Building L (2,160 square feet) will be on the home side (southern portion) of the field and will include men's and women's home restrooms, a storage room, a data room, an electrical room, and concessions. Building K (1,973 square feet) will be on the visitor side of the field with men's and women's visitors restrooms, a custodial room, and a health classroom with two restrooms.

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A gated breezeway will separate Building L and Building K, which includes three two-doored gates that provides pedestrian access into the stadium and track and field and large stainless-steel lettering "Home of the Cougars" over the breezeway entrance. The new Building M (2,387 square feet) will include a physical education (PE) classroom, a health classroom, two storage rooms (one outdoor and indoor), two restrooms, and an electrical room. A gated breezeway will separate Building M and Building L, which includes a metal overhanging wall with large stainless steel lettering "Capistrano Valley High School," and four two-doored gates, one single door gate, and a large roiling gate to provide pedestrians access to the stadium and track and field.

The north health classroom in Building K will accommodate a maximum student loading of 48 students; the PE classroom and south health classroom in Building M will accommodate a maximum student loading of 49 and 50 students, respectively. In total, the proposed project will increase the campus capacity by 147 students, which represents an approximately 7 percent increase to enrollment capacity.

The proposed project will replace the existing bleachers with expanded "home" and "visitors" permanent bleachers. The new "home" bleachers will be in the same location (on the southern portion of the stadium) as the existing bleachers and expand seating capacity from 1,312 seats to 2,000 seats. The home bleachers will also include a press box. The new "visitors" bleachers will be in the same location as the existing bleachers (on the northern portion of the stadium) and expand seating capacity from 574 seats to 750 seats. The proposed project will result in a total increase of 864 spectator seats. The proposed project will not introduce any new events/games nor expand existing sporting teams on-campus.

The existing stadium lighting and PA system surrounding the bleachers will be replaced and with new stadium lighting poles and LED luminaires and a new PA system. The existing track will be resurfaced, damaged areas will be patched, repainted and stripped. Aluminum covers will be installed at the two long jump sandpits along the northern portion of the field. The proposed project will repave the area around the track and field and proposed Buildings L, M, and K with new concrete, and asphalt. Several gates and fences will be replaced on the project site, and new gates and fences will be installed around the project site. The new scoreboard will be placed closer (northwest) to the track and field, and the new flagpole will be installed north of the new scoreboard. A new bike rack will be installed at the northwest corner of Building K, and a new fire hydrant will be replaced and installed in the same location. The northern portion of the two basketball courts that bound the project site will be repaired.

The existing parking lot #1-C will be repaved with new asphalt and the parking spaces will be reoriented. The new parking lot #1-C will include 21 parking stalls, four of which will be Americans with Disabilities Act (ADA) parking stalls, and associated parking signage. The new parking lot #1-C will be reduced from 27 parking stalls to 21 stalls, a net decrease of 6 parking stalls.

The proposed project will also relocate six full-size storage containers and three half-sized storage containers from the project site to the southeastern portion of campus. The proposed project will require removal of 16 ornamental trees on site that will be replaced with ornamental landscaping throughout the project site. The proposed project will protect the existing stadium monument in place.

The proposed project will benefit the existing student body, faculty, staff, and spectators with modern athletic and educational-related facilities on-campus.

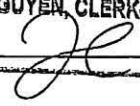
Construction of the proposed project is scheduled to begin in February 2025 and is anticipated to last approximately 15 months. All construction equipment and workers will be located within the boundaries of the campus and contractors will adhere to construction noise regulations to avoid disruption to campus operations.

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As standard construction practice, the construction personnel will water exposed areas at least three times a day during ground disturbing activities.

Description of Nature, Purpose, and Beneficiaries of Project

Capistrano Unified School District

Name of Public Agency Approving Project

Capistrano Unified School District

Name of Person or Agency Carrying Out Project

Exempt Status: (check one below)

☐ Ministerial (Sec. 21080(b)(1); 15268);

☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));

☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));

☒ Categorical Exemption. State type and section number: §15301 Class 1, Existing Facilities, §15302 Class 2, Replacement or Reconstruction, §15303 Class 3, New Construction or Conversion of Small Structures, §15311 Class 11, Accessory Structures, §15314 Class 14, Minor Additions to Schools.

☐ Statutory Exemptions. State code number:

The proposed parking lot, track, walkway, and basketball court improvements; ornamental fencing/gate replacement, and relocation of storage containers, are exempt from CEQA under Class 1, Existing Facilities (Section 15301). The parking lot restriping and reconfiguration, walkway, and basketball court improvements, and fencing/gate replacement are exterior alterations of existing school facilities on campus to improve the safety and access of campus. The proposed project includes patching, repainted and restriping the track includes the repair of existing facilities. Additionally, the installation of aluminum covers on the two long jump sandpits along the northern portion of the field is considered a minor alteration to facilities. Since the campus improvements are located in the same site and do not involve the expansion of use, the proposed project is exempt from CEQA under Section 15301.

The proposed replacement of the bleachers, scoreboard, flagpole, fire hydrant, stadium lighting, PA systems, fencing, and gates are exempt from CEQA under Class 2, replacement or reconstruction (Section 15302). The existing bleachers, scoreboard, flagpole, fire hydrant, stadium lighting, PA system, fencing, and gates are located on the perimeter of the track and field and will be replaced with new equipment/infrastructure in the same locations that will continue to serve the same purpose. The existing restroom and snack shop buildings will be replaced with Building K and L. Therefore, the project is exempt from CEQA under Section 15302.

The proposed construction bleachers, fencing and gates, bike racks, scoreboard, stadium lighting, landscaping, and PA system are exempt from CEQA under Class 3, New Construction or Conversion of Small Structures (Section 15303). The proposed bleachers, fencing and gates, scoreboard, stadium lighting, landscaping, and PA system are small accessory structures and located within the school campus. The new bike racks are small new equipment and accessory structures. The aforementioned improvements will be located on campus to serve students and not increase student capacity; the project is exempt from CEQA under Section 15303.

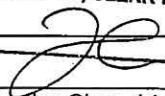
The proposed project will include the construction of a parking lot, parking signage, scoreboard, flagpole, stadium lighting, PA system, fencing, gates, and landscaping are exempt from CEQA under Class 11, Accessory Structures (Section 15311). The proposed project will reconstruct parking lot #1-C, and parking signage which are exempt under 15311(a), and (b). The installation of the scoreboard, flagpole, stadium lighting, PA system, fencing and gates, and landscaping are minor accessory structures to the Capistrano Valley HS campus to improve the associated stadium facilities. The aforementioned structures will be located in the stadium area to serve students, spectators and the school community and will not increase student capacity. The project is exempt from CEQA under Section 15311.

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The three academic-related buildings (Buildings L, M, and K) are exempt from CEQA under Class 14, Minor Additions to Schools (Section 15314). The new buildings will be located within the Capistrano Valley HS campus. Buildings L, M, and K includes the construction of two health classrooms and a physical education classroom, which will result in a net increase of 3 classrooms. The proposed project will increase the campus enrollment capacity by 147 students, which represents an approximately 7 percent increase to enrollment capacity. Since the new buildings will not increase classrooms by ten nor increase student enrollment capacity by more than 25 percent, the project is exempt from CEQA under Section 15314.

Therefore, the proposed project is exempt from CEQA under Sections 15301, 15302, 15303, 15311, and 15314. The proposed project was also reviewed for possible exceptions under Section 15300.2 and found that the exceptions do not apply. See Attachment to Notice of Exemption for further explanation of the evaluation, which is available at the Capistrano Unified School District Office, 33122 Valle Road, San Juan Capistrano, CA 92675. Reasons why project is exempt

John Forney, Chief Facilities Officer

949.234.9200

jgforney@capousd.org

Contact Person:

Area Code/Telephone/Extension:

Email:

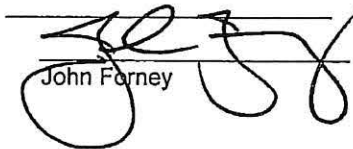
If filed by applicant:

1. Attach certified document of exemption findings
2. Has a Notice of Exemption been filed by the public agency approving the project

☒ Yes ☐ No

Date Received
for Filing:

Signature:


John Forney

Title: Chief Facilities Officer

Attachment to Notice of Exemption
CAPISTRANO VALLEY HIGH SCHOOL STADIUM MODERIZATION PROJECT
CAPISTRANO UNIFIED SCHOOL DISTRICT
SUPPLEMENTAL INFORMATION

This supplemental information provides justification for the Categorical Exemption pursuant to the California Environmental Quality Act (CEQA) Guidelines under California Code of Regulations, Title 14 Sections 15301 (14 CCR §§ 15301), 15302 (14 CCR §§ 15302), 15303 (14 CCR §§ 15303), 15311 (14 CCR §§ 15311), and 15314 (14 CCR §§ 15314).

1. EXISTING CONDITIONS

PROJECT LOCATION

The Capistrano Valley High School (campus) at 26301 Via Escolar (Assessor Parcel Number [APN] 74001303, 74001307, 74001327 and 74001325) is in the southern portion of the City of Mission Viejo (City) (see Figure 1, *Regional Location*) (Mission Viejo 2024). The City is surrounded by the City of Lake Forest and unincorporated Orange County area to the north; the City of Lake Forest and Laguna Hills to the west; the City of Laguna Niguel and San Juan Capistrano to the south; and the City of Rancho Santa Margarita, unincorporated community of Las Flores and unincorporated Orange County to the east. The campus is surrounded by commercial and residential uses to the north, commercial uses to the west, educational (Stoneybrooke Christian School), residential, and commercial uses to the south, and residential uses to the east. Interstate 5 (I-5) is 0.13 miles east of the campus, and State Route 73 (SR-73) is 0.25 miles northwest of campus (see Figure 1, *Regional Location* and Figure 2, *Local Vicinity*).

The project site includes approximately 6 acres of the northwestern side of the approximately 42-acre campus (project site). See Figure 3, *Aerial with View Locations*.

EXISTING PROJECT SITE CONDITIONS

Capistrano Valley High School (HS) campus is a 9th through 12th grade school with a 2023 enrollment 1,981 students (CDE 2024). Capistrano Valley HS consists of one central academic building with an attached performing arts theater, two two-story academic buildings, 25 portables, 1 relocatable restroom, a student quad, five shade structures, a gymnasium, the campus pool, a boys and girls locker room buildings, ten athletic-related portable classrooms (includes a gym and wrestling classrooms), a snack shop building, a permanent restroom building, a San Diego Gas and Energy (SDGE) building, various monuments, a ground/maintenance building, a track and field with stadium lighting and bleachers, a scoreboard sign, six stadium light poles, four PA poles, a shot-put area, three baseball fields with dugouts, a mixed use field, an auto-shop with an enclosed parking lot and lift, five parking lots (three parking lots with solar EV systems), five full and two half basketball courts, a batting cage area, 10 full-sized storage containers, five half-size storage containers, asphalt hardcourts and walkways throughout campus. The campus has an existing enrollment capacity of 2,000 students.

Vehicle access to parking lots on the campus is provided via two ingress-egress driveways and one ingress-only and one egress-only driveways along Via Escolar. Access to parking lot 1-A, 1-B, and 1-C is provided via the northernmost ingress-egress driveway and an internal vehicle roadway; access to parking lot 2 is provided via an ingress-only driveway at the Via Escolar roundabout and an egress-only driveway further northeast; access to parking lot 3 is

provided by an ingress-egress driveway off Via Escolar. Additionally, the campus has a pick-up and drop-off area that is provided within parking lot 1-A.

The project site is developed with parking lot #1-C, the campus stadium, track and field, and associated surrounding areas, which include three buildings (a restroom building, a snack shop building, and SDGE building), including two basketball courts, a shade structure, a stadium monument, bleachers, flagpole, stadium light poles, stadium PA system poles, planters and planter wall, a wooden booth, six full-sized storage containers, three half-sized storage containers, fencing, gates, fire hydrants, 16 trees, and hardscape and landscape areas. The 16 trees on-site include, ten Mexican Fan Palm (*Washingtonia* spp.) and six Queen Palm (*Syagrus romanzoffiana*) (see Appendix A, *Tree Identification*). The project site is primarily developed with the stadium, track and field, and hardscape/paved surfaces (see Figure 3). The campus is primarily flat with a slight slope northeast to northwest. See Figure 3, *Aerial View with Photo Locations*, Figure 4, *Project Site Photographs*, and Figure 5, *Surrounding Site Photographs*.

GENERAL PLAN LAND USE AND ZONING

The Capistrano Valley HS campus encompasses APN 74001304, 74001307, 74001327 and 74001325; and the project site encompasses APN 74001304 (Mission Viejo 2024). The campus and project site have a General Plan land use designation and a zoning designation of Community Facility (CF) (Mission Viejo 2024).

2. PROJECT DESCRIPTION

The District proposes to construct three academic buildings; relocate six full-size storage containers and three half-sized storage containers; redevelop parking-lot #1-C; replace the stadium bleachers, stadium lighting, PA system, fire hydrant, and scoreboard; the track will be resurfaced, damaged areas will be patched, repainted and stripped, and aluminum covers will be installed on the two long jump sandpits, and surrounding area; install new fencing, gates, a flagpole, parking signage, a bike rack, and ornamental landscaping (proposed project) (see Figure 6, *Capistrano Valley High School Site Plan*). The proposed project is discussed in more detail below.

The proposed project will demolish the existing three academic buildings (a restroom, snack shop, and SDGE building), two basketball courts, parking lot #1-C, a shade structure, bleachers, flagpole, stadium light poles, stadium PA system poles, planters and planter wall, a wooden booth, fencing, gates, fire hydrant, 16 trees, and landscape areas; and relocate six full-sized and three half-sized storage containers.

The proposed project would construct three buildings (Building L, K and M). The existing restroom building and existing snack shop building will be replaced with Buildings L and K. Building L (2,160 square feet) will be on the home side (southern portion) of the field and will include men's and women's home restrooms, a storage room, a data room, an electrical room, and concessions. Building K (1,973 square feet) will be on the visitor side of the field with men's and women's visitors restrooms, a custodial room, and a health classroom with two restrooms. A gated breezeway will separate Building L and Building K, which includes three two-doored gates that provides pedestrian access into the stadium and track and field and large stainless-steel lettering "Home of the Cougars" over the breezeway entrance. The new Building M (2,387 square feet) will include a physical education (PE) classroom, a health classroom, two storage rooms (one outdoor and indoor), two restrooms, and an electrical room. A gated breezeway will separate Building M and Building L, which includes a metal overhanging wall with large stainless steel lettering "Capistrano Valley High School," and four two-doored gates, one single door gate, and a large roiling gate to provide pedestrians access to the stadium and track and field.

The north health classroom in Building K will accommodate a maximum student loading of 48 students; the PE classroom and south health classroom in Building M will accommodate a maximum student loading of 49 and 50

students, respectively. In total, the proposed project will increase the campus capacity by 147 students, which represents an approximately 7 percent increase to enrollment capacity.

The proposed project will replace the existing bleachers with expanded "home" and "visitors" permanent bleachers. The new "home" bleachers will be in the same location (on the southern portion of the stadium) as the existing bleachers and expand seating capacity from 1,312 seats to 2,000 seats. The home bleachers will also include a press box. The new "visitors" bleachers will be in the same location as the existing bleachers (on the northern portion of the stadium) and expand seating capacity from 574 seats to 750 seats. The proposed project will result in a total increase of 864 spectator seats. The proposed project will not introduce any new events/games nor expand existing sporting teams on-campus.

The existing stadium lighting and PA system surrounding the bleachers will be replaced and with new stadium lighting poles and LED luminaires and a new PA system. The existing track will be resurfaced, damaged areas will be patched, repainted and stripped. Aluminum covers will be installed at the two long jump sandpits along the northern portion of the field. The proposed project will repave the area around the track and field and proposed Buildings L, M, and K with new concrete, and asphalt. Several gates and fences will be replaced on the project site, and new gates and fences will be installed around the project site. The new scoreboard will be placed closer (northwest) to the track and field, and the new flagpole will be installed north of the new scoreboard. A new bike rack will be installed at the northwest corner of Building K, and a new fire hydrant will be replaced and installed in the same location. The northern portion of the two basketball courts that bound the project site will be repaired.

The existing parking lot #1-C will be repaved with new asphalt and the parking spaces will be reoriented (see, Figure 6). The new parking lot #1-C will include 21 parking stalls, four of which will be Americans with Disabilities Act (ADA) parking stalls, and associated parking signage. The new parking lot #1-C will be reduced from 27 parking stalls to 21 stalls, a net decrease of 6 parking stalls.

The proposed project will also relocate six full-size storage containers and three half-sized storage containers from the project site to the southeastern portion of campus. The proposed project will require removal of 16 ornamental trees on site that will be replaced with ornamental landscaping throughout the project site. The proposed project will protect the existing stadium monument in place.

The proposed project will benefit the existing student body, faculty, staff, and spectators with modern athletic and educational-related facilities on-campus.

CONSTRUCTION

Construction of the proposed project is scheduled to begin in February 2025 and is anticipated to last approximately 15 months. All construction equipment and workers will be located within the boundaries of the campus and contractors will adhere to construction noise regulations to avoid disruption to campus operations. As standard construction practice, the construction personnel will water exposed areas at least three times a day during ground disturbing activities.

3. REASONS WHY THE PROJECT IS EXEMPT

The proposed project is exempt from further environmental review under the requirements of the California Environmental Quality Act (Public Resources Code §§ 21000 et seq.) because it is consistent with Class 1, Existing Facilities, Class 2, Replacement or Reconstruction, Class 3, New Construction or Conversion of Small Structures, Class 11, Accessory Structures, and Class 14, Minor Additions to Schools, as explained below.

CLASS 1, EXISTING FACILITIES

Class 1, Existing Facilities, consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The key consideration is whether the project involves negligible or no expansion of use. (CEQA Guidelines § 15301)

The proposed parking lot, track, walkway, and basketball court improvements; ornamental fencing/gate replacement, and relocation of storage containers, are exempt from CEQA under Class 1, Existing Facilities (Section 15301). The parking lot restriping and reconfiguration, walkway, and basketball court improvements, and fencing/gate replacement are exterior alterations of existing school facilities on campus to improve the safety and access of campus. The proposed project includes patching, repainted and restriping the track includes the repair of existing facilities. Additionally, the installation of aluminum covers on the two long jump sandpits along the northern portion of the field is considered a minor alteration to facilities. Since the campus improvements are located in the same site and do not involve the expansion of use, the proposed project is exempt from CEQA under Section 15301.

CLASS 2, REPLACEMENT OR RECONSTRUCTION

Class 2, Replacement or Reconstruction, consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. (CEQA Guidelines § 15302)

The proposed replacement of the bleachers, scoreboard, flagpole, fire hydrant, stadium lighting, PA systems, fencing, and gates are exempt from CEQA under Class 2, replacement or reconstruction (Section 15302). The existing bleachers, scoreboard, flagpole, fire hydrant, stadium lighting, PA system, fencing, and gates are located on the perimeter of the track and field and will be replaced with new equipment/infrastructure in the same locations that will continue to serve the same purpose. The existing restroom and snack shop buildings will be replaced with Building K and L. Therefore, the project is exempt from CEQA under Section 15302.

CLASS 3, NEW CONSTRUCTION OR CONVERSION OF SMALL STRUCTURES

Class 3, New Construction or Conversion of Small Structures, consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. (CEQA Guidelines § 15303)

The proposed construction bleachers, fencing and gates, bike racks, scoreboard, stadium lighting, landscaping, and PA system are exempt from CEQA under Class 3, New Construction or Conversion of Small Structures (Section 15303). The proposed bleachers, fencing and gates, scoreboard, stadium lighting, landscaping, and PA system are small accessory structures and located within the school campus. The new bike racks are small new equipment and accessory structures. The aforementioned improvements will be located on campus to serve students and not increase student capacity; the project is exempt from CEQA under Section 15303.

CLASS 11, ACCESSORY STRUCTURES

Class 11, Accessory Structures, consists of construction, or placement of minor structures accessory to (appurtenant to) existing commercial, industrial, or institutional facilities, including but not limited to: (a) On-premise signs; (b) Small parking lots; (c) Placement of seasonal or temporary use items such as lifeguard towers, mobile food units, portable restrooms, or similar items in generally the same locations from time to time in publicly owned parks, stadiums, or other facilities designed for public use. (CEQA Guidelines § 15311)

The proposed project will include the construction of a parking lot, parking signage, scoreboard, flagpole, stadium lighting, PA system, fencing, gates, and landscaping are exempt from CEQA under Class 11, Accessory Structures (Section 15311). The proposed project will reconstruct parking lot #1-C, and parking signage which are exempt under 15311(a), and (b). The installation of the scoreboard, flagpole, stadium lighting, PA system, fencing and gates, and landscaping are minor accessory structures to the Capistrano Valley HS campus to improve the associated stadium facilities. The aforementioned structures will be located in the stadium area to serve students, spectators and the school community and will not increase student capacity. The project is exempt from CEQA under Section 15311.

CLASS 14, MINOR ADDITIONS TO SCHOOLS

Class 14, Minor additions to schools, consist of minor additions to existing schools within existing school grounds where the addition does not increase original student capacity by more than 25% or ten classrooms, whichever is less. The addition of portable classrooms is included in this exemption (CEQA Guidelines § 15314)

The three academic-related buildings (Buildings L, M, and K) are exempt from CEQA under Class 14, Minor Additions to Schools (Section 15314). The new buildings will be located within the Capistrano Valley HS campus. Buildings L, M, and K includes the construction of two health classrooms and a physical education classroom, which will result in a net increase of 3 classrooms. The proposed project will increase the campus enrollment capacity by 147 students, which represents an approximately 7 percent increase to enrollment capacity. Since the new buildings will not increase classrooms by ten nor increase student enrollment capacity by more than 25 percent, the project is exempt from CEQA under Section 15314.

4. REVIEW OF EXCEPTIONS TO THE CATEGORICAL EXEMPTION

The project has been reviewed under CEQA Guidelines § 15300.2 - Exceptions, for any characteristics or circumstances that might invalidate findings that the project is exempt from CEQA. Each exception is listed below followed by an assessment of whether that exception applies to the project.

- (a) **Location.** Classes 3, 4, 5, 6 and 11 are qualified by consideration of where the project would be located—a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law by federal, state, or local agencies.

The project site is completely within the Capistrano Valley HS campus, which is entirely developed and surrounded by commercial, residential, and other educational uses. The campus has academic-related buildings, portable

classrooms, a student quad with, asphalt hardcourts, parking lots with and without solar EV system, several athletic fields, gymnasiums, a swimming pool, asphalt hardcourts and walkways throughout campus. Similarly, the project site is developed and includes the stadium, track and field, bleachers, paved walkways, and ornamental landscaping among other improvements as discussed above. There are no critical habitats on campus nor in the vicinity of the campus (USFWS 2022). Additionally, due to the campus and project site's being fully developed and operational, the campus and project site do not contain sensitive biological species nor habitat. The nearest critical habitat is approximately 1.20 miles south (USFWS 2022). No mapped wetlands exist on site (USFWS 2024). As discussed in section (e) below, there is also no evidence of hazardous materials or substances onsite. Therefore, this exception does not apply to the proposed project.

(b) Cumulative Impacts. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

In addition to the proposed project, other projects within the District include building/site improvements at Esencia K-8 School at 5 Arender Street. The Esencia K-8 School is approximately 4.30 miles east of the proposed project. Additionally, the project at Esencia K-8 School construction is expected to conclude in 2024 and will not overlap with the construction of the proposed project. Construction of each project will be executed individually and on different construction schedules. All construction equipment and activities will occur within the boundaries of each campus and will not extend to the other campuses. The proposed project and the other project within the district do not include subterranean levels and do not include extensive earthwork. Given the distance between the campuses and construction timeline, the construction of the proposed project will not combine with the other projects to create a cumulative impact during construction.

There are no known successive projects of the same type in the District. The proposed project would serve the Capistrano Valley HS community and will not introduce new events/sports. The Escencia K-8 building/site improvement project and the proposed project are limited to their respective campuses. Therefore, the proposed project will not combine with the other projects to create a cumulative impact during operation. This exception does not apply to the proposed project.

(c) Significant Effects. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. The determination whether this exception applies involves two distinct questions: (1) whether the project presents unusual circumstances, and (2) whether there is a reasonable possibility that a significant environmental impact will result from the unusual circumstances. The lead agency considers the second prong of this test only if it finds that some circumstance of the project is unusual. *Berkeley Hillside Preservation v City of Berkeley (2015) 60 C4th 1086, 1104.*

The proposed project does not present unusual circumstance or special environmental constraint that might lead to a significant impact. The campus and project site have operated as a school since 1980 and is surrounded by residential, commercial and other educational uses (CDE 2024b). Construction methods will be typical for school facilities and will comply with current building/structural code; water quality and air emissions standards; and best management practices (BMPs). Also, the operation of the proposed project will be similar to existing uses of at the Capistrano Valley HS campus.

Tree Removals

The proposed project will require the removal of 16 trees on-site: ten Mexican Fan Palm (*Washingtonia* spp.) and six Queen Palm (*Syagrus romanzoffiana*) (see Appendix A, *Tree Identification*). The 16 trees are not special-status species (CDFW 2024a, 2024b). The trees to be removed as part of the proposed project may contain nesting bids, nesting birds are protected by the Migratory Bird Treaty Act (MBTA), which governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests (US Code, Title 16, Sections 703–712). The MBTA prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations. Construction of the proposed project will be required to comply with applicable local, state, and federal regulations, such as the MBTA. As part of the construction process, and as standard practice, the District will implement a preconstruction nesting bird survey if construction were to start during nesting bird season (February through September).

Lighting

Additionally, the proposed project will replace existing stadium lighting with new light poles and light fixtures. The new stadium lighting will be in the same locations and have the same orientation as the existing stadium lighting. The new stadium lighting will be typical of stadium lighting used at the campus. The new light fixtures provide more focused light, which would reduce light spill compared to existing light fixtures. Existing campus and surrounding landscaping will further block the lighting. The stadium lighting will not introduce a new source of substantial lighting to the project site nor surrounding area. Therefore, the updating stadium lighting will not introduce unusual circumstances that could generate a significant impact.

Traffic Impact Analysis

The proposed project will increase bleacher capacity from 1,886 to 2,750, the increase in bleacher capacity will result in an increase in trips generated by a capacity level event (2,750 spectators). A capacity-level event with 2,750 spectators will generate a net increase of 345 vehicle trips during the peak hour (316 inbound and 29 outbound) and 690 trips per day (See Table 1, *Project Generated Traffic*) (See Appendix B, Traffic Impact Analysis). A capacity-level event will occur only a few times each year for football games and special events, such as a homecoming football game, a graduation ceremony, and a band/color guard major competition. The stadium will generate fewer vehicle trips for non-capacity football games, track and field events, soccer matches, etc. The traffic impact analysis is based on a capacity-level event to represent the worst-case scenario.

Table 1 Project Generated Traffic				
Facility	Evening Hour – Pre-Event			Daily Traffic
	Inbound	Outbound	Total	
Trip Generation Rates				
Stadium (vehicle trips per spectator)	0.366	0.033	0.399	0.798
Generated Traffic Volumes				
Existing Stadium (1,886 spectators)	690	62	752	1,505
Proposed Stadium (2,750 spectators)	1,006	91	1,097	2,195
Net Increase (864 spectators)	316	29	345	690
Source: Garland 2024 (see Appendix B)				

The proposed project will generate a demand for non-motorized travel as some event spectators and participants will travel to and from the school as pedestrians or on bicycles. Via Escobar, Marguerite Parkway, and Avery Parkway have

sidewalks on both sides of the street and Rancho Viejo Road has a bike trail/pedestrian path on the east side of the street. The two intersections in the study area are equipped with traffic signals and painted crosswalks with pedestrian crossing signals. Bike lanes are provided on both sides of Marguerite Parkway and Avery Parkway. Therefore, pedestrian and bicycle travel is well accommodated.

With regard to public transit, the Orange County Transportation Authority (OCTA) operates Route 91 along Marguerite Parkway and Rancho Viejo Road and there are bus stops at the Marguerite Parkway/Via Escolar intersection. It is anticipated, however, that a negligible number of people will use the bus route to travel to and from a game at the school. It is not anticipated that ridership on the bus route will noticeably be affected by the proposed project.

The proposed project would not provide any on- or off-site access or circulation features that would create or increase any design hazards or incompatible uses. Access to the school site would continue to be provided by the existing driveways on the north side of Via Escolar. There would be no roadway improvements in the public right-of-way and all improvements within the school site would be consistent with the criteria of the California Division of the State Architect.

The increased levels of vehicles, the increased number of pedestrians, and the increased number of vehicular turning movements that would occur at the driveways and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity. These streets and intersections have historically been accommodating school-related traffic on a daily basis for the existing school and athletics field. The proposed project's expanded stadium and improved lighting would be compatible with the design and operation of a high school, and the proposed project would not result in any major modifications to the existing access or circulation features at the school. As the existing street network could readily accommodate the anticipated increase in vehicular, pedestrian, and bicycle activity, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses, and not represent an unusual circumstance.

Vehicle Miles Traveled

Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in California Environmental Quality Act (CEQA) documents. On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analyses as part of CEQA compliance. SB 743 eliminated auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the current CEQA Guidelines, the criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). Pursuant to SB 743, the California Natural Resources Agency adopted revisions to the CEQA Guidelines on December 28, 2018, to implement SB 743. CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to "vehicle miles traveled" (VMT) were required beginning July 1, 2020, to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. State courts ruled that under the Public Resources Code Section 21099, subdivision (b)(2), "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" under CEQA, except for roadway capacity projects.

The County of Orange “2020 Updated Transportation Implementation Manual” includes screening criteria that can be used to identify when a proposed land development project is anticipated to result in a less than significant VMT impact. The document states that a project is presumed to have a less than significant impact on VMT if the project is a public facility. As the proposed project is a stadium expansion at a school, it is in the public facility category. The document indicates that land uses in the public facility category can be screened from requiring a detailed VMT analysis. Based on these guidelines, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and would have a less than significant VMT impact. The proposed project will accommodate and continue to serve local students within Capistrano Valley High School’s existing enrollment boundaries and will not represent an unusual circumstance.

Noise Impacts

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal, state, and city governments have established criteria to protect public health and safety and to prevent the disruption of certain human activities, such as classroom instruction, communication, or sleep. Additional information on noise and vibration fundamentals and applicable regulations are contained in Appendix C.

Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, hospital facilities, houses of worship, and open space/recreation areas where quiet environments are necessary for the enjoyment, public health, and safety of the community. The nearest sensitive receptors to the project site are residences to the east and southeast adjacent to the campus.

Ambient Noise Monitoring

To determine baseline noise levels for an existing football game within the project site, ambient noise monitoring was conducted during a California Interscholastic Federation Playoff Game at the existing stadium and included a halftime show. Three short-term (continuous 1-hour) measurements locations were conducted on the northern and eastern property lines of the project site and campus athletic fields. In addition to the continuous 1-hour measurements conducted at adjacent residential property lines, short-term measurements and observations were conducted at the far east side of the football stadium. All measurements were conducted Friday, November 8th, 2024. The short-term sound level meter used (Picollo II) for noise monitoring satisfies the American National Standards Institute (ANSI) standard for Type II instrumentation. The short-term sound level meters were programed to “slow” response and “A” weighting (dBA). The meter was calibrated prior to and after each monitoring period. All measurements were at least 5 feet above the ground and away from reflective surfaces. Temperatures were fair, ranging from 65 degrees to 58 degrees Fahrenheit, no winds were recorded, and no humidity during the noise measurements. Short-term measurement locations are shown in Figure 7, *Approximate Noise Monitoring Locations*, and the following tables (Table 2 though Table 5) summarize the results of the three short-term measurements.

Table 2 ST-1 Hourly Noise Measurement Summary in A-weighted Sound Levels

Time		1-hour Noise Level, dBA						
Start	End	Leq	Lmax	L2	L8	L25	L50	L90
7:00 PM	8:00 PM	64.3	73.9	67.3	65.9	64.8	64.0	62.6
8:00 PM	9:00 PM	65.6	78.2	70.7	68.6	66.1	64.2	62.1
9:00 PM	10:00 PM	65.3	75.8	70.4	68.0	65.4	64.1	62.5

Source: See Appendix C

Table 3 ST-2 Hourly Noise Measurement Summary in A-weighted Sound Levels

Time		1-hour Noise Level, dBA						
Start	End	Leq	Lmax	L2	L8	L25	L50	L90
7:00 PM	8:00 PM	60.8	72.3	66.9	63.7	61.4	59.3	56.3
8:00 PM	9:00 PM	61.2	75.2	67.9	64.9	61.3	58.6	55.8
9:00 PM	10:00 PM	63.0	78.9	70.6	66.1	63.0	60.8	55.3

Source: See Appendix C

Table 4 ST-3 Hourly Noise Measurement Summary in A-weighted Sound Levels

Time		1-hour Noise Level, dBA						
Start	End	Leq	Lmax	L2	L8	L25	L50	L90
7:00 PM	8:00 PM	58.3	67.0	63.8	61.5	58.9	57.1	54.3
8:00 PM	9:00 PM	58.0	73.2	65.3	61.7	57.5	55.7	52.9
9:00 PM	10:00 PM	58.2	71.0	63.2	60.8	58.9	57.0	54.0

Source: See Appendix C

Table 5 Short-Term Noise Measurements Summary in A-weighted Sound Levels

Monitoring Location	Time	Duration	15-minute Noise Level, dBA							
			Leq	Lmax	Lmin	L2	L8	L25	L50	L90
ST-4	8:21 PM	00:10:17.6	68.8	78.0	60.0	74.5	73.4	70.2	66.2	62.0
	9:11 PM	00:15:00.0	66.5	73.5	58.1	71.0	70.2	68.6	64.4	60.5
	10:27 PM	00:07:57.0	69.0	79.3	61.3	75.9	72.0	69.8	67.5	63.3

Source: See Appendix C

Operational Noise

Off-Site Traffic Noise

A significant impact would occur if the following traffic noise increases occur relative to the existing noise environment: 1.5 dBA in ambient noise environments of 65 dBA CNEL and higher; 3 dBA in ambient noise environments of 60 to 64 dBA CNEL; 5 dBA in ambient noise environments of less than 60 dBA CNEL.

Based on existing traffic noise modeling, a significant traffic noise impact occurs when the thresholds above are exceeded under cumulative conditions (with project) and the contribution of the project to future traffic is calculated to be greater than 1.5 dBA CNEL for Fairview Road, Baker Street, and Adams Avenue because existing traffic noise levels are above 65 dBA CNEL.

The proposed project could result in an increase in vehicles to the project site. To determine noise level increases at existing noise sensitive land uses due to project-generated traffic, net project trip traffic volumes from the project traffic study were compared to the existing daily traffic conditions. Table 6, *Project-Related Increases in Traffic Noise*, dBA CNEL at 50 Feet, shows the project-related traffic noise increases which accounts for new project trips. Traffic volume data for the new trips associated with the proposed project are provided by the Garland (Appendix B). The traffic study showed that the proposed project would generate an additional 690 traffic trips during stadium events.

Vehicle traffic noise levels were estimated using the FHWA Highway Traffic Noise Prediction Model. The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, vehicle traffic volumes, vehicle speeds, car/truck mix, number of lanes, and road width. As shown in Table 6, traffic noise increases due to the proposed project would result in an increase of 1 dBA CNEL or less. Projected traffic noise increases would be below the 1.5 dBA significance threshold. Therefore, traffic-related noise would result in a less-than-significant impact and will not represent an unusual circumstance.

Table 6 Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet

Roadway	Segment		Traffic Noise Increase					
	From	To	Existing Stadium 2024 No Project	Existing Stadium 2024 with Project	Existing 2024 Increase	Existing Stadium 2026 No Project	Existing Stadium 2026 With Project	Opening Year 2025 Increase
Via Escolar	the East	Marguerite Parkway	60	61	1	60	61	1
Marguerite Parkway	the North	Avery Parkway	73	73	<1	74	74	<1
Marguerite Parkway	Avery Parkway	Via Escolar	71	71	<1	71	71	<1
Rancho Viejo Road	the South	Via Escolar	71	71	<1	71	71	<1
Avery Parkway	the East	Marguerite Parkway	71	71	<1	72	72	<1
Avery Parkway	Marguerite Parkway	the West	67	67	<1	67	67	<1

Source: Traffic data provided by Garland 2024. See Appendix B.

Stadium Expansion

A change of 5 dBA is readily discernible in an exterior environment and a change in 10 dBA is perceived as a doubling in sound level. Based on this and noted that games would result in periodic (not daily) increases in ambient noise levels from the proposed stadium events, a threshold of 10 dBA above the ambient is used. A noise increase above 10 dBA for periodic events (such as stadium events) would be considered significant.

The proposed project would expand bleacher seating at the Capistrano Valley High School. The high school stadium currently holds up to 1,312 spectators on the home bleachers and up to 574 spectators on the visitor bleachers for a total of 1,886 spectators combined. The proposed project would increase capacity by 688 spectators on the home bleachers and up to 176 spectators on the visitor bleachers.

The proposed net increase of 864 spectators (total) was modeled using SoundPLAN computer software. SoundPLAN uses industry-accepted propagation algorithms based on International Organization for Standardization (ISO) and ÖAL-28 standards for outdoor sound propagation. See Appendix B of the Noise Appendix (contained in Appendix C)

for modeling results. The modeling calculations account for classical sound wave divergence (spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption and ground effects. Additionally, SoundPLAN provides for other correction factors, including level increases due to reflections, source directivity, and source tonality. SoundPLAN noise modeling estimated noise levels at the short-term noise measurement sites, representing the nearest residential receptors to the project site. The model also incorporated other stadium noise assumptions associated with football games. Based on other typical football game observations the following additional modeling inputs were assumed to be reasonable.

- Rowdy crowd cheering (both home and visitors) was assumed cheer for a cumulative 10 minutes per hour and each cheer interval to be approximately 10 seconds long.
- Home band was assumed to play a cumulative of 10 minutes per hour.
- Approximately 6 individual speakers for announcements (directed from the track facing spectators) were assumed to occur per hour, with individual announcement durations of 20 seconds, for a cumulative of 12 minutes per hour.

Table 7, *SoundPLAN Modeled Noise Levels*, shows predicted operational noise levels associated with the proposed project at noise measurement locations ST-1 through ST-3. Existing and Project operational noise contours of predicted operational noise associated with the proposed project on the project site and in the greater community are shown in Appendix C to the Noise Appendix (contained in Appendix C). Measured baseline football game noise levels at the short-term measurement sites adjacent to residential receptors to the east ranged from 58 dBA to 66 dBA Leq. Modeled sound levels at the nearest sensitive receptor are estimated to range between 60 dBA Leq and 67 dBA Leq as a result of the additional crowd noise due to proposed bleacher expansion. The proposed project is therefore estimated to increase existing stadium baseline noise levels at the adjacent sensitive receptors on a periodic basis by up to 3 dBA Leq. This would not exceed the threshold of 10 dBA. Therefore, an increase in periodic crowd noise increases during football games due to expanded bleacher capacity at the nearest receptors would be a less-than-significant impact. Thus, the proposed project will not represent a significant or an unusual circumstance.

Table 7 SoundPLAN Modeled Noise Levels

Location	Event Noise Level, dBA Leq		
	Football Game 1,500 Spectators (Measured)	Project Game 2,750 Spectators (Modeled)	Increase due to Project
ST-1	66	67	1
ST-2	63	66	3
ST-3	58	60	2

Air Quality/Greenhouse Gas/Energy

The project site is within the South Coast Air Basin (SoCAB) and the South Coast Air Quality Management District (South Coast AQMD) jurisdiction. The following analysis evaluates the impacts of the proposed project based on the significance criteria of the South Coast AQMD. The analysis focuses on air pollution from regional emissions and localized pollutant concentrations. “Emission” refers to the actual quantity of pollutant, measured in pounds per day. “Concentration” refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million (ppm) or micrograms per cubic meter (µg/m³). Emissions of the proposed project are modeled

using the California Emissions Estimator Model (CalEEMod), version 2022.1. Modeling emissions worksheets, assumptions, and output files are provided in Appendix D.

The following provides a summary of the potential short- and long-term air quality impacts associated with the proposed project.

Stadium Expansion

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust from off-road, diesel-powered construction equipment; 2) dust generated by construction activities; 3) exhaust from on-road vehicles; and 4) off-gassing of volatile organic compounds (VOC) from paints and asphalt.

Construction is anticipated to take approximately 15 months, from February 2025 to May 2026. Construction emissions were estimated using CalEEMod version 2022.1 and based on the preliminary construction duration provided by the District and the CalEEMod default equipment mix. The CalEEMod default assumptions assume a more intensive level of equipment use than is anticipated by the District during construction activities, therefore the following results are conservative. Construction emissions modeling is shown in Table 8, *Maximum Daily Regional Construction Emissions*.

Table 8 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day) ^{1, 2}					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 2025						
Demolition	2	24	21	<1	3	1
Site Preparation	3	32	31	<1	8	4
Grading	2	17	19	<1	4	2
Building Construction	1	10	13	<1	<1	<1
Year 2026						
Building Construction	1	10	13	<1	<1	<1
Paving	1	6	10	<1	1	<1
Architectural Coating	5	1	1	<1	<1	<1
Finishing/Landscaping	<1	1	2	<1	<1	<1
Building Construction, Paving, Architectural Coating, and Finishing/Landscaping	7	18	26	<1	1	1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	7	32	31	<1	8	4
South Coast AQMD Regional Construction Threshold	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1

¹ Based on the preliminary information provided or verified by the District. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment.

² Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including reducing speed limit to 25 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers. Also it would be standard procedure to water exposed areas 3 times per day during ground disturbing activities.

As shown in Table 8, maximum daily emissions from construction activities would be below the South Coast AQMD regional significance thresholds. Therefore, impacts related to the project-related construction activities would be less than significant and would not represent an unusual circumstances.

Construction LSTs

Localized significance thresholds are based on the California Ambient Air Quality Standards (AAQS), which are the most stringent AAQS to provide a margin of safety in the protection of public health and welfare. They are designated to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. Screening-level LSTs are the amount of project-related emissions at which localized concentrations (ppm or µg/m³) could exceed the AAQS for criteria air pollutants for which the SoCAB is designated nonattainment. They are based on the size of the area disturbed, distance to the nearest sensitive receptor, and Source Receptor Area (SRA). The nearest existing off-site residential sensitive receptor are the single-family residences adjacent to the project site on Oso Rojo, Boleada, and Mirar Vista Drive.

Table 9, *Localized Construction Emissions*, shows that the maximum daily on-site construction emissions (pounds per day) for NOX, CO, PM10, and PM2.5 would be less than their respective South Coast AQMD screening-level LSTs. The proposed project's standard procedure to water exposed areas at least three times a day during ground disturbing activities, will ensure that fugitive dust emissions do not exceed the screening level LSTs. Therefore, project-related construction activities would not expose sensitive receptors to substantial criteria air pollutant concentrations, and impacts would be less than significant, and would not represent an unusual circumstance.

Table 9 Localized Construction Emissions

Construction Activity	Pollutants(lbs/day) ¹			
	NOX	CO	PM10 ²	PM2.5 ²
Building Demolition 2025	22	20	2	1
1.00-Acre or Less Screening-Level LST	91	696	4	3
Exceeds LST?	No	No	No	No
Building Construction 2025	10	10	<1	<1
Building Construction 2026	1	10	<1	<1
1.31-Acre or Less Screening-Level LST	104	789	5	3
Exceeds LST?	No	No	No	No
Building Construction, Paving, Architectural Coating, and Finishing/Landscaping 2026	7	18	<1	<1
2.31-Acre or Less Screening-Level LST	138	1,077	7	4
Exceeds LST?	No	No	No	No
Grading 2025	16	18	4	2
2.50-Acre Screening-Level LST	142	1,128	7	5
Exceeds LST?	No	No	No	No
Site Preparation 2025	32	30	8	4
3.5-Acre Screening-Level LST	164	1,399	9	6
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2022.1. South Coast AQMD 2008 and 2023.

Notes: In accordance with South Coast AQMD methodology, only on-site stationary sources and mobile equipment are included in the analysis. Screening-level LSTs are based on receptors within 82 feet (25 meters) of the project site in SRA 21.

¹ Based on the preliminary information provided by the District. Where specific information for project-related construction activities or processes was not available, modeling was based on CalEEMod defaults. These defaults are based on construction surveys conducted by the South Coast AQMD.

² Includes fugitive dust control measures required by South Coast AQMD under Rule 403, such as reducing speed limit to 25 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers. Also it would be standard procedure to water exposed areas 3 times per day during ground disturbing activities

Project Operation Phase

Long-term air pollutant emissions associated with the proposed project include area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement), energy use (e.g., natural gas use from cooling and heating), and mobile sources (i.e., on-road vehicles). The primary source of long-term criteria air pollutant emissions generated by the proposed project would be mobile emissions from project-generated vehicle trips for stadium events. Based on data provided by Garland & Associates, the proposed project would generate an additional 690 new vehicle trips at a maximum capacity event (Appendix B).¹

As shown in Table 10, *Maximum Daily Regional Operation Emissions*, the maximum daily operation emissions would be less than their respective South Coast AQMD regional significance threshold values. Therefore, the operation of the proposed project would not contribute to the nonattainment designations of the SoCAB, and regional air quality impacts are less than significant, and would not represent an unusual circumstance.

Table 10 Maximum Daily Regional Operation Emissions

Source	Maximum Daily Emissions (lbs/Day)					
	VOC	NOx	CO	SO2	PM10	PM2.5
Mobile1	5	3	33	0	7	2
Area	<1	<1	0	<1	<1	<1
Energy	<1	<1	0	<1	<1	<1
Total	5	3	33	<1	7	2
South Coast AQMD Regional Threshold	55	55	550	150	150	550
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1 Highest winter or summer emissions are reported.

¹ These emissions results incorporate a net increase of 1,715 trips during a maximum capacity event based on a previous version of the proposed project with a larger proposed bleacher capacity. Therefore, these results reflect a more conservative level of maximum trips than anticipated.

Note: lbs – Pounds.

There is no reasonable possibility that the proposed project will have a significant effect on the environment due to unusual circumstances. This exception does not apply to the proposed project.

- (d) **Scenic Highways.** A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings or similar resources, within a highway officially designated as a state scenic highway.

According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, the closest officially designated state scenic highway is California State Route 91 (CA-91) is approximately 22.5 miles to the northeast of the project site (Caltrans 2024). The closest eligible state scenic highway is California State Route 74 (CA-74) is approximately 2.80 miles to the southeast of the project site (Caltrans 2024). The proposed project will not affect scenic resources along these highways due to the distance and intervening buildings, structures, and vegetation between the project site and these highways. The proposed project will not affect scenic resources along any officially designated or eligible scenic highways. Therefore, this exception does not apply to the proposed project.

¹The emission results shown below incorporate a net increase of 1,715 trips during a maximum capacity event based on a previous version of the proposed project with a larger proposed bleacher capacity.

(e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Government Code § 65962.5.

California Government Code Section 65962.5 requires the compiling of lists of the following types of hazardous materials sites: hazardous waste facilities subject to corrective action; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated.

Six environmental databases were searched for hazardous materials sites on the site and within a quarter mile radius:

- » GeoTracker: State Water Resources Control Board (SWRCB 2024)
- » EnviroStor: Department of Toxic Substances Control (DTSC 2024a)
- » EJScreen: US Environmental Protection Agency (USEPA 2024a)
- » EnviroMapper: US Environmental Protection Agency (USEPA 2024b)
- » Solid Waste Information System (SWIS): California Department of Resources Recovery and Recycling (CalRecycle 2022)
- » Cortese List: Department of Toxic Substances Control (DTSC 2024b)

Table 1 Hazardous Waste Sites within 0.25 miles

Site Address	Database	Identifier	Cleanup Status	Proximity to Site
Capistrano Valley High School 26301 Via Escolar Mission Viejo, CA 92691	EnviroMapper	Waste Hydraulic Acid Solution	Active (CAL000014205)	On-campus
	EnviroStor	School Investigation	No Further Action	On-campus
28802 Marguerite Mission Viejo, CA 92692	GeoTracker	LUST	Completed – Case Closed: 10/15/1991 (9UT1594)	0.18 miles West
26491 Jacinto Drive Mission Viejo, CA 92692	EnviroMapper	Asbestos	Inactive (expired: 2/19/2019) (CAC002989973)	0.19 Northeast
28992 Via Escolar Mission Viejo, CA 92692	EnviroMapper	Non-RCRA Hazardous Waste Solid (Paper Filters)	Active (CAL000182140)	0.20 miles Southwest
28992 Via Escolar Mission Viejo, CA 92692	EnviroMapper	N/a	Inactive (expired: 1/1/1995) (CAL000182140)	0.20 miles Southwest
28802 Marguerite Parkway Mission Viejo, CA 92692	EnviroMapper	Non-RCRA Hazardous Waste Solid (Paper Filters, Used absorbent, Oily solid waste/used oil filters)	Active (CAL000440631)	0.20 miles Northwest
28802 Marguerite Parkway Mission Viejo, CA 92692	EnviroMapper	Non-RCRA Hazardous Waste Solid (oily solid waste/used oil filters)	Inactive (expired: 6/30/2020) (CAD981379191)	0.20 miles Northwest
28752 Marguerite Parkway Mission Viejo, CA 92692	EnviroMapper	Non-RCRA Hazardous Waste Solid (Paper Filters)	Inactive (expired: 6/30/2020) (CAL000441628)	0.20 miles Northwest
28752 Marguerite Parkway Unit 7B, Mission Viejo, CA 92692	EnviroMapper	N/a	Inactive (expired: 1/1/1995) (CAD982348260)	0.20 miles Northwest
28730 Marguerite Parkway Mission Viejo, CA 92692	EnviroMapper	Non-RCRA Hazardous Waste Solid (Paper Filters, Used	Inactive (expired: 6/30/2021) (CAL000406049)	0.21 miles Northwest

Table 1 Hazardous Waste Sites within 0.25 miles

Site Address	Database	Identifier	Cleanup Status	Proximity to Site
		absorbent, Oily solid waste/used oil filters)		
28682 Marguerite Parkway Mission Viejo, CA 92692	EnviroMapper	General Permit Covered	Inactive (Permit expired: 9/2/2014) (CAZ445663)	0.24 miles Northwest
28911 Boleada Mission Viejo, CA 92692	EnviroMapper	N/a	Inactive (expired: 11/16/2018) (CAC002976324)	0.15 miles East

Source: SWRCB 2024, USEPA 2024b, DTSC 2024a

EnviroMapper identified the campus as a hazardous materials site containing a waste hydraulic acid solution, which is common in science classrooms and health/nurse's offices typical of school activities. The campus contains a permanent ID to dispose of the typical hazardous waste in accordance with state and federal policy. Additionally, a hazardous materials investigation occurred onsite, no hazardous waste was encountered and no further action was required. Thus, the proposed project will not affect this listing.

The hazardous waste search identified eleven other hazardous waste cases within 0.25 miles of Capistrano Valley HS. Nine cases are identified as inactive, and therefore, will not be affected by the proposed project. The active hazardous waste site at 28992 Via Escolar and 28802 Marguerite Parkway, is the Mission Tire Center and the Mission Viejo Kia Dealership, respectively. Both locations have a permanent ID which disposes of soil and fluid waste associated with vehicles. The active site disposes of hazardous waste in accordance with state and federal policy, thus the proposed project will not affect this listing. The project site and its surroundings are not identified in any of the other databases and are not identified as hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, the proposed project will not create a hazard to the public. This exception does not apply to the proposed project.

- (f) Historical Resources.** A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of historical resources. Under Public Resource Code § 21084.1, a historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources. Additionally, historical resources included in a local register of historical resources are presumed to be historically or culturally significant, and a lead agency can determine whether the resource may be an historical resource.

Capistrano Valley HS campus is not listed on the National Register of Historic Places, a California Historical Landmark, California Point of Historical Interest databases. There are also no listed historic resources within a 0.25-mile radius of the project site (NPS 2024; OHP 2024a). The nearest historic resource is the Williams, Roger Y., House 1.0 mile south of the project site (NPS 2024). The City of Mission Viejo does not have any historical places or landmarks listed within its general plan, and the County of Orange does not have any historical resources listed within the City of Mission Viejo (Mission Viejo 2021)). No historic resources have been identified on-site during preparation of this Notice of Exemption, and the historical sites exception does not apply to the proposed project.

5. CONCLUSION

The proposed project at the Capistrano Valley HS campus is exempt from CEQA review pursuant to CEQA Guidelines Sections 15301, 15302, 15303, 15311, and 15314. As substantiated in this document, the proposed project will not

meet the conditions specified in § 15300.2, Exceptions, of the CEQA Guidelines, and the proposed project is categorically exempt under Classes 1, 2, 3, 11 and 14.

6. REFERENCES

- California Department of Education (CDE). 2024. Data Quest - 2023-24 Enrollment by Ethnicity and Grade – Capistrano Valley High Report.
<https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthGrd.aspx?cds=30664643030210&aggllevel=school&year=2023-24>.
- . 2024b, December 3 (accessed) California School Directory – Capistrano Valley High.
<https://www.cde.ca.gov/schooldirectory/details?cdscode=30664643030210>.
- California Department of Fish and Wildlife (CDFW). 2024a, October. State and Federally Listed Endangered, Threatened, and Rare Plants of California.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline>.
- . 2024b, October. Special Vascular Plants, Bryophytes, and Lichens List.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>.
- California Department of Resources Recycling and Recovery (CalRecycle). 2024, November 5 (accessed). SWIS Facility/Site Search. <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>.
- California Department of Transportation (Caltrans). 2024, November 5 (accessed). California Scenic Highways, <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>.
- Department of Toxic Substances Control (DTSC). 2024a, November 5 (accessed). EnviroStor.
<http://www.envirostor.dtsc.ca.gov/public/>.
- . 2024b, November 5 (accessed). Hazardous Waste and Substances Site List (Cortese).
https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29
- Mission Viejo, City of. General Plan. 2021. <https://www.cityofmissionviejo.org/departments/community-development/planning/general-plan>.
- . 2024, November 5 (accessed). Mission Viejo GeoViewer. <https://missionviejo.geoviewer.io/>.
- National Park Service (NPS). 2024, December 3 (accessed). National Register of Historic Places.
<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>
- Orange, County of. 2024, December 3 (accessed). Historical Sites.
<https://www.orangecounty.net/html/historical.html#:~:text=The%20birthplace%20of%20Orange%20County,Spanish%2C%20Mexican%20and%20European%20heritage>.
- Office of Historic Preservation (OHP). 2024, December 3 (accessed). California Historical Resources.
<https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=30>
- State Water Resources Control Board. GeoTracker. Database. 2024, November 5 (accessed).
<https://geotracker.waterboards.ca.gov/>.
- US Environmental Protection Agency (USEPA). 2024a, November 5 (accessed). EJSCREEN.
<https://ejscreen.epa.gov/mapper/>.

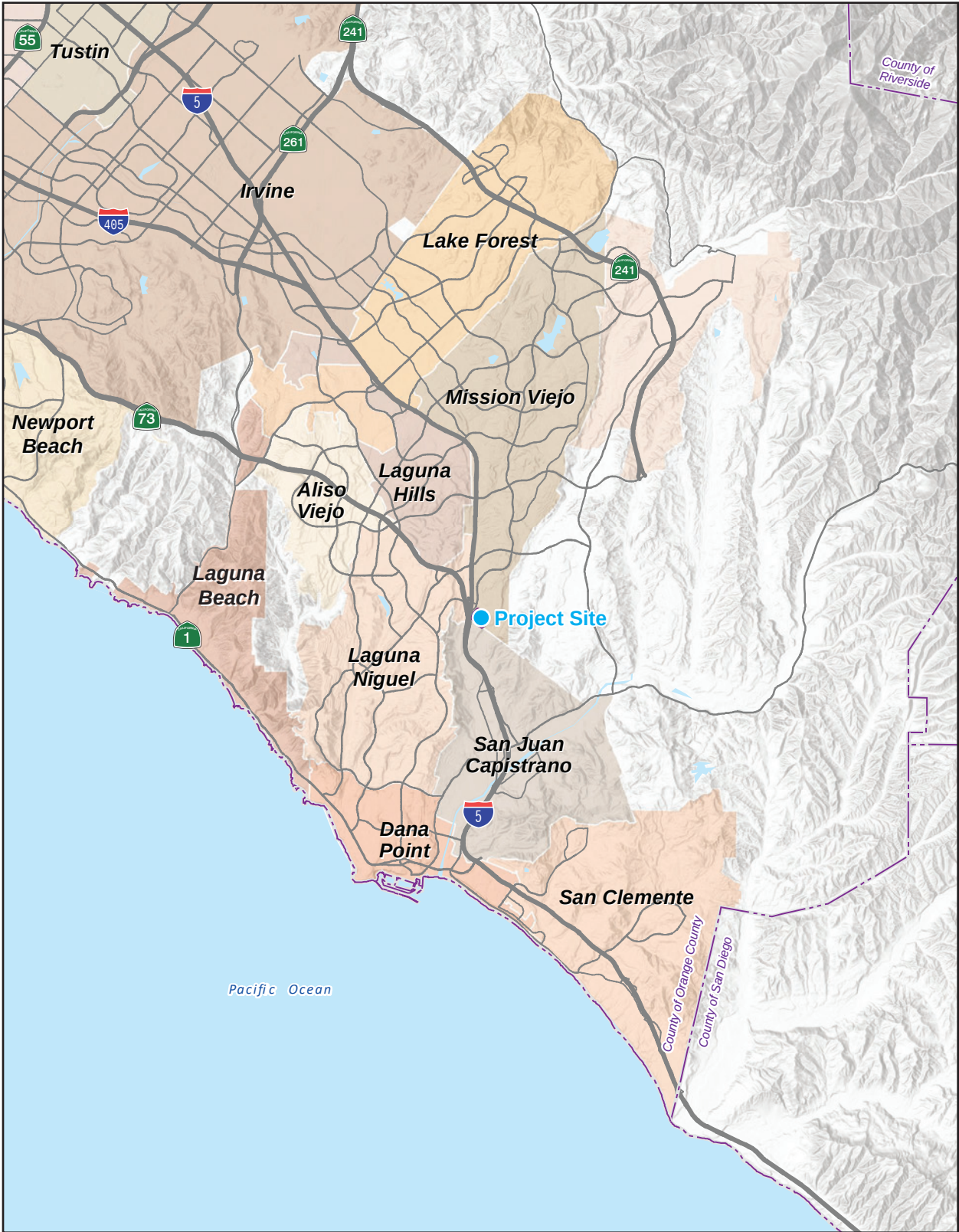
———. 2024b, November 5 (accessed). EnviroMapper for EnviroFacts. <https://enviro.epa.gov/enviro/em4ef.home>.

US Fish and Wildlife Service (USFWS). 2024b, November 5 (accessed). National Wetlands Inventory. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>

———. 2022, December 9. Critical Habitat for Threatened & Endangered Species. <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>

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Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.
Source: Generated using ArcMap 2024.



Figure 2 - Local Vicinity

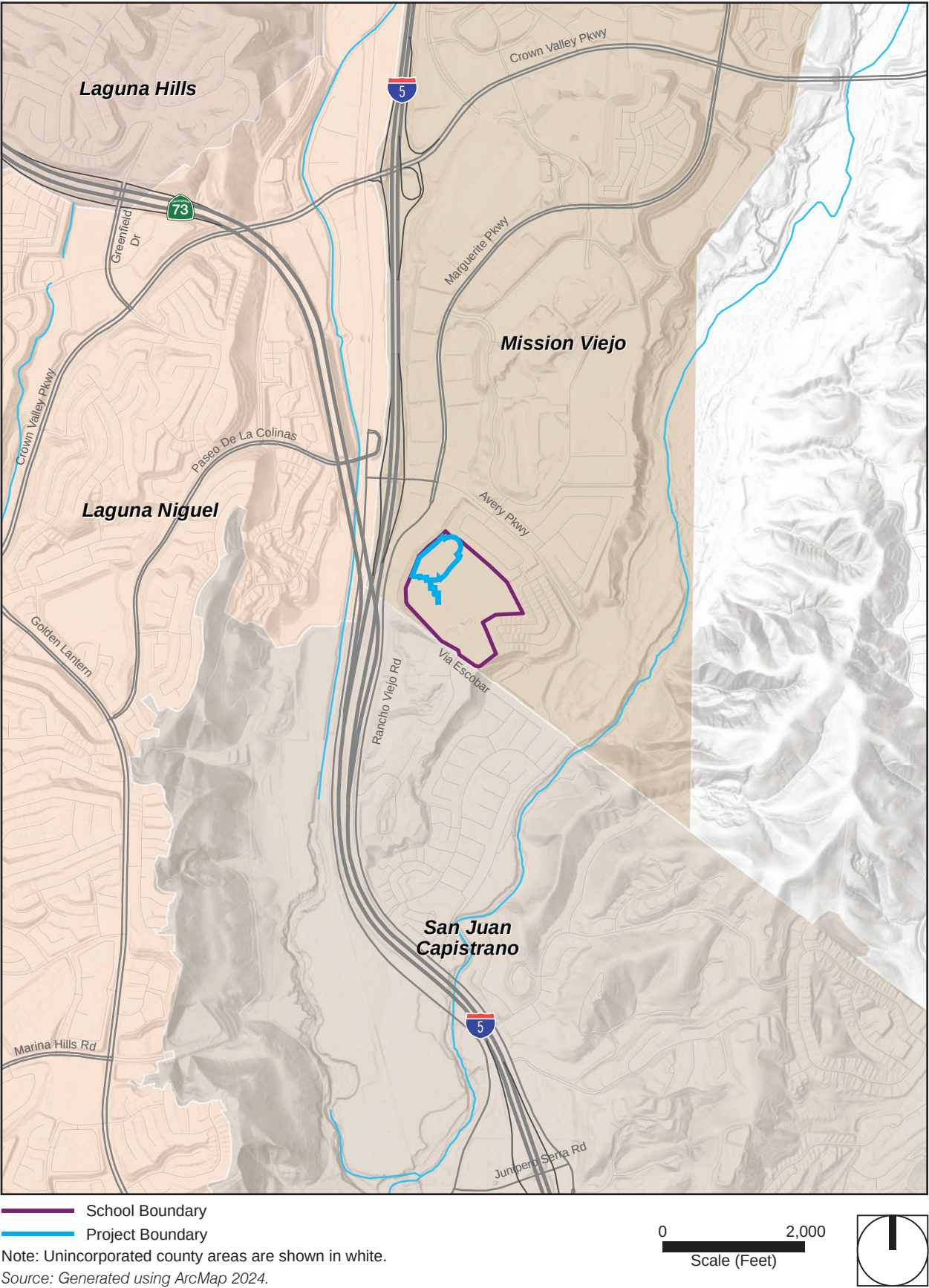
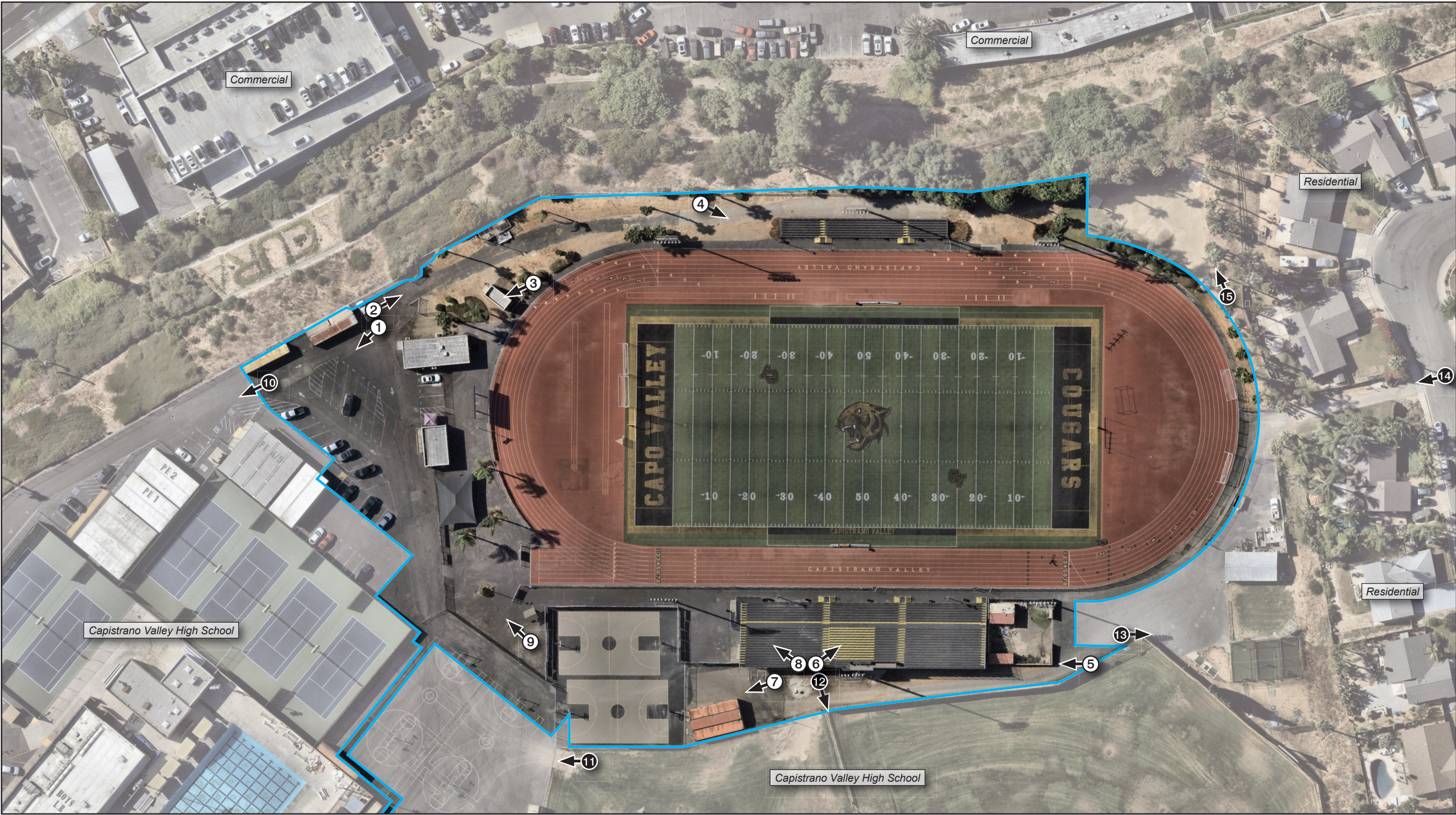


Figure 3 - Aerial Photograph with Photograph Locations



Project Boundary Photograph Location and Direction (15)

0 100
Scale (Feet)



Source: Nearmap 2024.

Figure 4 - Project Site Photographs



① From the northern end of parking lot #1-C, looking south at parking lot #1-C, and storage containers on the project site and the athletic-related portable classrooms in the distance.



② From the northern end of parking lot #1-C, looking north at a roadway, the San Diego Gas and Electric building, the restroom building, and landscaping on the project site.



③ From the western end the track and field, looking southwest at the snack shop building, the San Diego Gas and Electric building, the restroom building, a flagpole, a scoreboard, and landscaping on the project site.



④ From the northern boundary of the project site, looking northeast at the roadway, visitors bleachers, stadium lighting, PA system, and the track and field on the project site.



⑤ From the northeastern corner of the project site, looking southwest at the pedestrian access way, home bleachers, and storage containers on the project site.



⑥ From the southern end of the home bleachers on the project site, looking north of at the home bleachers, the track and field, stadium lighting, and PA system on the project site.



⑦ From the southern end of the home bleachers on the project site, looking southwest at the storage containers, two basketball courts, fencing, and gates on the project site.



⑧ From the southern end of the home bleachers on the project site, looking west at the track and field, the stadium lighting, basketball court, trees, shade structure, score board, the snack shop building, the restroom building, and the San Diego Gas and Energy (SDGE) building on the project site.



⑨ From the southern end of the project site south of the fenced basketball courts, looking west at the ornamental landscaping, the snack shop building, the restroom building, a flagpole, a scoreboard, and shade structure on the project site.

Source: PlaceWorks 2024.

Figure 5 - Surrounding Site Photographs



10 From the western end of parking lot #1-C, looking south at the vehicle roadway to parking lot #1-C, and athletic-related portable classrooms surrounding the project site.



11 From the southern end of the project site, looking southwest at the asphalt hardcourts, campus gymnasium, and the tennis courts surrounding the project site.



12 From the southern end of the home bleachers on the project site, looking east at the Varsity and Junior Varsity baseball fields surrounding the project site.



13 From the northeastern corner of the project site, looking northeast at the batting cages area, and a ground/maintenance building surrounding the project site.



14 From Mirar Vista Drive north of the track and field, looking southwest at the pedestrian walkway, and residential uses surrounding the project site.



15 From north of the track and field, looking northwest shot-put area and residential uses surrounding the project site.



Figure 7 - Noise Monitoring Locations



- School Boundary
- Short-term Noise Monitoring Locations (4)

0 200
Scale (Feet)



Source: Google Earth Pro 2024; PlaceWorks 2024.

Appendix A Tree Identification

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Appendix A - Tree Identification

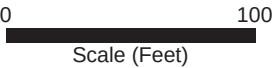


	Common Name	Botanical Name
①	Mexican Fan Palm	<i>Washingtonia</i> spp.
②	Mexican Fan Palm	<i>Washingtonia</i> spp.
③	Mexican Fan Palm	<i>Washingtonia</i> spp.
④	Mexican Fan Palm	<i>Washingtonia</i> spp.
⑤	Mexican Fan Palm	<i>Washingtonia</i> spp.
⑥	Mexican Fan Palm	<i>Washingtonia</i> spp.
⑦	Mexican Fan Palm	<i>Washingtonia</i> spp.
⑧	Mexican Fan Palm	<i>Washingtonia</i> spp.
⑨	Queen Palm	<i>Syagrus romanzoffiana</i>
⑩	Mexican Fan Palm	<i>Washingtonia</i> spp.
⑪	Queen Palm	<i>Syagrus romanzoffiana</i>
⑫	Queen Palm	<i>Syagrus romanzoffiana</i>
⑬	Queen Palm	<i>Syagrus romanzoffiana</i>
⑭	Queen Palm	<i>Syagrus romanzoffiana</i>
⑮	Queen Palm	<i>Syagrus romanzoffiana</i>
⑯	Mexican Fan Palm	<i>Washingtonia</i> spp.

Note: Trees 1-7, 10, and 16 are likely *W. robusta* or hybrid of *W. robusta* x *W. filifera*.

Project Boundary

Source: Nearmap



Appendix B Transportation Impact Analysis

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TRAFFIC IMPACT ANALYSIS
FOR THE PROPOSED
CAPISTRANO VALLEY HIGH SCHOOL
STADIUM MODERNIZATION PROJECT

Prepared for
CAPISTRANO UNIFIED SCHOOL DISTRICT
&
PLACEWORKS

Prepared by
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Huntington Beach, CA 92647
714-330-8984

DECEMBER 2024

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I.

INTRODUCTION AND STUDY METHODOLOGY

This report summarizes the results of a traffic/transportation impact analysis that was conducted for the stadium modernization and improvement project proposed by Capistrano Unified School District at Capistrano Valley High School, which is located at 26301 Via Escolar in Mission Viejo. The school campus is bounded by Via Escolar on the south, a row of commercial properties that front onto Marguerite Parkway on the west, and residential properties on the north and east. The school's stadium is located at the northwest end of the campus.

The proposed project involves the construction of new home and visitor bleachers at the stadium to expand the overall capacity from 1,886 spectator seats to 2,750 spectator seats, which is an increase of 864 additional seats. The project also includes new stadium lighting at the field.

A map showing the location of the school is provided on Figure 1 and an aerial photograph of the school and field is shown on Figure 2. The project would not result in a change in the number of students attending the high school. The project would provide the opportunity for additional spectators to have seating for games and other major events at the school's stadium.

An analysis has been conducted to evaluate the traffic/transportation impacts of the proposed project. The methodology for the traffic study, in general, was to address the transportation issue areas of the CEQA environmental checklist, which includes an evaluation of the project's impacts on 1) transit, roadway, bicycle, and pedestrian facilities, 2) vehicle miles traveled (VMT), 3) increased hazards or incompatible uses, and 4) emergency access.

To establish the existing conditions, an inventory was taken of the streets, sidewalks, bike lanes, and public transit routes in the vicinity of the school site. The inventory included physical features such as the number of lanes, types of traffic control devices, and crosswalk locations. In addition, traffic counts were conducted on the study area streets during the one-hour period prior to the start of a football game on a Friday evening. The increased volumes of traffic that would be generated by the expanded stadium were then quantified to determine the impacts of the project on traffic volumes.

Traffic volumes on the streets in the vicinity of the school were quantified for the following scenarios: existing conditions (2024), existing conditions plus the proposed project, future baseline conditions without the proposed project for the target year of 2026, and future conditions with the proposed project. The year 2026 was used for the future target year as that is anticipated to be the year of completion for the proposed project.

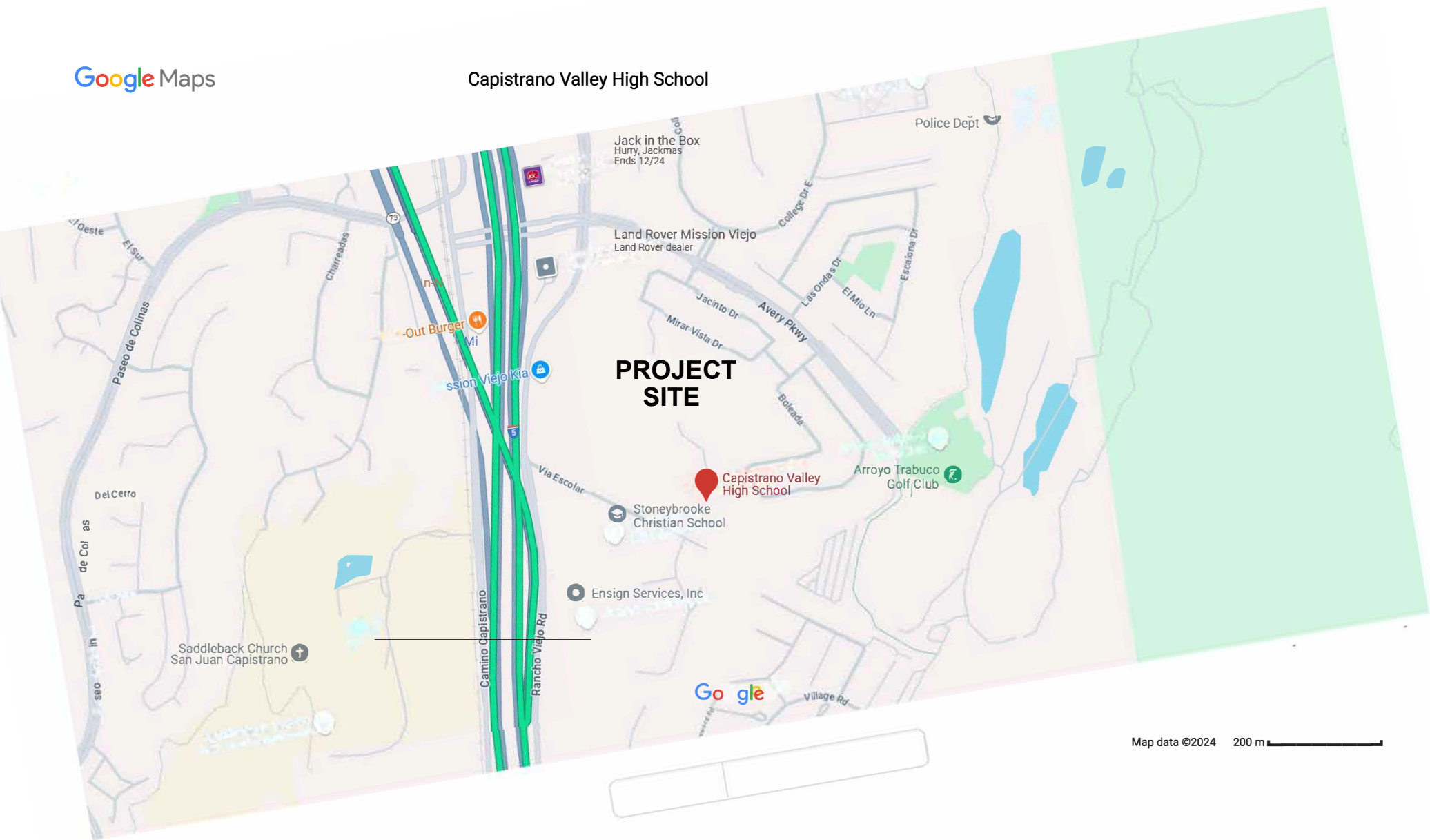


FIGURE 1
LOCATION MAP

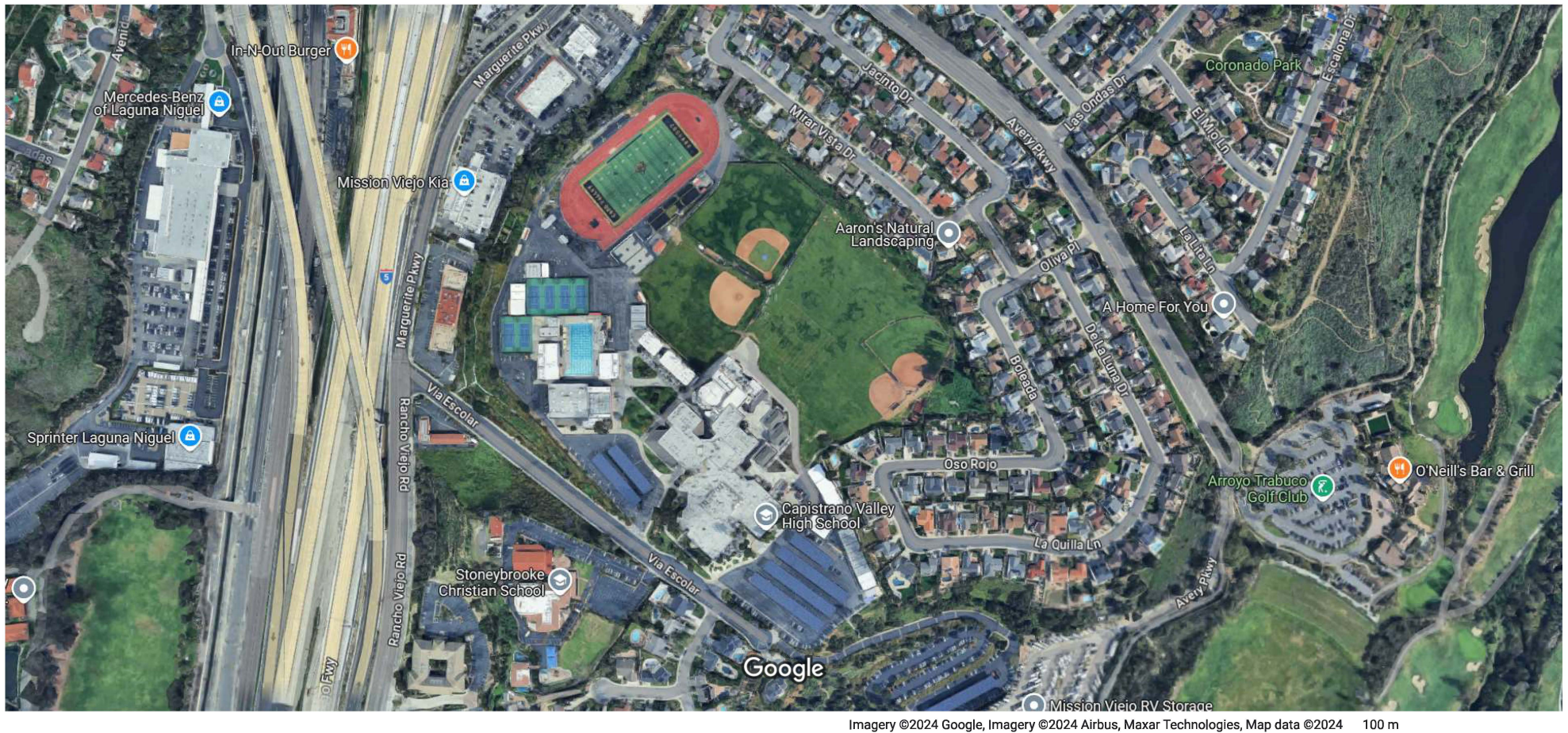


FIGURE 2
AERIAL PHOTO OF SCHOOL SITE

II. EXISTING TRAFFIC/TRANSPORTATION CONDITIONS

The street network in the vicinity of the school site (which includes sidewalks and bike lanes), an inventory of the types of traffic control devices and crosswalk locations, and the nearby bus transit routes are described below.

Street Network

The streets that provide access to the proposed project area include Via Escolar, Marguerite Parkway, Rancho Viejo Road, and Avery Parkway. The following paragraphs provide a brief description of the characteristics of these streets.

Via Escolar

Via Escolar is a three lane east-west street (two lanes eastbound and one lane westbound) that abuts the south side of the school campus. It has sidewalks on both sides of the street and parking on the north side of the street next to the school, although parking is prohibited from 6:00 to 10:00 AM and from 2:00 to 3:00 PM on school days. There are no bike lanes on Via Escolar.

There are three driveways on the north side of Via Escolar that provide access to the school's parking lots. A fourth driveway near the intersection with Marguerite Parkway provides access to a commercial area. The speed limit on Via Escolar is 35 miles per hour (mph), but there are signs that state Speed Limit 25 MPH – When Children Are Present.

Marguerite Parkway

Marguerite Parkway is a four lane north-south street that is located approximately 250 feet west of the school campus. It has sidewalks and bike lanes on both sides of the street, although the southbound bike lane on the west side of the street terminates approximately 900 feet north of Via Escolar. Parking is prohibited on both sides of the street. The speed limit on Marguerite Parkway is 40 mph between Via Escolar and Avery Parkway and 45 mph north of Avery Parkway.

Rancho Viejo Road

Rancho Viejo Road is a four lane north-south street that is the continuation of Marguerite Parkway south of Via Escolar. It has a two-directional bike trail/walking path along the east side of the street separated from the vehicular travel lanes. Parking is prohibited on both sides of the street and the speed limit is 45 mph.

Avery Parkway

Avery Parkway is a four lane east-west street located approximately 700 feet north of the school campus. It has sidewalks on both sides of the street and bike lanes on both sides of the street east of Marguerite Parkway. Parking is prohibited on both sides of the street and the speed limit is 35 mph.

Traffic Control and Crosswalks

The existing traffic control devices and crosswalks at the study area intersections are shown in Table 1.

<i>TABLE 1</i> <i>EXISTING TRAFFIC CONTROL DEVICES & CROSSWALKS</i>		
<i>Intersection</i>	<i>Traffic Control</i>	<i>Crosswalks</i>
Marguerite Parkway / Avery Parkway	Traffic Signal	On All Four Legs
Marguerite Parkway / Via Escolar	Traffic Signal	On North and East Legs

Bus Transit Service

The Orange County Transportation Authority (OCTA) operates Route 91 along Marguerite Parkway and Rancho Viejo Road and there are bus stops at the Marguerite Parkway/Via Escolar intersection. In addition, Mission Viejo Shuttle provides service to Capistrano Valley High School during the school's arrival and departure time periods.

III. TRAFFIC IMPACT ANALYSIS

This section summarizes the analysis of the proposed project's impacts on study area traffic/transportation conditions. First is a discussion of the significance standards followed by a discussion of project generated traffic volumes and the impact on daily and peak hour traffic volumes. This is followed by an analysis of the impacts associated with non-motorized transportation (pedestrians and bicycles) and the findings relative to the CEQA transportation issues.

Standards of Significance

With regard to the CEQA thresholds of significance, Appendix G of the CEQA Guidelines states that a project would normally have a significant effect on the environment if the project could:

- a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities,
- b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT),
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or
- d) Result in inadequate emergency access.

Project Generated Traffic

The volumes of traffic that would be generated by the stadium for a capacity-level event (2,750 spectators) were determined in order to estimate the impacts of the proposed project on the study area streets. As the stadium currently has bleachers with 1,886 seats, the volumes of traffic generated by the existing facility were also determined to quantify the net increase in traffic that would be generated by the new stadium. The trip generation rates and the anticipated volumes of traffic that would be generated by the existing and proposed stadium are shown in Table 2 for a capacity-level event.

The trip generation rates shown in Table 2 reflect the assumption that the stadium would generate a demand of one vehicle for every three seats (for vehicles that remain parked at the site) and that an additional ten percent of the vehicles arriving at the stadium would drop passengers off then leave. The rate of one vehicle for every three seats is based on the parking requirements in the City of Mission Viejo's Municipal Code. Section 9.25.020 of the Municipal Code, "Off-Street Parking Standards – Number of Parking Spaces Required," indicates that the parking requirement for auditoriums/places of assembly is one space for each three fixed seats.

TABLE 2 PROJECT GENERATED TRAFFIC				
Facility	Evening Hour – Pre-Event			Daily Traffic
	Inbound	Outbound	Total	
TRIP GENERATION RATES				
Stadium (vehicle trips per spectator)	0.366	0.033	0.399	0.798
GENERATED TRAFFIC VOLUMES				
Existing Stadium (1,886 spectators)	690	62	752	1,505
Proposed Stadium (2,750 spectators)	1,006	91	1,097	2,195
Net Increase (864 spectators)	316	29	345	690

Table 2 indicates that a capacity-level event with 2,750 spectators would generate a net increase of 345 vehicle trips during the peak hour (316 inbound and 29 outbound) and 690 trips per day. A capacity-level event would occur only a few times each year for football games and special events, such as a homecoming football game, a graduation ceremony, and a band/color guard major competition. The stadium would generate fewer vehicle trips for non-capacity football games, track and field events, soccer matches, etc. The traffic impact analysis is based on a capacity-level event to represent the worst-case scenario.

Impacts on Daily and Peak Hour Traffic Volumes

To quantify the increase in traffic volumes on each nearby street resulting from a capacity-level event at the stadium, the project generated traffic shown in Table 2 was geographically distributed onto the street network using the following directional percentages. This distribution assumption for arriving vehicles is based on the layout of the existing street network, the school attendance boundaries, and observations at the school.

DISTRIBUTION OF PROJECT GENERATED TRAFFIC

- Marguerite Parkway north of Avery Parkway 40%
- Avery Parkway west of Marguerite Parkway 40%
- Avery Parkway east of Marguerite Parkway 5%
- Rancho Viejo Road south of Via Escolar 15%

The impacts of the project on daily traffic volumes are shown on Table 3 for Via Escolar, Marguerite Parkway, Avery Parkway, and Rancho Viejo Road. The existing conditions scenario and the year 2026 baseline scenario are shown. The daily traffic volume on Via Escolar east of Marguerite Parkway, for example, would increase from 4,210 vehicles per day (vpd) with the existing stadium to 4,900 vpd with the new expanded stadium, which is an increase of 690 vehicles per day. The year 2026 was used for the future baseline scenario because it is anticipated to be the first year that the expanded stadium would be occupied. The year 2026 traffic volumes were estimated by expanding the existing traffic volumes by four percent (two percent per year for two years).

TABLE 3
PROJECT IMPACT ON DAILY TRAFFIC VOLUMES

Street/Location	Without Project	Existing Stadium Traffic	With Existing Stadium	New Stadium Net Increase	With New Project
EXISTING CONDITIONS AS BASELINE					
Via Escolar East of Marguerite Parkway	2,700	1,510	4,210	690	4,900
Marguerite Parkway North of Avery Parkway	25,300	600	25,900	280	26,180
North of Via Escolar	16,900	1,280	18,180	590	18,770
Avery Parkway West of Marguerite Parkway	27,800	600	28,400	280	28,680
East of Marguerite Parkway	9,800	80	9,880	30	9,910
Rancho Viejo Road South of Via Escobar	15,000	230	15,230	100	15,330
YEAR 2026 AS BASELINE					
Via Escolar East of Marguerite Parkway	2,810	1,510	4,320	690	5,010
Marguerite Parkway North of Avery Parkway	26,310	600	26,910	280	27,190
North of Via Escolar	17,580	1,280	18,860	590	19,450
Avery Parkway West of Marguerite Parkway	28,910	600	29,510	280	29,790
East of Marguerite Parkway	10,190	80	10,270	30	10,300
Rancho Viejo Road South of Via Escobar	15,600	230	15,830	100	15,930

The impacts of the project on peak hour traffic volumes are shown on Table 4. The peak hour for a football game is the one-hour period prior to the start of a game when spectators are arriving at the school site. This typically occurs from 6:00 to 7:00 on a Friday evening. The existing traffic counts were taken on Friday, November 15, 2024.

TABLE 4
PROJECT IMPACT ON PEAK HOUR TRAFFIC VOLUMES

Street/Location	Without Project	Existing Stadium Traffic	With Existing Stadium	New Stadium Net Increase	With New Project
EXISTING CONDITIONS AS BASELINE					
Via Escolar East of Marguerite Parkway	90	1,100	1,190	345	1,535
Marguerite Parkway North of Avery Parkway	1,360	440	1,800	140	1,940
North of Via Escolar	620	935	1,555	295	1,850
Avery Parkway West of Marguerite Parkway	1,350	440	1,790	140	1,930
East of Marguerite Parkway	370	55	425	15	440
Rancho Viejo Road South of Via Escobar	540	165	705	50	755

YEAR 2026 AS BASELINE					
Via Escolar East of Marguerite Parkway	95	1,100	1,195	345	1,540
Marguerite Parkway North of Avery Parkway	1,410	440	1,850	140	1,990
North of Via Escolar	640	935	1,575	295	1,870
Avery Parkway West of Marguerite Parkway	1,400	440	1,840	140	1,980
East of Marguerite Parkway	385	55	440	15	455
Rancho Viejo Road South of Via Escobar	560	165	725	50	775

Non-Motorized Transportation and Transit

The proposed project would generate a demand for non-motorized travel as some event spectators and participants would travel to and from the school as pedestrians or on bicycles. Via Escobar, Marguerite Parkway, and Avery Parkway have sidewalks on both sides of the street and Rancho Viejo Road has a bike trail/pedestrian path on the east side of the street. The two intersections in the study area are equipped with traffic signals and painted crosswalks with pedestrian crossing signals. Bike lanes are provided on both sides of Marguerite Parkway and Avery Parkway. So pedestrian and bicycle travel is well accommodated.

With regard to public transit, the Orange County Transportation Authority (OCTA) operates Route 91 along Marguerite Parkway and Rancho Viejo Road and there are bus stops at the Marguerite Parkway/Via Escolar intersection. It is anticipated, however, that a negligible number of people would use the bus route to travel to and from a game at the school. It is not anticipated that ridership on the bus route would be noticeably affected by the proposed project.

Findings Relative to CEQA Transportation Issues

The proposed project involves the construction of an expanded stadium and new lighting at Capistrano Valley High School that will result in an additional 864 spectators at the stadium for a capacity-level event. For the transportation analysis, Appendix G of the CEQA Guidelines states that a proposed project could have a significant effect on the environment if the project would:

- a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities,
- b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT),
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or
- d) Result in inadequate emergency access.

The findings regarding each of these issues are presented in the following sections.

Issue: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

CEQA Finding: No Impact

The Circulation Element of the City of Mission Viejo General Plan includes specific goals and policies that address the travel demands on the City's roadway system and outline the need to achieve balanced growth. The purpose of the Circulation Element is to provide for a safe, sensible and efficient circulation system for the City and to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways. The list of users includes bicyclists, children, people with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

The goals in the Circulation Element that are applicable to the proposed project are as follows:

Goal 1 - Manage and optimize a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is based upon, and is in balance with, the Land Use Element of the City of Mission Viejo General Plan.

Goal 2 - Protect the City's investment in its circulation system by assessing and mitigating the transportation impacts of new development proposed within and outside the City of Mission Viejo.

Goal 3 - Identify and assess the feasibility and funding of circulation improvements needed within the City, to address the impacts of regional traffic demands upon the City's circulation system.

Goal 4 - Preserve the residential character of local neighborhoods by minimizing through traffic and regulating vehicular speed.

Goal 5 - Facilitate the safe and efficient movement of people and vehicles to and from school sites.

The proposed stadium project is consistent with the goals presented in the Circulation Element and the project would not adversely affect the performance of any roadway, transit, or non-motorized (pedestrian and bicycle) transportation facilities. Based on the traffic analysis, the discussion of non-motorized transportation and transit, and a review of the Circulation Element of the City's General Plan, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Issue: Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT).

CEQA Finding: Less Than Significant Impact

Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in California Environmental Quality Act (CEQA) documents. On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analyses as part of CEQA compliance. SB 743

eliminated auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the current CEQA Guidelines, the criteria “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses” (Public Resources Code Section 21099(b)(1)). Pursuant to SB 743, the California Natural Resources Agency adopted revisions to the CEQA Guidelines on December 28, 2018, to implement SB 743. CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to “vehicle miles traveled” (VMT) were required beginning July 1, 2020, to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. State courts ruled that under the Public Resources Code Section 21099, subdivision (b)(2), “automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment” under CEQA, except for roadway capacity projects.

The County of Orange “2020 Updated Transportation Implementation Manual” includes screening criteria that can be used to identify when a proposed land development project is anticipated to result in a less than significant VMT impact. The document states that a project is presumed to have a less than significant impact on VMT if the project is a public facility. As the proposed project is a stadium expansion at a school, it is in the public facility category. The document indicates that land uses in the public facility category can be screened from requiring a detailed VMT analysis. Based on these guidelines, this stadium project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and would have a less than significant VMT impact.

Issue: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

CEQA Finding: Less Than Significant Impact

The proposed project would not provide any on- or off-site access or circulation features that would create or increase any design hazards or incompatible uses. Access to the school site would continue to be provided by the existing driveways on the north side of Via Escolar. There would be no roadway improvements in the public right-of-way and all improvements within the school site would be consistent with the criteria of the California Division of the State Architect.

The increased levels of traffic, the increased number of pedestrians, and the increased number of vehicular turning movements that would occur at the driveways and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity. These streets and intersections have historically been accommodating school-related traffic on a daily basis for the existing school and athletics field. The proposed project’s expanded stadium and improved lighting would be compatible with the design and operation of a high school, and the proposed project would not result in any major modifications to the existing access or circulation features at the school.

As the existing street network could readily accommodate the anticipated increase in vehicular, pedestrian, and bicycle activity, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses.

Issue: Result in inadequate emergency access.

CEQA Finding: No Impact

Emergency access to the school site is provided by three driveways on the north side of Via Escobar. The existing access and circulation features at the school, including the driveways, parking lots, on-site roadways, and fire lanes, would continue to accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. The proposed project would be designed to accommodate emergency access to the expanded stadium. Any modifications to the access/circulation features at the school are subject to and must satisfy the District's design requirements and would be subject to approval by the Fire Department and the California Division of the State Architect. Emergency vehicles could easily access the stadium and all other areas of the school via on-site travel corridors. The proposed project would not, therefore, result in inadequate emergency access.

IV. SUMMARY OF IMPACTS AND CONCLUSIONS

The key findings of the traffic impact analysis are presented below.

- The proposed expansion of the stadium from 1,886 seats to 2,750 seats, which is a net increase of 864 seats, would generate an additional 345 vehicle trips during the peak hour (316 inbound and 29 outbound) and 690 trips per day for a capacity-level event. The peak hour for this analysis represents the one-hour time period prior to the beginning of an event at the project site when patrons are traveling to the stadium, which would typically occur on a Friday evening between 6:00 and 7:00 p.m. for a football game. Approximately the same level of traffic would be generated at the end of an event when patrons are exiting (with the inbound and outbound traffic volumes reversed).
- An analysis of the traffic volumes on four streets in the vicinity of the school indicates that the additional traffic generated by the proposed project during a capacity-level event would not result in a substantial increase in traffic volumes on the study area streets.
- CEQA threshold of significance T-1 asks if the proposed project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The analysis indicates that there would be **no impact** because:
 - The proposed project would not adversely affect the performance or safety of any transit or non-motorized transportation facilities (pedestrians and bicycles) and would not conflict with any adopted plans, policies, or programs relative to these alternative transportation modes.
 - The Circulation Element of the City of Mission Viejo General Plan includes various goals and policies that address the travel demands on the City's roadway system and outline the need to achieve balanced growth. The purpose of the Circulation Element is to provide for a safe, sensible and efficient circulation system for the City and to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways. The list of users includes bicyclists, children, people with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors. The proposed project is consistent with the goals and policies presented in the Circulation Element and would not conflict with a program, plan, ordinance, or policy of the General Plan, including transit, roadway, bicycle, and pedestrian facilities.
- CEQA threshold of significance T-2 asks if the proposed project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT). The analysis indicates that the VMT impact would be less than significant because the proposed project is a public facility. The guidelines of the County of Orange "2020 Updated Transportation Implementation Manual" state that projects in this

category would have a **less than significant impact** on VMT and can be screened from any further VMT analysis.

- CEQA threshold of significance T-3 asks if the proposed project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). The analysis indicates that the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity and have historically been accommodating school-related traffic. The proposed project would be compatible with the design and operation of a high school and the proposed project would not result in any major modifications to the existing access or circulation features at the school. The proposed project would not, therefore, substantially increase hazards due to a geometric design feature or incompatible uses and would have a **less than significant impact**.
- CEQA threshold of significance T-4 asks if the proposed project would result in inadequate emergency access. The existing access and circulation features at the school, including the driveways, parking lots, on-site roadways, and fire lanes, would continue to accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. In addition, the proposed project would be designed to accommodate emergency access to the stadium. The proposed project would not result in inadequate emergency access and there would be **no impact**.

Appendix C Noise

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Environmental Setting

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal, state, and city governments have established criteria to protect public health and safety and to prevent the disruption of certain human activities, such as classroom instruction, communication, or sleep. Additional information on noise and vibration fundamentals and applicable regulations are contained in Attachment, *Fundamentals of Noise*.

Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, hospital facilities, houses of worship, and open space/recreation areas where quiet environments are necessary for the enjoyment, public health, and safety of the community. The nearest sensitive receptors to the project site are residences to the east and southeast adjacent to the Campus.

Ambient Noise Monitoring

To determine baseline noise levels for an existing football game within the project area, ambient noise monitoring was conducted during a California Interscholastic Federation Playoff Game at the existing track and field and included a halftime show. The existing track and field consist of home and visitor bleachers, a PA system, a home band, and food vendors at the southern portion of the track and field. Three short-term (continuous 1-hour) and one short-term (10 to 15 minutes) measurement locations were conducted on the northern and eastern property lines of the Project site and Campus athletic fields. All measurements were conducted Friday, November 8th, 2024. The short-term sound level meter used (Piccolo II) for noise monitoring satisfies the American National Standards Institute (ANSI) standard for Type II instrumentation. The short-term sound level meters were programmed to “slow” response and “A” weighting (dBA). The meter was calibrated prior to and after each monitoring period. All measurements were at least 5 feet above the ground and away from reflective surfaces. Temperatures were fair, ranging from 65 degrees to 58 degrees Fahrenheit, no winds were recorded, and no humidity during the noise measurements. Short-term measurement locations are described below and shown in Figure 1, *Approximate Noise Monitoring Locations*.

- **Short-Term Location 1 (ST-1)** was conducted on northern property line of the existing shot-put area, west of the residential home directly northwest of the track and field, approximately 340 feet from the center of the football field (50-yard line), 230 feet from the visitor side bleachers, and 170 feet from the northern pedestrian walkway. A continuous noise measurement at 1-hour intervals began at 7:00 pm and stopped at 10:00 pm. The noise environment is characterized by the football game noise (PA system, crowd, referee whistle), halftime show preparations, people walking and talking, as well as traffic noise from Interstate-5 (I-5) and State Route 73 (SR-73). Noise levels measured between 64.3 dBA and 65.6 dBA L_{eq} and between 73.9 dBA and 78.2 dBA L_{max} during the measurement period at ST-1. Results are summarized in Table 1, *ST-1 Hourly Noise Measurement Summary in A-weighted Sound Levels*.

Figure 1 - Noise Monitoring Locations



- School Boundary
- Short-term Noise Monitoring Locations (4)

0 200
Scale (Feet)



Source: Google Earth Pro 2024; PlaceWorks 2024.

Table 1 ST-1 Hourly Noise Measurement Summary in A-weighted Sound Levels

Time		1-hour Noise Level, dBA						
Start	End	L _{eq}	L _{max}	L ₂	L ₈	L ₂₅	L ₅₀	L ₉₀
7:00 PM	8:00 PM	64.3	73.9	67.3	65.9	64.8	64.0	62.6
8:00 PM	9:00 PM	65.6	78.2	70.7	68.6	66.1	64.2	62.1
9:00 PM	10:00 PM	65.3	75.8	70.4	68.0	65.4	64.1	62.5

Source: See Attachment, *Ambient Noise Monitoring Data*

- **Short-Term Location 2 (ST-2)** was conducted on northeastern property line of existing batting cages on campus, west of residential uses, approximately 440 feet from the center of the football field, 300 feet from the home bleachers, and 263 feet from the northern pedestrian walkway. A continuous noise measurement at 1-hour intervals began at 7:00 pm and stopped at 10:00 pm. The noise environment is characterized by the football game noise (PA system, crowd, referee whistle) and some batting cage activity. Noise levels measured between 60.8 dBA and 63.0 dBA L_{eq} and between 72.3 dBA and 78.2 dBA L_{max} during the measurement period at ST-2. Results are summarized in Table 2, *ST-2 Hourly Noise Measurement Summary in A-weighted Sound Levels*.

Table 2 ST-2 Hourly Noise Measurement Summary in A-weighted Sound Levels

Time		1-hour Noise Level, dBA						
Start	End	L _{eq}	L _{max}	L ₂	L ₈	L ₂₅	L ₅₀	L ₉₀
7:00 PM	8:00 PM	60.8	72.3	66.9	63.7	61.4	59.3	56.3
8:00 PM	9:00 PM	61.2	75.2	67.9	64.9	61.3	58.6	55.8
9:00 PM	10:00 PM	63.0	78.9	70.6	66.1	63.0	60.8	55.3

Source: See Attachment, *Ambient Noise Monitoring Data*

- **Short-Term Location 3 (ST-3)** was conducted on the northeastern property line of existing multi-use athletic field, approximately 606 feet from the northeastern corner of the home bleachers, and 550 feet from the loading zone driveway. A continuous noise measurement at 1-hour intervals began at 7:00 pm and stopped at 10:00 pm. The noise environment is characterized by the football game noise (PA system, crowd, referee whistle as well as distant traffic noise from Interstate-5 (I-5)). Noise levels measured between 58.0 dBA and 58.3 dBA L_{eq} and between 67.0 dBA and 73.2 dBA L_{max} during the measurement period at ST-3. Results are summarized in Table 3, *ST-3 Hourly Noise Measurement Summary in A-weighted Sound Levels*.

Table 3 ST-3 Hourly Noise Measurement Summary in A-weighted Sound Levels

Time		1-hour Noise Level, dBA						
Start	End	L _{eq}	L _{max}	L ₂	L ₈	L ₂₅	L ₅₀	L ₉₀
7:00 PM	8:00 PM	58.3	67.0	63.8	61.5	58.9	57.1	54.3
8:00 PM	9:00 PM	58.0	73.2	65.3	61.7	57.5	55.7	52.9
9:00 PM	10:00 PM	58.2	71.0	63.2	60.8	58.9	57.0	54.0

Source: See Attachment, *Ambient Noise Monitoring Data*

In addition to the continuous 1-hour measurements conducted at adjacent residential property lines, short-term measurements and observations were conducted at the far east side of the football field and track, near

the pedestrian access to Mirar Vista Drive, approximately 300 feet from the center of the football field. Results are summarized in Table 4, *ST-4 Short-Term Measurement Summary in A-weighted Sound Levels*. Observations of instantaneous maximum noise levels (L_{max}) during the measurement periods shown in Table 4 resulted in the referee whistle ranging from 63 dBA to 68 dBA L_{max} , crowd noise with whistle measured 76 dBA L_{max} , cheering from the home crowd ranged between 73 dBA to 75 dBA L_{max} , the band ranged from 71 dBA to 75 dBA L_{max} , the visitor crowd measured 70 dBA to 79 dBA L_{max} , the PA system during normal announcements measured 65 dBA L_{max} and the PA system with music during dance team show measured 71 dBA L_{max} .

Table 4 Short-Term Noise Measurements Summary in A-weighted Sound Levels

Monitoring Location	Time	Duration	15-minute Noise Level, dBA							
			L_{eq}	L_{max}	L_{min}	L_2	L_8	L_{25}	L_{50}	L_{90}
ST-4	8:21 PM	00:10:17.6	68.8	78.0	60.0	74.5	73.4	70.2	66.2	62.0
	9:11 PM	00:15:00.0	66.5	73.5	58.1	71.0	70.2	68.6	64.4	60.5
	10:27 PM	00:07:57.0	69.0	79.3	61.3	75.9	72.0	69.8	67.5	63.3

Source: See Attachment, *Ambient Noise Monitoring Data*

Applicable Standards

City of Mission Viejo Municipal Code

Sec. 6.35.040. Exterior noise standards.

- (a) The following noise standards, unless otherwise specifically indicated, shall apply to all residential property within the city:

Noise Standards

Noise level	Time period
55 dB(A)	7:00 a.m.—10:00 p.m.
50 dB(A)	10:00 p.m.— 7:00 a.m.

See Attachment, *Local Regulations and Standards*

If the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five dB(A).

- (b) It shall be unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level, when measured on any other residential property, to exceed:
- (1) The noise standard for a cumulative period of more than 30 minutes in any hour;
 - (2) The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour;
 - (3) The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour;
 - (4) The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour; or
 - (5) The noise standard plus 20 dB(A) for any period of time.

- (c) If the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to such category shall be increased to reflect such ambient noise level. If the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

Sec. 6.35.060. Special provisions.

The following activities shall be exempted from the provisions of this chapter:

- (1) Activities conducted on the grounds of any public or private nursery, elementary, intermediate or secondary school or college.
- (5) Noise sources associated with construction, repair, remodeling or grading of any real property, and delivery or repair of construction and grading equipment, provided such activities do not take place between the hours of 8:00 p.m. to 7:00 a.m. on weekdays and Saturdays, or at any time on Sunday or a federal holiday.

Operational Noise

Off-Site Traffic Noise

A project will normally have a significant effect on the environment related to traffic noise if it substantially increases the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an outdoor environment. Noise levels above 65 dBA CNEL are normally unacceptable at sensitive receptor locations such as residences, and noise environments in these areas would be considered degraded. Based on this, a significant impact would occur if the following traffic noise increases occur relative to the existing noise environment:

- 1.5 dBA in ambient noise environments of 65 dBA CNEL and higher
- 3 dBA in ambient noise environments of 60 to 64 dBA CNEL
- 5 dBA in ambient noise environments of less than 60 dBA CNEL

Based on existing traffic noise modeling, a significant traffic noise impact occurs when the thresholds above are exceeded under cumulative conditions (with project) and the contribution of the project to future traffic is calculated to be greater than 1.5 dBA CNEL for Fairview Road, Baker Street, and Adams Avenue because existing traffic noise levels are above 65 dBA CNEL.

The proposed project would result in an increase in vehicles to the project site. To determine noise level increases at existing noise sensitive land uses due to project-generated traffic, net project trip traffic volumes from the project traffic study were compared to the existing daily traffic conditions. Table 5, *Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet*, shows the project-related traffic noise increases which accounts for new project trips, where traffic volume data for the new trips associated with the proposed project are

provided by the Garland (2024). The traffic study showed that the proposed project would generate an additional 690 traffic trips during stadium events.

Vehicle traffic noise levels were estimated using the FHWA Highway Traffic Noise Prediction Model. The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, vehicle traffic volumes, vehicle speeds, car/truck mix, number of lanes, and road width. As shown in Table 5, traffic noise increases due to the proposed project would result in an increase of 1 dBA CNEL or less. Projected traffic noise increases would be below the 1.5 dBA significance threshold. Therefore, traffic-related noise would result in a less-than-significant impact and would not represent an unusual circumstances.

Table 5 Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet

Roadway	Segment		Traffic Noise Increase					
	From	To	Existing Stadium 2024 No Project	Existing Stadium 2024 with Project	Existing 2024 Increase	Existing Stadium 2026 No Project	Existing Stadium 2026 With Project	Opening Year 2025 Increase
Via Escolar	the East	Marguerite Parkway	60	61	1	60	61	1
Marguerite Parkway	the North	Avery Parkway	73	73	<1	74	74	<1
Marguerite Parkway	Avery Parkway	Via Escolar	71	71	<1	71	71	<1
Rancho Viejo Road	the South	Via Escolar	71	71	<1	71	71	<1
Avery Parkway	the East	Marguerite Parkway	71	71	<1	72	72	<1
Avery Parkway	Marguerite Parkway	the West	67	67	<1	67	67	<1

Source: Traffic data provided by Garland 2024. See Attachment, *Traffic Noise Modeling*.

Stadium Expansion

As discussed above, a change of 5 dBA is readily discernible in an exterior environment and a change in 10 dBA is perceived as a doubling in sound level. Based on this and noted that games would result in periodic (not daily) increases in ambient noise levels from the proposed stadium events, a threshold of 10 dBA above the ambient is used. A noise increase above 10 dBA for periodic events (such as stadium events) would be considered significant.

The proposed project would expand bleacher seating at the Capistrano Valley High School. The high school stadium currently holds up to 1,312 spectators on the home bleachers and up to 574 spectators on the visitor bleachers for a total of 1,886 spectators combined. The proposed project would increase capacity by 688 spectators on the home bleachers and up to 176 spectators on the visitor bleachers. Table 6, *Bleacher Capacity Net Increase*, below shows the Existing, Existing Plus Project, and the net increase in spectator capacity.

Table 6 Bleacher Capacity Net Increase

Existing No Project Spectator Capacity		Existing Plus Project Bleacher Capacity		Net Increase	
Home Bleachers	Visitor Bleachers	Home Bleachers	Visitor Bleachers	Home Bleachers	Visitor Bleachers
1,312	574	2,000	750	688	176
Total = 1,886		Total = 2,750		Total = 864	

The proposed net increase of 864 spectators (total) was modeled using SoundPLAN computer software. SoundPLAN uses industry-accepted propagation algorithms based on International Organization for Standardization (ISO) and ÖAL-28 standards for outdoor sound propagation. See Attachment, *SoundPLAN Noise Modeling*, for modeling results. The modeling calculations account for classical sound wave divergence (spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption and ground effects. Additionally, SoundPLAN provides for other correction factors, including level increases due to reflections, source directivity, and source tonality. SoundPLAN noise modeling estimated noise levels at the short-term noise measurement sites, representing the nearest residential receptors to the project site. The model also incorporated other stadium noise assumptions associated with football games. Based on other typical football game observations the following additional modeling inputs were assumed to be reasonable.

- Rowdy crowd cheering (both Home and Visitors) was assumed cheer for a cumulative 10 minutes per hour and each cheer interval to be approximately 10 seconds long.
- Home band was assumed to play a cumulative of 10 minutes per hour.
- Approximately 6 individual speakers for announcements (from the track facing spectators) were assumed to occur per hour, with individual announcement durations of 20 seconds, for a cumulative of 12 minutes per hour.

Table 7, *SoundPLAN Modeled Noise Levels*, shows predicted operational noise levels associated with the proposed project stadium expansion at noise measurement locations ST-1 through ST-3. Existing and Project operational noise contours of predicted operational noise associated with the proposed stadium expansion on the project site and in the greater community are shown in Attachment, *SoundPLAN Noise Modeling*. Measured baseline football game noise levels at the short-term measurement sites adjacent to residential receptors to the east ranged from 58 dBA to 66 dBA L_{eq} . Modeled sound levels at the nearest sensitive receptor are estimated to range between 60 dBA L_{eq} and 67 dBA L_{eq} as a result of the additional crowd noise due to proposed bleacher expansion. The project is therefore estimated to increase existing stadium baseline noise levels at the adjacent sensitive receptors on a periodic basis by up to 3 dBA L_{eq} . This would not exceed the threshold of 10 dBA. Therefore, an increase in periodic crowd noise increases during football games due to expanded bleacher capacity at the nearest receptors would be a less-than-significant impact, and would not represent an unusual circumstances.

Table 7 SoundPLAN Modeled Noise Levels

Location	Event Noise Level, dBA L _{eq}		
	Football Game 1,500 Spectators (Measured)	Project Game 2,750 Spectators (Modeled)	Increase due to Project
ST-1	66	67	1
ST-2	63	66	3
ST-3	58	60	2

ATTACHMENTS

FUNDAMENTALS OF NOISE

Fundamentals of Noise

NOISE

Noise is most often defined as unwanted sound; whether it is loud, unpleasant, unexpected, or otherwise undesirable. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as “noisiness” or “loudness.”

Noise Descriptors

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound, expressed on a logarithmic scale and with respect to a defined reference sound pressure. The standard reference pressure is 20 micropascals (20 μPa).
- **Vibration Decibel (VdB).** A unitless measure of vibration, expressed on a logarithmic scale and with respect to a defined reference vibration velocity. In the U.S., the standard reference velocity is 1 micro-inch per second (1×10^{-6} in/sec).
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Statistical Sound Level (L_n).** The sound level that is exceeded “n” percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the “median sound level.” The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the “intrusive sound level.” The L_{90} is the sound level exceeded 90 percent of the time and is often considered the “effective background level” or “residual noise level.”

- **Maximum Sound Level ($L_{\max}$).** The highest RMS sound level measured during the measurement period.
- **Root Mean Square Sound Level (RMS).** The square root of the average of the square of the sound pressure over the measurement period.
- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 PM to 10:00 PM and 10 dB from 10:00 PM to 7:00 AM. NOTE: For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive – that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.
- **Peak Particle Velocity (PPV).** The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.
- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

Characteristics of Sound

When an object vibrates, it radiates part of its energy in the form of a pressure wave. Sound is that pressure wave transmitted through the air. Technically, airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure that creates sound waves.

Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). Loudness or amplitude is measured in dB, frequency or pitch is measured in Hertz [Hz] or cycles per second, and duration or time variations is measured in seconds or minutes.

Amplitude

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale. Because of the physical characteristics of noise transmission and perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1 presents the subjective effect of changes in sound pressure levels. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually not discernible (even under ideal conditions). A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernible to most people in an exterior environment, and a 10 dB change is perceived as a doubling (or halving) of the sound.

Table 1 **Noise Perceptibility**

Change in dB	Noise Level
± 3 dB	Barely perceptible increase
± 5 dB	Readily perceptible increase
± 10 dB	Twice or half as loud
± 20 dB	Four times or one-quarter as loud

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Frequency

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all, but are “felt” more as a vibration. Similarly, though people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz.

When describing sound and its effect on a human population, A-weighted (dBA) sound levels are typically used to approximate the response of the human ear. The A-weighted noise level has been found to correlate well with people’s judgments of the “noisiness” of different sounds and has been used for many years as a measure of community and industrial noise. Although the A-weighted scale and the energy-equivalent metric are commonly used to quantify the range of human response to individual events or general community sound levels, the degree of annoyance or other response also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- General nature of the existing conditions (e.g., quiet rural or busy urban)
- Difference between the magnitude of the sound event level and the ambient condition
- Duration of the sound event
- Number of event occurrences and their repetitiveness
- Time of day that the event occurs

Duration

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time; half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2 , L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour, respectively. These “n” values are typically used to demonstrate compliance for stationary noise sources with many cities’ noise ordinances. Other values typically noted during a noise survey are the L_{min} and L_{max} . These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period, respectively.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and many local jurisdictions use an adjusted 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment (or “penalty”) of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00

PM and 10 dBA for the hours from 10:00 PM to 7:00 AM. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM. Both descriptors give roughly the same 24-hour level, with the CNEL being only slightly more restrictive (i.e., higher). The CNEL or L_{dn} metrics are commonly applied to the assessment of roadway and airport-related noise sources.

Sound Propagation

Sound dissipates exponentially with distance from the noise source. This phenomenon is known as “spreading loss.” For a single-point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source (conservatively neglecting ground attenuation effects, air absorption factors, and barrier shielding). For example, if a backhoe at 50 feet generates 84 dBA, at 100 feet the noise level would be 79 dBA, and at 200 feet it would be 73 dBA. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance over a reflective (“hard site”) surface such as concrete or asphalt. Line source noise in a relatively flat environment with ground-level absorptive vegetation decreases by an additional 1.5 dB for each doubling of distance.

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. Extended periods of noise exposure above 90 dBA results in permanent cell damage, which is the main driver for employee hearing protection regulations in the workplace. For community environments, the ambient or background noise problem is widespread, though generally worse in urban areas than in outlying, less-developed areas. Elevated ambient noise levels can result in noise interference (e.g., speech interruption/masking, sleep disturbance, disturbance of concentration) and cause annoyance. Since most people do not routinely work with decibels or A-weighted sound levels, it is often difficult to appreciate what a given sound pressure level number means. To help relate noise level values to common experience, Table 2 shows typical noise levels from familiar sources.

Table 2 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Vibration Fundamentals

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers. As with noise, vibration can be described by both its amplitude and frequency. Vibration displacement is the distance that a point on a surface moves away from its original static position; velocity is the instantaneous speed that a point on a surface moves; and acceleration is the rate of change of the speed. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During construction, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, receptors may be subject to levels of vibration that can cause annoyance due to noise generated from vibration of a structure or items within a structure.

Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal and RMS is the

square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage and RMS is typically more suitable for evaluating human response.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 3 displays the human response and the effects on buildings resulting from continuous vibration (in terms of various levels of PPV).

Table 3 Human Reaction to Typical Vibration Levels

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of “architectural” (i.e. not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to “architectural” damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage

Source: California Department of Transportation (Caltrans). 2020, April. *Transportation and Construction Vibration Guidance Manual*. Prepared by ICF International.

AMBIENT NOISE MONITORING DATA

Project: CVS-17.0

User: AC

Location: ST-1

Number	Start Date	Start Time	End Time	Duration	A-weighted dBA													
					Leq	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99	
1	11/8/2024	7:00:00 PM	8:00:00 PM	1:00:00	64.3	73.9	60.3	68.0	67.3	66.3	65.9	65.7	64.8	64.0	62.6	62.3	61.7	
2	11/8/2024	8:00:00 PM	9:00:00 PM	1:00:00	65.6	78.2	59.4	71.6	70.7	69.4	68.6	68.2	66.1	64.2	62.1	61.6	60.5	
3	11/8/2024	9:00:00 PM	10:00:00 PM	1:00:00	65.3	75.8	60.2	71.8	70.4	68.7	68.0	67.6	65.4	64.1	62.5	62.2	61.6	

Project: CVS-17.0

User: AC

Location: ST-2

Number	Start Date	Start Time	End Time	Duration	A-weighted dBA												
					Leq	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99
1	11/8/2024	7:00:00 PM	8:00:00 PM	1:00:00	60.8	72.3	53.1	68.4	66.9	64.7	63.7	63.3	61.4	59.3	56.3	55.7	54.3
2	11/8/2024	8:00:00 PM	9:00:00 PM	1:00:00	61.2	75.2	51.5	70.0	67.9	65.8	64.9	64.4	61.3	58.6	55.8	55.3	53.7
3	11/8/2024	9:00:00 PM	10:00:00 PM	1:00:00	63.0	78.9	51.1	72.6	70.6	67.5	66.1	65.4	63.0	60.8	55.3	54.4	53.1

Project: CVS-17.0

User: AC

Location: ST-3

Number	Start Date	Start Time	End Time	Duration	A-weighted dBA													
					Leq	Lmax	Lmin	L1	L2	L5	L8	L10	L25	L50	L90	L95	L99	
1	11/8/2024	7:00:00 PM	8:00:00 PM	1:00:00	58.3	67.0	50.9	64.4	63.8	62.4	61.5	61.1	58.9	57.1	54.3	53.8	52.8	
2	11/8/2024	8:00:00 PM	9:00:00 PM	1:00:00	58.0	73.2	49.1	66.8	65.3	62.9	61.7	61.1	57.5	55.7	52.9	52	50.4	
3	11/8/2024	9:00:00 PM	10:00:00 PM	1:00:00	58.2	71.0	48.1	64.7	63.2	61.6	60.8	60.5	58.9	57.0	54.0	52.7	50.2	

Project: CVS-17.0

User: AC

Location: ST-4 300 feet east of the center of football field

													Event	Lmax dBA
													Whistle	63-68
													Crowd and Whistle	76
													Home Crowd	73-75
													Home Crowd -Booing	75
													Band	71-75
													Visitor Crowd	70-79
													PA System	65
													PA System music	71

A-weighted dBA												
Number	Start Date	Start Time	Duration	Leq	Lmax	Lmin	L2	L8	L25	L50	L90	L99
1	11/8/2024	8:21:51 PM	0:10:18	68.8	78.0	60.0	74.5	73.4	70.2	66.2	62.0	60.5
2	11/8/2024	9:11:00 PM	0:15:00	66.5	73.5	58.1	71.0	70.2	68.6	64.4	60.5	59.0
3	11/8/2024	9:27:00 PM	0:07:57	69.0	79.3	61.3	75.9	72.0	69.8	67.5	63.3	62.2

LOCAL REGULATIONS AND STANDARDS

CHAPTER 6.35. NOISE CONTROL¹

Sec. 6.35.010. Declaration of policy.

- (a) In order to control unnecessary, excessive and annoying sounds emanating from areas of the city, it is hereby declared to be the policy of the city to prohibit such sounds generated from all sources as specified in this chapter.
- (b) It is determined that certain sound levels are detrimental to the public health, welfare and safety, and contrary to public interest.

(Ord. No. 88-12, § 3(4-6-1), 6-27-88)

Sec. 6.35.020. Definitions.

The following words, phrases and terms as used in this chapter shall have the meaning as indicated below:

Ambient noise level means the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

Cumulative period means an additive period of time composed of individual time segments which may be continuous or interrupted.

Decibel (dB) means a unit which denotes the ratio between two quantities which are proportional to power: The number of decibels corresponding to the ratio of two amounts of power is ten times the logarithm to the base ten of this ratio.

Dwelling unit means a single unit providing complete, independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation.

Emergency machinery, vehicle or work means any machinery, vehicle or work used, employed or performed in an effort to protect, provide or restore safe conditions in the community or for the citizenry; or work by private or public utilities when restoring utility service.

Fixed noise source means a stationary device which creates sounds while fixed or motionless, including but not limited to industrial and commercial machinery and equipment, pumps, fans, compressors, generators, air conditioners and refrigeration equipment.

Grading means any excavating or filling of earth material, or any combination thereof, conducted at a site to prepare such site for construction or other improvements thereon.

¹Cross reference(s)—Citations in lieu of immediate arraignment, ch. 1.08; buildings and construction generally, tit. 8; animals, tit. 10; offenses against public safety, ch. 11.17; traffic generally, tit. 12; parks and recreational facilities, tit. 13; streets and sidewalks, tit. 14.

State law reference(s)—Authority to adopt noise regulations, Health and Safety Code § 46002.

Impact noise means the noise produced by the collision of one mass in motion with a second mass which may be either in motion or at rest.

Mobile noise source means any noise source other than a fixed noise source.

Noise level means the A-weighted sound pressure level in decibels obtained by using a sound level meter at slow response with a reference pressure of 20 micronewtons per square meter. The unit of measurement shall be designated as dB(A).

Person means a person, firm, association, copartnership, joint venture, corporation or any entity, public or private in nature.

Residential property means a parcel of real property which is developed and used either in part or in whole for residential purposes, other than transient uses such as hotels and motels.

Simple tone noise means a noise characterized by a predominant frequency or frequencies so that other frequencies cannot be readily distinguished.

Sound level meter means an instrument meeting American National Standard Institute's Standard S1.4-1971 for Type 1 or Type 2 sound level meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.

Sound pressure level of a sound, in decibels, means 20 times the logarithm to the base ten of the ratio of the pressure of the sound to a reference pressure, which reference pressure shall be explicitly stated.

(Ord. No. 88-12, § 3(4-6-2), 6-27-88)

Cross reference(s)—Definitions generally, § 1.01.170.

Sec. 6.35.030. Noise level measurement criteria.

Any noise level measurements made pursuant to the provisions of this chapter shall be performed using a sound level meter as defined in section 6.35.020.

(Ord. No. 88-12, § 3(4-6-3), 6-27-88)

Sec. 6.35.040. Exterior noise standards.

- (a) The following noise standards, unless otherwise specifically indicated, shall apply to all residential property within the city:

Noise Standards

Noise level	Time period
55 dB(A)	7:00 a.m.— 10:00 p.m.
50 dB(A)	10:00 p.m.— 7:00 a.m.

If the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five dB(A).

- (b) It shall be unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level, when measured on any other residential property, to exceed:

- (1) The noise standard for a cumulative period of more than 30 minutes in any hour;

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- (2) The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour;
 - (3) The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour;
 - (4) The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour; or
 - (5) The noise standard plus 20 dB(A) for any period of time.
- (c) If the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to such category shall be increased to reflect such ambient noise level. If the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(Ord. No. 88-12, § 3(4-6-5), 6-27-88)

Sec. 6.35.050. Interior noise standards.

- (a) The following interior noise standards, unless otherwise specifically indicated, shall apply to all residential property within the city:

Interior Noise Standards

Noise level	Time period
55 dB(A)	7:00 a.m.—10:00 p.m.
45 dB(A)	10:00 p.m.— 7:00 a.m.

If the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five dB(A).

- (b) It shall be unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level, when measured within any other dwelling unit on any residential property, to exceed:
- (1) The interior noise standard for a cumulative period of more than five minutes in any hour;
 - (2) The interior noise standard plus five dB(A) for a cumulative period of more than one minute in any hour; or
 - (3) The interior noise standard plus ten dB(A) for any period of time.
- (c) If the ambient noise level exceeds either of the first two noise limit categories above, the cumulative period applicable to such category shall be increased to reflect such ambient noise level. If the ambient noise level exceeds the third noise limit category the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(Ord. No. 88-12, § 3(4-6-6), 6-27-88)

Sec. 6.35.060. Special provisions.

The following activities shall be exempted from the provisions of this chapter:

- (1) Activities conducted on the grounds of any public or private nursery, elementary, intermediate or secondary school or college.
- (2) Outdoor gatherings, public dances and shows, provided such events are conducted pursuant to a license issued by the county pursuant to title 5 of the codified ordinances of the county.

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- (3) Activities conducted on any park or playground, provided such park or playground is owned and operated by a public entity.
 - (4) Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle or work.
 - (5) Noise sources associated with construction, repair, remodeling or grading of any real property, and delivery or repair of construction and grading equipment, provided such activities do not take place between the hours of 8:00 p.m. to 7:00 a.m. on weekdays and Saturdays, or at any time on Sunday or a federal holiday.
 - (6) All mechanical devices, apparatus or equipment which are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions.
 - (7) Mobile noise sources associated with agricultural operations, provided such operations do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a federal holiday.
 - (8) Mobile noise sources associated with agricultural pest control through pesticide application, provided that the application is made in accordance with restricted material permits issued by or regulations enforced by the agricultural commissioner.
 - (9) Noise sources associated with the maintenance of real property, provided such activities take place between 7:00 a.m. and 8:00 p.m. on any day except Sunday or a federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a federal holiday.
 - (10) Any activity to the extent regulation thereof has been preempted by state or federal law.

(Ord. No. 88-12, § 3(4-6-7), 6-27-88; Ord. No. 89-37, § 1, 11-27-89)

Sec. 6.35.070. Delivery, repair, and operations prohibited during certain hours.

Onsite building operations and the delivery of any materials, supplies, or construction equipment and the repair thereof, related directly or indirectly to onsite building operations located within one-half mile of a structure for human occupancy shall be prohibited between the hours of 8:00 p.m. to 7:00 a.m. on weekdays and Saturdays, or at any time on Sunday or a city holiday.

(Ord. No. 89-37, § 2(4-6-7.5), 11-27-89)

Sec. 6.35.080. Schools, hospitals and churches; special provisions.

It shall be unlawful for any person to create any noise which causes the noise level at any school, hospital or church while the same is in use to exceed the noise limits as specified in section 6.35.040 prescribed for the assigned noise zone in which the school, hospital or church is located, or which noise level unreasonably interferes with the use of such institutions or which unreasonably disturbs or annoys patients in the hospital, provided conspicuous signs are displayed in three separate locations within one-tenth of a mile of the institution indicating the presence of a school, church or hospital.

(Ord. No. 88-12, § 3(4-6-8), 6-27-88)

Sec. 6.35.090. Motor vehicle racing.

It shall be unlawful to conduct motor vehicle racing, testing, timing or similar noise-producing activities at raceways, speedways, offroad vehicle courses, drag strips or other similar places, including, but not limited to, the operation of midget race cars, drag cars, motorcycles, offroad vehicles, and specialty automobiles, between the hours of 11:30 p.m. and 8:00 a.m.

(Ord. No. 88-12, § 3(4-6-8.1), 6-27-88)

Sec. 6.35.100. Noise level measurement.

The location selected for measuring exterior noise levels shall be at any point on the affected property. Interior noise measurements shall be made within the affected dwelling unit. The measurement shall be made at a point at least four feet from the wall, ceiling, or floor nearest the alleged offensive noise source and may be made with the windows of the affected unit open.

(Ord. No. 88-12, § 3(4-6-10), 6-27-88)

Sec. 6.35.110. Manner of enforcement.

- (a) The chief of police and the city community development director and their duly authorized representatives are directed to enforce the provisions of this chapter. The chief of police and the city health officer and their duly authorized representatives are authorized, pursuant to Penal Code § 836.5, to arrest any person without a warrant when they have reasonable cause to believe that such person has committed a misdemeanor in their presence.
- (b) No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this article while such person is engaged in the performance of his duty.

(Ord. No. 88-12, § 3(4-6-11), 6-27-88)

Sec. 6.35.120. Variance procedure.

The owner or operator of a noise source which violates any of the provisions of this chapter may file an application with the health officer for a variance from the provisions thereof wherein such owner or operator shall set forth all actions taken to comply with such provisions, the reasons why immediate compliance cannot be achieved, a proposed method of achieving compliance, and a proposed time schedule for its accomplishment. The application shall be accompanied by a fee in the amount of \$75.00. A separate application shall be filed for each noise source; provided, however, that several mobile sources under common ownership, or several fixed sources on a single property may be combined into one application. Upon receipt of the application and fee, the health officer shall refer it with his recommendation thereon within 30 days to the noise variance board for action thereon in accordance with the provisions of this chapter. An applicant for a variance shall remain subject to prosecution under the terms of this chapter until a variance is granted.

(Ord. No. 88-12, § 3(4-6-12), 6-27-88)

Sec. 6.35.130. Noise variance board.

- (a) There is hereby created a noise variance board consisting of five members. Two of the members shall be professional engineers, one of whom shall have demonstrated knowledge and experience in the field of

acoustics, and one of whom shall be a registered mechanical engineer. One member shall be a physician licensed in this state, qualified in the field of physiological effects of noise. One member shall be a representative of business and industry. One member shall be a representative of the general public.

- (b) The noise variance board shall evaluate all applications for variance from the requirements of this article and may grant the variances with respect to time for compliance, subject to such terms, conditions and requirements as it may deem reasonable to achieve maximum compliance with the provisions of this article. The terms, conditions and requirements may include but shall not be limited to limitations on noise levels and operating hours. Each such variance shall set forth in detail the approved method of achieving maximum compliance and a time schedule for its accomplishment. In its determinations the board shall consider the magnitude of nuisance caused by the offensive noise; the uses of property within the area of impingement by the noise; the time factors related to study, design, financing and construction of remedial work; the economic factors related to age and useful life of equipment; and the general public interest and welfare. Any variance granted by such board shall be by resolution and shall be transmitted to the health officer for enforcement. Any violation of the terms of such variance shall be unlawful.
- (c) Members of the variance board shall be appointed by, and shall serve at the pleasure of, the city council. The board shall adopt reasonable rules and regulations for its own procedures in carrying out its functions under the provisions of this chapter.
- (d) Three members shall constitute a quorum and at least three affirmative votes shall be required in support of any action.
- (e) The health officer, or his appointed representative, shall be a nonvoting ex officio member of the variance board, and shall act as secretary of the board.
- (f) Meetings of the noise variance board shall be held at the call of the secretary and at such times and locations as the board shall determine. All such meetings shall be open to the public.
- (g) Traveling and other expenses incurred by each board member in the performance of his official duties shall be reimbursed at a rate determined by resolution of the council.

(Ord. No. 88-12, § 3(4-6-13), 6-27-88)

Sec. 6.35.140. Appeals.

- (a) Within 15 days following the decision of the variance board on an application the applicant, the health officer, or any member of the city council, may appeal the decision to the city council by filing a notice of appeal with the secretary of the variance board. In the case of an appeal by the applicant for a variance the notice of appeal shall be accompanied by a fee to be computed by the secretary on the basis of the estimated cost of preparing the materials required to be forwarded to the council as discussed hereafter. If the actual cost of such preparation differs from the estimated cost, appropriate payments shall be made either to or by the secretary.
- (b) Within 15 days following receipt of a notice of appeal and the appeal fee the secretary of the variance board shall forward to the council copies of the application for variance; the recommendation of the health officer; the notice of appeal; all evidence concerning such application received by the variance board and its decision thereon. In addition, any person may file with the council written arguments supporting or attacking the decision and the council may in its discretion hear oral arguments thereon. The clerk shall mail to the applicant a notice of the date set for hearing of the appeal. The notice shall be mailed at least ten days prior to the hearing date.
- (c) Within 60 days following its receipt of the notice of appeal the council shall either affirm, modify or reverse the decision of the variance board. Such decision shall be based upon the council's evaluation of the matters

submitted to the council in light of the powers conferred on the variance board and the factors to be considered, both as enumerated in sections 6.35.120 and 6.35.130.

- (d) As part of its decision the council may direct the variance board to conduct further proceedings on the application. Failure of the council to affirm, modify or reverse the decision of the variance board within the 60-day period shall constitute an affirmance of the decision.

(Ord. No. 88-12, § 3(4-6-14), 6-27-88)

TRAFFIC NOISE MODELING

Traffic Noise Calculator: FHWA 77-108																							Capistrano Valley HS Modernization (CVS-17.0) Existing 2024 with Stadium Event Traffic Noise									
	Output						Inputs															Auto Inputs										
	dBA at 50 feet			Distance to CNEL Contour																												
ID	L _{eq,24hr}	L _{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway			Segment From - To	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance								
1	55.9	59.6	60	11	23	50	Via Escolar		the East	Marguerite Parkway	4,210	25	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20								
2	69.3	73.0	73	109	345	1090	Marguerite Parkway		the North	Avery Parkway	25,900	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44								
3	66.6	70.3	71	58	184	583	Marguerite Parkway		Avery Parkway	Via Escolar	18,180	40	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44								
4	67.0	70.7	71	59	127	275	Rancho Viejo Road		the South	Via Escolar	15,230	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44								
5	67.2	71.0	71	61	132	285	Avery Parkway		the East	Marguerite Parkway	28,400	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44								
6	62.6	66.4	67	24	75	236	Avery Parkway		Marguerite Parkway	the West	9,880	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44								

Traffic Noise Calculator: FHWA 77-108																							Capistrano Valley HS Modernization (CVS-17.0) Existing 2026 with New Stadium Event Traffic Noise													
	Output						Inputs														Auto Inputs															
	dBA at 50 feet			Distance to CNEL Contour																																
ID	L _{eq,24hr}	L _{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway			Segment From - To	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver	Ground Absorption	Lane Distance												
1	56.5	60.2	61	12	26	55	Via Escolar			the East	Marguerite Parkway	4,900	25	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20											
2	69.3	73.0	73	110	348	1101	Marguerite Parkway			the North	Avery Parkway	26,180	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44											
3	66.7	70.4	71	60	190	602	Marguerite Parkway			Avery Parkway	Via Escolar	18,770	40	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44											
4	67.0	70.7	71	59	128	276	Rancho Viejo Road			the South	Via Escolar	15,330	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44											
5	67.3	71.0	71	62	133	287	Avery Parkway			the East	Marguerite Parkway	28,680	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44											
6	62.7	66.4	67	24	75	236	Avery Parkway			Marguerite Parkway	the West	9,910	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44											

Traffic Noise Calculator: FHWA 77-108																							Capistrano Valley HS Modernization (CVS-17.0) Existing 2026 with Stadium Event Traffic Noise										
	Output						Inputs															Auto Inputs											
	dBA at 50 feet			Distance to CNEL Contour																													
ID	L _{eq,24hr}	L _{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway			Segment From - To	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver	Ground Absorption	Lane Distance									
1	56.0	59.7	60	11	23	51	Via Escolar		the East	Marguerite Parkway	4,320	25	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20									
2	69.5	73.2	74	113	358	1132	Marguerite Parkway		the North	Avery Parkway	26,910	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44									
3	66.7	70.4	71	60	191	605	Marguerite Parkway		Avery Parkway	Via Escolar	18,860	40	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44									
4	67.2	70.9	71	61	131	282	Rancho Viejo Road		the South	Via Escolar	15,830	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44									
5	67.4	71.1	72	63	136	292	Avery Parkway		the East	Marguerite Parkway	29,510	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44									
6	62.8	66.5	67	25	77	245	Avery Parkway		Marguerite Parkway	the West	10,270	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44									

Traffic Noise Calculator: FHWA 77-108																							Capistrano Valley HS Modernization (CVS-17.0) Existing 2026 with New Stadium Event Traffic Noise									
	Output						Inputs															Auto Inputs										
	dBA at 50 feet			Distance to CNEL Contour																												
ID	L _{eq,24hr}	L _{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway		Segment From - To	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance									
1	56.6	60.3	61	12	26	56	Via Escolar	the East	Marguerite Parkway	5,010	25	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20									
2	69.5	73.2	74	114	362	1144	Marguerite Parkway	the North	Avery Parkway	27,190	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44									
3	66.9	70.6	71	62	197	624	Marguerite Parkway	Avery Parkway	Via Escolar	19,450	40	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44									
4	67.2	70.9	71	61	131	283	Rancho Viejo Road	the South	Via Escolar	15,930	45	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44									
5	67.5	71.2	72	63	137	294	Avery Parkway	the East	Marguerite Parkway	29,790	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44									
6	62.8	66.5	67	25	78	246	Avery Parkway	Marguerite Parkway	the West	10,300	35	0.0%	96.5%	2.0%	1.5%	75.0%	10.0%	15.0%	4	Hard	50	0	44									

SoundPLAN NOISE MODELING

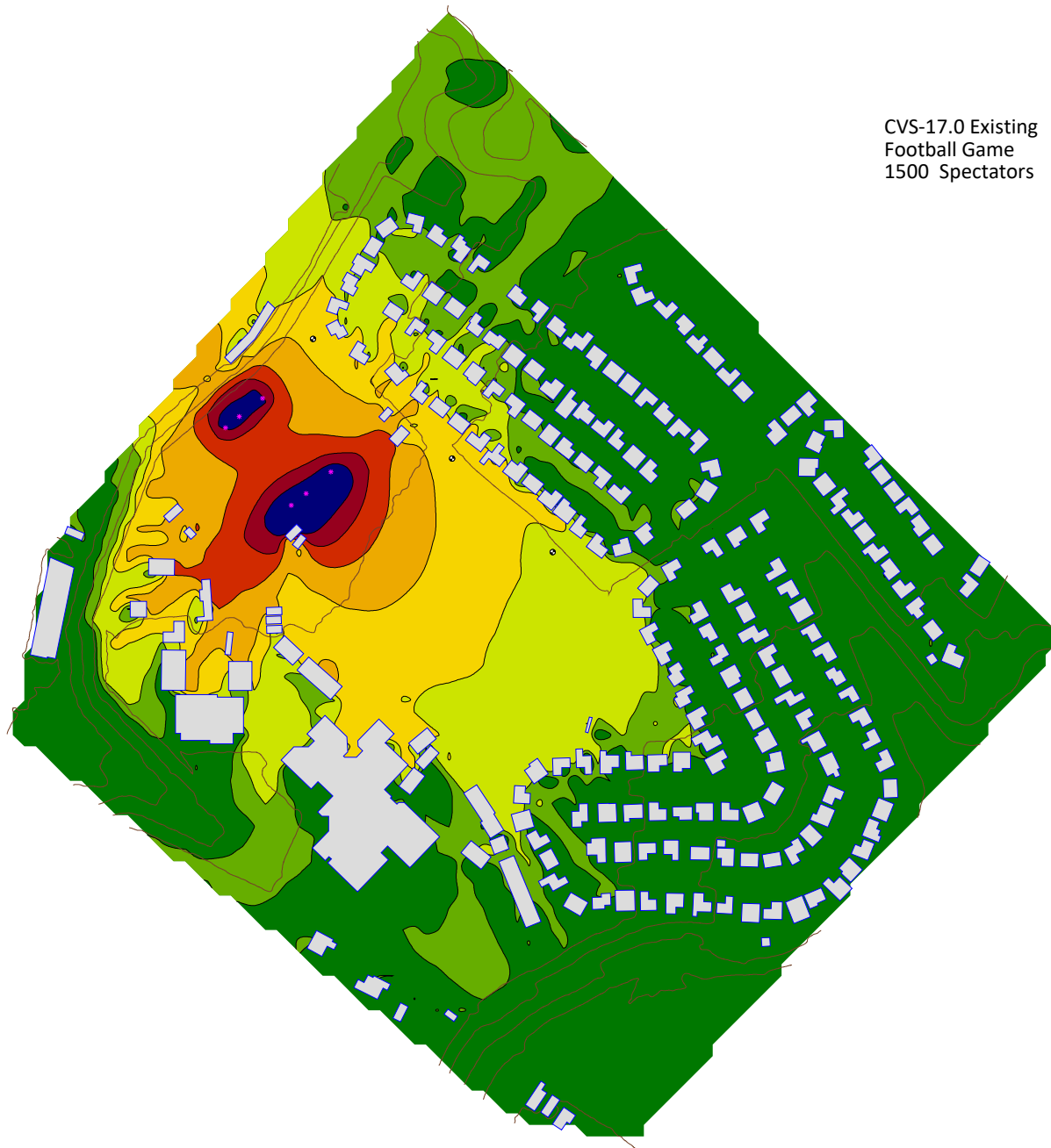
Noise level

Leq,d
in dB(A)

	<= 50
50 <	<= 55
55 <	<= 60
60 <	<= 65
65 <	<= 70
70 <	<= 75
75 <	<= 80
80 <	

Signs and symbols

- Point source
- Area source
- Building
- Elevation line
- Receiver



CVS-17.0 Existing
Football Game
1500 Spectators

2

A blank sheet of white graph paper with a light gray grid. The grid consists of small squares, approximately 10 units wide by 10 units high. A thicker vertical line runs down the left side, creating a margin. There are also thicker horizontal lines near the top and bottom edges.

Capistrano Valley High School Stadium Modernization

Contribution level - Existing 1500

9

Source	Source group	Source ty	Leq,d dB(A)	Leq,n dB(A)	
Receiver ST-1 FI G Leq,d 65.7 dB(A) Leq,n 65.7 dB(A)					
Band	Default industrial noise	Area	57.6	57.6	
Away B	Default industrial noise	Area	58.7	58.7	
Home B	Default industrial noise	Area	56.4	56.4	
Home S-3	Default industrial noise	Point	49.7	49.7	
Away S-2	Default industrial noise	Point	55.6	55.6	
Away S-3	Default industrial noise	Point	58.5	58.5	
Away S-1	Default industrial noise	Point	57.2	57.2	
Home S-1	Default industrial noise	Point	51.5	51.5	
Home S-2	Default industrial noise	Point	49.6	49.6	
Receiver ST-2 FI G Leq,d 64.7 dB(A) Leq,n 64.7 dB(A)					
Band	Default industrial noise	Area	58.9	58.9	
Away B	Default industrial noise	Area	49.0	49.0	
Home B	Default industrial noise	Area	59.3	59.3	
Home S-3	Default industrial noise	Point	55.0	55.0	
Away S-2	Default industrial noise	Point	47.0	47.0	
Away S-3	Default industrial noise	Point	47.3	47.3	
Away S-1	Default industrial noise	Point	47.0	47.0	
Home S-1	Default industrial noise	Point	56.3	56.3	
Home S-2	Default industrial noise	Point	55.2	55.2	
Receiver ST-3 FI G Leq,d 59.3 dB(A) Leq,n 59.3 dB(A)					
Band	Default industrial noise	Area	53.0	53.0	
Away B	Default industrial noise	Area	44.5	44.5	
Home B	Default industrial noise	Area	51.8	51.8	
Home S-3	Default industrial noise	Point	51.7	51.7	
Away S-2	Default industrial noise	Point	41.3	41.3	
Away S-3	Default industrial noise	Point	41.2	41.2	
Away S-1	Default industrial noise	Point	42.9	42.9	
Home S-1	Default industrial noise	Point	51.1	51.1	
Home S-2	Default industrial noise	Point	51.6	51.6	

PlaceWorks 3 MacArthur Place, Ste 1100 Santa Ana, CA 92707 USA

1

Capistrano Valley High School Stadium Modernization Octave spectra of the sources in dB(A) - Existing 1500

3

Name	Source type	I or A m,m²	Li dB(A)	Rw dB	L'w dB(A)	Lw dB(A)	KI dB	KT dB	LwMax dB(A)	DO-Wall dB	Day histogram	Emission spectrum	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)	16kHz dB(A)
Away B	Area	190.65			94.1	116.9	0.0	0.0		0	Crowd during Game 10 min 60*10 sec	American Football, Spectators's area		90.9	106.0	113.8	109.8	109.5	103.1	94.0	
Away S-1	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Away S-2	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Away S-3	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Band	Area	61.81			102.1	120.0	0.0	0.0		0	Band during Game 20% = 12 minutes	Live bands (Pop, Rock, Metal)	105.5	105.0	109.6	114.5	115.3	111.9	107.2	99.7	81.6
Home B	Area	716.60			91.4	120.0	0.0	0.0		0	Crowd during Game 10 min 60*10 sec	American Football, Spectators's area		94.0	109.1	116.9	112.9	112.6	106.2	97.1	
Home S-1	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Home S-2	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Home S-3	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3

PlaceWorks 3 MacArthur Place, Ste 1100 Santa Ana, CA 92707 USA

1

Capistrano Valley High School Stadium Modernization

Hourly sound power level in dB(A) - Exisitng 1500

5

Name	0-1 o'clock dB(A)	1-2 o'clock dB(A)	2-3 o'clock dB(A)	3-4 o'clock dB(A)	4-5 o'clock dB(A)	5-6 o'clock dB(A)	6-7 o'clock dB(A)	7-8 o'clock dB(A)	8-9 o'clock dB(A)	9-10 o'clock dB(A)	10-11 o'clock dB(A)	11-12 o'clock dB(A)	12-13 o'clock dB(A)	13-14 o'clock dB(A)	14-15 o'clock dB(A)	15-16 o'clock dB(A)	16-17 o'clock dB(A)	17-18 o'clock dB(A)	18-19 o'clock dB(A)	19-20 o'clock dB(A)	20-21 o'clock dB(A)	21-22 o'clock dB(A)	22-23 o'clock dB(A)	23-24 o'clock dB(A)
Away B	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1
Away S-1	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Away S-2	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Away S-3	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Band	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Home B	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2
Home S-1	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Home S-2	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Home S-3	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0

PlaceWorks 3 MacArthur Place, Ste 1100 Santa Ana, CA 92707 USA

1

Noise level

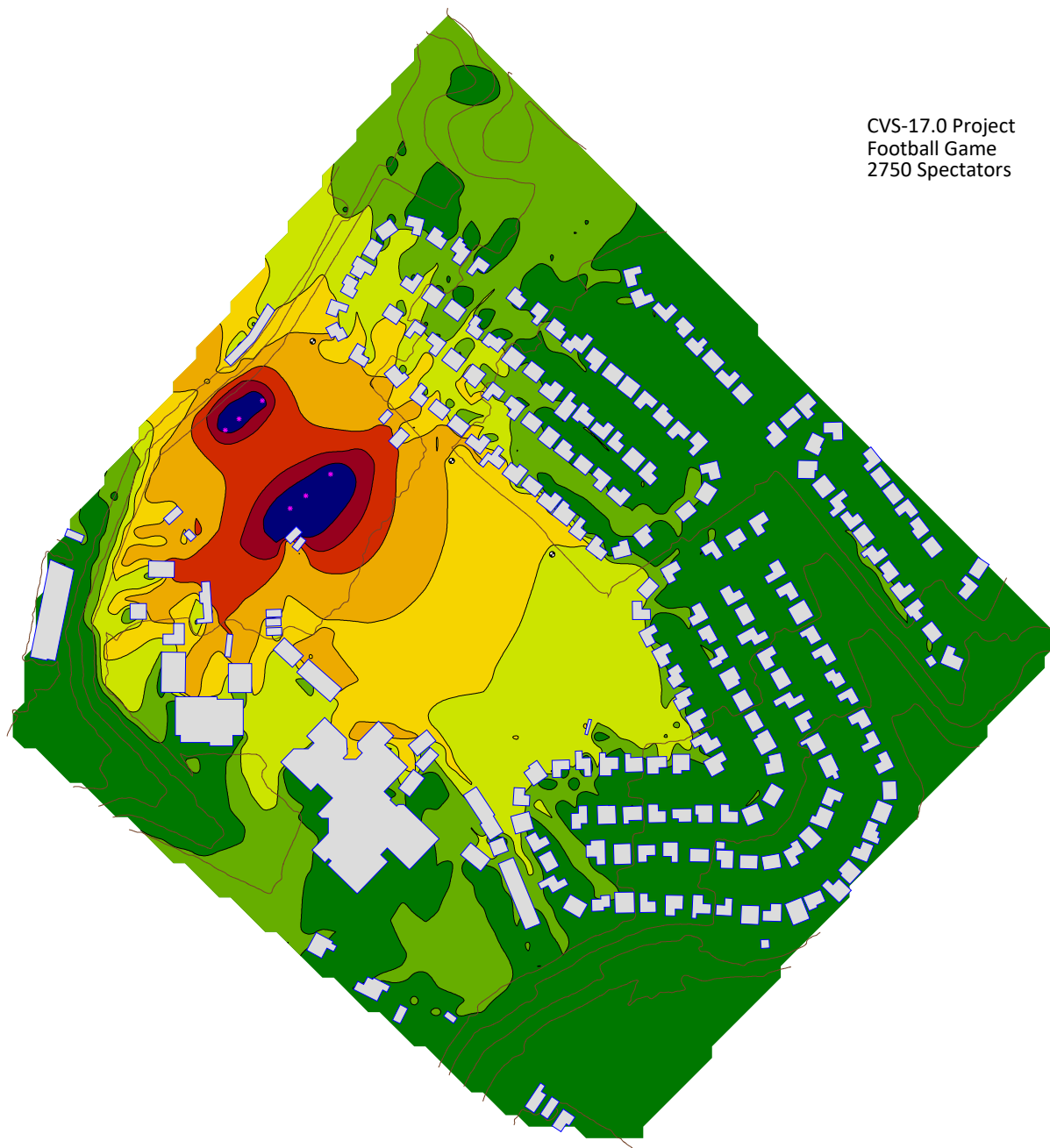
Leq,d
in dB(A)

		<= 50
50 <		<= 55
55 <		<= 60
60 <		<= 65
65 <		<= 70
70 <		<= 75
75 <		<= 80
80 <		

Signs and symbols

-  Point source
-  Area source
-  Building
-  Elevation line
-  Receiver

CVS-17.0 Project
Football Game
2750 Spectators



2

[illegible]

	PlaceWorks 3 MacArthur Place, Ste 1100 Santa Ana, CA 92707 USA	1
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Capistrano Valley High School Stadium Modernization

Contribution level - Project

9

Source	Source group	Source ty	Leq,d dB(A)	Leq,n dB(A)	
Receiver ST-1 FI G Leq,d 66.5 dB(A) Leq,n 66.5 dB(A)					
Away S-2	Default industrial noise	Point	55.6	55.6	
Away S-3	Default industrial noise	Point	58.5	58.5	
Away S-1	Default industrial noise	Point	57.2	57.2	
Home S-1	Default industrial noise	Point	51.5	51.5	
Home S-2	Default industrial noise	Point	49.6	49.6	
Band	Default industrial noise	Area	57.6	57.6	
Home S-3	Default industrial noise	Point	49.9	49.9	
Away Bleachers	Default industrial noise	Area	60.5	60.5	
Home Bleachers	Default industrial noise	Area	59.4	59.4	
Receiver ST-2 FI G Leq,d 65.8 dB(A) Leq,n 65.8 dB(A)					
Away S-2	Default industrial noise	Point	47.0	47.0	
Away S-3	Default industrial noise	Point	47.3	47.3	
Away S-1	Default industrial noise	Point	47.0	47.0	
Home S-1	Default industrial noise	Point	56.3	56.3	
Home S-2	Default industrial noise	Point	55.2	55.2	
Band	Default industrial noise	Area	58.9	58.9	
Home S-3	Default industrial noise	Point	55.5	55.5	
Away Bleachers	Default industrial noise	Area	50.8	50.8	
Home Bleachers	Default industrial noise	Area	62.3	62.3	
Receiver ST-3 FI G Leq,d 60.1 dB(A) Leq,n 60.1 dB(A)					
Away S-2	Default industrial noise	Point	41.3	41.3	
Away S-3	Default industrial noise	Point	41.2	41.2	
Away S-1	Default industrial noise	Point	42.9	42.9	
Home S-1	Default industrial noise	Point	51.1	51.1	
Home S-2	Default industrial noise	Point	51.6	51.6	
Band	Default industrial noise	Area	53.0	53.0	
Home S-3	Default industrial noise	Point	51.7	51.7	
Away Bleachers	Default industrial noise	Area	46.3	46.3	
Home Bleachers	Default industrial noise	Area	54.8	54.8	

Capistrano Valley High School Stadium Modernization

Octave spectra of the sources in dB(A) - Project

3

Name	Source type	I or A m,m²	Li dB(A)	Rw dB	L'w dB(A)	Lw dB(A)	KI dB	KT dB	LwMax dB(A)	DO-Wall dB	Day histogram	Emission spectrum	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)	16kHz dB(A)
Away Bleachers	Area	190.65			95.9	118.7	0.0	0.0		0	Crowd during Game 10 min 60*10 sec	American Football, Spectators's area		92.7	107.8	115.6	111.6	111.3	104.9	95.8	
Away S-1	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Away S-2	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Away S-3	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Band	Area	61.81			102.1	120.0	0.0	0.0		0	Band during Game 20% = 12 minutes	Live bands (Pop, Rock, Metal)	105.5	105.0	109.6	114.5	115.3	111.9	107.2	99.7	81.6
Home Bleachers	Area	716.60			94.4	123.0	0.0	0.0		0	Crowd during Game 10 min 60*10 sec	American Football, Spectators's area		97.0	112.1	119.9	115.9	115.6	109.2	100.1	
Home S-1	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Home S-2	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3
Home S-3	Point				120.0	120.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	91.7	106.3	109.1	114.7	115.4	112.2	107.0	100.7	79.3

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Capistrano Valley High School Stadium Modernization

Hourly sound power level in dB(A) - Project

5

Name	0-1 o'clock dB(A)	1-2 o'clock dB(A)	2-3 o'clock dB(A)	3-4 o'clock dB(A)	4-5 o'clock dB(A)	5-6 o'clock dB(A)	6-7 o'clock dB(A)	7-8 o'clock dB(A)	8-9 o'clock dB(A)	9-10 o'clock dB(A)	10-11 o'clock dB(A)	11-12 o'clock dB(A)	12-13 o'clock dB(A)	13-14 o'clock dB(A)	14-15 o'clock dB(A)	15-16 o'clock dB(A)	16-17 o'clock dB(A)	17-18 o'clock dB(A)	18-19 o'clock dB(A)	19-20 o'clock dB(A)	20-21 o'clock dB(A)	21-22 o'clock dB(A)	22-23 o'clock dB(A)	23-24 o'clock dB(A)
Away Bleachers	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9
Away S-1	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Away S-2	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Away S-3	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Band	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Home Bleachers	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2
Home S-1	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Home S-2	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
Home S-3	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0

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Appendix D Air Quality

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AIR QUALITY

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in South Coast Air Quality Management District's (South Coast AQMD) *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD's website (South Coast AQMD 1993, 2023). The California Environmental Quality Act (CEQA) allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. South Coast AQMD has established thresholds of significance for regional air quality emissions for operational activities. In addition to the daily thresholds listed in Table 1, *South Coast AQMD Regional Operation Significance Thresholds*, projects are also subject to the ambient air quality standards (AAQS), which are addressed through the localized carbon monoxide (CO) impacts and localized significance thresholds (LST).

Regional Operational Significance Thresholds

South Coast AQMD has adopted regional operational emissions thresholds to determine a project's cumulative impact on air quality in the South Coast Air Basin (SoCAB). Table 1, *South Coast AQMD Regional Operation Significance Thresholds*, lists thresholds that are applicable for all projects uniformly, regardless of size or scope. There is growing evidence that although ultrafine particulates (PM₁₀) contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from particulate matter (PM). However, the US Environmental Protection Agency (EPA) and California Air Resources Board (CARB) have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 1 South Coast AQMD Regional Operation Significance Thresholds

Air Pollutant	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	55 lbs/day
Nitrogen Oxides (NO _x)	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day
Particulates (PM ₁₀)	150 lbs/day
Particulates (PM _{2.5})	55 lbs/day

Source: South Coast AQMD 2023.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- » Linked to increased cancer risk (PM_{2.5}, toxic air contaminants [TACs])
- » Aggravates respiratory disease (O₃, PM_{2.5})
- » Increases bronchitis (O₃, PM_{2.5})
- » Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O₃)
- » Reduces resistance to infections and increases fatigue (O₃)
- » Reduces lung growth in children (PM_{2.5})

- » Contributes to heart disease and heart attacks (PM_{2.5})
- » Contributes to premature death (O₃, PM_{2.5})
- » Linked to lower birth weight in newborns (PM_{2.5}) (South Coast AQMD 2011a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM_{2.5} is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015).

Mass emissions in Table 1 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not usually trigger a regional health impact. South Coast AQMD is the primary agency responsible for ensuring the health and welfare of individuals sensitive to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an air quality management plan (AQMP) that details regional programs to attain the AAQS.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for attainment by South Coast AQMD did not predict a violation of CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods.¹ As identified in South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection (South Coast AQMD 2003). To generate a significant CO impact under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (BAAQMD 2023).

Localized Construction Significance Thresholds

South Coast AQMD developed LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at a project site, as seen in Table 2, *South Coast AQMD Localized Significance Thresholds*. Emissions of NO₂, CO, PM₁₀, and PM_{2.5} could expose sensitive receptors to substantial concentrations of criteria air pollutants. Off-site mobile-source emissions are not

¹ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day, with LOS E in the morning peak hour and LOS F in the evening peak hour.

included in the LST analysis. A project would generate a significant impact if it would generate emissions that, when added to the local background concentrations, violate the AAQS.

Table 2 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
24-Hour PM _{2.5} Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³

Source: South Coast AQMD 2023.

ppm = parts per million; µg/m³ = micrograms per cubic meter; CAAQS = California Air Quality Management Standards

¹ Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is nonattainment for PM₁₀ and PM_{2.5}, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated on-site that would trigger the levels shown in Table 2 for projects under five acres. These “screening-level” LSTs are the localized significance thresholds for all projects of five acres and less; however, they can be used as screening criteria for larger projects to determine whether dispersion modeling may be required in order to compare concentrations of air pollutants generated by the project to the concentrations shown in Table 2.

In accordance with South Coast AQMD’s LST methodology, the screening-level operational LSTs are based on the project site’s size of 4 acres. The screening-level operational LSTs for the project site in Source Receptor Area 21 (SRA 21), Capistrano Valley, are shown in Table 3, *South Coast AQMD Screening-Level Localized Construction Significance Thresholds*.

Table 3 South Coast AQMD Screening-Level Localized Construction Significance Thresholds

Project Site Size	Threshold (lbs/day)			
	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
1.00 Acres	91	696	4	3
1.31 Acres	104	789	5	3
2.31 Acres	138	1,077	7	4
2.50 Acres	142	1,128	7	5
3.50 Acres	164	1,399	9	6

Source: South Coast AQMD 2008 and 2011b.

Notes: In accordance with South Coast AQMD methodology, screening level LSTs are based on non-sensitive receptors within 82 feet (25 meters) in SRA 21.

This section addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations.

The primary air pollutants of concern for which the AAQS have been established are ozone (O₃), carbon monoxide (CO), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead (Pb). Areas are classified under the federal and California Clean Air Acts as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The SoCAB, which is managed by the South Coast AQMD, is designated nonattainment for O₃ and PM_{2.5} under the California and National AAQS, nonattainment for PM₁₀ under the California AAQS, and nonattainment for lead (Los Angeles County only) under the National AAQS (CARB 2024).

Project Construction Phase

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust from off-road, diesel-powered construction equipment; 2) dust generated by construction activities; 3) exhaust from on-road vehicles; and 4) off-gassing of volatile organic compounds (VOC) from paints and asphalt.

Construction is anticipated to take approximately 15 months, from February 2025 to May 2026. Construction emissions were estimated using CalEEMod version 2022.1 and based on the preliminary construction duration provided by the District and the CalEEMod default equipment mix. The CalEEMod default assumptions assume more intensive level of equipment use than is anticipated by the District during construction activities, so therefore the following results are conservative. Construction emissions modeling is shown in Table 4, *Maximum Daily Regional Construction Emissions*.

Table 4 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day) ^{1, 2}					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 2025						
Demolition	2	24	21	<1	3	1
Site Preparation	3	32	31	<1	8	4
Grading	2	17	19	<1	4	2
Building Construction	1	10	13	<1	<1	<1
Year 2026						
Building Construction	1	10	13	<1	<1	<1
Paving	1	6	10	<1	1	<1
Architectural Coating	5	1	1	<1	<1	<1
Finishing/Landscaping	<1	1	2	<1	<1	<1
Building Construction, Paving, Architectural Coating, and Finishing/Landscaping	7	18	26	<1	1	1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	7	32	31	<1	8	4
South Coast AQMD Regional Construction Threshold	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

Table 4 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day) ^{1, 2}					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}

Source: CalEEMod Version 2022.1

¹ Based on the preliminary information provided or verified by the District. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment.

² Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including reducing speed limit to 25 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers. Also it would be standard procedure to water exposed areas 3 times per day during ground disturbing activities.

As shown in Table 4, maximum daily emissions from construction activities would be below the South Coast AQMD regional significance thresholds. Therefore, impacts related to the project-related construction activities would be less than significant, and will not represent an unusual circumstance.

Construction LSTs

Localized significance thresholds are based on the California AAQS, which are the most stringent AAQS to provide a margin of safety in the protection of public health and welfare. They are designated to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. Screening-level LSTs are the amount of project-related emissions at which localized concentrations (ppm or µg/m³) could exceed the AAQS for criteria air pollutants for which the SoCAB is designated nonattainment. They are based on the size of the area disturbed, distance to the nearest sensitive receptor, and SRA. The nearest existing off-site residential sensitive receptor are the single-family residences adjacent to the project site on Oso Rojo, Boleada, and Mirar Vista Drive.

Table 5, *Localized Construction Emissions*, shows that the maximum daily on-site construction emissions (pounds per day) for NO_x, CO, PM₁₀, and PM_{2.5} would be less than their respective South Coast AQMD screening-level LSTs. The proposed project's standard procedure to water exposed areas at least three times a day during ground disturbing activities will ensure that fugitive dust emissions do not exceed the screening level LSTs. Therefore, project-related construction activities would not expose sensitive receptors to substantial criteria air pollutant concentrations, and impacts would be less than significant and will not represent an unusual circumstance.

Table 5 Localized Construction Emissions

Construction Activity	Pollutants(lbs/day) ¹			
	NO _x	CO	PM ₁₀ ²	PM _{2.5} ²
Building Demolition 2025	22	20	2	1
1.00-Acre or Less Screening-Level LST	91	696	4	3
Exceeds LST?	No	No	No	No
Building Construction 2025	10	10	<1	<1
Building Construction 2026	1	10	<1	<1
1.31-Acre or Less Screening-Level LST	104	789	5	3
Exceeds LST?	No	No	No	No

Building Construction, Paving, Architectural Coating, and Finishing/Landscaping 2026	7	18	<1	<1
2.31-Acre or Less Screening-Level LST	138	1,077	7	4
Exceeds LST?	No	No	No	No
Grading 2025	16	18	4	2
2.50-Acre Screening-Level LST	142	1,128	7	5
Exceeds LST?	No	No	No	No
Site Preparation 2025	32	30	8	4
3.5-Acre Screening-Level LST	164	1,399	9	6
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2022.1. South Coast AQMD 2008 and 2023.

Notes: In accordance with South Coast AQMD methodology, only on-site stationary sources and mobile equipment are included in the analysis. Screening-level LSTs are based on receptors within 82 feet (25 meters) of the project site in SRA 21.

¹ Based on the preliminary information provided by the District. Where specific information for project-related construction activities or processes was not available, modeling was based on CalEEMod defaults. These defaults are based on construction surveys conducted by the South Coast AQMD.

² Includes fugitive dust control measures required by South Coast AQMD under Rule 403, such as reducing speed limit to 25 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers. As a standard procedure, exposed areas shall be watered 3 times per day during ground disturbing activities.

Project Operation Phase

Long-term air pollutant emissions associated with the proposed project include area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement), energy use (e.g., natural gas use from cooling and heating), and mobile sources (i.e., on-road vehicles). The primary source of long-term criteria air pollutant emissions generated by the proposed project would be mobile emissions from project-generated vehicle trips for stadium events. Based on data provided by Garland & Associates, the proposed project would generate an additional 690 new vehicle trips at a maximum capacity event (Appendix B).²

As shown in Table 6, *Maximum Daily Regional Operation Emissions*, the maximum daily operation emissions would be less than their respective South Coast AQMD regional significance threshold values. Therefore, the operation of the proposed project would not contribute to the nonattainment designations of the SoCAB, and regional air quality impacts are less than significant and will not represent an unusual circumstance.

Table 6 Regional Operation Emissions

Source	Maximum Daily Emissions (lbs/Day)					
	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Mobile ¹	5	3	33	0	7	2
Area	<1	<1	0	<1	<1	<1
Energy	<1	<1	0	<1	<1	<1
Total	5	3	33	<1	7	2
South Coast AQMD Regional Threshold	55	55	550	150	150	550

² The emission results shown below incorporate a net increase of 1,715 trips during a maximum capacity event based on a previous version of the proposed project with a larger proposed bleacher capacity.

Exceeds Threshold?	No	No	No	No	No	No
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Source: CalEEMod Version 2022.1 Highest winter or summer emissions are reported.

¹ These emissions results incorporate a net increase of 1,715 trips during a maximum capacity event based on a previous version of the proposed project with a larger proposed bleacher capacity. Therefore, these results reflect a more conservative level of maximum trips than anticipated.

Note: lbs – Pounds.

Localized Long-Term Operational Impacts

Operation of the proposed project would not generate substantial quantities of emissions from on-site, stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from South Coast AQMD include industrial land uses, such as chemical processing and warehousing operations where substantial truck idling could occur on-site (CARB 2005). The proposed project does not fall within these categories of uses.

While operation of the proposed project could result in the use of standard on-site mechanical equipment and occasional use of landscaping equipment for project site maintenance, air pollutant emissions generated from these sources would be nominal (see Table 6). Therefore, on-site emissions generated from operation of the proposed project would not expose off-site sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations typically produced at intersections. The SoCAB has been designated as attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2023).

The proposed project would increase the capacity of the campus’s existing stadium resulting in a net increase of vehicle trips during events at the facilities. Per the traffic impact analysis (TIA), the project-related 345 new PM daily vehicle trips would only occur when a capacity event at the stadium would occur. In addition, as shown in Table 4, *Project Impact On Peak Hour Traffic Volumes*, of the TIA, the with project peak hour volumes would not exceed the CO hotspot screening levels (Garland & Associates 2024). Thus, development and operation of the proposed project would not produce the volume of traffic required to generate a CO hotspot at nearby intersections. Therefore, the proposed project would not substantially increase CO hotspots at intersections and impacts would be less than significant.

Odors

The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions

of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatment plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project does not include any of these uses.

Construction activities could also generate odors from construction equipment, such as diesel exhaust, and from VOCs from architectural coatings and paving activities. However, these odors would be temporary and confined to the immediate vicinity of the construction equipment. They are not expected to affect a substantial number of people. Therefore, impacts related to objectionable operational and construction-related odors would be less than significant.

6. REFERENCES

- Bay Area Air Quality Management District (BAAQMD). 2023, April. 2022 California Environmental Quality Act Air Quality Guidelines. <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>.
- California Air Pollution Control Officer's Association (CAPCOA). 2022, April. CalEEMod, California Emissions Estimator Model User Guide, Version 2022.1. Prepared by: ICF in collaboration with Sacramento Metropolitan Air Quality Management District. <https://www.caleemod.com/user-guide>.
- California Air Resources Board (CARB). 2005, April. Air Quality and Land Use Handbook: A Community Health Perspective. <https://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf>.
- . 2024, February 7 (accessed). Maps of State and Federal Area Designations. <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>.
- Garland & Associates. 2024, December 9. Project Generated Traffic, Capistrano Valley High School Stadium Modernization Project.
- South Coast Air Quality Management District (South Coast AQMD). 1993. *California Environmental Quality Act Air Quality Handbook*.
- . 2003, August. 2003 Air Quality Management Plan. Appendix V. <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp>.
- . 2008, July. Final Localized Significance Threshold Methodology. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>.
- . 2011a, December. The Health Effects of Air Pollution. <http://www.aqmd.gov/docs/default-source/publications/brochures/the-health-effects-of-air-pollution-brochure.pdf>.
- . 2011b. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>.

- . 2015, October. "Blueprint for Clean Air: 2016 AQMP White Paper." 2016 AQMP White Papers Web Page.
<https://www.aqmd.gov/docs/default-source/Agendas/aqmp/white-paper-working-groups/wp-blueprint-final.pdf?sfvrsn=2>.
- . 2023, March (revised). South Coast AQMD Air Quality Significance Thresholds.
<https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25>.

CalEEMod Inputs- Capistrano Valley HS Stadium Project, Construction

Name:	Capistrano Valley HS Stadium Project, Construction
Project Number:	CVS-17
Project Location:	26301 Via Escolar, Mission Viejo, CA 92692
County/Air Basin:	Orange-South Coast
Climate Zone:	12
Land Use Setting:	Suburban
Operational Year:	2025
Gas Utility:	Southern California Gas
Electric Utility:	San Diego Gas & Electric
Air Basin:	South Coast Air Basin
Air District:	South Coast AQMD
SRA:	21- Capistrano Valley

Project Site Acreage	
Disturbed Site Acreage	4.00

Demolition	SQFT	Tons of Debris
Building Demolition	2,000	92
Asphalt Demolition	67,000	993
TOTAL		1,085

Project Components	SQFT	Building Footprint	Acres	Number of Stories
Construction				
Building K	2,160	2,160	0.05	1
Building L	1,973	1,973	0.05	1
Building M	2,387	2,387	0.05	1
Surface Work				Number of Stalls
Asphalt	23,000		0.53	
Landscaping	6,453		0.15	
Replacement of Existing Parking Lot	8,500		0.20	35
Hardscape	26,000		0.60	
TOTAL	70,473		1.62	
Extra Hardscape ¹	103,767		2.38	
TOTAL	174,240		4.00	

Notes
¹ Accounts for additional acreage of disturbance

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Landscaped Area	Special Landscaped Area
Education	High School	6.52	1000 sqft	0.30	6,520	6,453	0
Parking	Other Non-Asphalt Surfaces	129.77	1000 sqft	2.98	129,767	-	-
Parking	Parking Lot	8.50	1000 sqft	0.20	8,500	-	-
Parking	Other Asphalt Surfaces	23.00	1000 sqft	0.53	23,000		
				4.00			

Demolition

Component	Amount to be Demolished	Haul Truck Capacity ¹	Haul Distance (miles) ¹	Total Trip Ends	Duration (days)	Trip Ends Per Day
Building (CY)	184	16	20	24	21	2
Asphalt (tons)	993	8	20	249	21	12
Total				273		14

Notes¹ CalEEMod defaults**Architectural Coating**

	Percent Painted
Interior Painted:	100%
Exterior Painted:	100%

SCAQMD Rule 1113

Interior Paint VOC content:	50	grams per liter
Exterior Paint VOC content:	50	grams per liter
Parking Paint VOC content:	100	grams per liter

Structures	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface Area	Paintable Interior Area ¹	Paintable Exterior Area ¹
Non-Residential Structures					
School Buildings	6,520	2.0	13,040	9,780	3,260
				9,780	3,260
Parking					
Parking Area	161,267	6%	9,676	-	9,676
					9,676

Notes¹

CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

² The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user.³ Assumes that all parking and non-parking asphalt will be striped. CalEEMod methodology assumes 6% of surface area is striped.**Construction Mitigation****SCAQMD Rule 403****Water Unpaved Roads**

Frequency:	2	per day
PM10:	55	% Reduction
PM25:	55	% Reduction

Unpaved Roads

Vehicle Speed:	25	mph
----------------	----	-----

SCAQMD Rule 1186

Clean Paved Road	9	% PM Reduction
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San Diego Gas & Electric Energy Intensity Factors

	Forecasted Factors 2026 ¹	
CO ₂ :	45.099	pounds per megawatt hour
CH ₄ :	0.033	pound per megawatt hour
N ₂ O:	0.004	pound per megawatt hour

Notes¹ CalEEMod defaults used.

Construction Activities and Schedule Assumptions

* based on construction start and end dates provided by District

CalEEMod Default Construction Schedule				
Construction Activities	Phase Type	Start Date	End Date	CalEEMod Duration (Workday)
Demolition	Demolition	2/1/2025	3/1/2025	20
Site Preparation	Site Preparation	3/2/2025	3/9/2025	5
Grading	Grading	3/10/2025	3/21/2025	10
Building Construction	Building Construction	3/22/2025	2/7/2026	230
Paving	Paving	2/8/2026	3/5/2026	19
Architectural Coating	Architectural Coating	3/6/2026	3/31/2026	18

Normalization Calculations

CalEEMod Defaults Construction Duration	
423	days of construction
1.16	years of construction
13.91	months of construction

Assumed Construction Duration	
2/1/2025	5/1/2026
454	days
14.93	months

Norm Factor: 1.07

New Construction Schedule (CalEEMod)

Construction Activities	Start Date	End Date	CalEEMod Duration (Workday)	Final Adjusted Duration
Demolition	2/1/2025	3/3/2025	21	21
Site Preparation	3/4/2025	3/10/2025	7	5
Grading	3/11/2025	3/25/2025	9	11
Building Construction	3/26/2025	5/1/2026	248	288
Paving	4/3/2026	5/1/2027	20	21
Architectural Coating	4/3/2026	5/1/2026	20	21
Finishing and Landscaping	4/3/2026	5/1/2026	20	21

Notes

¹ Assume Building Construction, Paving, Architectural Coating, and Finishing and Landscaping phases overlap for conservative estimate.

CalEEMod Construction Off-Road Equipment Inputs

*Based on information from District. Where information has not been provided, CalEEMod default equipment, worker, and vendor trips have been used.

Construction Equipment Details					
Equipment	# of Equipment	hr/day	hp	load factor	total trips per day
Demolition					
Concrete/Industrial Saws	1	8	33	0.73	
Excavators	3	8	36	0.38	
Rubber Tired Dozers	2	8	367	0.4	
Worker Trips					15
Vendor Trips					0
Hauling Trips					14
Water Trucks		Acres Disturbed:	1.0		6
Onsite Travel (mi/day)			1.24		
Site Preparation					
Rubber Tired Dozers	3	8	367	0.4	
Tractors/Loaders/Backhoes	4	8	84	0.37	
Worker Trips					18
Vendor Trips					0
Hauling Trips					0
Water Trucks		Acres Disturbed:	3.5		18
Onsite Travel (mi/day)			4.33		
Grading					
Excavators	1	8	36	0.38	
Graders	1	8	148	0.41	
Rubber Tired Dozers	1	8	367	0.4	
Tractors/Loaders/Backhoes	3	8	84	0.37	
Worker Trips					15
Vendor Trips					0
Hauling Trips					0
Water Trucks		Acres Disturbed:	2.5		14
Onsite Travel (mi/day)			3.09		

Building Construction					
Cranes	1	7	367	0.29	
Forklifts	3	8	82	0.2	
Generator Sets	1	8	14	0.74	
Tractors/Loaders/Backhoes	3	7	84	0.37	
Welders	1	8	46	0.45	
Worker Trips					3
Vendor Trips					1
Hauling Trips					0
Paving					
Pavers	1	8	81	0.42	
Cement and Mortar Mixers	2	6	10	0.56	
Tractors/Loaders/Backhoes	1	8	36	0.37	
Paving Equipment	2	8	89	0.36	
Rollers	2	8	36	0.38	
Worker Trips					20
Vendor Trips					0
Hauling Trips					0
Architectural Coating					
Air Compressors	1	6	37	0.48	
Worker Trips					1
Vendor Trips					0
Hauling Trips					0
Finishing and Landscaping ¹					
Tractors/Loaders/Backhoes	1	8	84	0.37	
Worker Trips					3
Vendor Trips					0
Hauling Trips					0

Notes:

¹ Equipment mix based on similar past school development projects.

Water Truck Vendor Trip Calculation

Amount of Water (gal/acre/day)¹	Water Truck Capacity (gallons)²
10,000	4,000

Notes

¹ Based on data provided in Guidance for Application for Dust Control Permit

Maricopa County Air Quality Department. 2005, June. Guidance for Application of Dust Control Permit. https://www.epa.gov/sites/default/files/2019-04/documents/mr_guidanceforapplicationfordustcontrolpermit.pdf

² Based on standard water truck capacity:

McLellan Industries. 2024, January (access). Water Trucks. <https://www.mclellanindustries.com/trucks/water-trucks/>

³ Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

Building Demolition Haul Trip Calculation

Conversion factors*

0.046 ton/SF	Building Debris
2.0 CY/ton	Building Debris
1.2641662 tons/cy	Soil
20 tons	Truck Capacity in tons
16 CY	Truck Capacity in CY
0.791035229 CY/ton	Soil

Building	BSF Demo	Tons/SF	Tons	CY of Building Materials	Haul Truck (CY)	Round Trips	Total Trip Ends
Building Demolition	2,000 2,000	0.046	92	184	16	12	24

*CalEEMod User's Guide Version 2022, Appendix C

Pavement Volume to Weight Conversion

Component	Total SF of Area ¹	Assumed Thickness (foot) ²	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf) ³	AC Mass (lbs)	AC Mass (tons)
Asphalt Demolition	67,000	0.333	22,333	89	1,985,185	992.59
Total	67,000					993

¹ Based on aerial image of existing project site.

² Pavements and Surface Materials. Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Connecticut Cooperative Extension System, 1999.

³ <https://www.delmar.ca.us/DocumentCenter/View/5668/CalRecycle-Conversion-Table>

CalEEMod Inputs- Capistrano Valley HS Stadium Project, Construction

Name:	Capistrano Valley HS Stadium Project, Construction
Project Number:	CVS-17
Project Location:	26301 Via Escolar, Mission Viejo, CA 92692
County/Air Basin:	Orange-South Coast
Climate Zone:	12
Land Use Setting:	Suburban
Operational Year:	2025
Gas Utility:	Southern California Gas
Electric Utility:	San Diego Gas & Electric
Air Basin:	South Coast Air Basin
Air District:	South Coast AQMD
SRA:	21- Capistrano Valley

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Building Square Feet	Landscaped Area
Education	High School	7	1000 sqft	0.30	6,520	6,453
Parking	Other Non-Asphalt Surfaces	130	1000 sqft	2.98	129,767	
Parking	Parking Lot	9	1000 sqft	0.20	8,500	
Parking	Other Asphalt Surfaces	23	1000 sqft	0.53	23,000	-
				4.00		

Trips (Average Weekday Daily)

Land Use Type	Average Weekday Daily Trips	CalEEMod Trip Rate	Saturday Trips	CalEEMod Trip Rate	Sunday Trips	CalEEMod Trip Rate
Elementary School	1,715	263.04	0	0.00	0	0.00

Source: Garland & Associates. November 21, 2024, Capistrano Valley HS Stadium Modernization Project Generated Traffic

Notes

¹ No trips on weekend as the majority of events would occur during weekdays.

Water Use (CalEEMod Defaults)¹

	Indoor (gals/year)	Outdoor (gals/year)	Total
High School	216,494	185,851	402,345

Notes

¹ Assumes 100% aerobic treatment.

Solid Waste (CalEEMod Defaults)

Land Use	Total Solid Waste (tons/yr)
High School	8.48

Electricity (Buildings)

CalEEMod Default Energy Use

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBtu/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Title-24 Natural Gas Energy Intensity (kBtu/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (kBtu/size/year)
Elementary School	43,983.51	102,685	36,957.60	56,803.10	7,025.91	45,882.34
Parking Lot	7,446.00	0	7,446.00	0.00	0.00	0.00
Total	51,429.51	102,685				

Architectural Coating (see construction land use tab)

CVS-17 Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CVS-17
Construction Start Date	2/1/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	18.4
Location	26301 Via Escolar, San Juan Capistrano, CA 92692, USA
County	Orange
City	Mission Viejo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	6043
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
High School	6.52	1000sqft	0.30	6,520	6,453	6,453	—	—

Other Non-Asphalt Surfaces	130	1000sqft	2.98	0.00	0.00	—	—	—
Parking Lot	8.50	1000sqft	0.20	0.00	0.00	—	—	—
Other Asphalt Surfaces	23.0	1000sqft	0.53	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.56	7.17	18.1	26.2	0.04	0.70	0.35	1.04	0.64	0.08	0.72	—	4,540	4,540	0.17	0.05	1.25	4,561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.06	3.39	32.4	31.3	0.05	1.37	7.10	8.47	1.26	2.88	4.14	—	6,107	6,107	0.25	0.22	0.09	6,153
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.05	0.88	8.17	9.55	0.02	0.34	0.33	0.67	0.31	0.10	0.41	—	1,838	1,838	0.08	0.03	0.18	1,850
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.16	1.49	1.74	< 0.005	0.06	0.06	0.12	0.06	0.02	0.08	—	304	304	0.01	0.01	0.03	306

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.36	1.14	10.5	13.2	0.02	0.43	0.04	0.48	0.40	0.01	0.41	—	2,468	2,468	0.10	0.03	0.23	2,478
2026	7.56	7.17	18.1	26.2	0.04	0.70	0.35	1.04	0.64	0.08	0.72	—	4,540	4,540	0.17	0.05	1.25	4,561
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.06	3.39	32.4	31.3	0.05	1.37	7.10	8.47	1.26	2.88	4.14	—	6,107	6,107	0.25	0.22	0.09	6,153
2026	1.29	1.08	9.90	13.1	0.02	0.38	0.04	0.42	0.35	0.01	0.36	—	2,465	2,465	0.10	0.03	0.01	2,475
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.05	0.88	8.17	9.55	0.02	0.34	0.33	0.67	0.31	0.10	0.41	—	1,838	1,838	0.08	0.03	0.18	1,850
2026	0.67	0.61	2.82	3.85	0.01	0.11	0.03	0.14	0.10	0.01	0.11	—	702	702	0.03	0.01	0.05	705
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.16	1.49	1.74	< 0.005	0.06	0.06	0.12	0.06	0.02	0.08	—	304	304	0.01	0.01	0.03	306
2026	0.12	0.11	0.51	0.70	< 0.005	0.02	0.01	0.02	0.02	< 0.005	0.02	—	116	116	< 0.005	< 0.005	0.01	117

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.60	5.22	2.97	32.8	0.08	0.05	7.18	7.23	0.05	1.82	1.87	4.98	7,876	7,881	0.93	0.33	26.9	8,031
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.50	5.12	3.22	31.1	0.07	0.05	7.18	7.23	0.05	1.82	1.87	4.98	7,579	7,584	0.95	0.35	0.72	7,713

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.99	3.72	2.32	22.8	0.05	0.04	5.07	5.11	0.03	1.29	1.32	4.98	5,483	5,488	0.82	0.25	8.31	5,591
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.73	0.68	0.42	4.16	0.01	0.01	0.93	0.93	0.01	0.23	0.24	0.82	908	909	0.14	0.04	1.38	926

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.36	4.99	2.94	32.5	0.08	0.05	7.18	7.23	0.04	1.82	1.87	—	7,835	7,835	0.42	0.33	26.9	7,972
Area	0.23	0.23	< 0.005	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.17	1.17	< 0.005	< 0.005	—	1.17
Energy	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.3	39.3	0.01	< 0.005	—	39.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.41	0.30	0.72	0.04	< 0.005	—	2.10
Waste	—	—	—	—	—	—	—	—	—	—	—	4.57	0.00	4.57	0.46	0.00	—	16.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	5.60	5.22	2.97	32.8	0.08	0.05	7.18	7.23	0.05	1.82	1.87	4.98	7,876	7,881	0.93	0.33	26.9	8,031
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.32	4.94	3.19	31.1	0.07	0.05	7.18	7.23	0.04	1.82	1.87	—	7,539	7,539	0.44	0.35	0.70	7,655
Area	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.3	39.3	0.01	< 0.005	—	39.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.41	0.30	0.72	0.04	< 0.005	—	2.10
Waste	—	—	—	—	—	—	—	—	—	—	—	4.57	0.00	4.57	0.46	0.00	—	16.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	5.50	5.12	3.22	31.1	0.07	0.05	7.18	7.23	0.05	1.82	1.87	4.98	7,579	7,584	0.95	0.35	0.72	7,713

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.77	3.50	2.29	22.6	0.05	0.03	5.07	5.10	0.03	1.29	1.32	—	5,442	5,442	0.31	0.25	8.29	5,533
Area	0.22	0.21	< 0.005	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.80	0.80	< 0.005	< 0.005	—	0.80
Energy	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.3	39.3	0.01	< 0.005	—	39.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.41	0.30	0.72	0.04	< 0.005	—	2.10
Waste	—	—	—	—	—	—	—	—	—	—	—	4.57	0.00	4.57	0.46	0.00	—	16.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	3.99	3.72	2.32	22.8	0.05	0.04	5.07	5.11	0.03	1.29	1.32	4.98	5,483	5,488	0.82	0.25	8.31	5,591
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.64	0.42	4.12	0.01	0.01	0.93	0.93	0.01	0.23	0.24	—	901	901	0.05	0.04	1.37	916
Area	0.04	0.04	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.50	6.50	< 0.005	< 0.005	—	6.56
Water	—	—	—	—	—	—	—	—	—	—	—	0.07	0.05	0.12	0.01	< 0.005	—	0.35
Waste	—	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.65
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.73	0.68	0.42	4.16	0.01	0.01	0.93	0.93	0.01	0.23	0.24	0.82	908	909	0.14	0.04	1.38	926

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.71	0.71	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.46	0.46	< 0.005	0.05	0.05	—	5.86	5.86	< 0.005	< 0.005	< 0.005	6.17
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.28	1.15	< 0.005	0.05	—	0.05	0.05	—	0.05	—	197	197	0.01	< 0.005	—	198
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.6	32.6	< 0.005	< 0.005	—	32.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.73	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	192
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	191	191	0.01	0.03	0.01	200
Hauling	0.09	0.02	1.23	0.53	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	977	977	0.08	0.16	0.05	1,026

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.2
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
Hauling	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	56.2	56.2	< 0.005	0.01	0.05	59.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.90
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.30	9.30	< 0.005	< 0.005	0.01	9.78

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	1.61	1.61	< 0.005	0.16	0.16	—	16.4	16.4	< 0.005	< 0.005	< 0.005	17.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.08	0.06	0.61	0.58	< 0.005	0.03	—	0.03	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.85	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	221	221	< 0.005	0.01	0.02	224
Vendor	0.04	0.02	0.62	0.30	< 0.005	< 0.005	0.15	0.16	< 0.005	0.04	0.05	—	574	574	0.03	0.08	0.04	599
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.30	4.30	< 0.005	< 0.005	0.01	4.35
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	1.15	1.15	< 0.005	0.11	0.11	—	12.2	12.2	< 0.005	< 0.005	< 0.005	12.8
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	73.0	73.0	< 0.005	< 0.005	—	73.2
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.1	12.1	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.73	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	192
Vendor	0.03	0.01	0.48	0.24	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	447	447	0.03	0.06	0.03	466
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.74	4.74	< 0.005	< 0.005	0.01	4.80
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.79
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.74	7.17	0.01	0.24	—	0.24	0.22	—	0.22	—	1,318	1,318	0.05	0.01	—	1,323
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.05	1.31	< 0.005	0.04	—	0.04	0.04	—	0.04	—	218	218	0.01	< 0.005	—	219

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.4	36.4	< 0.005	< 0.005	0.14	36.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.1	34.1	< 0.005	< 0.005	0.09	35.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.6	34.6	< 0.005	< 0.005	< 0.005	35.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.1	34.1	< 0.005	< 0.005	< 0.005	35.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.3	19.3	< 0.005	< 0.005	0.03	19.5
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	0.01	3.23
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	< 0.005	3.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.30	0.25	2.33	3.07	0.01	0.09	—	0.09	0.08	—	0.08	—	568	568	0.02	< 0.005	—	570
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.06	0.05	0.43	0.56	< 0.005	0.02	—	0.02	0.02	—	0.02	—	94.0	94.0	< 0.005	< 0.005	—	94.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	0.12	36.2
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.5	33.5	< 0.005	< 0.005	0.09	35.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.9	33.9	< 0.005	< 0.005	< 0.005	34.3
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.5	33.5	< 0.005	< 0.005	< 0.005	35.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.15	8.15	< 0.005	< 0.005	0.01	8.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.35	1.35	< 0.005	< 0.005	< 0.005	1.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.23	8.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,350	1,350	0.05	0.01	—	1,355
Paving	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.7	77.7	< 0.005	< 0.005	—	77.9
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.05	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	260	260	< 0.005	0.01	0.91	264
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	0.02	14.6

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.39	2.39	< 0.005	< 0.005	< 0.005	2.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.02	5.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.68	7.68	< 0.005	< 0.005	—	7.71

Architect ural	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.27	1.27	< 0.005	< 0.005	—	1.28
Architect ural Coating s	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.13	7.13	< 0.005	< 0.005	0.02	7.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Finishing and Landscaping (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.03	1.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	290	290	0.01	< 0.005	—	291
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.7	16.7	< 0.005	< 0.005	—	16.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.6	32.6	< 0.005	< 0.005	0.11	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	5.36	4.99	2.94	32.5	0.08	0.05	7.18	7.23	0.04	1.82	1.87	—	7,835	7,835	0.42	0.33	26.9	7,972
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.36	4.99	2.94	32.5	0.08	0.05	7.18	7.23	0.04	1.82	1.87	—	7,835	7,835	0.42	0.33	26.9	7,972
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	5.32	4.94	3.19	31.1	0.07	0.05	7.18	7.23	0.04	1.82	1.87	—	7,539	7,539	0.44	0.35	0.70	7,655
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.32	4.94	3.19	31.1	0.07	0.05	7.18	7.23	0.04	1.82	1.87	—	7,539	7,539	0.44	0.35	0.70	7,655
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.69	0.64	0.42	4.12	0.01	0.01	0.93	0.93	0.01	0.23	0.24	—	901	901	0.05	0.04	1.37	916
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.69	0.64	0.42	4.12	0.01	0.01	0.93	0.93	0.01	0.23	0.24	—	901	901	0.05	0.04	1.37	916

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	5.43	5.43	< 0.005	< 0.005	—	5.68
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92	< 0.005	< 0.005	—	0.96
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6.35	6.35	< 0.005	< 0.005	—	6.64
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	5.43	5.43	< 0.005	< 0.005	—	5.68
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92	< 0.005	< 0.005	—	0.96
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	6.35	6.35	< 0.005	< 0.005	—	6.64
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.90	0.90	< 0.005	< 0.005	—	0.94

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15	< 0.005	< 0.005	—	0.16
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05	< 0.005	< 0.005	—	1.10

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.9	32.9	< 0.005	< 0.005	—	33.0
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.9	32.9	< 0.005	< 0.005	—	33.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.9	32.9	< 0.005	< 0.005	—	33.0

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.9	32.9	< 0.005	< 0.005	—	33.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.45	5.45	< 0.005	< 0.005	—	5.46
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.45	5.45	< 0.005	< 0.005	—	5.46

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.05	< 0.005	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.17	1.17	< 0.005	< 0.005	—	1.17
Total	0.23	0.23	< 0.005	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.17	1.17	< 0.005	< 0.005	—	1.17
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Total	0.04	0.04	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.41	0.30	0.72	0.04	< 0.005	—	2.10
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.41	0.30	0.72	0.04	< 0.005	—	2.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.41	0.30	0.72	0.04	< 0.005	—	2.10
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.41	0.30	0.72	0.04	< 0.005	—	2.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.07	0.05	0.12	0.01	< 0.005	—	0.35

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.07	0.05	0.12	0.01	< 0.005	—	0.35

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	4.57	0.00	4.57	0.46	0.00	—	16.0
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.57	0.00	4.57	0.46	0.00	—	16.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	4.57	0.00	4.57	0.46	0.00	—	16.0

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.57	0.00	4.57	0.46	0.00	—	16.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.65
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.65

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO ₂	PM _{10E}	PM _{10D}	PM _{10T}	PM _{2.5E}	PM _{2.5D}	PM _{2.5T}	BCO ₂	NBCO ₂	CO _{2T}	CH ₄	N ₂ O	R	CO _{2e}
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	2/1/2025	3/3/2025	5.00	21.0	—
Site Preparation	Site Preparation	3/4/2025	3/12/2025	5.00	7.00	—
Grading	Grading	3/13/2025	3/25/2025	5.00	9.00	—
Building Construction	Building Construction	3/26/2025	5/1/2026	5.00	288	—
Paving	Paving	4/3/2026	5/1/2026	5.00	21.0	—
Architectural Coating	Architectural Coating	4/3/2026	5/1/2026	5.00	21.0	—
Finishing and Landscaping	Trenching	4/3/2026	5/1/2026	5.00	21.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Finishing and Landscaping	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	6.00	10.2	HHDT,MHDT
Demolition	Hauling	14.0	20.0	HHDT
Demolition	Onsite truck	1.00	1.24	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	18.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	1.00	4.33	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	14.0	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	1.00	3.09	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2.74	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1.07	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.55	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Finishing and Landscaping	—	—	—	—
Finishing and Landscaping	Worker	2.50	18.5	LDA,LDT1,LDT2
Finishing and Landscaping	Vendor	—	10.2	HHDT,MHDT
Finishing and Landscaping	Hauling	0.00	20.0	HHDT
Finishing and Landscaping	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	9,780	3,260	9,676

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,085	—
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	9.00	0.00	—
Paving	0.00	0.00	0.00	0.00	3.70

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
High School	0.00	0%
Other Non-Asphalt Surfaces	2.98	0%
Parking Lot	0.20	100%
Other Asphalt Surfaces	0.53	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	589	0.03	< 0.005
2026	0.00	589	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
High School	1,715	0.00	0.00	447,130	10,149	0.00	0.00	2,645,860
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	9,780	3,260	9,676

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
High School	216,494	185,852
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
High School	8.48	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Adjusted to account for construction start and end date provided by District
Construction: Off-Road Equipment	Adjusted to account for finishing and landscaping activity
Construction: Trips and VMT	Adjusted to account for onsite water truck and water truck vendor trips
Operations: Vehicle Data	Adjusted to include trip generation results from Garland and Associates traffic study
Land Use	Lot acreage of high school land use category updated to include acreage of landscaping

Regional Construction Emissions Worksheet:

3.1. Demolition (2025) - Unmitigated							
		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite		Winter					
	Off-Road Equipment	2.40	22.20	19.90	0.03	0.92	0.84
	Demolition	0.00	0.00	0.00	0.00	0.71	0.11
	Onsite truck	< 0.005	0.02	0.01	< 0.005	0.46	0.05
	Total	2.40	22.22	19.91	0.03	2.09	1.00
Offsite							
	Worker	0.05	0.06	0.73	0.00	0.20	0.05
	Vendor	0.01	0.21	0.10	< 0.005	0.05	0.02
	Hauling	0.02	1.23	0.53	0.01	0.27	0.08
	Total	0.08	1.50	1.36	0.01	0.52	0.15
TOTAL		2.48	23.72	21.27	0.04	2.61	1.15
Onsite		MAX					
	Off-Road	2.40	22.20	19.90	0.03	0.92	0.84
	Demolition	0.00	0.00	0.00	0.00	0.71	0.11
	Onsite truck	0.00	0.02	0.01	0.00	0.46	0.05
	Total	2.40	22.22	19.91	0.03	2.09	1.00
Offsite							
	Worker	0.05	0.06	0.73	0.00	0.20	0.05
	Vendor	0.01	0.21	0.10	0.00	0.05	0.02
	Hauling	0.02	1.23	0.53	0.01	0.27	0.08
	Total	0.08	1.50	1.36	0.01	0.52	0.15
TOTAL		2	24	21	0	3	1
3.3. Site Preparation (2025) - Unmitigated							
		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite		Winter					
	Off-Road Equipment	3.31	31.60	30.20	0.05	1.37	1.26
	Dust From Material Movement	0.00	0.00	0.00	0.00	5.11	2.63
	Onsite truck	< 0.005	0.03	0.02	< 0.005	1.61	0.16
	Total	3.31	31.63	30.22	0.05	8.09	4.05
Offsite							
	Worker	0.06	0.07	0.85	0.00	0.23	0.05
	Vendor	0.02	0.62	0.30	< 0.005	0.16	0.05
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.08	0.69	1.15	0.00	0.39	0.10
TOTAL		3.39	32.32	31.37	0.05	8.48	4.15
Onsite		MAX					
	Off-Road Equipment	3.31	31.60	30.20	0.05	1.37	1.26
	Dust From Material Movement	0.00	0.00	0.00	0.00	5.11	2.63
	Onsite truck	0.00	0.03	0.02	0.00	1.61	0.16
	Total	3.31	31.63	30.22	0.05	8.09	4.05
Offsite							
	Worker	0.06	0.07	0.85	0.00	0.23	0.05
	Vendor	0.02	0.62	0.30	0.00	0.16	0.05
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.08	0.69	1.15	0.00	0.39	0.10
TOTAL		3	32	31	0	8	4

3.5. Grading (2025) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite		Summer					
	Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	Dust From Material Movement	0.00	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		0.00	0.00	0.00	0.00	0.00	0.00
Onsite		Winter					
	Off-Road Equipment	1.74	16.30	17.90	0.03	0.72	0.66
	Dust From Material Movement	0.00	0.00	0.00	0.00	1.84	0.89
	Onsite truck	< 0.005	0.03	0.01	< 0.005	1.15	0.11
	Total	1.74	16.33	17.91	0.03	3.71	1.66
Offsite							
	Worker	0.05	0.06	0.73	0.00	0.20	0.05
	Vendor	0.01	0.48	0.24	< 0.005	0.12	0.04
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.06	0.54	0.97	0.00	0.32	0.09
TOTAL		1.80	16.87	18.88	0.03	4.03	1.75
Onsite		MAX					
	Off-Road Equipment	1.74	16.30	17.90	0.03	0.72	0.66
	Dust From Material Movement	0.00	0.00	0.00	0.00	1.84	0.89
	Onsite truck	0.00	0.03	0.01	0.00	1.15	0.11
	Total	1.74	16.33	17.91	0.03	3.71	1.66
Offsite							
	Worker	0.05	0.06	0.73	0.00	0.20	0.05
	Vendor	0.01	0.48	0.24	0.00	0.12	0.04
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.06	0.54	0.97	0.00	0.32	0.09
TOTAL		2	17	19	0	4	2

3.7. Building Construction (2025) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite		Summer					
	Off-Road Equipment	1.13	10.40	13.00	0.02	0.43	0.40
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.13	10.40	13.00	0.02	0.43	0.40
Offsite							
	Worker	0.01	0.01	0.15	0.00	0.04	0.01
	Vendor	< 0.005	0.04	0.02	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.05	0.17	0.00	0.05	0.01
TOTAL		1.14	10.45	13.17	0.02	0.48	0.41
Onsite		Winter					
	Off-Road Equipment	1.13	10.40	13.00	0.02	0.43	0.40
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.13	10.40	13.00	0.02	0.43	0.40
Offsite							
	Worker	0.01	0.01	0.13	0.00	0.04	0.01
	Vendor	< 0.005	0.04	0.02	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.05	0.15	0.00	0.05	0.01
TOTAL		1.14	10.45	13.15	0.02	0.48	0.41
Onsite		MAX					
	Off-Road Equipment	1.13	10.40	13.00	0.02	0.43	0.40
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.13	10.40	13.00	0.02	0.43	0.40
Offsite							
	Worker	0.01	0.01	0.15	0.00	0.04	0.01
	Vendor	0.00	0.04	0.02	0.00	0.01	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.05	0.17	0.00	0.05	0.01
TOTAL		1.14	10.45	13.17	0.02	0.48	0.41

3.9. Building Construction (2026) - Unmitigated

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Summer					
	Off-Road Equipment	1.07	9.85	13.00	0.02	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.07	9.85	13.00	0.02	0.38	0.35
Offsite							
	Worker	0.01	0.01	0.14	0.00	0.04	0.01
	Vendor	< 0.005	0.03	0.02	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.04	0.16	0.00	0.05	0.01
TOTAL		1.08	9.89	13.16	0.02	0.43	0.36
Onsite		Winter					
	Off-Road Equipment	1.07	9.85	13.00	0.02	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.07	9.85	13.00	0.02	0.38	0.35
Offsite							
	Worker	0.01	0.01	0.12	0.00	0.04	0.01
	Vendor	< 0.005	0.04	0.02	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.05	0.14	0.00	0.05	0.01
TOTAL		1.08	9.90	13.14	0.02	0.43	0.36
Onsite		MAX					
	Off-Road Equipment	1.07	9.85	13.00	0.02	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.07	9.85	13.00	0.02	0.38	0.35
Offsite							
	Hauling	0.01	0.01	0.14	0.00	0.04	0.01
	Vendor	0.00	0.04	0.02	0.00	0.01	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.05	0.16	0.00	0.05	0.01
TOTAL		1.08	9.90	13.16	0.02	0.43	0.36

3.11. Paving (2026) - Unmitigated

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Summer					
	Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	0.24
	Paving	0.09	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.77	6.23	8.81	0.01	0.26	0.24
Offsite							
	Worker	0.07	0.06	1.05	0.00	0.26	0.06
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.07	0.06	1.05	0.00	0.26	0.06
TOTAL		0.84	6.29	9.86	0.01	0.52	0.30
Onsite		MAX					
	Off-Road Equipment	0.68	6.23	8.81	0.01	0.26	0.24
	Paving	0.09	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.77	6.23	8.81	0.01	0.26	0.24
Offsite							
	Hauling	0.07	0.06	1.05	0.00	0.26	0.06
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.07	0.06	1.05	0.00	0.26	0.06
TOTAL		0.84	6.29	9.86	0.01	0.52	0.30

3.13. Architectural Coating (2026) - Unmitigated							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Summer					
	Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	0.02
	Architectural Coatings	5.02	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	5.14	0.86	1.13	0.00	0.02	0.02
Offsite							
	Worker	< 0.005	< 0.005	0.03	0.00	0.01	< 0.005
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.03	0.00	0.01	0.00
TOTAL		5.14	0.86	1.16	0.00	0.03	0.02
Onsite		MAX					
	Off-Road Equipment	0.12	0.86	1.13	0.00	0.02	0.02
	Architectural Coatings	5.02	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	5.14	0.86	1.13	0.00	0.02	0.02
Offsite							
	Worker	0.00	0.00	0.03	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.03	0.00	0.01	0.00
TOTAL		5.14	0.86	1.16	0.00	0.03	0.02
3.15. Finishing and Landscaping (2026) - Unmitigated							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Summer					
	Off-Road Equipment	0.10	1.03	1.91	< 0.005	0.03	0.03
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.10	1.03	1.91	0.00	0.03	0.03
Offsite							
	Worker	0.01	0.01	0.13	0.00	0.03	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.01	0.13	0.00	0.03	0.01
TOTAL		0.11	1.04	2.04	0.00	0.06	0.04
Onsite		MAX					
	Off-Road Equipment	0.10	1.03	1.91	0.00	0.03	0.03
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.10	1.03	1.91	0.00	0.03	0.03
Offsite							
	Worker	0.01	0.01	0.13	0.00	0.03	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.01	0.13	0.00	0.03	0.01
TOTAL		0.11	1.04	2.04	0.00	0.06	0.04
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
3.1. Demolition (2025) - Unmitigated		2	24	21	0	3	1
3.3. Site Preparation (2025) - Unmitigated		3	32	31	0	8	4
3.5. Grading (2025) - Unmitigated		2	17	19	0	4	2
3.7. Building Construction (2025) - Unmitigated		1	10	13	0	0	0
3.9. Building Construction (2026) - Unmitigated		1	10	13	0	0	0
3.11. Paving (2026) - Unmitigated		1	6	10	0	1	0
3.13. Architectural Coating (2026) - Unmitigated		5	1	1	0	0	0
3.15. Finishing and Landscaping (2026) - Unmitigated		0	1	2	0	0	0
Building Construction 2026, Paving, Architectural Coating, and Finishing/Landscaping		7	18	26	0	1	1
MAX DAILY		7	32	31	0	8	4
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Regional Construction Emissions Worksheet:

3.1. Demolition (2025) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite		Winter			
	Off-Road Equipment	22.20	19.90	0.92	0.84
	Demolition	0.00	0.00	0.71	0.11
	Onsite truck	0.02	0.01	0.46	0.05
	Total	22.22	19.91	2.09	1.00
Onsite		MAX			
	Off-Road Equipment	22.20	19.90	0.92	0.84
	Dust From Material Movement	0.00	0.00	0.71	0.11
	Onsite truck	0.02	0.01	0.46	0.05
	Total	0.00	0.00	0.00	0.00
TOTAL		22.22	19.91	2.09	1.00

3.3. Site Preparation (2025) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite		Winter			
	Off-Road Equipment	31.60	30.20	1.37	1.26
	Dust From Material Movement	0.00	0.00	5.11	2.63
	Onsite truck	0.03	0.02	1.61	0.16
	Total	31.63	30.22	8.09	4.05
Onsite		MAX			
	Off-Road Equipment	31.60	30.20	1.37	1.26
	Dust From Material Movement	0.00	0.00	5.11	2.63
	Onsite truck	0.03	0.02	1.61	0.16
	Total	31.63	30.22	8.09	4.05
TOTAL		31.63	30.22	8.09	4.05

3.5. Grading (2025) - Unmitigated

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		Summer			
	Off-Road Equipment	0.00	0.00	0.00	0.00
	Dust From Material Movement	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00
Onsite		Winter			
	Off-Road Equipment	16.30	17.90	0.72	0.66
	Dust From Material Movement	0.00	0.00	1.84	0.89
	Onsite truck	0.03	0.01	1.15	0.11
	Total	16.33	17.91	3.71	1.66
Onsite		MAX			
	Off-Road Equipment	16.30	17.90	0.72	0.66
	Dust From Material Movement	0.00	0.00	1.84	0.89
	Onsite truck	0.03	0.01	1.15	0.11
	Total	16.33	17.91	3.71	1.66
TOTAL		16.33	17.91	3.71	1.66

3.7. Building Construction (2025) - Unmitigated

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		Summer			
	Off-Road Equipment	10.40	10.40	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	10.40	10.40	0.00	0.00
	TOTAL	10.40	10.40	0.00	0.00
Onsite		Winter			
	Off-Road Equipment	1.13	10.40	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	1.13	10.40	0.00	0.00
Onsite		MAX			
	Off-Road Equipment	10.40	10.40	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	10.40	10.40	0.00	0.00
TOTAL		10.40	10.40	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		Summer			
	Off-Road Equipment	1.07	9.85	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	1.07	9.85	0.00	0.00
Onsite		Winter			
	Off-Road Equipment	1.07	9.85	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	1.07	9.85	0.00	0.00
Onsite		MAX			
	Off-Road Equipment	1.07	9.85	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	1.07	9.85	0.00	0.00
TOTAL		1.07	9.85	0.00	0.00

3.11. Paving (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		Summer			
	Off-Road Equipment	0.68	6.23	0.00	0.00
	Paving	0.09	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	0.77	6.23	0.00	0.00
TOTAL		0.77	6.23	0.00	0.00
Onsite		MAX			
	Off-Road Equipment	0.68	6.23	0.00	0.00
	Paving	0.09	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	0.77	6.23	0.00	0.00
TOTAL		0.77	6.23	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		Summer			
	Off-Road Equipment	0.12	0.86	0.00	0.00
	Architectural Coatings	5.02	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	5.14	0.86	0.00	0.00
Onsite		MAX			
	Off-Road Equipment	0.12	0.86	0.00	0.00
	Architectural Coatings	5.02	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	5.14	0.86	0.00	0.00
TOTAL		5.14	0.86	0.00	0.00

3.15. Finishing and Landscaping (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5 Total
Onsite		Summer			
	Off-Road Equipment	0.10	1.03	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	0.10	1.03	0.00	0.00
Onsite					
	Off-Road Equipment	0.10	1.03	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	0.10	1.03	0.00	0.00
TOTAL		0.10	1.03	0.00	0.00

	NOx	CO	PM10 Total	PM2.5 Total
3.1. Demolition (2025) - Unmitigated	22	20	2	1
1.00 Acre LST	91	696	4.00	3.00
Exceeds LST?	no	no	no	no
3.3. Site Preparation (2025) - Unmitigated	32	30	8	4
3.5 Acre LST	164	1,399	9	6
Exceeds LST?	no	no	no	no
3.5. Grading (2025) - Unmitigated	16	18	4	2
2.5 Acre LST	142	1,128	7	5
Exceeds LST?	no	no	no	no
3.7. Building Construction (2025) - Unmitigated	10	10	0	0
1.31 Acre LST	104	789	5	3
Exceeds LST?	no	no	no	no
3.9. Building Construction (2026) - Unmitigated	1	10	0	0
1.31 Acre LST	104	789	5	3
Exceeds LST?	no	no	no	no
Building Construction 2026, Paving, Architectural Coating, and Finishing/Landscaping	7	18	0	0
2.31 Acre LST	138	1,077	7	4
Exceeds LST?	no	no	no	no

Regional Operation Emissions Worksheet

¹ CalEEMod, Version 2022.1

Proposed Project

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	5	3	33	0	7	2
Area	0	< 0.005	0	< 0.005	< 0.005	< 0.005
Energy	< 0.005	0	0	< 0.005	< 0.005	< 0.005
Total	5	3	33	0	7	2

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	5	3	31	0	7	2
Area	0	0	0	0	0	0
Energy	< 0.005	0	0	< 0.005	< 0.005	< 0.005
Total	5	3	31	0	7	2

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	5	3	33	0	7	2
Area	0	0	0	0	0	0
Energy	0	0	0	0	0	0
Total	5	3	33	0	7	2

Regional Thresholds (lb/day)

	55	55	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No