

AGENDA



VALLEJO PLANNING COMMISSION REGULAR MEETING – 7:00 P.M. COUNCIL CHAMBERS

555 Santa Clara Street, Vallejo, California

Jamar Stamps, Chair
Eric Blind, Vice Chair
Peggy Cohen-Thompson
Donald Douglass
Wanda Madeiros
Anthony Taylor
Tara Beasley-Stansberry

March 18, 2024

NOTICE: Members of the public will be able to participate in-person or remotely via Zoom. City Hall and the Council Chambers will be open to members of the public 30 minutes prior to the start of the meeting.

VIEW THE MEETING:

There are four different ways you can view this public meeting:

- In Person
- Watch Vallejo local channel 28
- Stream from the City website: www.cityofvallejo.net/Streaming
- Join the Zoom webinar: <https://ZoomRegular.Cityofvallejo.net>

IMPORTANT NOTICE

This AGENDA contains a brief general description of each item to be considered. The posting of the recommended actions does not indicate what action may be taken. If comments come to the Planning Commission without prior notice for an item not listed on the AGENDA, no specific answers or responses should be expected at this meeting per State law.

Pursuant to Government Code Section 54954.3 of the Brown Act, members of the public shall be afforded the opportunity to speak on any agenda item of interest to them after being recognized by the presiding officer. Members of the public wishing to be so recognized are requested to submit a completed speaker card to the Secretary of the Planning Commission prior to the consideration of the item or raise their hand via ZOOM: (<https://ZoomRegular.Cityofvallejo.net>) or by phone: Dial (669) 900-6833. Enter Meeting ID: 914 0075 0676#. Press * 9 to digitally raise your hand from the phone. For additional instructions on how to speak remotely during public comment, please visit www.cityofvallejo.net/publiccomment. In person speakers will be recognized first.

This AGENDA contains a brief general description of each item to be considered. The posting of the recommended actions does not indicate what action may be taken. If comments come to the Planning Commission without prior notice and are not listed on the AGENDA, no specific answers or response should be expected at this meeting per State law.

Notice of Availability of Public Records: All public records relating to an open session item, which are not exempt from disclosure pursuant to the Public Records Act, that are distributed to a majority of the Planning Commission will be available on the City of Vallejo website at www.cityofvallejo.net subject to staff's ability to post the documents prior to the meeting.

Disclosure Requirements: Government Code Section 84308 (d) sets forth disclosure requirements which apply to persons who actively support or oppose projects in which they have a "financial interest", as that term is defined by the Political Reform Act of 1974. If you fall within that category, and if you (or your agent) have made a contribution of \$250 or more to any commissioner within the last twelve months to be used in a federal, state or local election, you must disclose the fact of that contribution in a statement to the Commission.

Appeal Rights: The applicant or any party adversely affected by the decision of the Planning Commission may, within ten days after the rendition of the decision of the Planning Commission, appeal the decision by filing a written appeal with the Director of Planning and Development Services. Such written appeal shall state the reason or reasons for the appeal and why the applicant believes he or she is adversely affected by the decision of the Planning Commission. Such appeal shall not be timely filed unless it is actually received by Director of Planning and Development Services or designee no later than the close of business on the tenth calendar day after the rendition of the decision of the Planning Commission. If such date falls on a weekend or City holiday, then the deadline shall be extended until the next regular business day.



The Council Chambers in City Hall is ADA compliant. Devices for the hearing impaired are available from the City Clerk. Requests for disability related modifications or accommodations, aids or services may be made by a person with a disability to the City Clerk's office no less than 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act of 1990 and the federal rules and regulations adopted in implementation thereof.

If you have any questions regarding any of the following agenda items, please call the assigned planner or project manager at (707) 648-4326.

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL**

4. **CONSENT CALENDAR AND APPROVAL OF AGENDA**

Upon motion of any Commissioner, all items placed upon the consent calendar may be acted upon collectively, and each shall be deemed to have received the action recommended by the Secretary or City Attorney; except that if any Commissioner objects to the placement of an item on the consent calendar, or if any member of the public wishes to address the Commission on any such item, the item shall be removed from the consent calendar and shall be heard and acted upon in its proper place on the agenda as designated by the Presiding Officer.

After making changes in the agenda, if any, as permitted under these rules of order and procedure, the Commission shall approve the agenda which shall constitute the agenda of business to be considered at the meeting. The motion offered to approve the agenda shall include the adoption of the consent calendar.

A. APPROVAL OF AGENDA

B. APPROVAL OF MINUTES

a. February 21, 2024 – Regular Meeting

C. OTHER CONSENT ITEMS -None.

5. **REPORT OF THE CITY COUNCIL LIAISON**

The City Council Liaison may, from time to time, wish to make announcements and report on items of activity that may be of interest to the Commission and the general public.

6. **COMMUNITY FORUM**

The Presiding Officer shall announce that members of the public have the opportunity to directly address the Commission on items of interest to the public that are within the subject matter jurisdiction of the Commission and not on the current agenda. Up to fifteen (15) minutes shall be set aside for the community forum and each speaker shall be allocated up to three (3) minutes unless time is extended by the Presiding Officer with the Commission's consent. Items of business listed on the agenda shall not be further discussed under the community forum. Anyone desiring to address the Commission may indicate such interest in one of the two ways listed below:

1. Any interested members of the public desiring to communicate with the Planning Commission for this item may approach the podium to speak when the Presiding Officer opens the Community Forum and indicate that they would like to do so.

*2. Any interested members of the public desiring to communicate with the Planning Commission for this item may do so via ZOOM: (<https://ZoomRegular.Cityofvallejo.net>), or by phone: Dial (669) 900-6833. Enter Meeting ID: 914 0075 0676#. Press * 9 to digitally raise your hand from the phone. For additional instructions on how to speak remotely during public comment, please visit www.cityofvallejo.net/publiccomment. Please know that in-person speakers will be recognized first.*

7. PUBLIC HEARINGS

A.

PROJECT NUMBER(S): Major Use Permit (UP22-0008)

PROJECT PLANNER: Erwin Ordoñez, Planning Consultant

PROJECT LOCATION: 241-255 Georgia Street

PROJECT SUMMARY: The project is proposing the phased conversion of a vacant two-story, 34,819 square-foot office building in Downtown Vallejo with associated interior/exterior on-site and right-of-way improvements allowing for the operation of a new charter high school with an enrollment of up to 400 students.

CEQA DETERMINATION: The project is exempt from environmental review under California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332 (Class 32: In-fill Projects) because the project is on a site of less than 5 acres within city limits surrounded by urban uses, is consistent with the applicable general plan designation and all applicable general plan policies as well as with the applicable zoning designation and regulations, has no value as habitat for endangered, rare or threatened species, is adequately served by all required utilities and public services, and approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality. None of the exceptions under CEQA Guidelines Section 15300.2 apply.

RECOMMENDATION Staff recommends that the Planning Commission adopt Resolution No. PC 24-XX finding the project categorically exempt pursuant to CEQA Guidelines Section 15332 (Class 32: In-fill Projects) and APPROVING Major Use Permit (UP22-0008), subject to conditions.

8. WRITTEN COMMUNICATIONS

Written communications from the public will be received and filed. Written communications regarding items on the agenda will be noted at the time the item is considered.

9. REGULAR REPORTS

A. SECRETARY'S REPORT

The Secretary may, from time to time, report on items that may be of interest to the Commission and general public.

B. CITY ATTORNEY'S REPORT

The City Attorney may, from time to time, report on items that may be of interest to the Commission and general public.

C. REPORT OF THE PRESIDING OFFICER AND MEMBERS OF THE PLANNING COMMISSION

The Presiding Officer and any Commissioner may, from time to time, wish to make certain

announcements, request information from staff, and to report on items of activity that may be of interest to the Commission and the general public.

D. REPORT OF THE SUBCOMMITTEES

10. OTHER AGENDA ITEMS

A. INFORMATIONAL ITEMS – None

B. Discussion of Future Agenda Items

- a. Phase 2 Zoning Code Updates
- b. Housing, Safety and Environmental Justice Elements
- c. Overview of new State housing laws

11. ADJOURNMENT

I, Jasmine Thibeaux, do hereby certify that I have caused a true copy of the above notice and agenda to be delivered to each of the members of the Vallejo Planning Commission, at the time and in the manner prescribed by law and that this agenda was posted at City Hall, 555 Santa Clara Street, CA at 5:00 p.m. on Tuesday, March 12, 2024.

Dated: March 12, 2024



Jasmine Thibeaux

CITY OF VALLEJO PLANNING COMMISSION
Regular MEETING MINUTES
COUNCIL CHAMBERS
February 21, 2024

1. CALL TO ORDER

The meeting was called to order by Chair Stamps at 7:00pm.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Present: Chair Stamps, Vice-Chair Blind, Commissioners Cohen-Thompson, Douglass, Madeiros, Taylor, and Beasley-Stansberry (Commissioner Beasley-Stansberry joined the meeting at 7:09pm)

Absent: None

Staff present: Planning and Development Services Director Christina Ratcliffe, City Attorney Laura Zagaroli

4. CONSENT CALENDAR AND APPROVAL OF AGENDA

A. APPROVAL OF AGENDA

B. APPROVAL OF MINUTES

a. January 17, 2024 – Regular Meeting

C. OTHER CONSENT ITEMS – None

Action: Moved by Commissioner Cohen-Thompson, seconded by Commissioner Vice-Chair Blind, the Commission approve the agenda, minutes, and consent calendar with the following vote:

VOTE:

AYES: Chair Stamps, Vice-Chair Blind, Commissioners Cohen-Thompson, Douglass, Madeiros, and Taylor

NOES: None

ABSENT: Commissioner Beasley-Stansberry

ABSTAIN: None

5. REPORT OF THE CITY COUNCIL LIASION – Councilmember Matulac proxied for the absent Councilmember Palmares and discussed future goal setting in economic development.

6. COMMUNITY FORUM – None

7. PUBLIC HEARING

A.

PROJECT NUMBER(S): Major Use Permit (MJP23-0001)
Public Convenience or Necessity (PCN23-0003)

PROJECT PLANNER: David Storer, Interim Planning Manager

PROJECT LOCATION: 4301 Sonoma Blvd / APN: 0051-250-700

PROJECT SUMMARY: The project consists of a Major Use Permit to secure a Type 20 Alcoholic Beverage Control (ABC) license for “off-sale beer and wine” within an existing 1,725 square foot Arco AM/PM convenience store with associated fuel sales, at 4301 Sonoma Boulevard. A Determination of Public Convenience or Necessity is also required because the proposed beer and wine sales would be located within Census Tract 2518.02, which has an existing over-concentration of off-sale alcohol licenses.

CEQA DETERMINATION: The project is categorically exempt under the California Environmental Quality Act (CEQA) pursuant to Section 15301 Class 1: “Existing Facilities” of the CEQA Guidelines.

RECOMMENDATION: Staff recommends that the Planning Commission adopt Resolution No. PC 23-011 to APPROVE MJP23-0001, and PCN23-0003, subject to conditions.

Action: Moved by Commissioner Cohen-Thompson, seconded by Commissioner Taylor, the Commission made a motion to approve MJP23-0001, PCN23-0003 based on the findings and corrections conditions of approval therein.

VOTE:

AYES: Chair Stamps, Vice-Chair Blind, Commissioners Cohen-Thompson, Douglass, Madeiros, Taylor and Beasley-Stansberry

NOES: None

ABSENT: None

ABSTAIN: None

B.

PROJECT NUMBER: Major Use Permit (MJP23-0004) – removed from the consideration of the Commission because the applicant modified their application.
Minor Use Permit (MUP23-0017)
Public Convenience or Necessity (PCN23-0004)

PROJECT PLANNER: Adriana Ortiz, Contract Planner (absent)
Interim Planning Manager, David Storer, made presentation before the Commission

PROJECT LOCATION: 5182 Sonoma Blvd, Suite 200 / APN: 0067-150-290

PROJECT SUMMARY: The project consists of a Minor Use Permit to allow the operation of a convenience store and a Major Use Permit to secure a Type-21 Alcoholic Beverage Control (ABC) license for "Off-Sale General" within an existing 2,650 square foot Meadows Store, at 5182 Sonoma Boulevard, Suite 200. A Determination of Public Convenience or Necessity is also required because the proposed beer, wine, and distilled spirits sales would be located within Census Tract 2518.03 and would result in an existing over-concentration of off-sale alcohol licenses.

CEQA DETERMINATION: The project is categorically exempt under the California Environmental Quality Act (CEQA) pursuant to Section 15301 Class 1: "Existing Facilities" of the CEQA Guidelines.

RECOMMENDATION: Staff recommends that the Planning Commission adopt Resolution No. PC 24-01 to APPROVE MJP23-0004, MUP23-0017 and PCN23-0004, subject to conditions.

Action: Moved by Commissioner Cohen-Thompson, seconded by Commissioner Douglass, the Commission made a motion to strike MJP23-0004 from recommendation, adopt Resolution No. PC 24-01, and approve MUP23-0017 and PCN23-0004 subject to findings and conditions.

VOTE:

AYES: Chair Stamps, Vice-Chair Blind, Commissioners Cohen-Thompson, Douglass, Madeiros, Taylor and Beasley-Stansberry

NOES: None

ABSENT: None

ABSTAIN: None

C.

PROJECT NUMBER: Minor Use Permit (MUP22-0008) and Development Review (DVR22-0025)

PROJECT PLANNER: Douglas Fenn, Contract Planner

PROJECT LOCATION: 100 W. Baxter Street (vacant lot); APN: 0051-163-140)

PROJECT SUMMARY: The project involves constructing a 3,048 square foot two-story single-family (livable space) residence, including a 2-car garage on a vacant hillside 6,305 square foot parcel (100 W. Baxter Street). The residence's first floor consists of two (2) bedrooms with a shared bathroom, a laundry room, an

entertainment area, a downstairs living room, and a storage room. The second floor will have a kitchen, living area, storage room, powder room, and master suite.

CEQA DETERMINATION:

The project is exempt pursuant to California Environmental Quality Act (CEQA) Guidelines, Section 15303 Class 3(a) because it proposes a single-family residence in a residential zone. Up to three single-family residences may be constructed or converted under this exemption in urbanized areas.

RECOMMENDATION:

Staff recommends that the Planning Commission adopt a Resolution to APPROVE Minor Use Permit (MUP22-0008) and Development Review (DVR22-0025) based on the findings and in Resolution No. PC 24-XX.

Action: Moved by Commissioner Cohen-Thompson, seconded by Commissioner Douglass, the Commission made a motion to adopt a Resolution to APPROVE Minor Use Permit (MUP22-0008) and Development Review (DVR22-0025) based on the findings and conditions in Resolution No. PC 24-XX.

VOTE:

AYES: Chair Stamps, Vice-Chair Blind, Commissioners Cohen-Thompson, Douglass, Madeiros, Taylor and Beasley-Stansberry

NOES: None

ABSENT: None

ABSTAIN: None

8. WRITTEN COMMUNICATIONS - None

9. REGULAR REPORTS

A. SECRETARY'S REPORT

Planning and Development Services Director Ratcliffe gave an update on the recruitment for further staffing.

B. CITY ATTORNEY'S REPORT - None

C. REPORT OF THE PRESIDING OFFICER AND MEMBERS OF THE PLANNING COMMISSION - None

D. REPORT OF THE SUBCOMMITTEES – None

10. OTHER AGENDA ITEMS

A. INFORMATIONAL ITEM - New Commission/Board Budget/Work Plan policy

B. POSSIBLE DISCUSSION OF FORMATION OF AD HOC SUBCOMMITTEE TO WORK ON PLANNING COMMISSION BUDGET/WORK PLAN

C. Discussion of Future Agenda Items

- a. Phase 2 Zoning Code Updates
- b. Housing, Safety and Environmental Justice Elements
- c. Overview of new State housing laws

11. ADJOURNMENT

Chair Stamps adjourned the meeting at 9:00 p.m.

ATTEST:

Jamar Stamps, CHAIR

ATTEST:

Christina Ratcliffe
SECRETARY



**STAFF REPORT
CITY OF VALLEJO
PLANNING COMMISSION**

I. PROJECT INFORMATION

Item No. 7-A

DATE OF MEETING:	March 18, 2024
PROJECT NUMBER:	Major Use Permit (UP22-0008)
PREPARED BY:	Erwin Ordoñez, Planning Consultant
PROJECT LOCATION:	241-255 Georgia Street
APPLICABLE ZONING CODE SECTION(S):	Schools: Vallejo Municipal Code (VMC) §16.335; Major Use Permit VMC §§16.301-A and 16.606; Development Standards: Mixed-Use Districts VMC §16.203-A; Minimum Parking Requirements VMC §16.508.04
PROJECT SUMMARY:	The project is proposing the phased conversion of a vacant two-story, 34,819 square-foot office building in Downtown Vallejo with associated interior/exterior on-site and right-of-way improvements allowing for the operation of a new charter high school with an enrollment of up to 400 students.
CEQA DETERMINATION:	The project is exempt from environmental review under California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332 (Class 32: In-fill Projects) because the project is on a site of less than 5 acres within city limits surrounded by urban uses, is consistent with the applicable general plan designation and all applicable general plan policies as well as with the applicable zoning designation and regulations, has no value as habitat for endangered, rare or threatened species, is adequately served by all required utilities and public services, and approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality. None of the exceptions under CEQA Guidelines Section 15300.2 apply.

RECOMMENDATION:	Staff recommends that the Planning Commission adopt Resolution No. PC 24-XX APPROVING UP22-0008, subject to the attached conditions of approval, after FINDING the project categorically exempt pursuant to CEQA Section 15332 (Class 32: In-fill Exemption).
APPLICANT:	Elite Public Schools 100 Whitney Ave. Vallejo, CA 94589
PROPERTY OWNER:	Brian Baylies 51 Red Cypress Ct. Danville, CA 94506
GENERAL PLAN DESIGNATION:	District – Downtown Waterfront (D-D/W)
ZONING DISTRICT:	Downtown Mixed Use (DMX)
EXISTING LAND USE:	Vacant Office Building
SURROUNDING LAND USE:	North – Vallejo Housing Authority Office, Special Education Private School (Immersive Learning Center) South – Downtown Parking Lot G/ Vallejo Transit Center East – Commercial (Restaurant/Office/Retail) West – Commercial (Vacant Offices)
LOT AREA:	30,666 square feet (.704 acres)
TOTAL FLOOR AREA:	34,819 square foot building, 1.14 FAR
PARKING REQUIREMENTS/ PROVIDED:	No on-site parking required (Downtown Parking District)

II. PROJECT DESCRIPTION

A. Background

In May 2022, Elite Public Schools, the project applicant, submitted a Preliminary Review application, requesting feedback from City staff on a proposed charter high school for 190 students at 241-255 Georgia Street. Staff reviewed the submittal and returned written comments regarding requirements under the Vallejo Municipal Code, associated development standards and processing procedures and additional filing requirements necessary for a formal application.

On July 7, 2022, the applicant applied for a Major Use Permit proposing the phased conversion of the vacant two-story, 34,819 square-foot office building at this location along with associated interior/exterior on-site and right-of-way improvements that would allow for the operation of a new public charter high school

charter high school with an enrollment of up to 400 students. Staff determined that the project might qualify for a CEQA exemption and commissioned back-up studies for Greenhouse Gas emissions (GHG), Noise and Transportation. A traffic consultant prepared a Transportation Impact Analysis (TIA) and an environmental consultant prepared background analysis and documentation materials regarding GHG, noise analysis and potential historic/cultural resources impacts necessary to make a California Environmental Quality Act (CEQA) exemption determination.

Location and Land Use Context

The project is proposed for an existing vacant two-story office building located on a 30,666 square foot corner lot in the Downtown, with frontages along Georgia Street and Sacramento Street. The site is located across the street from the Vallejo Housing Authority, with private offices and a private school use to the north, commercial uses to the east and west, and Downtown Parking Lot G and Vallejo Transit Center to the south:

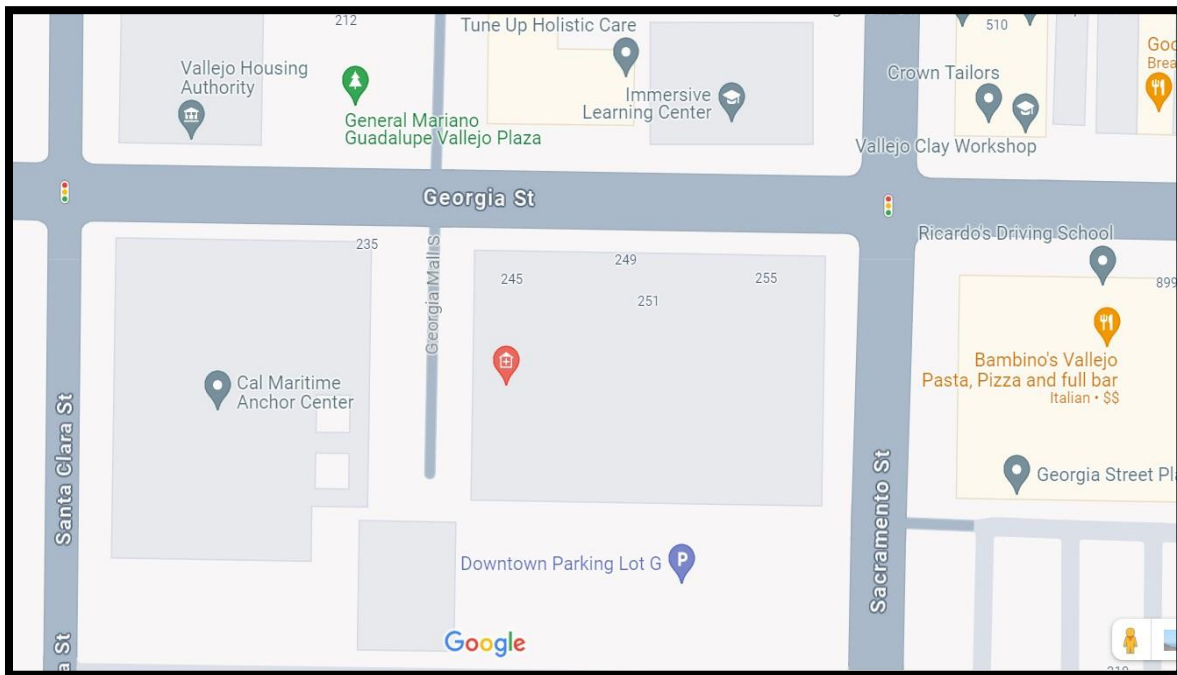
Table 1 – Surrounding Uses	
Direction	Land Uses
North	Public (Vallejo Housing Authority), Offices Special Education Private School (Immersive Learning Center)
East	Commercial (Restaurants/Offices/Retail)
South	Downtown Parking Lot G/ Vallejo Transit Center
West	Commercial (Cal Maritime Anchor Center, Vacant Offices)

The immediate vicinity of the project site is characterized by existing commercial, office, retail, and public/quasi-public uses. City Hall, the John F. Kennedy Library, and Marina Vista Memorial Park are approximately 500 feet northwest of the project site. The Waterfront and Ferry Landing are approximately 1,000 feet southwest of the project site.

Figure 1 – Vicinity Map



Figure 2 – Surrounding Uses



B. Project Description

The proposed project is requesting approval of a Major Use Permit for the phased conversion of a vacant two-story office building in Downtown Vallejo with associated interior/exterior, on-site and right-of-way improvements allowing for the operation of a new charter high school with an enrollment of up to 400 students. Proposed school hours are Monday through Friday between 8:00 a.m. and 3:30 p.m. with occasional afterschool activities, weekend events, monthly board meetings, and semi-annual parent engagement events.

The existing two-story building is located at 241-255 Georgia Street and has a total building area of 34,819 square feet. Of the interior space, 22,959 SF will be dedicated to school-related education uses on the ground floor and 11,860 square feet of existing mezzanine space on the second floor that will be used for administrative offices. The balance of the second floor volume is open to the floor below creating double height ceilings. Most of the renovation work will be in the form of interior tenant improvements to facilitate the operation of the high school. There is no on-site parking, but adequate public parking is available on-street or in the surrounding Downtown Parking District lots. Visitors, students, and faculty that drive to the school will need to purchase parking passes in the Downtown Parking District lots or use on-street public parking or drop-off when visiting the school. A total of 38 bicycle parking spaces will be provided on-site to comply with City requirements.

The applicant is proposing that the project will be completed in phases as the school continues to grow enrollment and additional funds for construction become available. Enrollment during the initial phase is anticipated to be approximately 250 students but the applicant is seeking approval for a maximum of 400 students. Staff will include 10 teachers with 25 administrative staff during the initial phase. The proposed initial phase of this project will be to develop approximately 18,000 square feet of interior space suitable for classrooms, bathroom facilities, a serving kitchen, common areas and a future gymnasium on the ground floor with administrative offices planned for the second story and the potential to incorporate additional student capacity and other education-related amenities in future project phases as the existing offices spaces are remodeled. Recreation use areas for PE classes will be provided within the building.

On-site improvements for the initial phase will include:

1. Tenant improvements for 18,000 square feet on the ground floor including installation of entrance door key fob system.
2. Installation of Full Fire Life Safety System building wide - (Fire Sprinklers and Fire Alarm system)
3. Replacement of existing light fixtures to LED to meet Title 24 requirements.
4. Restroom upgrades to meet fixture count and Americans with Disability Act (ADA) requirements.
5. Removal and replacement of interior walls to create classrooms for the student population.
6. Constructing a serving kitchen for lunch
7. Constructing a future interior basketball court (under a separate building permit)
8. Erecting perimeter fencing and locked security/emergency exit doors.
9. Installation of a perimeter and entrance security camera
10. Construction of ADA access ramp at South entrance

Except for the installation of perimeter fencing at the North- and South-facing elevations of the building and a new accessible ramp to the South, no on-site major exterior (elevation) improvements are currently anticipated (See Figures 3 & 4). Signs with the school's name will be proposed to be posted at select location(s) on the building façade and a separate sign permit will be applied for when locations have been identified.

Off-site right-of-way improvements (See Figure 4 & 5) include:

1. Repainting curbs

- ### Figure 3 – Proposed Elevations



Figure 4 – Proposed Site Plan

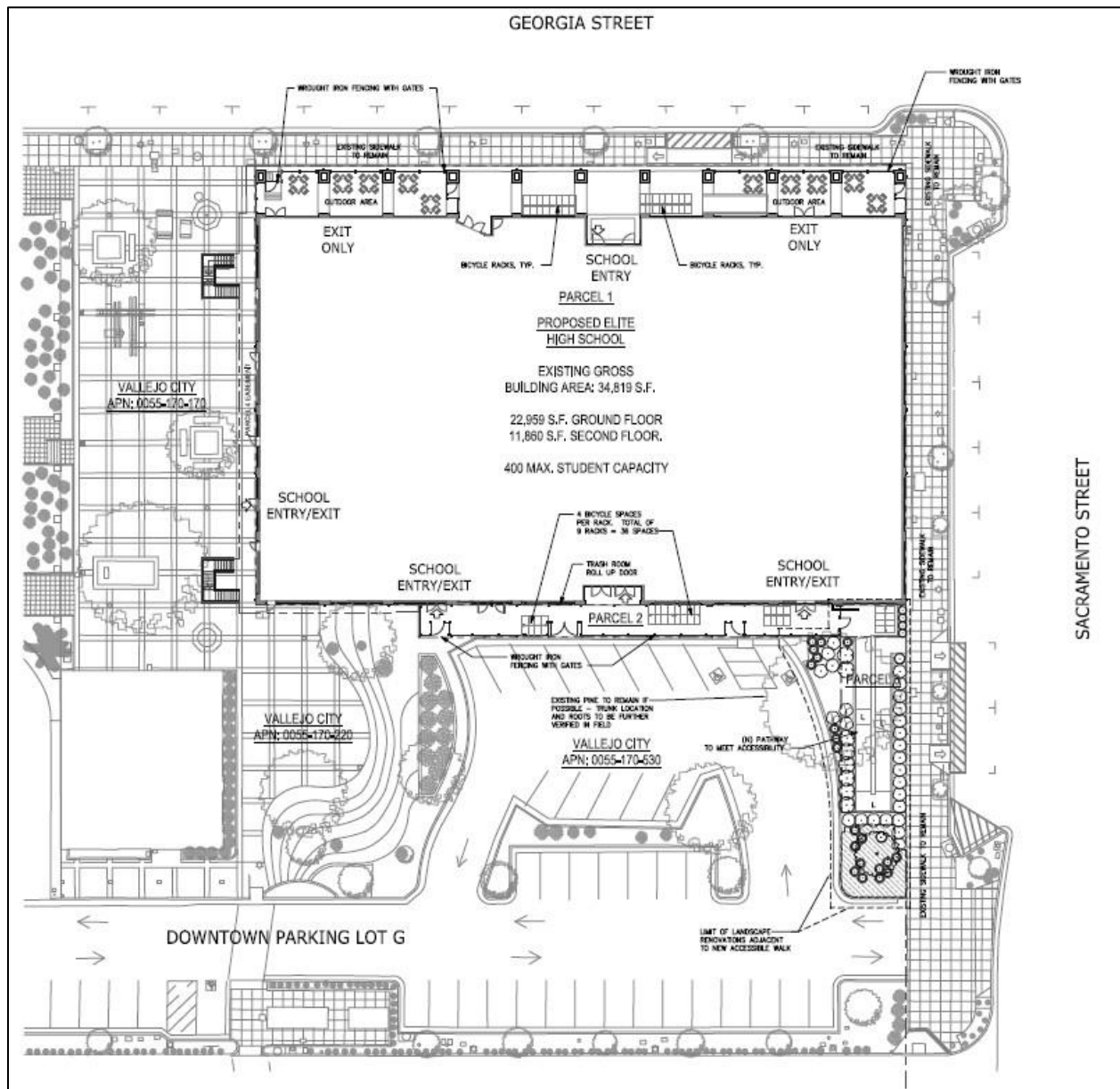
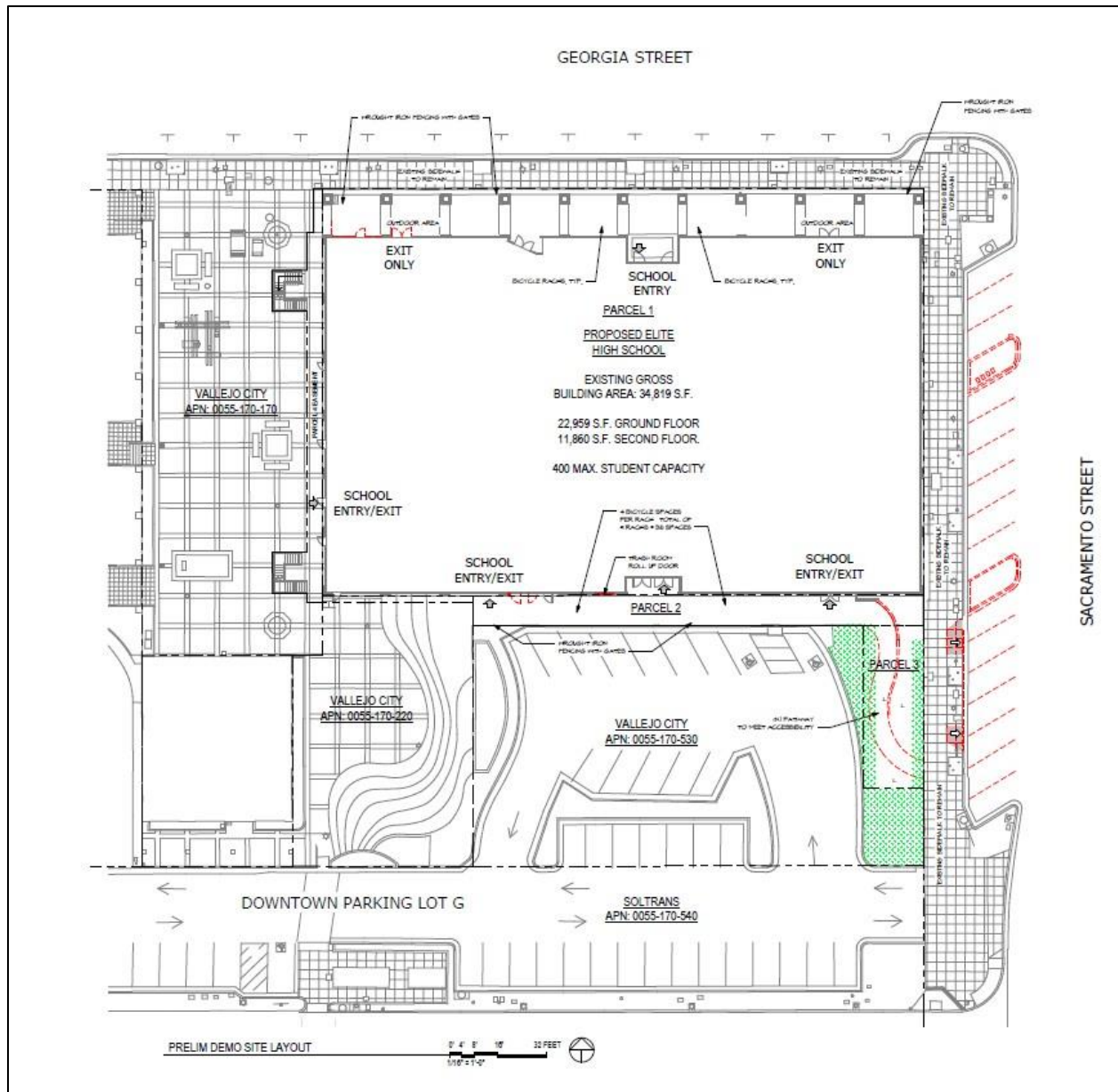


Figure 5 – Existing Site Plan



III. STAFF ANALYSIS

Required Permits

The project requires the following approval under the Vallejo Municipal Code (VMC):

Table 2 – Required Permits			
Permit Type	Description	VMC Chapter	Review Authority
Major Use Permit	School K-12, over 10,000 SF	§§16.301-A and 16.606	Planning Commission Action

The Planning Commission is being asked to review and act on the Major Use Permit.

General Plan Consistency

The General Plan 2040 Land Use Designation for the subject property is District – Downtown Waterfront (D-DW). The General Plan characterizes this designation as follows:

The D-D/W designation applies to the downtown area, consistent with the Downtown Specific Plan; the adjacent Central Waterfront, subject to the Waterfront Planned Development Master Plan; and the Southern Waterfront. It is intended to promote a vibrant, pedestrian-oriented place that seamlessly integrates downtown with the waterfront. Layering compatible land uses and public amenities, together at various scales and intensities, the D-D/W designation allows for multiple functions within the same building or adjacent to one another in the same general vicinity to foster a mix of uses that encourages people to live, work, play, and shop in close proximity. The D-D/W designation is also intended to create a vibrant destination for people from other parts of the city and the region. The maximum permitted FAR in the D-D/W designation is 6.0, with a minimum residential density of 30 dwelling units per acre up to 90 dwelling units per acre.

The project is consistent with the D-DW land use designation in that a school is a resident serving use that helps foster a mix of uses so people can live, work, play and shop in close proximity.

Table 3 - General Plan 2040 Policies and Actions	
Policies and Actions	Staff's Analysis
POLICY CP-3.1 <i>High Quality Education. Foster high quality schools that enhance civic pride.</i>	A proposed public charter high school near the Vallejo Transit Center in the Downtown supports this policy because it allows for additional choice options for a greater geographic diversity of potential students who could benefit from high quality, alternative teaching methods and learning environments.
Action CP-3.1D <i>Work with charter schools, private schools, parochial schools, and preschools to assess needs for a range of high-quality educational opportunities in the community.</i>	The proposed charter school will provide a high-quality educational choice with easy access and adjacent to the Immersive Learning Center, which focuses on Science Technology Engineering Arts Mathematics (STEAM).

POLICY CP-1.6 <i>Active Transportation Network. Promote the health benefits of walking and bicycling by providing a convenient and safe network of bicycle paths and routes, sidewalks, pedestrian paths, and trails, including connections with major destinations such as civic facilities, educational institutions, employment centers, shopping, and recreation areas.</i>	A proposed high school walking distance to the Vallejo Transit Center, civic facilities such as the John F. Kennedy Library, the Vallejo Ferry Landing, parks, and the waterfront supports this policy by supporting multiple modes of transportation for students, faculty, and visitors. Additionally, Georgia Street is identified as a Class III Bicycle Facility (Bike Route) in the City's Bikeway Master Plan. The applicant is also providing 38 bicycle parking spaces on site for use by faculty and students.
Action CP-1.6C <i>Encourage school siting decisions that take safe walking and bicycling access into account.</i>	The school is in walking and bicycling distance to downtown retail, civic facilities, parks and the waterfront and Georgia Street is a Class III Bicycle Route. In addition, the applicant is providing bike racks to accommodate 38 bikes.
POLICY CP-1.8 <i>Strong Schools, Engaged Students and Families. Support efforts by schools to reduce the dropout rate in recognition that education is a predictor of health.</i>	A proposed public charter high school near the Vallejo Transit Center in the Downtown supports this policy because it allows for additional choice options for a greater geographic diversity of potential students who could benefit from high quality, alternative teaching methods and learning environments. In addition, a complimentary educational use, the Immersive Learning Center, which focuses on Science Technology Engineering Arts Mathematics (STEAM) and computer technology focused K-12 grade education, tutoring, workshops, and summer camps, is located immediately across Georgia Street from the proposed project site, potentially creating synergy for the student population.
Policy NBE-2.8: Infill Development. Promote infill development targets vacant and underutilized sites for community-desired and enhancing uses that is compatible with surrounding uses.	The project proposes the renovation and adaptive reuse of a vacant office building in the Downtown and facilitates the addition of a new business that both serves City residents and helps activate the underutilized site and its surroundings. The additional activity provided by the proposed school use is also anticipated to enhance economic activity with new potential customers, clients, and patrons for surrounding commercial uses.

Vallejo Municipal Code Compliance

The project site is zoned Downtown Mixed Use (DMX), and the Zoning Code provides the following description of the DMX district:

The DMX Zoning District is intended to create and establish regulations to implement the Downtown Vallejo Specific Plan that will promote a vibrant, pedestrian-oriented place that seamlessly integrates Downtown with the waterfront. A broad range of permitted uses are allowed to provide flexibility in the use of space. Standards for physical form will create an urban character in Downtown, with minimal setbacks and views into ground floor space to activate frontages.

The applicants are proposing to occupy an existing vacant two-story office building and operate a public charter high school with an enrollment of up to 400 students and staff of 35 employees. The proposed renovations are in line with an adaptive reuse of the building because the “look and feel” of the building exteriors are generally being maintained and tenant improvements are focused internally on the requirements of the proposed educational use. No major exterior modifications are proposed for the building’s exterior walls and site improvements include fencing on the north and south sides and an ADA access ramp for the building’s two south entrances. Existing landscaping areas will be retained and upgraded with new plant materials.

The project is consistent with the applicable standards in the DMX zoning district as demonstrated in the Table, below:

Table 4 – Downtown Mixed Use Development and Parking Standards (VMC Sections 16.203-A and 16.508.04)			
Code Section	Development Standard	Proposal	Compliant
16.203.03 D.b.	Entrances: All non-residential activities located at the street level shall provide one direct at-grade entrance from the public right-of-way for each street frontage exceeding 50 feet.	An entrance is located on Georgia Street, and two additional entrances are provided on the South building elevation facing Lot G. Due to grade difference these are accessed via a proposed new Sacramento Street ADA ramp.	Yes
16.508.04 A	Minimum Parking Requirements: Downtown Mixed-Use Zoning District: Buildings and building additions constructed prior to adoption of the Downtown Specific Plan (September 2005) are exempt from the requirements of this chapter. All other construction and uses in the downtown shall provide parking in compliance with Table 16.508-A: Parking Requirements in Downtown Specific Plan Districts.	City records show that the building was constructed in 1966, therefore it is exempt from parking requirements.	Yes

Conditional Use in Downtown Mixed-Use District

Additionally, VMC Table 16.301-A: Land Use Regulations, lists a School (K-12): large (10,000 sf or more) in the DMX district and indicates that a Major Use Permit application for this use is required to be reviewed and approved by the Planning Commission.

Additional School Standards

VMC Section 16.335 (SCHOOLS) further specifies that a Major Use Permit is required for establishment of a school in all or part of an existing building that was not designed for or occupied by a K-12 school and that to grant the Use Permit, the Director or the Planning Commission shall determine, based on the information presented by the applicant that the following standards of Chapter 16.335 apply:

Table 5 – Schools Standards (VMC Section 16.335.02)			
Code Section	Standard	Proposal	Compliant
16.335.02. A.3.a	That the school location is appropriate for the use, and that adjacent uses will not be adversely affected.	A similar and complimentary educational use is located across Georgia Street from the site. Students also have easy Access to the library. In addition, the school would bring staff, students and parents into the downtown area increasing pedestrian traffic to restaurants and shops.	Yes
16.335.02. A.3.b	That adequate access, student drop-off areas and required off-street parking is provided	Under 16.508.04 A, no parking is required for this site. No off-street parking is available on the site; however, on-street public parking is available on Georgia and Sacramento Streets. Additional parking to support the school and other nearby uses is available in the Downtown Parking District parking lots via parking passes which can be purchased. The applicant is proposing drop-off zones along the curblane of the Georgia and Sacramento Street during the morning and afternoon which will temporarily reduce the availability of the on-street parallel spaces	Yes

		during this period. Sixteen (16) diagonal spaces on Sacramento Street will be permanently converted into 8 parallel spaces. The TIA analyzed these issues and made recommendations which have been incorporated into the Conditions of Approval.	
16.335.02. A.3.c	That outdoor play areas are appropriately sized, furnished with facilities and equipment, safe, and secure.	No outdoor recreation activities are proposed on site or required by the State.	Yes
16.335.02. B.1	That the applicant's site plan has the proposed enrollment and student capacity of the school	A maximum of 400 students	Yes
16.335.02. B.2	That the applicant's site plan has the size and location of all indoor and outdoor areas for physical education;	PE indoor space noted on plans	Yes
16.335.02. B.3	That the applicant's site plan has the pedestrian and traffic circulation systems proposed for the site, include student drop-off areas, in addition to queuing areas for pick up	The TIA and Site Plan show proposed drop off and circulation; A Condition of Approval requires submission of circulation plan consistent with the TIA prior to issuance of permits.	Yes
16.335.02. B.4	That the applicant's site plan has the proposed parking, both on-site and off-site	No on-site parking. Off-site street parking and Downtown Parking Lot G are both shown on the site plan.	Yes
16.335.02. B.5	That the applicant's site plan has the development phasing schedule, if the school will be developed in phases.	The development plans and project description show the proposed phasing	Yes
16.335.02. C.1	If the proposed site is within 1,500 feet of a railroad track easement, a safety study shall be submitted with the Use Permit application	N/A, not within 1,500 of railroad	Yes

16.335.02. C.2	If the proposed site is within 1,500 feet of an above-ground fuel storage tank or high-pressure oil or gas pipeline, or within 2,000 feet of a hazardous waste disposal site, a hazards risk assessment shall be submitted with the Use Permit application	N/A, none apply	Yes
16.335.02. D.1	The site shall be easily accessible from arterial or collector streets and shall allow minimum peripheral visibility from planned driveways and drop-off areas.	The site on the corner of Georgia and Sacramento Streets. Sacramento is a collector. The site is also easily accessible from Mare Island Way and Curtola Parkway, which are both arterial streets.	Yes
16.335.02. D.2	Parent drop-off areas, queuing areas for pick up, bus loading areas if provided, and on-site parking shall be separated from walkways to allow students to enter and exit the school grounds safely.	Walkway separation is provided	Yes

16.335.02. D.3	Adequate outdoor or indoor play areas shall be provided to meet the needs for the planned enrollment. The minimum standard is 50 square feet of active play area per student. The Director or the Planning Commission, may reduce this requirement upon finding that: a. Public parks are with one-quarter mile of the school and a joint-use agreement with the City has been executed, or b. The scheduling of Physical Education (e.g., staggered recess times) permits more efficient use of on-site facilities.	No outdoor play areas are provided. 1,685 square feet of indoor space for PE activities is provided (accommodates approximately 34 students at one time) There will be four PE classes daily, five days/week, which is sufficient to accommodate all 400 students.	Staff and the City Attorney have concluded that the proposed indoor recreational space/staggered PE class schedule would be sufficient for Staff's recommendation pending Planning Commission review as formal approval body.
16.335.02. F.3	Entries shall be lighted to ensure the safety of persons and the security of buildings. Outdoor lighting that is not required for security shall be turned off when a building or outdoor recreational area is not in use.	Proposed lighting is shown on the development plans and is sufficient to ensure the safety of persons and security of the Building.	Yes

The project as proposed with the conditions of approval included in this report complies with the applicable development standards of the DMX District.

Discussion

The following comments provide a summary of the staff analysis of the project. They are separated by subject to facilitate the review by the Planning Commission. The information provided is referenced in Section IV, the *Findings* section at the end of this report.

Recreational space

The proposed charter high school is requesting approval for an enrollment of up to 400 students which would require 50 square feet of recreation space or 20,000 square feet on-site to be consistent with the basic standard noted by VMC 16.335.02.D.3. The applicant proposes to satisfy the students' recreational needs with two designated interior PE areas totaling 1,685 square feet, staggered PE class schedules. The VMC provides that the Planning Commission has the authority to reduce the 20,000 square foot requirement as part of its review of the Major Use Permit application by finding that:

- a) Public parks are within one-quarter mile of the school and a joint-use agreement with the City has been executed, or
- b) The scheduling of Physical Education (e.g., staggered recess times) permits more efficient use of on-site facilities.

The applicant is requesting approval of its proposal based on the staggered use and size of the proposed interior recreational spaces. Staff believes that this meets the requirement of the code.

Off-Street Parking

The existing building has no off-street parking spaces on site. Per Section 16.508.04 A:

Downtown Mixed-Use Zoning District. Buildings and building additions constructed prior to adoption of the Downtown Specific Plan (September 2005) are exempt from the requirements of this chapter. All other construction and uses in the downtown shall provide parking in compliance with Table 16.508-A: Parking Requirements in Downtown Specific Plan Districts.

City records show that the existing building was constructed in 1966, prior to the adoption of the Downtown Specific Plan, and therefore exempt from parking requirements. The property is located within the Downtown Parking District and the project's occupants and visitors will be eligible to purchase parking passes and use the parking lots within the Downtown Parking District. The TIA prepared by the Fehr & Peers Transportation Consultants documented ample available parking in most of the nearby Parking District lots.

In addition, as previously noted, the applicant is providing bike racks and the site is immediately adjacent to the Downtown Vallejo Transit hub, which provides easy access bus service.

Review of Potential Traffic Impacts

During the review process, planning staff had initial concerns regarding potential traffic impacts. The proposed charter high school use is expected to generate 688 average daily trips, with 276 trips occurring in the a.m. peak hour and 166 trips in the p.m. peak hour. The City Traffic Engineer reviewed the site plan, project description and concurred with the appropriateness of retaining a consultant to prepare a Transportation Impact Analysis (TIA). The City retention of a consultant to prepare a TIA was funded by the applicant in early 2023 and work was completed in December 2023. The City's Traffic Engineer has reviewed and approved the TIA, which is included as Attachment 3.

The TIA was prepared to determine significant transportation impacts related to the California Environmental Quality Act (CEQA) for the project based on standards and methodologies set forth by the City of Vallejo. As required by CEQA, Potential significant impacts from traffic were analyzed using Vehicle Miles Traveled (VMT) and Level of Service (LOS), Site access, circulation, off-site parking, and off-site queuing were also analyzed.

The TIA concluded that the project would not have significant impacts based on VMT or LOS criteria and noted that ample parking is available for the proposed use in the Downtown Parking District lots. Additionally, the TIA made recommendations to minimize potential queuing impacts from the proposed drop-off and pick-up operations. These recommendations have been incorporated into staff's recommended conditions of approval for the project.

In addition to the TIA, staff had an environmental consultant study potential noise, air quality, and historic/cultural resources impacts. The studies show that there will be no significant impact, which supports the recommended Class 32: In-fill exemption.

IV. FINDINGS

Major Use Permit Findings

VMC Section 16.606.03, requires the review authority to make the following findings prior to granting a Major Use Permit (the findings are in **bold**, and staff's determination follows in *italics*):

A. The proposed use is conditionally allowed within the applicable zoning district and complies with all other applicable provisions of the Zoning Code and all other titles of the Vallejo Municipal Code.

The proposed project is located on a property zoned Downtown Mixed Use (DMX). Vallejo Municipal Code Table 16.301-A: Land Use Regulations, requires a Major Use Permit for a School more than 10,000 square feet. With the granting of a Use Permit, the project is consistent with the applicable development standards outlined in Title 16 of the Vallejo Municipal Code (VMC), as proposed and conditioned.

B. The proposed use is consistent with the general plan and any applicable specific plan or planned development and any other applicable plans.

The project site is designated as District – Downtown Waterfront (D-D/W) on the General Plan Land Use Map. It is intended to promote a vibrant, pedestrian-oriented place that seamlessly integrates downtown with the waterfront. Layering compatible land uses and public amenities, together at various scales and intensities, the D-D/W designation allows for multiple functions within the same building or adjacent to one another in the same general vicinity to foster a mix of uses that encourages people to live, work, play, and shop in close proximity. The D-D/W designation is also intended to create a vibrant destination for people from other parts of the city and the region. The project as proposed and conditioned adds 400 students and support staff to the Downtown area in an existing building that has remained vacant for years. This will also bring parents into the downtown and help to activate economic vitality to the Downtown. The project is also consistent with applicable General Plan 2040 policies as noted above in the report.

C. The subject parcel is physically suitable for the type of land use being proposed.

The public charter high school is proposing to renovate and occupy a vacant two-story office building in the Downtown area. No major exterior alterations are proposed for the exterior design of the building. The subject parcel is physically suitable for the proposed use because most activities associated with the school use will occur indoors, the applicant has agreed to incorporate changes to their proposed operational plans and procedures and will construct off-site public improvements to ensure that the proposed use will not create negative impacts on the surrounding properties. These plans and procedures are included as Conditions of Approval. The applicant is proposing to satisfy recreational needs of students with staggered scheduling in the interior recreation areas.

- D. The proposed use is compatible with existing and permissible land uses within the zoning district and the general area in which the proposed use is to be located which may include but not be limited to size, intensity, hours of operation, number of employees, or the nature of the operation.**

The proposed project is compatible with existing and permissible land uses within the zoning district. A similar educational use is located immediately across Georgia Street from the project site, the use will activate a vacant commercial building and includes site improvements to ensure compatibility with surrounding uses. The proposed use plans to operate between the hours of 8:00 a.m. to 3:30 p.m. Monday-Friday with occasional after-school events and activities. Conditions of approval have been added to reflect these hours and reasonable limitations.

- E. The physical location or placement of the use on the site is compatible with and will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood.**

The physical location of the proposed project inside an existing vacant office building will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood. Conditions of approval have been added to address vehicle queuing during drop-off and pick up hours.

- F. The proposed use and related project features will not create any nuisances arising from the emission of odor, dust, gas, noise, vibration, smoke, heat or glare at a level exceeding ambient conditions and would not otherwise be detrimental to the public interest, health, safety, or general welfare.**

As proposed and conditioned, the public charter high school will not create any nuisances from odors, dust, gas, noise, vibration, smoke, heat or glare exceeding ambient conditions. As proposed and conditioned, the use will not be detrimental to the public interest, health, safety, or general welfare.

- G. The project has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this chapter.**

Following a review of the project, staff is recommending that the Planning Commission find the project categorically exempt from the requirements of the California Environmental Quality Act (CEQA), pursuant to Section 15332, Class 32: In-fill Projects. Staff required studies that support this exemption, which is discussed in more detail, below.

V. ENVIRONMENTAL REVIEW

Following a review of the project, staff is recommending that the Planning Commission find it exempt from the requirements of the California Environmental Quality Act (CEQA). Under CEQA, the State has identified classes of projects which have been determined to not have a significant impact on the environment and are therefore exempt from the requirements of CEQA.

The project is exempt pursuant to CEQA Guidelines Section 15332 (Class 32: In-fill Projects) because the project is on a site of less than 5 acres within city limits surrounded by urban uses, is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations, has no value as habitat for endangered, rare or threatened species, is adequately served by all required utilities and public services, and approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality. Further, none of the exceptions pursuant to Section 15300.2 of the CEQA Guidelines apply.

As part of the development application review process, the City retained consultants to prepare additional analysis, research and document topic areas to assist City staff's review of potential impacts. Specifically, *Fehr & Peers Transportation Consultants*, were retained to prepare a Transportation Impact Analysis (TIA) for the project and *Ascent Environmental Consultants*, were retained to provide additional research and background documentation regarding potential noise, air quality, and historic/cultural resources impacts. A summary of each analysis is discussed below and copies of the background documentation/analysis are provided in Attachments 4-6.

Transportation Impact Analysis

A Transportation Impact Analysis (TIA) was prepared by Fehr & Peers Transportation Consultants for this project that includes a Vehicle Miles Traveled (VMT) analysis, Level of Service (LOS) assessment, and site plan review with recommendations.

The VMT Analysis was based on guidelines from the City of Vallejo's CEQA Transportation Impact Analysis Guidelines (Revised October 2020) determined that the Project is not expected to have a VMT-related transportation impact because it is within a Transit Priority Area, is "local-serving" in nature, and is therefore screened out of any additional VMT analysis. This is consistent with CEQA Guidelines section 15064.3(b) which notes that "Generally, projects within one half-mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact."

The LOS analysis concluded that a Level of service analysis is not required under Senate Bill 743 (SB 743) and CEQA but continued to analyze the project's effect on intersection operations by evaluating eight study intersections. Under Opening Year and Cumulative conditions, the LOS analysis concluded that "the Project does not cause any study intersection to degrade to unacceptable conditions, based on the City's level of service policies. Therefore, the Project is not required to provide intersection improvements."

The Intersections analyzed by the TIA include:

1. *Sonoma Boulevard/Florida Street*
2. *Mare Island Way/Georgia Street*
3. *Santa Clara Street/Georgia Street*
4. *Sacramento Street/Georgia Street*
5. *Sonoma Boulevard/Georgia Street*
6. *Mare Island Way/Maine Street*
7. *Maine Street/Sacramento Street*
8. *Sonoma Boulevard/Curtola Parkway*

The TIA also documented the following:

- All study intersections are expected to operate acceptably under the Opening Year and Opening Year Plus Project Conditions.
- All study intersections are expected to operate acceptably under the Cumulative and Cumulative Plus Project Conditions.
- The Project proposes no features that would be hazardous to pedestrian travel and does not conflict with any pedestrian facilities plans or programs. The Project is not expected to result in significant adverse impacts related to pedestrian facilities.
- The proposed project Trip Generation for the proposed private high school with 400 students was estimated to generate 688 average daily trips, with a total of 276 peak hour trips in the morning (172 in-bound, 104 out-bound), and 166 peak hour trips in the afternoon (64 in-bound, 102 out-bound).

- The publicly available parking lots in the vicinity of the Project site have considerable availability.
- The Project must include an additional two bicycle parking spaces (38 total) to satisfy the City's requirements.

The TIA included the following recommendations which have been incorporated into the recommend Conditions of Approval:

- Add "No parking from 7 to 9 AM and 3 to 5 PM on weekdays - violators will be towed" signs along both loading zones.
- Paint the curbs white in both loading and unloading zones.
- The school should work with the City and local towing operators to actively enforce the no parking restriction.
- Install traffic control devices compliant with "Manual Uniform Traffic Control Devices" (MUTCD) - R10-7 "DO NOT BLOCK INTERSECTION" on all four approaches to the Santa Clara Street/Georgia Street and Sacramento Street/Georgia Street intersections. Signs shall be mast arm mounted, if possible, with existing equipment (street mounted/installed if not possible on the existing signal mast arms).
- School staff should be stationed at various fixed locations at the loading zones to meet vehicles at the curb and to direct drivers entering/exiting the loading areas. At least six staff members should be stationed on Georgia Street and three on Sacramento Street. At least one staff member should be stationed at the southwest corner of Georgia Street/Sacramento Street to ensure vehicles are not blocking the intersection.
- In the morning, staff should be stationed at the loading zones at least one hour before the first morning bell and stay approximately 10 minutes after the start of school. In the afternoon, staff should be stationed at the loading zones at least 10 minutes before the last afternoon bell and stay approximately five minutes after the queues have dissipated.
- Vehicles are to pull forward in the loading zones as far as possible to allow for the maximum number of vehicles to drop-off/pick-up their student(s).
- Parents/guardians are to stay in their vehicles at all times while students exit/enter via the right side of the vehicles when greeted by the staff member.
- The school should create a written drop-off and pick-up procedure with supporting graphics that can be communicated with the students' parents/guardians via handouts and shared electronically through the school's website.

Air Quality

The purpose of the Air Quality Study (Attachment 4) is to evaluate whether the proposed project could potentially result in any significant effects related to air quality for purposes of determining consistency with the requirements of a Class 32 Categorical Exemption under CEQA. This study includes a brief explanation of the project, applicable standards of significance, analysis of air quality impacts, emission modeling results, and conclusions.

The Study concludes that the "...Project generated construction and operational criteria air pollutant and precursor emissions would not exceed BAAQMD recommended thresholds of significance for project related construction or operational emissions and thus would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The project would generate minimal additional vehicle trips but would not result in substantial mobile or stationary sources of TACs and would not result in sources of odors. Thus, approval of the project would not result in a significant effect related to air quality."

Noise Study

The purpose of the Noise Study (Attachment 5) is to evaluate whether the project would have a significant effect related to noise. This study includes a brief explanation of the project, applicable standards of significance, analysis of noise and vibration impacts, and conclusions.

The Noise Study concludes that the "...Project-generated construction noise would be short-term and temporary and would comply with the City of Vallejo's construction noise standards and would not expose sensitive land uses to excessive noise. The project would not result in operational sources of substantial vibration. Project construction would not require the use of vibration-inducing equipment such as pile drivers and all construction would occur during the less sensitive daytime hours when people are awake thereby reducing the exposure of sensitive receptors to substantial vibration levels. Operational stationary noise sources would not result in new substantial sources of noise in the project area or exceed applicably City standards. Operational increases in noise levels from vehicle trips would not result in a substantial increase in noise over existing conditions. Therefore, project related construction and operational noise and vibration would not be expected to exceed federal, state, or local standards or expose sensitive land uses to substantial increases in noise or vibration levels. Thus, approval of the project would not result in a significant effect related to noise."

Historic/Cultural Resources Study

The purpose of the Study (Attachment 6) is to evaluate whether the project would have a potential significant effect on. The Study concluded that the project would not cause a substantial adverse change in the significance of a historical resource, including both built environment features and archaeological sites.

The Study notes that "...building at 241-255 Georgia Street is not listed on the CRHR or as a City of Vallejo Landmark. The project does not have the potential to cause a substantial adverse change in the significance of a historical resource. ...

There are no known archeological or tribal cultural resources on the site that qualify as historical resources, according to readily available material. Given that the property has been previously disturbed, the likelihood of finding such resources intact and within their relevant historic context is relatively low. Although not required to support an infill exemption or an SB 330 application, the project would comply with Public Resources Code and Health and Safety Code requirements that protect unanticipated cultural discoveries."

The Study also provides references to Public Resources Code section 21083.2 (archaeological resources) and Health and Safety Code section 7050.5 ("adopted best practices" for cultural resource discoveries). Staff has incorporated the consultant's information in the recommended Conditions of Approval to ensure compliance with these regulations.

VI. NOTICING AND PUBLIC COMMENTS

On March 4, 2024, pursuant to VMC Section 16.602.08 – Noticing, a notice of this hearing was published in the Times Herald, mailed to all active neighborhood groups, all property owners within 500 feet of the subject property, and any other local agency expected to provide water, wastewater treatment, or other essential facilities or services to the project, as well as to members of the Planning Commission, the applicant and property owner. Interested parties were also notified in the same manner.

At the writing of this report, no written communication has been received.

VII. CONCLUSION / STAFF RECOMMENDATION

Based on the analysis contained in this staff report and the project's consistency with General Plan 2040 and the Vallejo Municipal Code, staff recommends that the Planning Commission **APPROVE** Major Use Permit (UP22-0008), with the Class 32 Categorical Exemption, based on the findings provided in the attached Resolution and subject to the Conditions of Approval provided as Exhibit A to the Resolution.

VIII. EXPIRATION

Pursuant to VMC Section 16.602.12 (A.2), approval of the Major Use Permit, shall automatically expire two years after approval, unless authorized construction has commenced prior to the expiration date (March 18, 2026; if approved at this meeting and not appealed).

IX. APPEAL PROCEDURE

VMC Section 16.602.14, Appeals, the applicant, or any party adversely affected by the decision of the Planning Commission may, within ten days after the rendering of the decision of the Planning Commission, appeal in writing to the City Council by filing a written appeal with a fee of \$1,409.21 with the City Clerk. Such written appeal shall state the reason or reasons for the appeal and why the applicant believes he or she is adversely affected by the decision of the Planning Commission. Such appeal shall not be timely filed unless it has been received by the City Clerk or designee no later than the close of business on the tenth calendar day after the decision of the Planning Commission. If such date falls on a weekend or City holiday, then the deadline shall be extended until the next regular business day.

Notice of the appeal, if any, including the date and time of the City Council's consideration of the appeal, shall be sent by the City Clerk to all property owners within five hundred feet of the project boundary. The Council may affirm, reverse, or modify any decision of the Planning Commission that is appealed.

X. ATTACHMENTS

1. Resolution No. PC 24-XXX and Exhibit A – Conditions of Approval
2. Project Plans
3. Traffic Impact Study, dated December 2023
4. Ascent Memorandum: Air Quality, dated February 21, 2024
5. Ascent Memorandum: Noise, dated February 21, 2024
6. Ascent Memorandum: Historic Resources, dated February 21, 2024

CITY OF VALLEJO PLANNING COMMISSION

RESOLUTION NO. PC 24-XXX

**A RESOLUTION APPROVING MAJOR USE PERMIT (UP22-0008)
ALLOWING THE OPERATION OF A NEW PUBLIC CHARTER HIGH SCHOOL
WITH AN ENROLLMENT OF UP TO 400 STUDENTS IN AN EXISTING TWO-STORY
BUILDING AT 241-255 GEORGIA STREET (APN:0055-170-390) AND
FINDING THE PROJECT CATEGORICALLY EXEMPT FROM ENVIRONMENTAL
REVIEW UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
PURSUANT TO CEQA GUIDELINES SECTION 15332 (CLASS 32: IN-FILL
PROJECTS)**

I. GENERAL FINDINGS

WHEREAS, on August 29, 2017, the City Council adopted General Plan 2040 which serves as a guide for the community's future growth and development; and

WHEREAS, the Major Use Permit approval is being requested for property that has a General Plan 2040 Land Use Designation of District – Downtown Waterfront (D-D/W); and

WHEREAS, on July 22, 2021, the City Council adopted the Zoning Code and Zoning Map to implement General Plan 2040's Land Use Plan; and

WHEREAS, the property is located in the Downtown Mixed Use (DMX) Zoning District; and

WHEREAS, on July 7, 2022, Elite Public Schools submitted an application for a Major Use Permit to allow the operation of a new public charter high school with an enrollment of up to 400 students in an existing two-story building at 241-255 Georgia Street; and

WHEREAS, on August 11, 2023, the application was determined to be complete; and

WHEREAS, on March 18, 2024, the City of Vallejo Planning Commission held a duly noticed public hearing; and

WHEREAS, the Planning Commission considered testimony and evidence, both written and oral, provided at the public hearing, as well as other documents contained in the record of proceedings relating to the Project, which are maintained in the offices of the City of Vallejo Planning Division; and

WHEREAS, based on evidence received in the staff report and at the public hearing, the Planning Commission makes the following factual findings:

II. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDING

Following a review of the project, the Planning Commission has determined that it is exempt from the California Environmental Quality Act (CEQA) requirements. The project is exempt from environmental review under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332 (Class 32: In-fill Projects) because the project is on a site of less than 5 acres within city limits surrounded by urban uses, is consistent with the applicable general plan designation and all applicable general plan policies as well as with the applicable zoning designation and regulations, has no value as habitat for endangered, rare or threatened species, is adequately served by all required utilities and public services, and approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality. Further, none of the exceptions pursuant to Section 15300.2 of the CEQA Guidelines apply, in that

- a. There is no reasonable possibility that the renovation of an empty office building will have a significant effect on the environment as there are no unusual circumstances associated with this downtown in-fill site; and
- b. There will be no 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, as the location is not near a scenic highway;
- c. The project site is not included on any list compiled pursuant to Section 65962.5 of the Government Code pertaining to hazardous materials; and
- d. The project will not cause a substantial adverse change in the significance of a historical resource.

III. FINDINGS RELEVANT TO THE APPROVAL OF THE MAJOR USE PERMIT

Vallejo Municipal Code (VMC) Section 16.606.03 requires the review authority to make the following findings prior to granting a Major Use Permit. the findings are in **bold**, and staff's determination follows in *italics*.

- A. The proposed use is conditionally allowed within the applicable zoning district and complies with all other applicable provisions of the Zoning Code and all other titles of the Vallejo Municipal Code.**

The proposed project is located on a property zoned Downtown Mixed Use (DMX). Vallejo Municipal Code Table 16.301-A: Land Use Regulations, requires a Major Use Permit for a school more than 10,000 square feet. The project is consistent with the applicable development standards outlined in Title 16 of the VMC, as proposed and conditioned.

- B. The proposed use is consistent with the general plan and any applicable specific plan or planned development and any other applicable plans.**

The project site is designated as District – Downtown Waterfront (D-D/W) on the General Plan Land Use Map. It is intended to promote a vibrant, pedestrian-oriented place that seamlessly integrates downtown with the waterfront. Layering compatible land uses and public amenities, together at various scales and intensities, the D-D/W designation allows for multiple functions within the same building or adjacent to one another in the same general vicinity to foster a mix of uses that encourages people to live, work, play, and shop in close proximity. The D-D/W designation is also intended to create a vibrant destination for people from other parts of the city and the region. The project as proposed and conditioned adds 400 students and support staff to the Downtown area in an existing building that has remained vacant for years. This will also bring parents into the downtown

and help to activate economic vitality to the Downtown. The project is also consistent with applicable General Plan 2040 policies as noted above in the report.

C. The subject parcel is physically suitable for the type of land use being proposed.

The public charter high school is proposing to renovate and occupy a vacant two-story office building in the Downtown area. No major exterior alterations are proposed for the exterior design of the building. The subject parcel is physically suitable for the proposed use because most activities associated with the school use will occur indoors, the applicant has agreed to incorporate changes to their proposed operational plans and procedures and will construct off-site public improvements to ensure that the proposed use will not create negative impacts on the surrounding properties. These plans and procedures are included as Conditions of Approval. The applicant is proposing to satisfy recreational needs of students with staggered scheduling in the interior recreation areas.

D. The proposed use is compatible with existing and permissible land uses within the zoning district and the general area in which the proposed use is to be located which may include but not be limited to size, intensity, hours of operation, number of employees, or the nature of the operation.

The proposed project is compatible with existing and permissible land uses within the zoning district. A similar educational use is located immediately across Georgia Street from the project site, the use will activate a vacant commercial building and includes site improvements to ensure compatibility with surrounding uses. The proposed use plans to operate between the hours of 8:00 a.m. to 3:30 p.m. Monday-Friday with occasional after-school events and activities. Conditions of approval have been added to reflect these hours and reasonable limitations.

E. The physical location or placement of the use on the site is compatible with and will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood.

The physical location of the proposed project inside an existing vacant office building will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood. Conditions of approval have been added to address vehicle queuing during drop-off and pick up hours.

F. The proposed use and related project features will not create any nuisances arising from the emission of odor, dust, gas, noise, vibration, smoke, heat or glare at a level exceeding ambient conditions and would not otherwise be detrimental to the public interest, health, safety, or general welfare.

As proposed and conditioned, the public charter high school will not create any nuisances from odors, dust, gas, noise, vibration, smoke, heat or glare exceeding ambient conditions. As proposed and conditioned, the use will not be detrimental to the public interest, health, safety, or general welfare.

G. The project has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this chapter.

Following a review of the project, staff is recommending that the Planning Commission find the project categorically exempt from the requirements of the California Environmental Quality Act (CEQA), pursuant to Section 15332, Class 32, In-fill Projects. Staff required studies that support this exemption, which is discussed in more detail, below.

IV. DETERMINATIONS RELEVANT TO THE APPROVAL OF ESTABLISHMENT OF A SCHOOL IN ALL OR PART OF AN EXISTING BUILDING THAT WAS NOT DESIGNED FOR OR OCCUPIED BY A K-12 SCHOOL

VMC Section 16.335.02 A 3 requires the review authority to make the following determinations to grant a Use Permit (the determinations are in **bold**, and staff's determination follows in *italics*):

- a. The school location is appropriate for the use, and that adjacent uses will not be adversely affected.**

The school location is appropriate for the use, and adjacent uses will not be adversely affected in that a similar and complimentary educational use is located across Georgia Street from the site and students also have easy access to the John F. Kennedy library. In addition, the school would bring staff, students and parents into the downtown area increasing pedestrian traffic to restaurants and shops.

- b. Adequate access, student drop-off areas and required off-street parking is provided.**

Under VMC section 16.508.04 A, no parking is required for this site; however, on-street public parking is available on Georgia and Sacramento Streets. Additional parking to support the school and other nearby uses is available in the Downtown Parking District parking lots via parking passes which can be purchased. The applicant is proposing drop-off zones along the curblane of the Georgia and Sacramento Streets during the morning and afternoon which will temporarily reduce the availability of the on-street parallel spaces during this period. Sixteen (16) diagonal spaces on Sacramento Street will be permanently converted into 8 parallel spaces. In addition, the site is adjacent to the Vallejo Transit Hub, and has easy walking or biking via the Class III bike lanes. The applicant is providing bike racks for 38 bikes.

- c. Outdoor play areas are appropriately-sized, furnished with facilities and equipment, safe, and secure.**

N/A. While indoor PE areas are provided, there are no outdoor facilities.

V. RESOLUTION APPROVING THE PROJECT AT 241-255 GEORGIA STREET

NOW, THEREFORE, LET IT BE RESOLVED that the Planning Commission hereby FINDS that the project is exempt from environmental review under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332 (Class 32: In-fill Projects), based on the above findings.

BE IT FURTHER RESOLVED that the Planning Commission hereby **APPROVES** Major Use Permit (UP22-0008) subject to the Conditions of Approval attached to this Resolution.

VI. VOTE

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Vallejo, State of California, on the 18th day of March 2024 by the following vote to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

JAMAR STAMPS, CHAIRPERSON
City of Vallejo Planning Commission

Attest:

CHRISTINA RATCLIFFE, AICP, SECRETARY
City of Vallejo Planning Commission

Exhibit A: Conditions of Approval

EXHIBIT A

CONDITIONS OF APPROVAL

MAJOR USE PERMIT (UP22-0008)
241-255 GEORGIA STREET, VALLEJO CA, 94589
APN: 0055-170-390

PERMIT DESCRIPTION: The project consists of the phased conversion of a vacant two-story, 34,819 square-foot office building in Downtown Vallejo with associated interior/exterior on-site and right-of-way improvements allowing for the operation of a new public Charter high school with an enrollment of up to 400 students.

A. PLANNING DIVISION

Staff Contact: Erwin Ordoñez, Planning Consultant (707) 648-4326
eordonez@interwestgrp.com

Pre-Building Permit:

1. The applicant shall submit a numbered list to the Planning Division with a written response regarding how each condition of project approval contained in this report will be satisfied. The list should be submitted to the project planner, who will coordinate the development of the project. The approved COA will be included in the permit set after the cover sheet with each condition listed and how the applicant will address each condition in writing.
2. The site plan, floor plans, building elevations, and any additional information or representations, whether oral or written, indicating the proposed manner of operation submitted with an application or submitted during the approval process are deemed conditions of approval. Applicant guarantees, warrants, and ensures compliance with the plans and conditions in all respects.
3. The Applicant shall apply for and receive a Temporary Use Permit from the Planning Division for any temporary office or construction trailer.

During Construction

1. Construction activities shall be managed in compliance with the following requirements:
 - a. Site Watering. During the project's construction, all portions of the site shall be watered as necessary to reduce emissions of dust and other particulate matter, and all stockpiles shall be covered.
 - b. Maintenance. Streets and sidewalks shall be made dirt-free at the completion of construction.

- c. Noise. All construction and transport equipment shall be muffled in accordance with state and federal laws.
 - d. Emissions. Construction and transport equipment shall be operated to minimize exhaust emissions. During construction, trucks and equipment should be running only when necessary.
 - e. Water Run-off. All water run-off from construction sites shall be controlled. During construction, trucks and equipment should be running only when necessary and shall comply with Chapter 12.41 of the Vallejo Municipal Code.
- 2. No person shall make, or cause to suffer, or permit to be made upon any public property, public right-of-way, or private property any excessive noise, annoying noise, amplified sound or vibrations that are physically annoying to reasonable persons of normal sensitivity or that are so harsh or so prolonged or unnatural or unusual in their use, time or place as to cause or contribute to the unnecessary and unreasonable discomfort of any persons of normal sensitivity located at the lot line of the property from which these noises emanate or that interfere with the peace and comfort of residents or their guests, or the operators or customers in places of business in the vicinity, or that may detrimentally or adversely affect such residences or places of business. (VMC Section 16.502.09 (C))
- 3. Construction, demolition, and related loading/unloading activities that may generate noise shall be limited to 7 a.m. and 6 p.m. Monday- Friday, Saturday 9 am- 6 pm and Sundays and holidays not allowed. (VMC Section 16.502.09 (D))
- 4. The fencing for construction sites shall not be installed until a building permit or grading permit has been issued and shall be removed before final inspection. In the event that the building permits expire before the construction is completed, the Planning and Development Services Director may issue a temporary use permit under Chapter 16.339, Temporary Uses, to allow the fencing to remain for a longer period of time. (VMC Section 16.505.08 (B))

Pre-Building Final

- 1. Prior to the first final building inspection, the landscape architect shall provide a completed Certificate of Completion and a Certificate of Installation, according to the Landscape Documentation by VMC Chapter 16.71: Water Efficient Landscape Requirements. The documentation shall include the following:
 - a. Irrigation Scheduling (VMC §16.71.050)
 - b. Schedule of Landscape and Irrigation Maintenance (VMC §16.71.051)
 - c. Landscape Irrigation Audit Report (VMC §16.71.052)
 - d. Soil Management Report (VMC §16.71.045)
- 2. Prior to first final building inspection, the Applicant shall install landscaping and irrigation per approved plans. The landscape architect shall verify in writing that the landscaping and irrigation have been installed per the approved landscape plans concerning size, health, number and species of plants, and the overall design concept.

Landscaping

1. Maintenance Required. All landscaping shall be maintained in a healthy and always thriving condition, in compliance with the approved landscape plan. Irrigation systems and their components shall be fully functional and consistent with the original approved design or upgraded to reflect current best practices for water efficiency. Regular maintenance shall include but is not limited to:
 - a. Adjusting, checking, and repairing irrigation equipment; resetting automatic controllers; aerating and de-thatching turf areas; adding/replenishing fertilizer, mulch, and soil amendments; insect control; the replacement of dead or diseased plants; pruning; watering; and weeding all landscaped areas.
 - b. The trimming of vegetation is necessary to maintain the effective functioning of solar energy facilities and passive solar design features installed both on-site and on adjacent properties.
 - c. Pruning, cultivating, weeding, fertilizing, replacing plants, and regularly watering.
 - d. Pruning or removal of overgrown vegetation, cultivated or uncultivated, that may harbor rats, vermin, or other nuisances or otherwise be detrimental to neighboring properties.
 - e. The removal of dead, decayed, diseased, or hazardous trees, weeds, and debris that create an unsightly appearance and may be dangerous to public safety and welfare or detrimental to neighboring properties or property values. Compliance shall be by removal, replacement, or maintenance.
 - f. Landscaping (trees, shrubs, ground cover, turf, etc.) which, due to accident, damage, disease, lack of maintenance, or other cause, fails to show a healthy appearance and growth, shall be replaced. Replacement plants shall conform to all standards that govern the original planting installation, approved landscaping plan, or the director's approval. (VMC Section 16.504.08 (D))
2. Accumulation of leaves, twigs, bark, and other similar materials shall be removed regularly. Planting areas shall be always kept free of weeds. (VMC §16.504.08 (C))

Lighting

1. Lighting shall be designed, located, and installed to be directed downward or toward structures, be shielded or fully shielded. It shall be well-maintained to prevent glare, light trespass (unwanted light on adjacent lots and public rights-of-way), and light pollution to the maximum extent feasible. No permanently installed lighting shall blink, flash, or be of unusually high intensity or brightness, as determined by the Planning and Development Services Director. (VMC §16.506.04 (B))

General Requirements

1. A final decision on an application for any discretionary approval subject to appeal shall become effective after the expiration of ten calendar days following the date of action unless an appeal is filed. No building permit or business license shall be issued until the 11th day following the action date. If a different termination date is fixed at the time of

granting, or if actual construction or alteration has begun under valid building permits, the ten days may be waived. (VMC §16.602.11)

2. The review authority, in the granting of any permit, may specify a time consistent with the purposes of the use and necessary to safeguard the public safety, health, and welfare, within which the proposed use must be undertaken and actively and continuously pursued. If no time period is specified, any permit granted under the Zoning Code shall automatically expire within two years of the effective date (which is March 18, 2024) (VMC §16.602.12 (A)). All Planning permits associated with this approval shall expire on March 18, 2026, unless exercised or extended.
3. If a permit is granted in conjunction with approval of new construction, issuance of a building permit shall constitute exercise of rights; provided, however, that, unless otherwise specified as a condition of project approval, the permit shall expire if:
 - i. The Building Permit expires.
 - ii. Final inspection is not completed, or certificate of occupancy issued within the time specified as a condition of project approval.
 - iii. The rights granted under the permit are not exercised within one year following the earliest to occur of the following: issuance of a certificate of occupancy; or if no certificate of occupancy is required, the last required final inspection for the new construction. (VMC §16.602.11 (B))
4. The Planning and Development Services Director may approve a one-year extension of any permit or approval granted for a residential or non-residential project under the Zoning Code upon receipt of a written application and fees received fifteen calendar days (November 6, 2025) before the expiration date with the required fee prior to expiration of the permit. (VMC §16.602.11 (C.1))
5. No change in the use or structure for which a permit or other approval has been issued is permitted unless the permit is modified as provided for in the Zoning Code. For this chapter, the modification of a permit may include minor modification of a development review approval that is in substantial compliance as determined by the Planning and Development Services Director. (VMC §16.602.11 (D))
6. Applications for changes to an approved permit must be filed and processed in compliance with the requirements in VMC Section 16.602.02, Application Forms and Fees, and shall be subject to a fee established by the Master Fee Schedule.
 - a. Minor Modifications. The Planning and Development Services Director may approve minor changes to approved plans that are consistent with the original findings and conditions approved by the hearing body and would not intensify any potentially detrimental effects of the project.
 - b. Major Modifications. A request for changes in conditions of approval of a discretionary permit or a change in an approved site plan or building plan that would affect the findings adopted as a basis for project approval shall be treated as a new application, except that the Planning and Development Services Director may approve changes that she determines to be minor. (VMC §16.602.11 (E))
7. A request for major changes to an approved site plan or building plan that will not affect the findings adopted as a basis for project approval but are still considered substantial

shall be forwarded to the original review authority for the discretionary permit for review and approval. (VMC §16.602.11 (F))

8. For new developments, utilities including, but not limited to, all electrical, telephone, cable television, fiber-optic cable, gas, water, sewer, irrigation/recycled water, and similar distribution lines providing direct service to a project shall be installed underground within the site. The Planning and Development Services Director may waive this requirement upon determining that underground installation is infeasible, or the electrical line is otherwise exempt from an under-grounding requirement. (VMC §16.501.10)
9. The Applicant shall obtain an inspection from the Planning Division before the final building inspection. All inspections require a minimum of 24-hour notice. Occupancy permits shall not be granted until all construction and landscaping are completed and finalized by the approved plans and required conditions of approval or a bond has been posted to cover all costs of the unfinished work as agreed to by the Planning and Development Services Director.
10. Applicant shall indemnify, hold harmless, and defend City, its officers, officials, directors, employees, agents, volunteers and affiliates and each of them from any and all claims, demands, causes of action, damages, costs, expenses, actual attorney's fees, applicant's fees, expert fees, losses or liability, in law or in equity, of every kind and nature whatsoever arising out of or in connection with Applicant's operations, or any subcontractor's operations, to be performed under this agreement for Applicant's or subcontractor's tort negligence including active or passive, or strict negligence, including but not limited to personal injury including, but not limited to bodily injury, emotional injury, sickness or disease, or death to persons and/or damage to property of anyone, including loss of use thereof, caused or alleged to be caused by any act or omission of Applicant, or any subcontractor, or anyone directly or indirectly employed by any of them or anyone for the full period of time allowed by the law, regardless to any limitation by insurance, with the exception of the sole negligence or willful misconduct of the City. No modification of the project, any application, permit, certification, condition, environmental determination, other approval, change in applicable laws and regulations, or change in processing methods shall alter the Applicant's indemnity obligation.

Transportation Impact Analysis (TIA)

The following conditions of approval implement recommendations from the Transportation Impact Analysis prepared for this project.

1. Prior to the issuance of any permits, the Applicant shall prepare and submit for approval to the City's Traffic Engineering Division, a proposed **Parking and Circulation Plan**, which will describe in detail: proposed hours, days of operation, staffing, permanent and temporary signage, methods of dissemination/distribution of information, enforcement mechanisms, and proposed operational procedures for implementing the pedestrian, bicycles and vehicular circulation/parking noted in the plan.

At least two copies of the approved plan shall be provided to the City Traffic Engineering and Planning Divisions to be retained as a Public Record and to ensure future enforcement of the Major Use Permit Conditions of Approval. Violations of City approved Conditions of Approvals may result in future Use Permit revocation actions.

The required plan shall:

- a. Direct parents/guardians to the Georgia Street loading/unloading zone when dropping off or picking up their students.
 - b. Require that staff, students, and visitors will be responsible for paying for their parking spots in the City-owned and publicly available parking within the surrounding area.
 - c. Identify vehicles regularly parked in the schools loading zone that need to be ticketed and towed by the City and a mechanism to regularly share this information with Vallejo Police Department and Public Works
 - d. Detail how (School) Staff will be stationed at unique locations at the loading zones and meet vehicles at the curb to help direct drivers entering/exiting the loading areas. At least six staff members should be stationed on Georgia Street and three on Sacramento Street. At least one staff member should be stationed at the southwest corner of Georgia Street/Sacramento Street to ensure vehicles are not blocking the intersection.
 - e. Detail the schedule for staff to be stationed at the loading zones at least one hour before the first morning bell and stay approximately 10 minutes after the start of school. In the afternoon, staff should be stationed at the loading zones at least 10 minutes before the last afternoon bell and stay approximately five minutes after the queues have dissipated.
 - f. Require parent's vehicles to pull forward in the loading zones as far as possible to allow for the maximum number of vehicles to drop-off/pick-up their student(s).
 - g. Require parents/guardians to stay in their vehicles at all times while students exit/enter via the right side of the vehicles when greeted by the staff member.
 - h. Include a written drop-off and pick-up procedure with supporting graphics that can be communicated with the students' parents/guardians via handouts and shared electronically through the school's website.
2. Prior to the issuance of any permits, the Applicant shall amend plans submitted for Building Permit Plan Check approval to show bicycle parking facilities to accommodate at least 38 bicycle parking spaces and the required bicycle parking shall be available for use prior to issuance of Final Inspection approvals or the issuance of a Certificate of Occupancy.
 3. Prior to issuance of Final Inspection approvals or the issuance of a Certificate of Occupancy the applicant(s), at their shall cost, shall permanently install in a manner consistent with City standards, City approved signs along both proposed loading zones (Georgia Street and Sacramento Street) which note the following: "No parking from 7 to 9 AM and 3 to 5 PM on weekdays - violators will be towed".

4. Prior to issuance of Final Inspection approvals or the issuance of a Certificate of Occupancy the applicant(s), at their shall cost, shall permanently paint the curbs white in both loading and unloading zones in a manner consistent with City and State standards.
5. Prior to issuance of Final Inspection approvals or the issuance of a Certificate of Occupancy, the applicant(s), at their shall cost, shall permanently install in a manner consistent with City standards, Manual on Uniform Traffic Control Devices (MUTCD) compliant R10-7 "DO NOT BLOCK INTERSECTION" signs on all four approaches to the Santa Clara Street/Georgia Street and Sacramento Street/Georgia Street intersections. Signs shall be mast arm mounted if possible with existing equipment (street mounted/installed if not possible on the existing signal mast arms).
6. Prior to issuance of Final Inspection approvals or the issuance of a Certificate of Occupancy the applicant(s), at their cost, shall permanently install or cause to be installed in a manner consistent with City standards, all the improvements noted within the public rights-of-way as depicted in the approved development plans including all regulatory signs. The applicant(s) are responsible for obtaining any additional approvals and paying for any additional fees associated with these improvements.

Historical/Cultural Resources Best Practice for Excavation

The following conditions of approval implement recommendations from the Historic/Cultural Resources background documentation prepared for this project.

1. The applicant shall immediately notify the City Building and Planning Divisions upon the discovery of any historic, cultural, or archaeological discovery that results from the construction or excavation activities occurring on the project site.
2. If a unique archaeological resource is discovered, reasonable efforts shall be made by the applicant to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of appropriate treatment, in no order of preference, may include, but are not limited to, the following:
 - a) Planning construction to avoid archaeological sites.
 - b) Deeding archaeological sites into permanent conservation easements.
 - c) Capping or covering archaeological sites with a layer of soil before building on the sites.
 - d) Planning parks, greenspace, or other open space to incorporate archaeological sites.
3. To the extent that unique archaeological resources are discovered and preservation in place is not feasible, an archeologist would determine an appropriate treatment plan, which could include excavation. Retention of a qualified archeologist for this purpose shall be made at the applicant's expense with the approval of the City.

4. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the applicant shall immediately notify the City and there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.
5. Upon the discovery of the Native American remains, the applicant/landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in State Law, with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

B. BUILDING DIVISION

Staff Contact: Steve Arnold, Building Official, (707) 648-4387

Steve.Arnold@cityofvallejo.net

1. Plans and permits are required for building, mechanical, plumbing and electrical work per California Code of Regulations, Title 24 and applicable City Ordinance in effect at the time of completed Building Permit application date and required fees shall be paid at time of application.
2. 2022 California Code of Regulations will apply to this project if permit application(s) are received before end of 2025. After December 31, 2025, the 2025 California Code of Regulations will apply.
3. Accessibility is required for this project per CBC 11B; See 11b-209.2 and 11B-503 for Passenger drop off and loading zone requirements.

4. Prior to the issuance of permits, please refer to Section 32020 of the Education Code for Fire/Police/Ambulance access requirements at fences or gates.
5. Vertical access is required for Phase 2 second floor education area. Please clarify your intent with Building Division staff prior to applying for permits for Phase 2. A possible exception for second floor office space less than 3000 square feet and not open to the public per 11B..206.2.3 EXC 1.2 (info only)

C. VALLEJO FLOOD & WASTEWATER DISTRICT (VFWD)

Staff Contact: Alan Mitchell, P.E., Contract Plan Check, (530) 681-0553

alan.mitchell@ponticelloinc.com

1. Provide sewer analysis for VFWD approval, prior to issuance of Building Permit.
2. A complete District Pre-Treatment Questionnaire (PTQ) is required, describing the nature of proposed food service. Here is a link for the PTQ that can also be located on the VFWD's website.
4. Pay applicable VFWD fees (plan review, connection, inspection) before approval by VFWD and issuance of Building Permit.
5. VFWD inspection will be required prior to Building Permit sign-off.
6. Verify depth of existing sewer main, prior to starting construction. Notify VFWD if greater than 10'.
7. Prior to occupancy/final building inspection, provide a standard VFWD cleanout at the right-of-way/easement line per District standards and a two-way cleanout at the building per the U.P.C. This applies to all laterals.
8. New 2-way cleanout is shown under the bike racks, so please confirm the bike racks are moveable for access to cleanout.
9. See VFWD Detail SS-2, Table 1, which shows new lower lateral shall be SDR26 PVC.
10. Confirm separation between existing W and proposed lower sewer lateral. Notify Vallejo PW Water Division to confirm acceptable.
11. Provide sewer analysis before VFWD approval.
12. Pay applicable VFWD fees before approval.

D. SOLANO COUNTY TRANSIT

Staff Contact: Patricia Carr, General Services Manager, pat@soltransride.com

1. The drop-off behind the building MUST be controlled by the school. Carpools queues cannot block access to the private roadway or access to the parking spaces.

E. VALLEJO FIRE DEPARTMENT

Fire Prevention Plan Review

Project Description: CHANGE IN USE; Preliminary Review to Establish a Public Charter School (E Occupancy) from an Existing Building — 34,819 sq. ft. of Tenant Improvement — 22,959 E Occupancy and 11,860 of B Occupancy

The project plans have been reviewed with the information supplied. Subsequent plan submittals for review may be subject to additional requirements. Field inspections that discover fire/life safety issues may require additional revisions or alterations. Permits expire 1 year from issuance. The Fire Department recommends a fire safety inspection should occur to review the building for Fire and Building Code compliance.

Fire Code Requirements

FIRE ACCESS

2. The building electrical service disconnecting means shall be installed in a readily accessible location either outside the building or nearest the point of entrance of the service conductors. The disconnecting means shall be accessible to emergency personnel, either directly or by a remote actuating device without requiring transit of the building interior.
3. A Knox Box (key box) mounted no higher than 5 feet above the finished floor containing appropriate keys for emergency Fire Department access shall be provided. The minimum size box is the 3200 series with a hinged door. The tamper kit is not required, box color may be any of the Knox options. It takes approximately 2 weeks for delivery. For more information call the Fire Prevention Division at (707) 658-4565 or visit www.knoxbox.com
4. Keys for the Knox Box entry system required by the Fire Department shall be attached to durable tags with permanent marking identifying the door(s) or lock(s) that the key functions with. i.e. "MASTER" or "MECHANICAL ROOM",
5. Approved address numbers shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Said numbers shall clearly contrast with their background. The characters shall be a minimum of 4" high with a 1/2" stroke. The size of the building and distance or location of the address numbers from the roadway may necessitate larger numbers. A building directory sign is required at the main entrance. All buildings require identification numbers or letters.

6. Rooms or areas containing controls for HVAC systems, electrical panels, automatic fire extinguishing systems, fire alarm equipment or other detection, suppression or control elements shall be identified with appropriate signs.

FIRE PROTECTION SYSTEMS

8. Smoke detection/dampers for HVAC systems shall be required as set forth in the Mechanical Code. Areas served by a single or multiple units exceeding 2,000 CFM shall have detectors installed and supervised by the fire alarm system. Detectors shall not trip a general alarm. Detectors shall be selfrestoring or a readily accessible manual reset shall be installed.
9. The minimum fire-extinguisher requirement shall be one 2A-10BC rated portable unit in such locations so that maximum floor-travel distance does not exceed 75 to the nearest extinguisher from any portion of the building with a maximum of 3,000 square feet of floor area surveyed. Plan submittal shall include the proposed location of extinguishers. Final location shall be approved in the field by the Fire Department.
10. All fire extinguishers shall be mounted in a conspicuous and readily accessible location either on a bracket or within an approved storage cabinet. Fire extinguishers shall be mounted so the top of the unit is 3 feet to 5 feet off the finished floor. If the extinguisher is not readily visible, a sign shall be located directly above the extinguisher. The sign shall be legible and of a contrasting color with its background.
11. An automatic fire sprinkler system is required for the proposed E Occupancy tenant improvement building. Please submit 2 sets of plans and calculations to the Fire Marshal's Office and obtain permit prior to installation. Please note the density of the system must be compatible with the occupancy classification and designed in accordance with NFPA 13.
12. A manual and automatic fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of the Fire Code and NFPA 72 is required. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. Please submit 2 sets of fire alarm plans and obtain permit from the Fire Prevention Bureau prior to installation. Please include listed device selections cut sheets.
13. A underground fire service main is required. A separate permit from the Fire Prevention Division is required. Please submit 2 sets of plans for the underground fire service main for review by the Fire Official prior to installation.
14. This project shall comply with the California Fire Code regarding fire flow requirements, including Appendix B. Fire flow calculations shall be designed by a fire protection engineer or C-16 licensed contractor.
15. Fire hydrants must be installed and approved by the fire department prior to combustible construction. Fire hydrants shall be spaced a maximum of 300 feet apart. Please indicate on the plans the location of all existing and proposed Fire hydrants.
16. Approved impact protection shall be installed as necessary to protect hydrants from vehicular damage.

17. The contractor shall be responsible for painting of hydrants, verifying street valves are fully opened and the placement of blue reflective dots prior to requesting a final inspection. Maintenance, inspection and testing of private hydrants are the responsibility of the property owner. Private hydrants shall be painted red.
18. Kitchen. Provide an approved automatic fire extinguishing system to protect all cooking equipment. A permit is required from the Fire Marshal's office for fixed fire extinguishing systems. Please submit 2 sets of plans for review and approval. Design and system calculations shall be prepared by a licensed C-16 Contractor.
19. Activation of the (kitchen) fixed fire extinguishing system shall activate the building fire alarm.

MEANS OF EGRESS

20. An exit corridor is required and shall be a minimum of 44 inches wide and have a fire resistive rating of 1 hour.
21. All buildings shall comply with the California Building Code, Chapter 10 Means of Egress requirements. Including but not limited to; exit signs, exit doors, exit hardware and exit illumination.
22. Provide an approved exit sign over all required exit doors.
23. Means of egress illumination shall be provided and maintained at any time the building is occupied. The means of egress shall be illuminated of not less than 1 foot candle power and shall be approved by the Fire Prevention Division prior to sign-off of the final inspection.
24. Emergency exit lighting shall be provided at or near all exits and as designated by the Fire Marshal. Final exit lighting shall be approved by the Fire Marshal prior to sign-off of the final inspection.
25. All emergency lighting, exit sign lights shall have two separate sources of power as required by the California Building Code.
26. Locking devices on exit doors shall conform to the California Building Code. Only one lock or latch requiring one motion/operation to open/unlock is required. No double keyed dead-bolts are permitted on exit doors.
27. Maintain the width of the exit system; tables, chairs, storage systems and other devices shall not obstruct the means of egress along the path of exit travel based on the cumulative occupant load served. Maintain clear access to all exits.
28. Provide panic hardware on all required exits. All exit doors shall open in the exit direction of travel. A, E, 1 2 and 1 2.1 Occupancies only.

MISC. REQUIREMENTS

- 29. All interior finishes, decorative material and furnishings shall meet the flammability, smoke and combustibility requirements of the Fire Code.
- 30. All roof material shall be rated class 'A' or better.
- 31. Provide "Roof Access" sign at roof ladder location.
- 32. Post an occupant load sign in a conspicuous place near the main exit from all rooms designated as "Assembly Areas". The sign shall read as follows;

Maximum Occupants:

General_____

Dining_____

(calculations shall be provided by the Architect)

- 33. Provide a 1-hour fire separation between the B and A & E occupancies as required by the 2019 California Building Code.
- 34. The Emergency Plan including fire drill procedures shall be submitted to the Fire Marshal for review prior to final occupancy.

VFD & CSFM Fire Drill Requirements for Schools

CFC 403.5 Group E occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. Group E occupancies shall comply with Sections 403.5.1 through 403.5.4. [California Code of Regulations, Title 19, Division 1, S3.13(a)(1)] Fire Drills. (Group E Occupancies)

(a) Group E Occupancies.

(1) General. Every person and public officer managing, controlling, or in charge of any public, private, or parochial school shall cause the fire alarm signal to be sounded upon the discovery of fire. Every person and public officer managing, controlling, or in charge of any public, private, or parochial school, other than a two-year community college, shall cause the fire alarm signal to be sounded not less than once every calendar month at the elementary and intermediate levels, and not less than twice yearly at the secondary level, in the manner prescribed in California Code of Regulations, Title 24, Part 2, Section 907. A fire drill shall be held at the secondary level not less than twice every school year.

403.5.1 Group E Occupancies. Every person and public officer managing, controlling, or in charge of any public, private, or parochial school, other than a two-year community college, shall cause the fire alarm signal to be sounded not less than once every calendar month at the elementary and intermediate levels, and not less than twice yearly

at the secondary level in the manner prescribed in Section 907. A fire drill shall be held at the secondary level not less than twice every school year.

403.5.1.1 Emergency Pre-Fire Planning. Each school principal, district superintendent or day nursery manager shall, in cooperation with the enforcing agency, prepare procedures to be followed in case of fire or other emergency. They should include the following:

1. Posting of the telephone number of the fire department in the office and/or at the main switchboard.
2. Assignment of a responsible person to call the fire department upon notification of any fire or activation of the alarm system for any reason other than fire drills.
3. Posting in a conspicuous place in each classroom or assembly area a plan showing paths of travel to evacuate the room in case of emergency and including an alternate route.
4. Posting in each classroom instructions to be followed by the teacher. These should include:
 - a. 4.1. Maintaining of order during evacuation.
 - b. 4.2. Removal of roll call book and calling of roll when designated evacuation area is reached.

403.5.2 First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

403.5.3 Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires.

403.5.4 Assembly points. Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated to avoid interference with fire department operations. The assembly areas shall be arranged to keep each class separate to provide accountability of all individuals.

35. A final inspection from the Fire Prevention Division is required.

Requests for field inspection shall be made a minimum of 24 hours in advance by calling the Fire Prevention Division at (707) 648-4565, Monday through Friday 9:00AM to 3:00PM. If you have any questions regarding these requirements, please feel free to contact this office at (707) 648-4565.

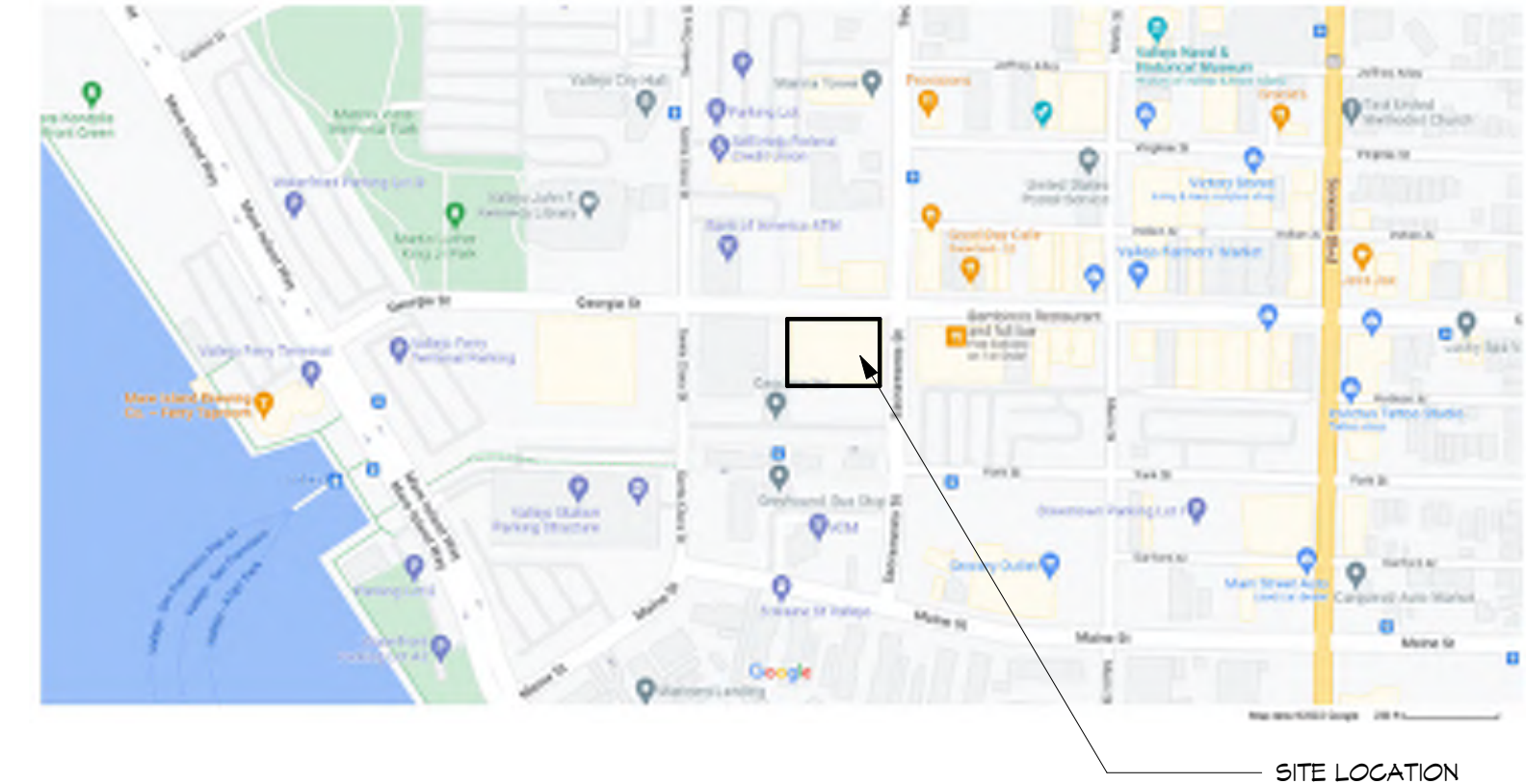
PROPOSED ELITE PUBLIC SCHOOLS - VALLEJO

241-255 Georgio Street
Vallejo, CA

MAJOR USE PERMIT (PLANNING SUBMITTAL)

PROJECT DESCRIPTION:

THE PROPOSED PUBLIC CHARTER HIGH SCHOOL WILL PROVIDE A VALUABLE HIGH SCHOOL IN THE DOWNTOWN VALLEJO AREA. THE EXISTING BUILDING LOCATED AT 241-255 GEORGIA STREET WILL ACCOMMODATE A MAXIMUM OF 400 STUDENTS AND 35 STAFF. THE BUILDING IS A PARTIAL TWO-STORY BUILDING WITH A COMBINED TOTAL SQUARE FOOTAGE OF 34,819 SQUARE FEET. THE TENANT IMPROVEMENT PROJECT WILL BE PHASED AS FUNDS BECOME AVAILABLE TO UPGRADE THE BUILDING. THE FIRST PHASE PERMIT WILL INCLUDE THE FULL GROUND FLOOR WITH TWO SUITES IDENTIFIED AS DEDUCTIVE ALTERNATES IF THE BIDS COME IN TOO HIGH. THE SECOND PHASE WILL INCLUDE THE SECOND FLOOR AND ANY WORK THAT WAS NOT COMPLETED ON THE FIRST FLOOR IN PHASE I. THE PROGRAM FOR THE GROUND FLOOR INCLUDES 13 CLASSROOMS, A LIBRARY ALCOVE, MULTI-PURPOSE ROOM, SERVING KITCHEN, 4 OFFICES, RESTROOMS, AND STORAGE AREAS. THE SECOND FLOOR WILL ACCOMMODATE 5 ADDITIONAL CLASSROOMS, STORAGE, RESTROOMS, A CONFERENCE ROOM AND 4 PRIVATE OFFICES. THE MAIN VISITOR ENTRANCE WILL BE LOCATED ON GEORGIA STREET AND THE STUDENT ENTRANCE WILL BE AT THE BACK OF THE BUILDING AT LOT G. STUDENTS WILL ACCESS THE BUILDING FROM AN ADA COMPLIANT RAMP OFF SACRAMENTO STREET THAT WILL LEAD TO A GATED, FENCED WALKWAY. THE SECOND FLOOR WILL HAVE ACCESS OFF THE WEST END OF THE BUILDING WITH A NEW ELEVATOR AND COMPLIANT ENTRY STAIRS.



VICINITY MAP

PROJECT NUMBER: 0055-170-390
APN: 0055-170-390
TYPE OF CONSTRUCTION: III-B
SEPARATION WALLS: AS APPLICABLE
OCCUPANCY GROUP: E OCCUPANCY

TABULATIONS:
TOTAL LOT AREA = 0.704 ACRE (PARCEL 1 @ 0.620 + PARCEL 2 @ 0.034 + PARCEL 3 @ 0.025 + PARCEL 4 @ 0.025)

GROSS BUILDING AREA: 34,819 S.F.

22,990 S.F. GROUND FLOOR
11,860 S.F. SECOND FLOOR.

PROJECT DATA:

ZONING: DMX (DOWNTOWN MIXED-USE)

	REQUIRED	EXISTING
FRONT SETBACK:	00	00
SIDE SETBACK:	00	00
REAR SETBACK:	00	00
BUILDING HEIGHT:	102 FT.	34 FT.

BICYCLE PARKING (VMC 16.508.12 & TABLE 16.508-D):
SCHOOLS - 2 SHORT-TERM SPACES PER CLASSROOM OR 6% OF STUDENT CAPACITY PLUS STAFF.
18 CLASSROOMS * 2 = 36 BICYCLE SPACES

TOTAL PARCEL AREA (PARCELS 1, 2 & 3): 30,666 S.F.
EXISTING & PROPOSED LANDSCAPE AREA: 1,425 S.F. (0.046 %)

PROJECT TEAM

APPLICANT:
ELITE PUBLIC SCHOOLS
100 WHITNEY AVENUE
VALLEJO, CA 94589
(707) 652-3142
CONTACT: DR. RAMONA BISHOP

OWNER:
BRYAN BAYLES
51 RED CYPRESS CT
DANVILLE, CA 94506

ARCHITECT:
KINYON + KIM ARCHITECTS, INC.
1801 OAKLAND BLVD., SUITE 320
WALNUT CREEK, CA 94596
(925) 934-1160
CONTACT: DAVID KIM, AIA

CIVIL:
ATLAS CIVIL DESIGN
872 HIGUERA STREET
SAN LUIS OBISPO, CA 93401
(760) 718-8010
CONTACT: A.J. WHITAKER, PE

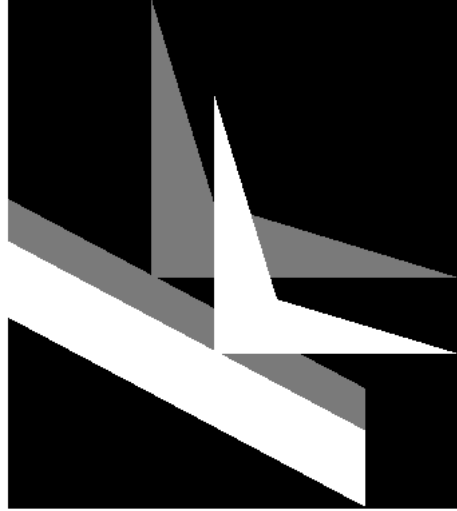
PROJECT MANAGEMENT:
JO ANN KOPLIN

JWKOPLIN@GMAIL.COM
(310) 717-4323

MUP SUBMITTAL SHEET INDEX

MUP1	MUP SUBMITTAL COVER SHEET
MUP2	FIRE DEPARTMENT COMMENTS
MUP3	SITE CONTEXT PHOTOS
MUP4	PRELIM SITE LAYOUT
MUP4.1	PRELIM DEMO SITE LAYOUT
MUP5	PHASE 1 PRELIM DEMO GROUND FLOOR
MUP6	PHASE 1 PRELIM GROUND FLOOR
MUP7	PHASE 2 PRELIM GROUND FLOOR
MUP8	PHASE 2 PRELIM DEMO SECOND FLOOR
MUP9	PHASE 2 PRELIM SECOND FLOOR
MUP10	PHASE 2 PRELIM ROOF PLAN
MUP11	PRELIM MASTER GROUND FLOOR
MUP12	PRELIM MASTER SECOND FLOOR
MUP13	PRELIM EXTERIOR ELEVATIONS
1 of 6	TITLE SHEET
2 of 6	DEMOLITION AND SITE IMPROVEMENT PLAN - A
3 of 6	DEMOLITION AND SITE IMPROVEMENT PLAN - B
4 of 6	UTILITY PLAN
5 of 6	OFF-SITE IMPROVEMENT PLAN
6 of 6	DETAILS
L1	PRELIMINARY LANDSCAPE PLAN

Kinyon + Kim
Architects, Inc.



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Vallejo High School
Tenant Improvements

251 Georgia Street
Vallejo, CA 94590

APN: 0055-170-390

09/26/2023

MUP1

FIRE DEPARTMENT COMMENTS

EXHIBIT A

Project #: 220118
Drawn by: Author
Checked by: Checker



Fire Prevention Plan Review

July 20, 2022

Permit Number: UP22-0008
Site Address: 241 Georgia Street
Planner: John Dacey Email: john.dacey@kinyonkim.com
Project Description: **CHANGE IS USE**; Preliminary Review to Establish a Public Charter School (E-Occupancy) from an Existing Building - 34,819 sq. ft. of Tenant Improvement - 22,999 E Occupancy and 11,860 of B Occupancy
Plan Review Fee: \$555

The project plans have been reviewed with the information supplied. Subsequent plan submittals for review may be subject to additional requirements. Field inspections that discover fire/safety issues may require additional revisions or alterations. Permits expire 1 year from issuance. The Fire Department recommends a fire safety inspection should occur to review the building for Fire and Building Code compliance.

Fire Code Requirements

FIRE ACCESS

1. Access roads shall be designed and maintained to support the imposed loads of fire apparatus weighing 70,000 lbs. with an all-weather driving surface.
2. Access roads that are fire lanes shall either be posted with permanent all-weather signs constructed and installed in accordance with the Fire Department Fire Lane Marking Standards or shall all have curbs painted red and a sign posted at each entrance. Contact the Fire Prevention Bureau for further information and design templates. Location of such area's shall be determined prior to final inspection.
3. The building electrical service disconnecting means shall be installed in a readily accessible location either outside the building or nearest the point of entrance of the service conductors. The disconnecting means shall be accessible to emergency personnel, either directly or by a remote actuating device without requiring transit of the building interior.
4. A Knox Box (key box) mounted no higher than 5 feet above the finished floor containing appropriate keys for emergency Fire Department access shall be provided. The minimum size box is the 3200 series with a hinged door. The tamper kit is not required, box color may be any of the Knox options. It takes approximately 2 weeks for delivery. For more information call the Fire Prevention Division at (707) 656-4565 or visit www.knoxbox.com

1



25. All emergency lighting, exit sign lights shall have two separate sources of power as required by the California Building Code.
26. Locking devices on exit doors shall conform to the California Building Code. Only one lock or latch requiring one motion/operation to open/unlock is required. No double keyed dead-locks are permitted on exit doors.
27. Maintain the width of the exit system; tables, chairs, storage systems and other devices shall not obstruct the means of egress along the path of exit travel based on the cumulative occupant load served. Maintain clear access to all exits.
28. Provide panic hardware on all required exits. All exit doors shall open in the exit direction of travel. A, E, I, 2 and I 2.1 Occupancies only.

MISC. REQUIREMENTS

29. All interior finishes, decorative material and furnishings shall meet the fire flameability, smoke and combustibility requirements of the Fire Code.
30. All roof material shall be rated class "A" or better.
31. Provide "Roof Access" sign at roof ladder location.
32. Post an occupant load sign in a conspicuous place near the main exit from all rooms designated as "Assembly Areas". The sign shall read as follows:

Maximum Occupants:

General:.....

Dining:.....

(calculations shall be provided by the Architect)
33. Provide a 1 hour fire separation between the B and A & E occupancies as required by the 2019 California Building Code.
34. The Emergency Plan including fire drill procedures shall be submitted to the Fire Marshal for review prior to final occupancy.

VFD & CSFM Fire Drill Requirements for Schools

CFC 403.5 Group E occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. Group E occupancies shall comply with Sections 403.5.1 through 403.5.4.

4

5. Keys for the Knox Box entry system required by the Fire Department shall be attached to durable tags with permanent marking identifying the door(s) or lock(s) that the key functions with, i.e. "MASTER" or "MECHANICAL ROOM".
6. Approved address numbers shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Solid numbers shall clearly contrast with their background. The characters shall be a minimum of 4" high with a 1/2" stroke. The size of the building and distance or location of the address numbers from the roadway may necessitate larger numbers. A building directory sign is required at the main entrance. All buildings require identification numbers or letters.
7. Rooms or areas containing controls for HVAC systems, electrical panels, automatic fire extinguishing systems, fire alarm equipment or other detection, suppression or control elements shall be identified with appropriate signs.

FIRE PROTECTION SYSTEMS

8. Smoke detection/dampers for HVAC systems shall be required as set forth in the Mechanical Code. Areas served by a single or multiple units exceeding 2,000 CFM shall have detectors installed and supervised by the fire alarm system. Detectors shall not trip a general alarm. Detectors shall be self-restoring or a readily accessible manual reset shall be installed.
9. The minimum fire-extinguisher requirement shall be one 2A-10BC rated portable unit in such locations so that maximum floor-travel distance does not exceed 75' to the nearest extinguisher from any portion of the building with a maximum of 3,000 square feet of floor area surveyed. Plan submittal shall include the proposed location of extinguishers. Final location shall be approved in the field by the Fire Department.
10. All fire extinguishers shall be mounted in a conspicuous and readily accessible location either on a bracket or within an approved storage cabinet. Fire extinguishers shall be mounted so the top of the unit is 3 feet to 5 feet off the finished floor. If the extinguisher is not readily visible, a sign shall be located directly above the extinguisher. The sign shall be legible and of a contrasting color with its background.
11. An automatic fire sprinkler system is required for the proposed E Occupancy tenant improvement building. Please submit 2 sets of plans and calculations to the Fire Marshal's Office and obtain permit prior to installation. Please note the density of the system must be compatible with the occupancy classification and designed in accordance with NFPA 13.
12. A manual and automatic fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of the Fire Code and NFPA 72 is required. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. Please submit 2 sets of fire alarm plans

2

(California Code of Regulations, Title 19, Division 1, § 13(a)(1)) Fire Drills. (Group E Occupancies)

(a) Group E Occupancies

(1) General. Every person and public officer managing, controlling, or in charge of any public, private, or parochial school shall cause the fire alarm signal to be sounded upon the discovery of fire. Every person and public officer managing, controlling, or in charge of any public, private, or parochial school, other than a two-year community college, shall cause the fire alarm signal to be sounded not less than once every calendar month at the elementary and intermediate levels, and not less than twice yearly at the secondary level, in the manner prescribed in California Code of Regulations, Title 24, Part 2, Section 907. A fire drill shall be held at the secondary level not less than twice every school year.

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1. Posting of the telephone number of the fire department in the office and/or at the main switchboard.
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3. Posting in a conspicuous place in each classroom or assembly area a plan showing paths of travel to evacuate the room in case of emergency and including an alternate route.
4. Posting in each classroom instructions to be followed by the teacher. These should include:
 - a. 4.1. Maintaining of order during evacuation.
 - b. 4.2. Removal of roll call book and ceiling of roll when designated evacuation area is reached.

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403.5.3 Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires.

5

and obtain permit from the Fire Prevention Bureau prior to installation. Please include listed device selections cut sheets.

13. A underground fire service main is required. A separate permit from the Fire Prevention Division is required. Please submit 2 sets of plans for the underground fire service main for review by the Fire Official prior to installation.

14. This project shall comply with the California Fire Code regarding fire flow requirements, including Appendix B. Fire flow calculations shall be designed by a fire protection engineer or C-16 licensed contractor.

15. Fire hydrants must be installed and approved by the fire department prior to combustible construction. Fire hydrants shall be spaced a maximum of 300 feet apart. Please indicate on the plans the location of all existing and proposed Fire hydrants.

16. Approved impact protection shall be installed as necessary to protect hydrants from vehicular damage.

17. The contractor shall be responsible for painting of hydrants, verifying street valves are fully opened and the placement of blue reflective dots prior to requesting a final inspection. Maintenance, inspection and testing of private hydrants are the responsibility of the property owner. Private hydrants shall be painted red.

18. **Kitchen.** Provide an approved automatic fire extinguishing system to protect all cooking equipment. A permit is required from the Fire Marshal's office for fixed fire extinguishing systems. Please submit 2 sets of plans for review and approval. Design and system calculations shall be prepared by a licensed C-16 Contractor.

19. Activation of the (kitchen) fixed fire extinguishing system shall activate the building fire alarm

MEANS OF EGRESS

20. An exit corridor is required and shall be a minimum of 44 inches wide and have a fire resistive rating of 1 hour.
21. All buildings shall comply with the California Building Code, Chapter 10 Means of Egress requirements. Including but not limited to; exit signs, exit doors, exit hardware and exit illumination.
22. Provide an approved exit sign over all required exit doors.
23. Means of egress illumination shall be provided and maintained at any time the building is occupied. The means of egress shall be illuminated of not less than 1 foot candle power and shall be approved by the Fire Prevention Division prior to sign-off of the final inspection.
24. Emergency exit lighting shall be provided at or near all exits and as designated by the Fire Marshal. Final exit lighting shall be approved by the Fire Marshal prior to sign-off of the final inspection.

3

403.5.4 Assembly points. Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated to avoid interference with fire department operations. The assembly areas shall be arranged to keep each class separate to provide accountability of all individuals.

35. A final inspection from the Fire Prevention Division is required.

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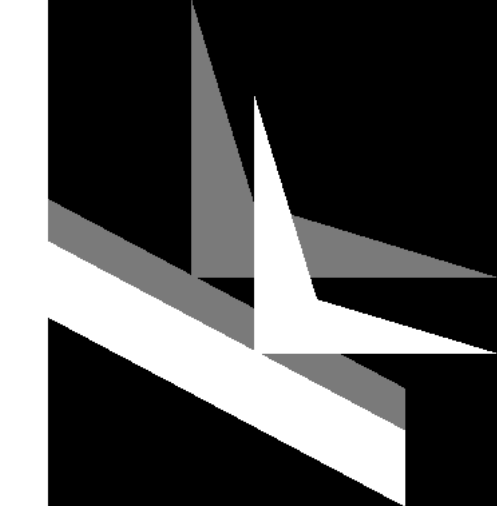
We strive to provide excellent customer service to your complete satisfaction.

Vince Sproule
Fire Prevention Division
Vallejo Fire Department

EY 2022-2023 VFD FEE ESTIMATE

1. \$ 585 Planning Review of Proposed New Development
2. 585 Building Permit Phase
3. 645 plus \$6.71 per head. Fire Sprinkler System NFPA 13
4. 393 plus \$6.71 per device. Fire Sprinkler Monitoring System. NFPA 72
5. 781 Fire Sprinkler - Underground Water Main Line. NFPA 24
6. 781 Automatic UL 300 Kitchen Fire Suppression System

Kinyon + Kim
Architects, Inc.



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Vallejo, CA 94596
Tel: 925.934.8132

Vallejo High School
Tenant Improvements

251 Georgia Street
Vallejo, CA 94590

APN: 0055-170-390

09/26/2023

MUP2

EXHIBIT A

Project #: 220118
Drawn by: Author
Checked by: Checker



VIEW FROM GEORGIA STREET
NORTHEAST CORNER



VIEW FROM GEORGIA STREET
NORTHWEST CORNER



VIEW FROM SACRAMENTO STREET
SOUTHEAST CORNER



VIEW FROM SOUTH



WEST VIEW



NORTH VIEW OF GEORGIA STREET



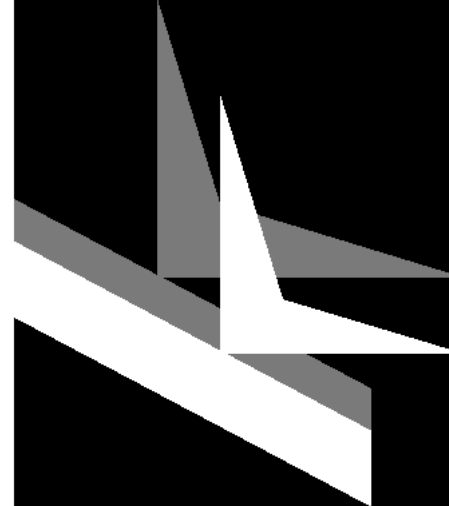
EAST VIEW OF SACRAMENTO ST



WEST VIEW

Kinyon + Kim
Architects, Inc.

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Oakland, CA 94612
P: 925.934.8132



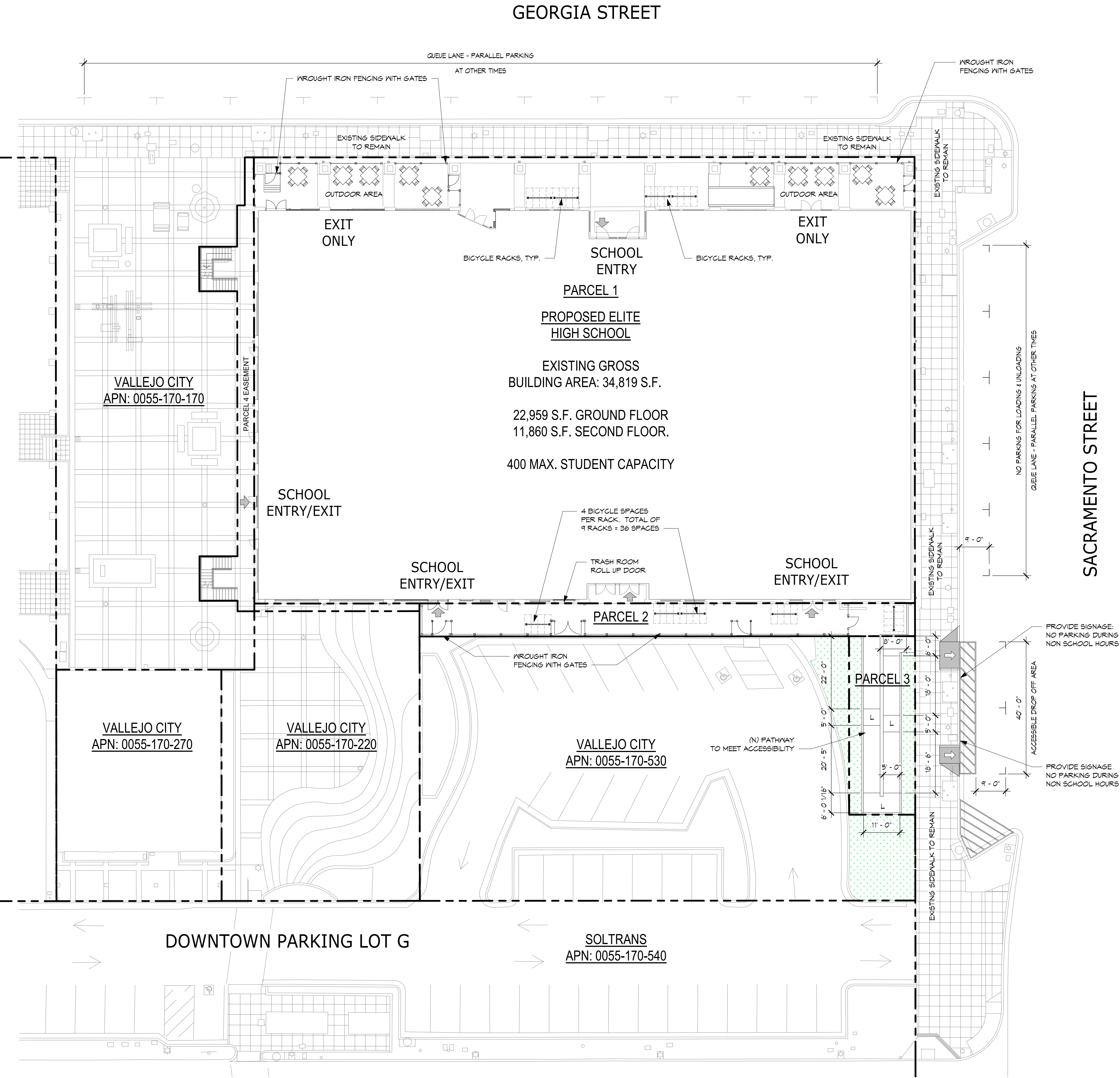
Vallejo High School
Tenant Improvements

251 Georgia Street
Vallejo, CA 94590

APN: 0055-170-390

09/26/2023

MUP3



LOADING AND UNLOADING STUDENTS
MONDAY - FRIDAY: 8:00 AM TO 9:00 AM (MORNING)
MONDAY - FRIDAY: 3:00 PM TO 4:00 PM (AFTERNOON)
WEDNESDAY: 1:00 PM TO 2:00 PM (EARLY DISMISSAL)
FOOD DELIVERY
MONDAY - FRIDAY: 8:00 AM TO 9:00 AM (MORNING)
MONDAY - FRIDAY: 11:00 AM TO 1:00 PM (AFTERNOON)



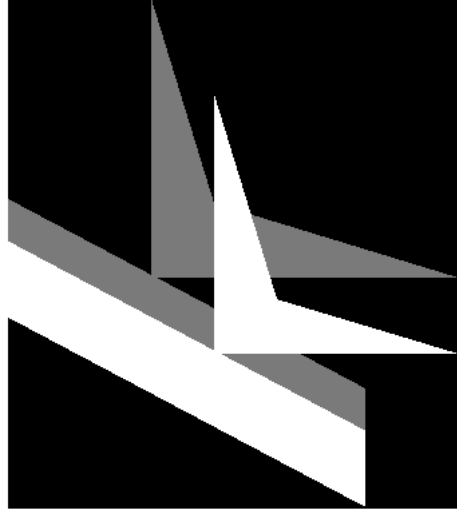
PRELIM SITE LAYOUT

0' 4' 8' 16' 32 FEET
1/16" = 1'-0"



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Kinyon + Kim
Architects, Inc.



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ELITE Public
Schools

Vallejo High School
Tenant Improvements

251 Georgia Street
Vallejo, CA 94590

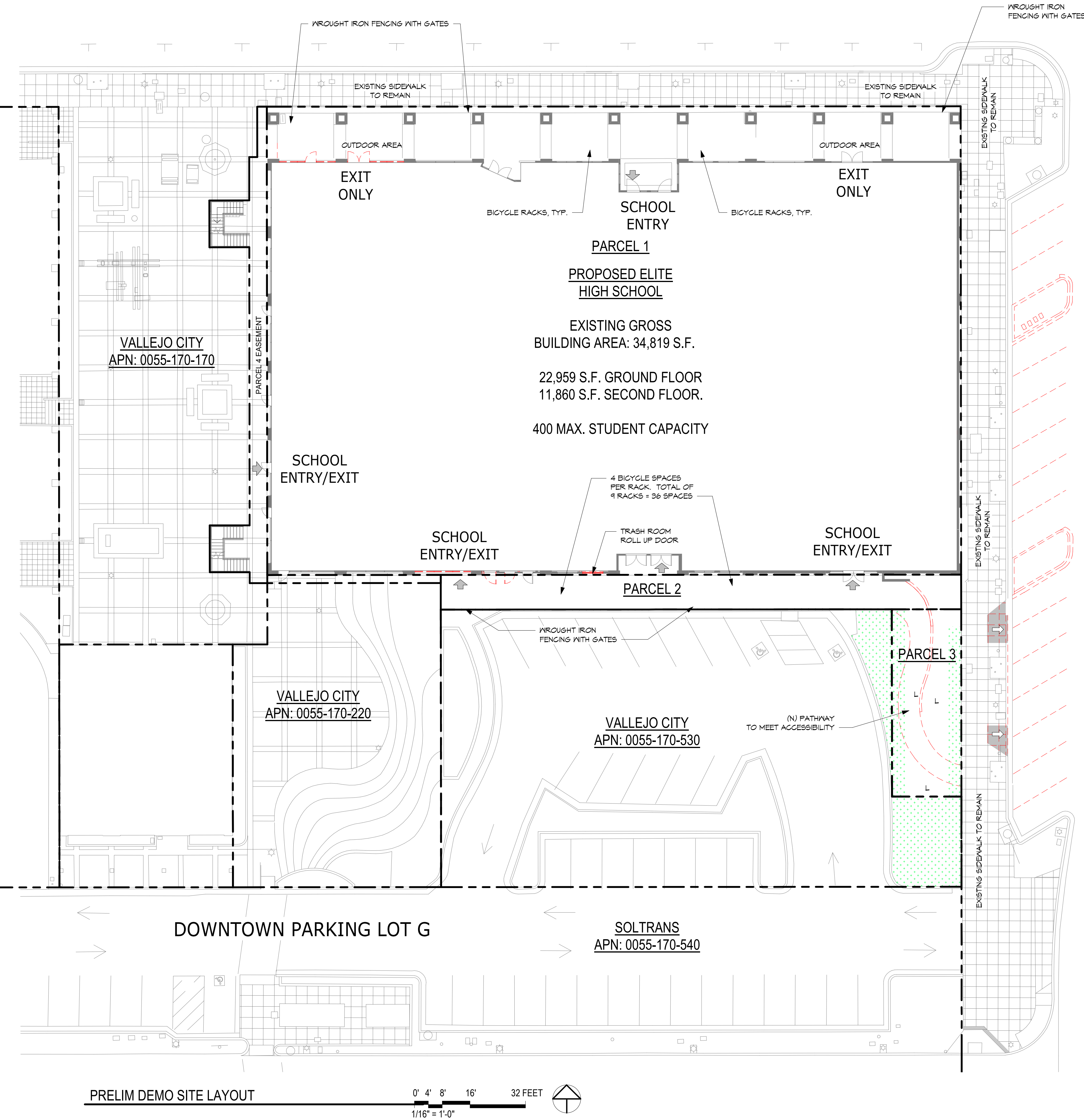
APN: 0055-170-390

09/26/2023

MUP4

EXHIBIT A

Project #: 220118
Drawn by: Author
Checked by: Checker



DEMO LEGEND	
	EXISTING WALL TO REMAIN
	DEMOLISHED WALL
	(E) STOREFRONT / DOOR TO BE REMOVED

SACRAMENTO STREET

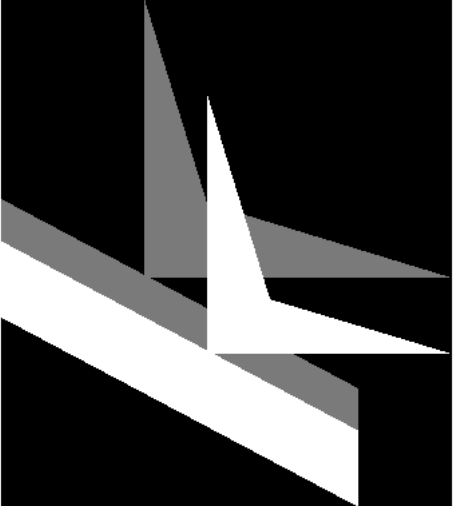
DOWNTOWN PARKING LOT G

PRELIM DEMO SITE LAYOUT

0' 4' 8' 16' 32 FEET
1/16" = 1'-0"



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Vallejo High School
Tenant Improvements

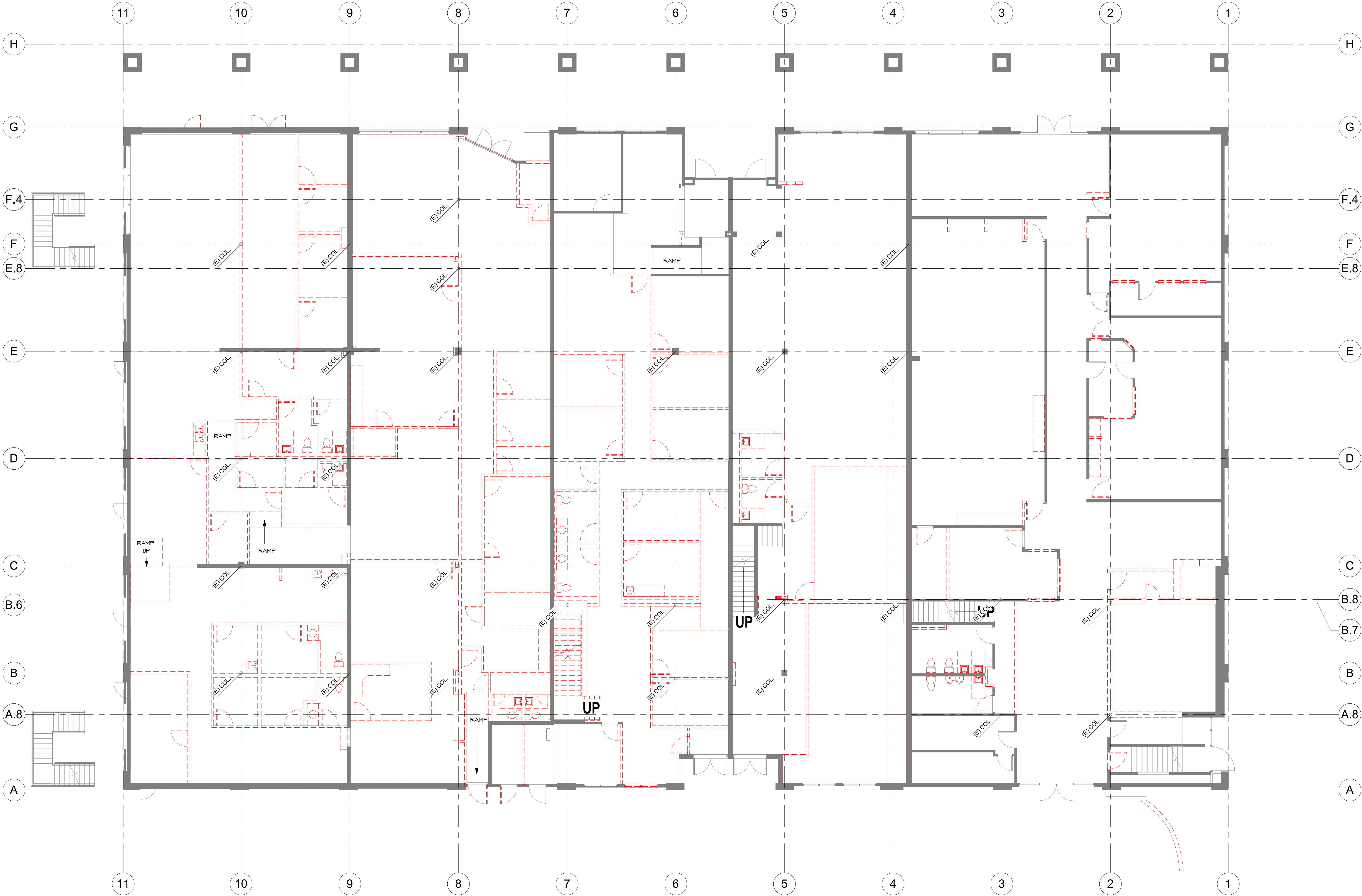
251 Georgia Street
Vallejo, CA 94590
APN: 0055-170-390

09/26/2023

MUP4.1

EXHIBIT A

Project #: 220118
Drawn by: Author
Checked by: Checker



WALL LEGEND

EXISTING WALL TO REMAIN

DEMOLISHED WALL

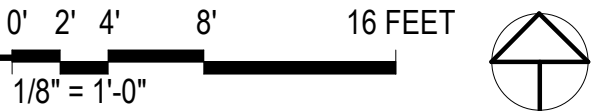
(E) STOREFRONT / DOOR TO BE REMOVED

EXISTING FIXTURES TO BE REMOVED - PHASE 1	
Type	Count
HAND SINK	10
KITCHEN SINK	6
WALL HUNG URINAL	2
WATER CLOSET	14

Kinyon + Kim Architects, Inc.

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PHASE 1 EXISTING DEMO
PRELIM GROUND FLOOR



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Vallejo High School
Tenant Improvements

251 Georgia Street
Vallejo, CA 94590

APN: 0055-170-390

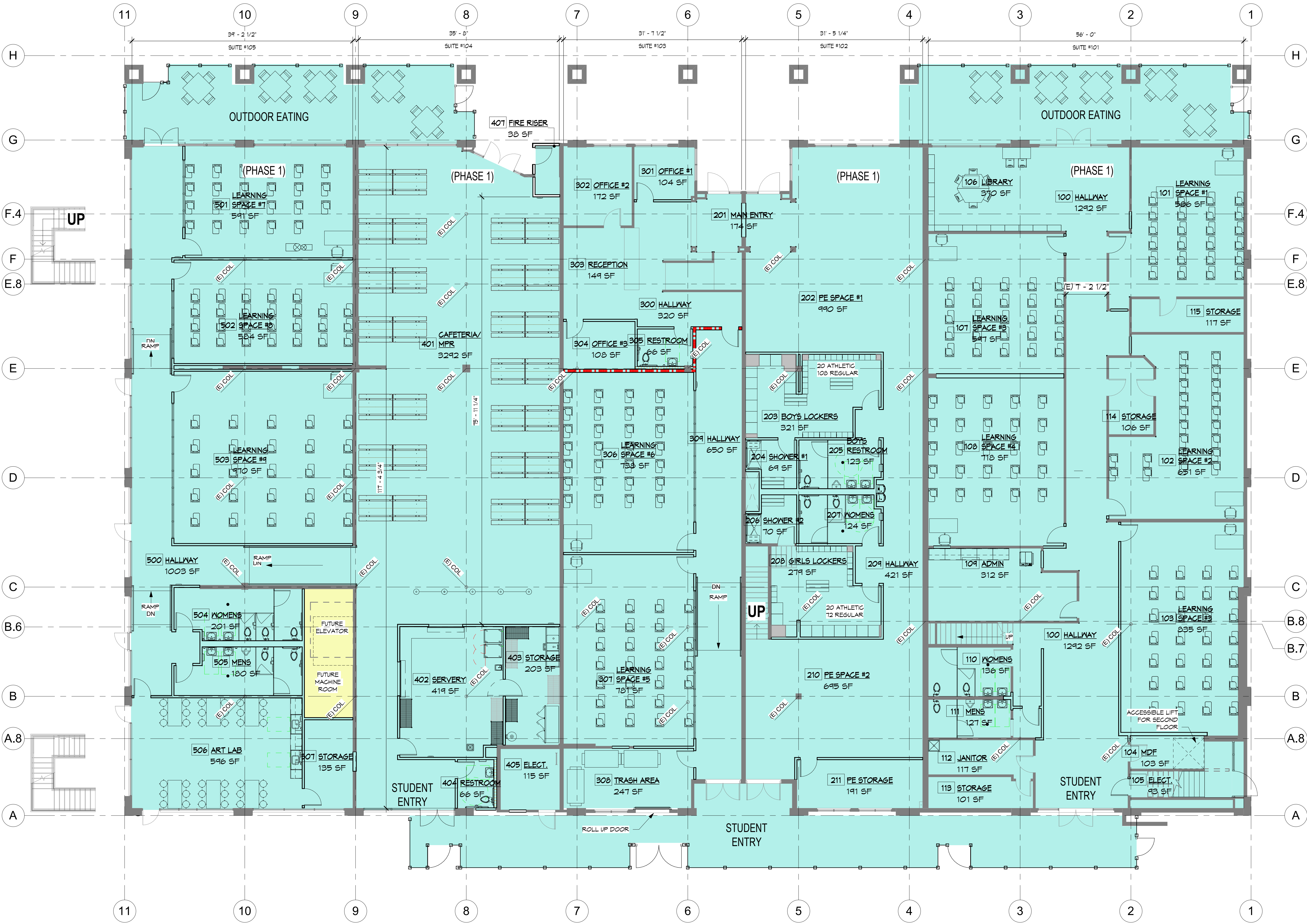
09/26/2023

MUP5

GEORGIA STREET

EXHIBIT A

Project #: 220118
Drawn by: Author
Checked by: Checker



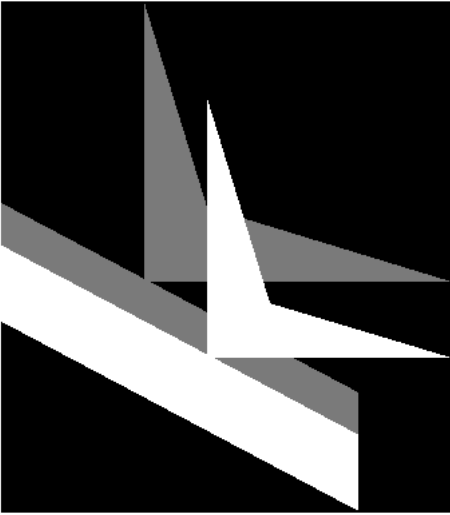
PERIOD 1 8:30-10:00	MPR Cooperative Games	PE ROOM #1 Fitness	PE ROOM #2 Dance	PE ROOM #3 Yoga	Waterfront Park Ball games
9 TH GRADE	30 students	30	20	20	40
10 TH GRADE					
11 TH GRADE					
12 TH GRADE					

PERIOD 2 10:05-11:40	MPR Cooperative Games	PE ROOM #1 Fitness	PE ROOM #2 Dance	PE ROOM #3 Zumba	Waterfront Park Jogging
9 TH GRADE					
10 TH GRADE	30	30	20	20	40
11 TH GRADE					
12 TH GRADE					

PERIOD 3 12:15-1:50	MPR LUNCH PERIOD	PE ROOM #1 Fitness	PE ROOM #2 Dance	PE ROOM #3 HIIT	Waterfront Park Volleyball
9 TH GRADE					
10 TH GRADE	30	30	20	20	40
11 TH GRADE					
12 TH GRADE					

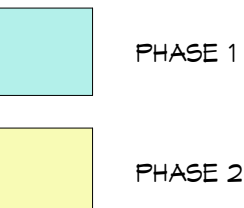
PERIOD 4 1:55-3:30	MPR Cooperative Games	PE ROOM #1 Fitness	PE ROOM #2 Dance	PE ROOM #3 Conditioning	Waterfront Park Soccer
9 TH GRADE	40				
10 TH GRADE					
11 TH GRADE	30	20	20	30	
12 TH GRADE					

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PHASE LEGEND



Vallejo High School
Tenant Improvements

251 Georgia Street
Vallejo, CA 94590

APN: 0055-170-390

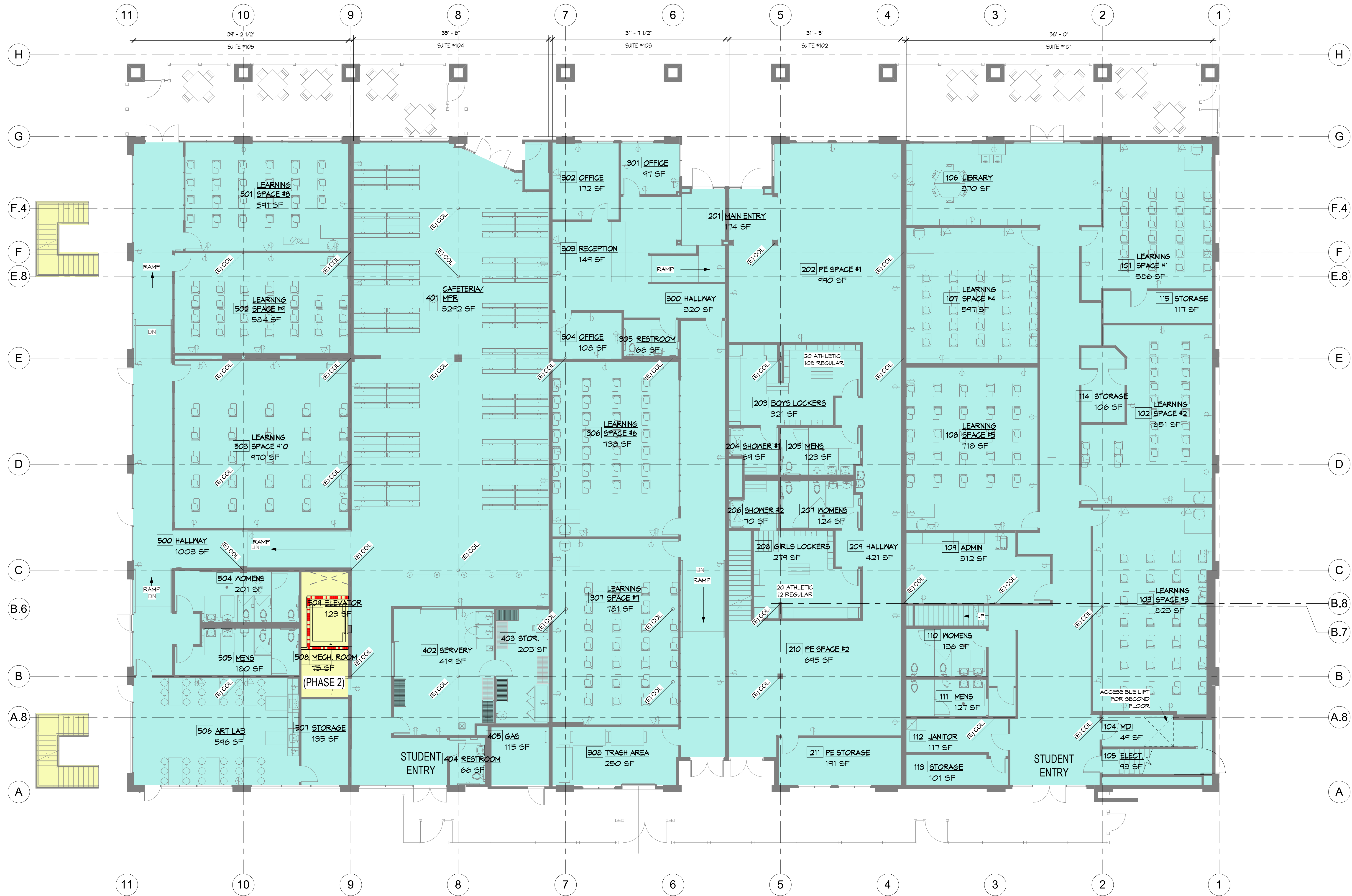
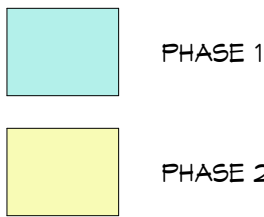
09/26/2023

MUP6

EXHIBIT A

Project #: 220118
Drawn by: IDA
Checked by: DEK

PHASE LEGEND



PHASE 2 PRELIM GROUND FLOOR



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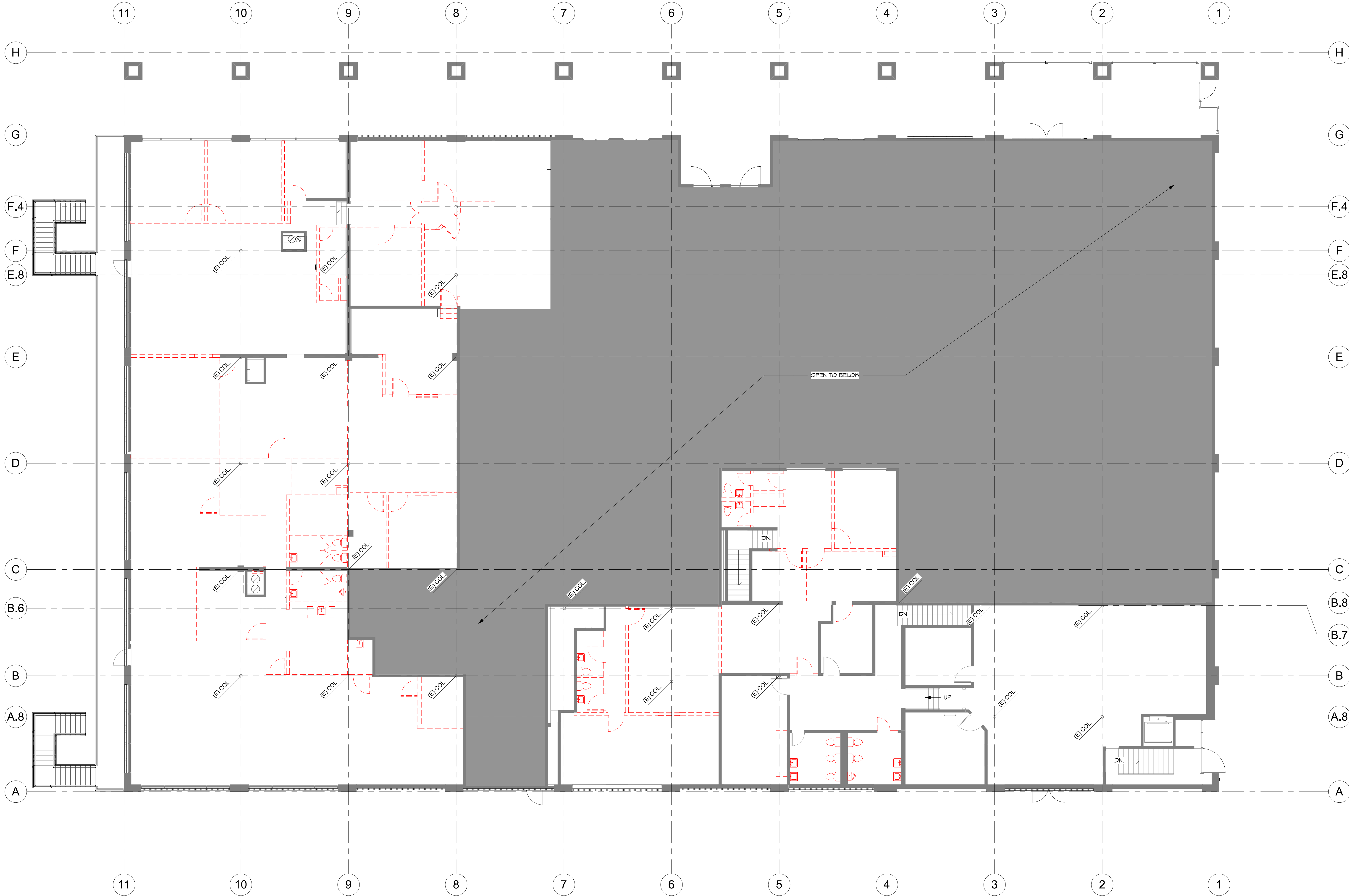
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Tenant Improvements

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09/26/2023

MUP7



WALL LEGEND

- EXISTING WALL TO REMAIN
- DEMOLISHED WALL
- (E) STOREFRONT / DOOR TO BE REMOVED

EXISTING FIXTURES TO BE REMOVED - PHASE 2

Type	Count
HAND SINK	10
KITCHEN SINK	3
WALL HUNG URINAL	1
WATER CLOSET	12

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PHASE 2 EXISTING DEMO
PRELIM SECOND FLOOR



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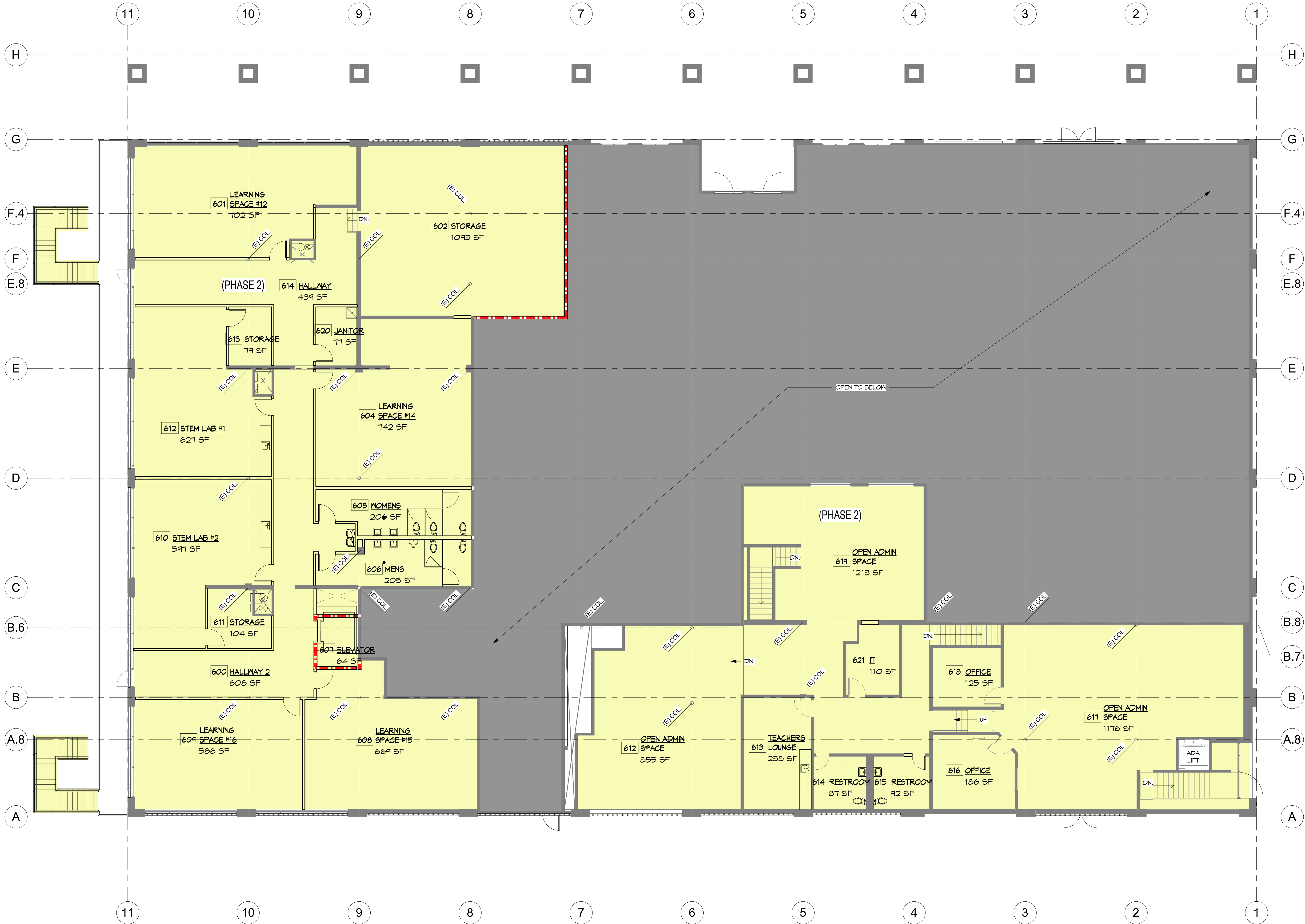
APN: 0055-170-390

09/26/2023

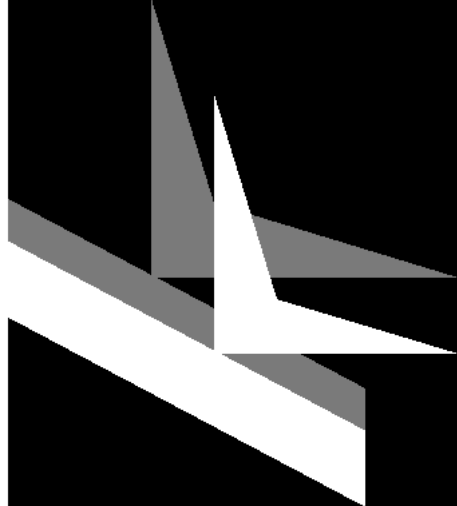
MUP8

EXHIBIT A

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MUP9

PRELIMINARY ROOF TOP AIR CONDITIONING UNIT SCHEDULE																
PLAN MARK	QTY.	MANUF.	MODEL NO.	NOM. TONS	SA CFM	OA CFM	ESP	COOLING		HEATING		ELECTRICAL				LOCATION
								TOTAL (MBH)	SENS. (MBH)	GAS INPUT (MBH)	OUTPUT (MBH)	MAX FUSE	FAN BHP	MCA	VOLTS	PH.
AC-1	1	CARRIER	48LCD014	12.5	5,000	1,000	0.6"	146.5	113.4	176	143	100	3.6	81.3	208/230	3
AC-2	1	CARRIER	48LCD008	7.5	3,000	600	0.6"	93.3	70.3	150	120	60	2.4	52	208/230	3
AC-3-6	4	CARRIER	48GCDM042AS	5	2,000	500	0.5"	63.0	48.3	60	49	50	1.4	33	208/230	3
AC-7-10	4	CARRIER	48GCDM05K2AS	4	1,600	400	0.5"	50.0	37.1	60	49	45	0.9	33	208/230	3
AC-11-26	16	CARRIER	48GCDM042AS	3	1,200	400	0.5"	35.1	25.6	60	49	35	0.9	28	208/230	3

PRELIMINARY EXHAUST FAN SCHEDULE											
PLAN MARK	MANUF.	MODEL NO.	AREA SERVED	PERFORMANCE			ELECTRICAL				LOCATION
				CFM	ESP	RPM	VOLTS	PH.	HP	WATTS	
EF-1,2	GREENHECK	GB-100	VARIES	580	0.70"	1,345	115	1	1/4	~	ROOF
EF-3,4	GREENHECK	GB-098	VARIES	300	0.70"	1,321	115	1	1/6	~	ROOF
EF-5	GREENHECK	GB-097	VARIES	220	0.70"	1,596	115	1	1/6	~	ROOF
EF-6	GREENHECK	GB-100	VARIES	450	0.70"	1,337	115	1	1/4	~	ROOF
EF-7,8	PANASONIC	FV-05-11VKS1	RESTROOMS	80	0.3"	1131	115	1	~	10.2	CEILING

EXHIBIT A

Project #: 220118
Drawn by: IDA
Checked by: DEK

ROOF LEGEND

EXISTING TO REMAIN

NEW UNITS TO BE INSTALLED

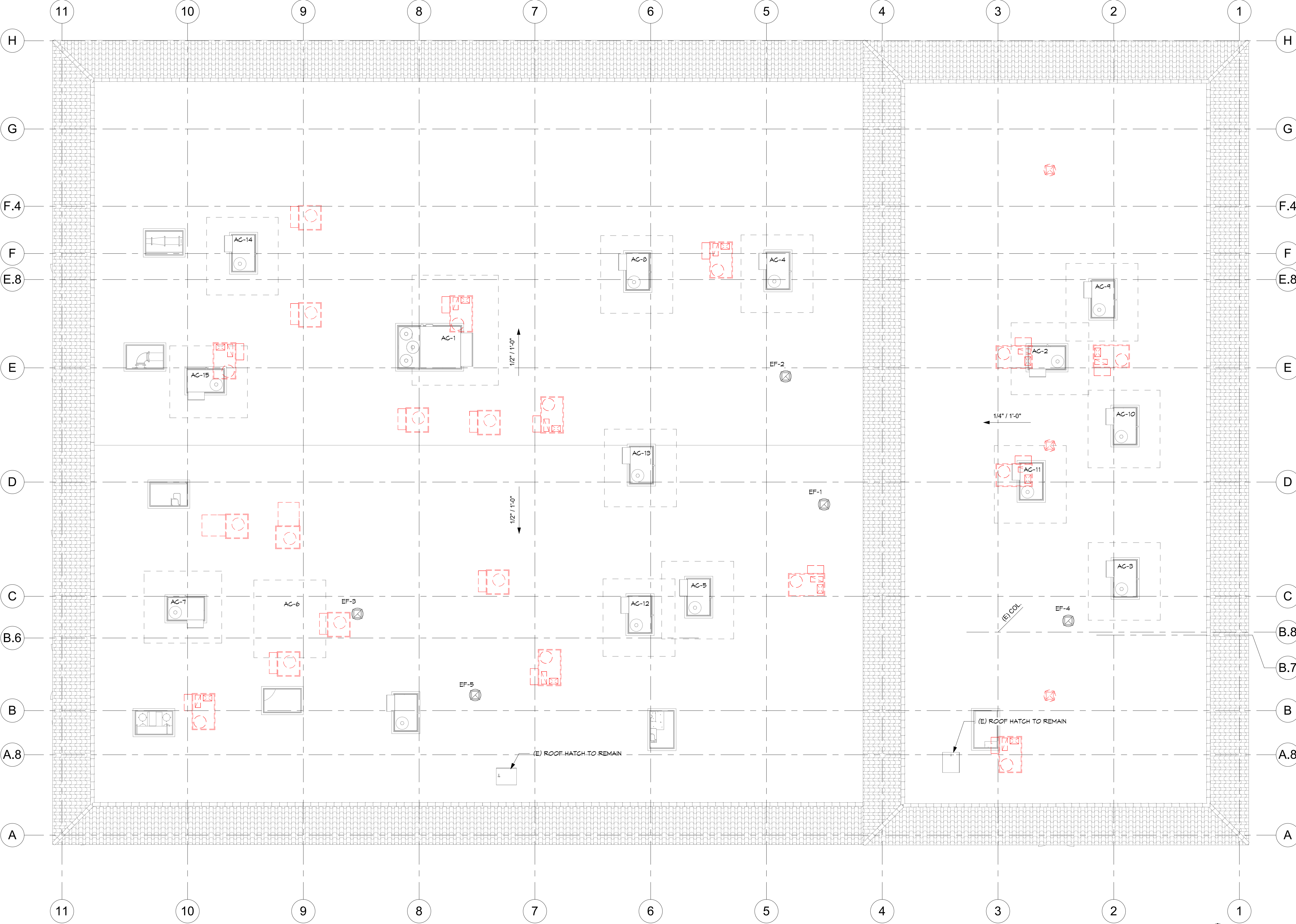
NEW TO BE INSTALLED

EXISTING UNITS TO BE REMOVED

EXISTING TO BE REMOVED

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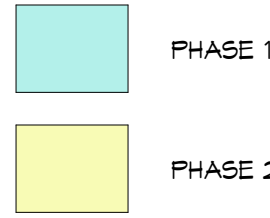
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MUP10

EXHIBIT A

Project #: 220118
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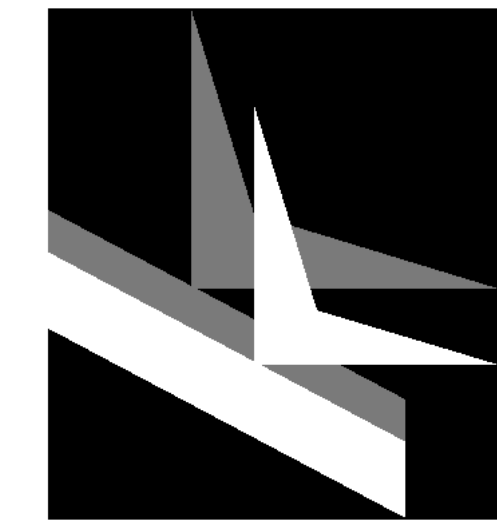
PHASE LEGEND



PE PROGRAM SPACE

CAFETERIA	3,210 SF
PE SPACE #1	424 SF
PE SPACE #2	644 SF
BOYS LOCKERS	321 SF
SHOWERS #1	64 SF
MENS	123 SF
SHOWERS #2	10 SF
WOMENS	124 SF
GIRLS LOCKERS	279 SF
HALLWAY	420 SF
PE STORAGE	200 SF
LEARNING SPACE #1	712 SF
LEARNING SPACE #2	760 SF
LEARNING SPACE #3	903 SF
LEARNING SPACE #4	547 SF
LEARNING SPACE #5	717 SF
TOTAL	10,260 SF

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PLUMBING FIXTURES - GROUND FLOOR			
TYPE	COUNT		
	EXISTING	NEW	DIFFERENCE
3 COMP SINK	-	1	1
BI-LEVEL WATER FOUNTAIN & FILLING STATION	-	1	1
FLOOR DRAIN	-	6	6
HAND SINK	10	14	4
HAND SINK HS-31	-	1	1
SHOWER	-	2	2
URINALS	2	3	1
WATER CLOSET	14	13	-1
KITCHEN SINK	6	-	-6

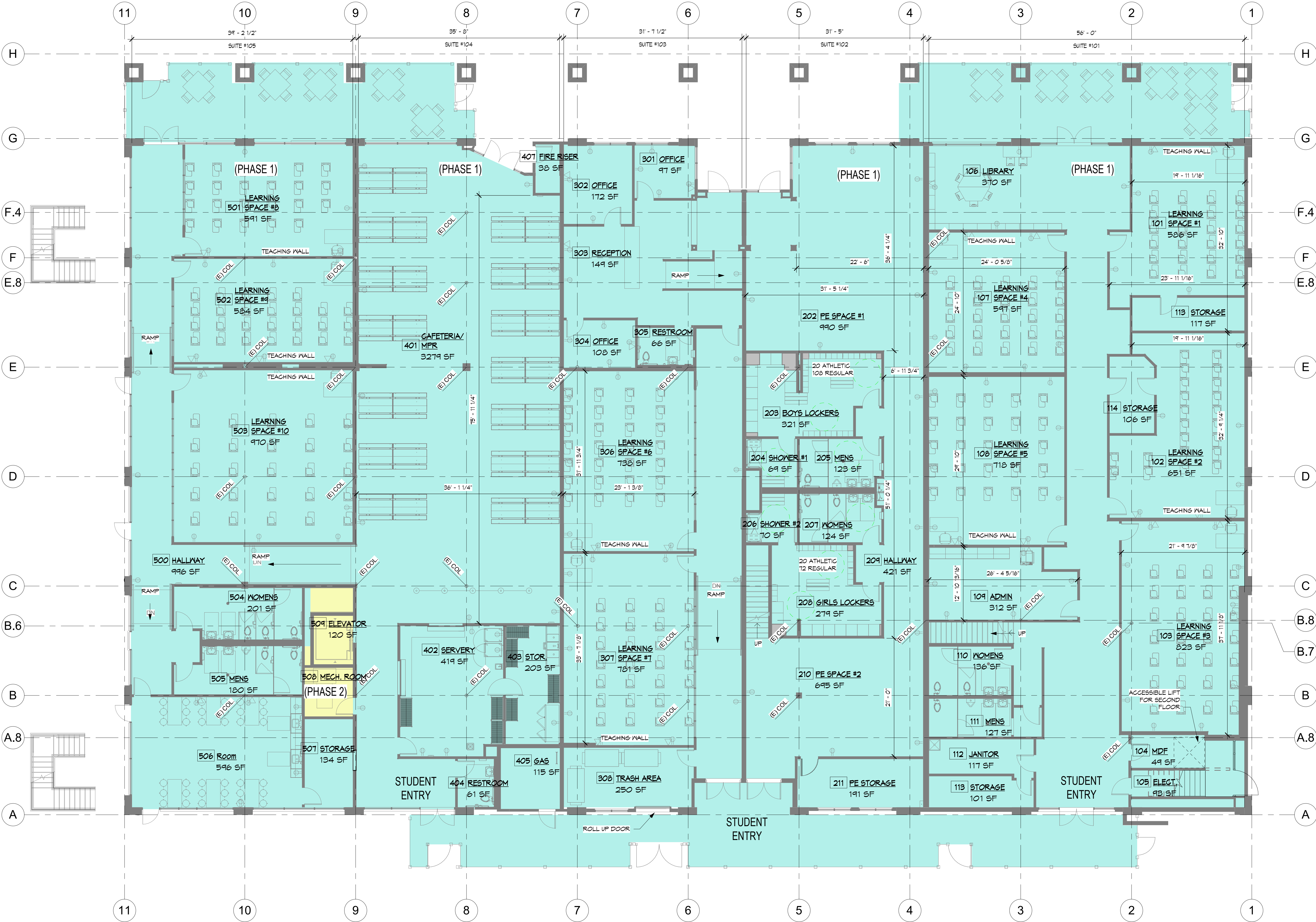
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MUP11



PRELIM MASTER GROUND
FLOOR



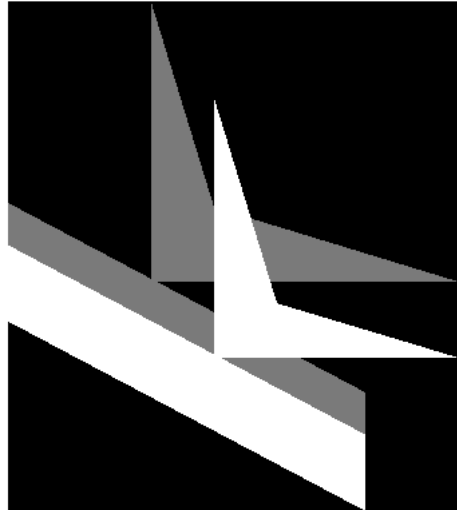
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PHASE LEGEND

- PHASE 1
- PHASE 2

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PLUMBING FIXTURES - SECOND FLOOR			
TYPE	COUNT		
	EXISTING	NEW	DIFFERENCE
FLOOR DRAIN	-	2	2
HAND SINK	10	6	-4
URINALS	1	1	-
WATER CLOSET	12	7	-5
KITCHEN SINK	3	3	-

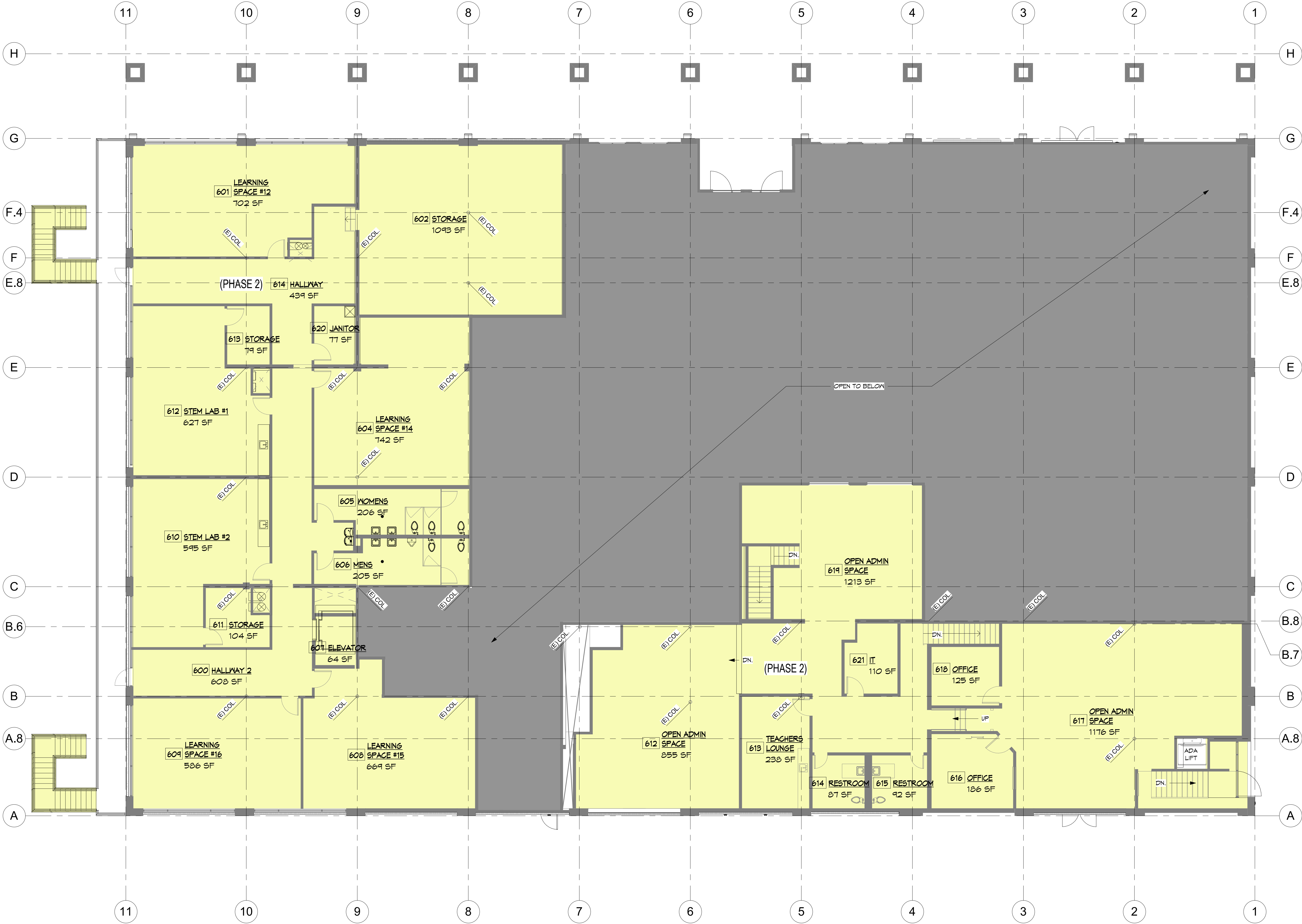
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MUP12



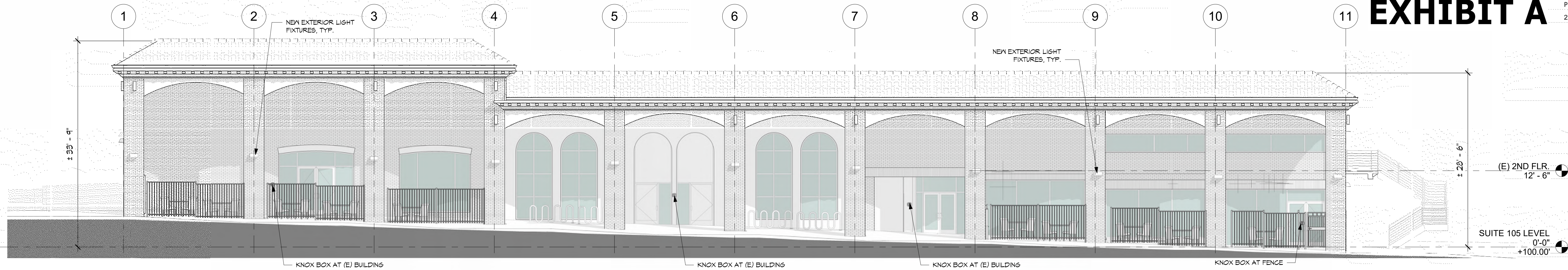
PRELIM MASTER SECOND FLOOR



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PRELIM GEORGIA STREET
ELEVATION NORTH

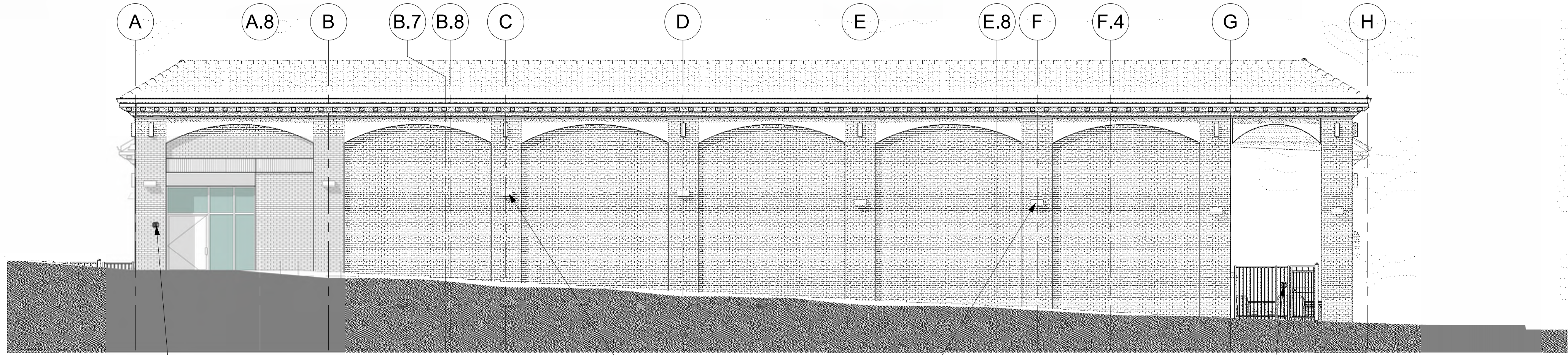
0' 2' 4' 8' 16 FEET
1/8" = 1'-0"



WST LED
Architectural Wall Sconce

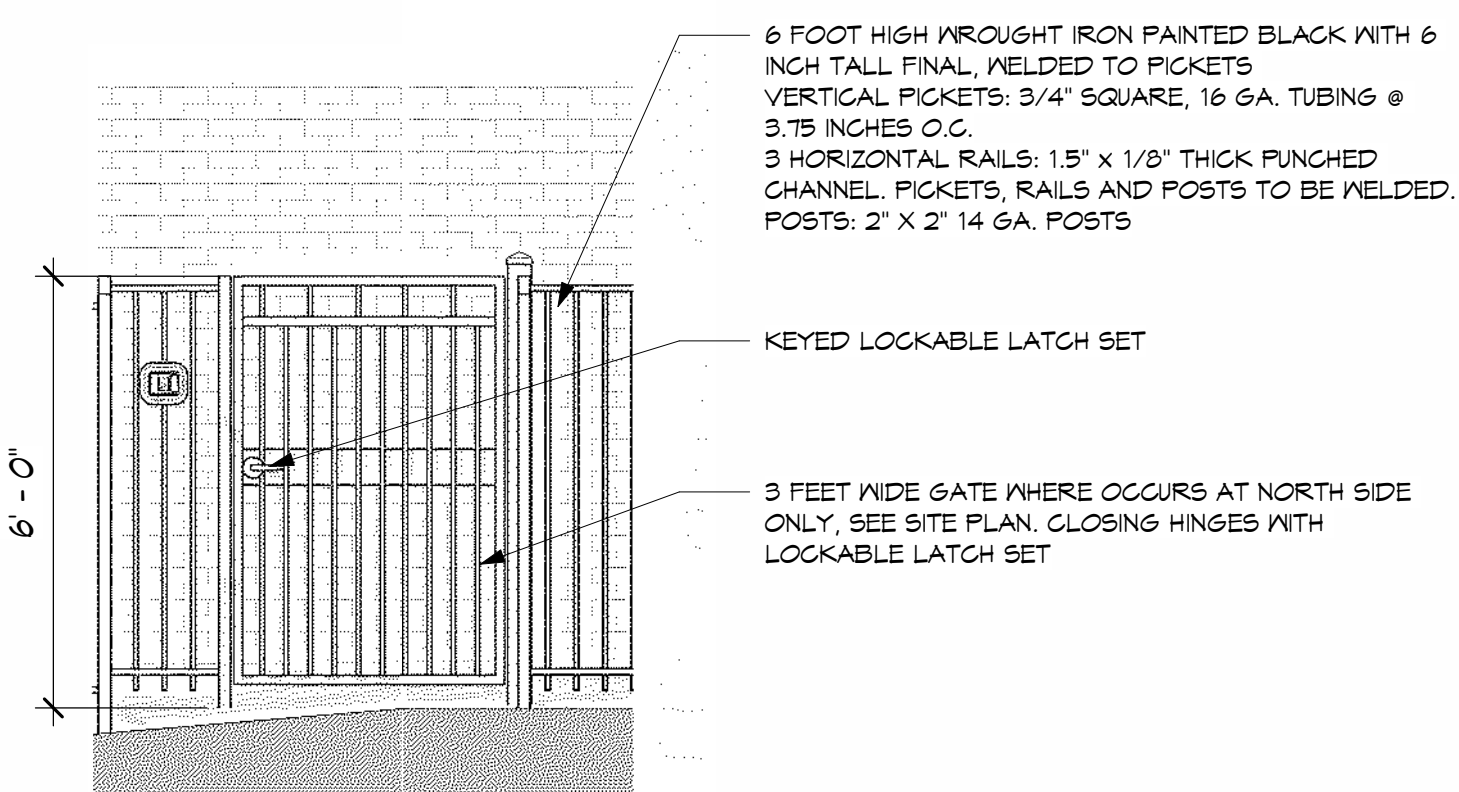


EXTERIOR LIGHT FIXTURES

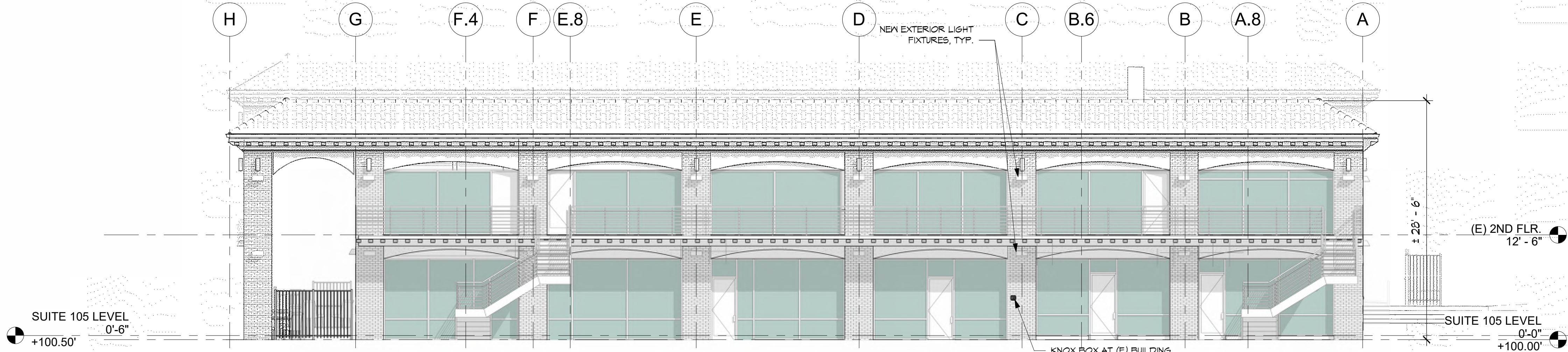


PRELIM EAST ELEVATION

0' 2' 4' 8' 16 FEET
1/8" = 1'-0"

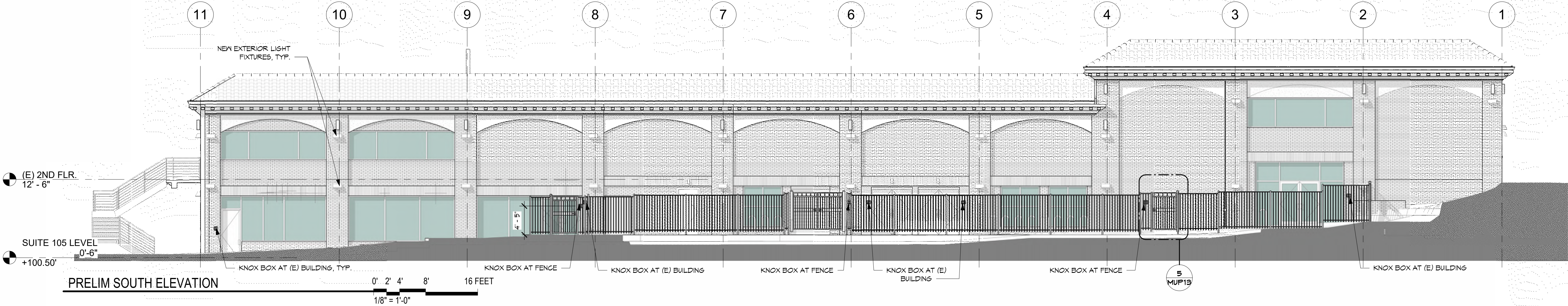


5
MUP13
FENCE ELEVATION
3/8" = 1'-0"



PRELIM WEST ELEVATION

0' 2' 4' 8' 16 FEET
1/8" = 1'-0"



PRELIM SOUTH ELEVATION

0' 2' 4' 8' 16 FEET
1/8" = 1'-0"

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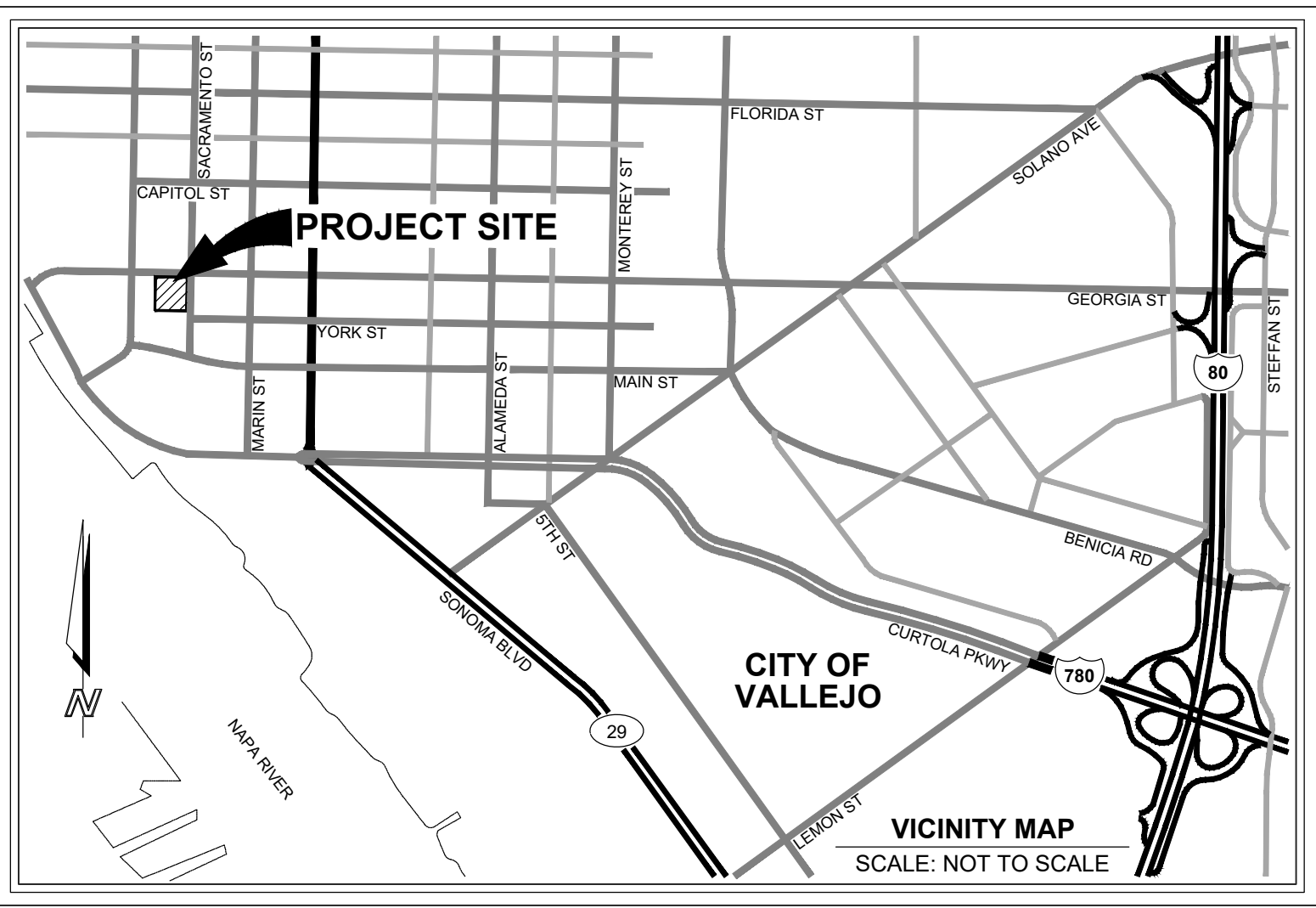
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09/26/2023

MUP13

S:\LOCAL_CLOUD\SHARED\2022\22-049 GEORGIA ST. VALLEJO CIVIL\DWG\SITE IMPROVEMENT PLANS\22-049 1 TITLE SHEET.DWG - PLOT DATE: August 22, 2023



PROJECT INFORMATION

OWNER/DEVELOPER

BRYAN BAYLES
51 RED CYPRESS CT
DANVILLE, CA 94506
JO ANN KOPPEL
PROJECT MANAGER
TEL: (310) 717-4323

ENGINEER

ATLAS CIVIL DESIGN, INC.

872 HIGUERA STREET
SAN LUIS OBISPO, CA 93401
TYLER H. JOHNSON
TEL: (213) 810-8470

SITE ADDRESS

241-255 GEORGIA STREET
VALLEJO, CA 94590

ABBREVIATIONS

AB	AGGREGATE BASE	LF	LINEAR FOOT
AC	ASPHALT CONCRETE	MH	MANHOLE
APN	ASSESSOR PARCEL NUMBER	N'LY	NORTHERLY
BC	BACK OF CURB	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	PCC	PORTLAND CEMENT CONCRETE
CB	CATCH BASIN		
CL	CURB FACE	PL	PROPERTY LINE
CL	CENTERLINE	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	RD	ROOF DRAIN
CONST	CONSTRUCT.	RW	RECLAIMED WATER
	CONSTRUCTION	S	SEWER OR SOUTH
CY	CUBIC YARD	SD	STORM DRAIN
DWG	DRAWING	SLY	SQUARE FOOT
E	EAST	STD	STANDARD
EA	EACH	TC	TOP OF CURB
E'LY	EASTERLY	TOP	TOP OF PIPE
EP	EDGE OF PAVEMENT	TRANS	TRANSITION
ESMT	EASEMENT	TS	TOP OF SLOPE
EX/EXIST	EXISTING	TYP	TYPICAL
FF	FINISHED FLOOR	W	WATER OR WEST
FG	FINISHED GRADE	WLY	WESTERLY
FL	FLOW LINE	XXX.XX	PROPOSED ELEVATION
FS	FINISHED SURFACE		EXISTING ELEVATION
GB	GRADE BREAK		DRAINAGE FLOW DIRECTION
INV	INVERT		
JS	JUNCTION STRUCTURE		

LEGEND

	PROPERTY LINE
	CENTER LINE
	EXISTING BUILDING OVERHANG
	PATH OF TRAVEL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING BUILDING WITH OVERHANG
	EXISTING SIGN
	EXISTING TREE/SHRUB
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	SAWCUT LINE
	GRADE BREAK
	PROPOSED PCC PAVEMENT
	PROPOSED AC PAVEMENT
	GRIND AND OVERLAY PAVEMENT
	PROPOSED TRUNCATED DOMES
	PROPOSED WHEEL STOP
	ACCESSIBLE STALLS & ACCESS AISLE
	PROPOSED SIGN
	PROPOSED HANDRAILS
	PROPOSED CURB

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ENGINEER'S NOTE

UNAUTHORIZED CHANGES & USES:
THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER OF RECORD.

NOTE TO CONTRACTOR

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD ATLAS CIVIL DESIGN, INC. HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ATLAS CIVIL DESIGN, INC. PERSONNEL.

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES AND STRUCTURES WHETHER SHOWN OR NOT SHOWN ON THIS PLAN, AND SHALL BE RESPONSIBLE FOR PROTECTING THEM FROM DAMAGE, THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THIS PLAN ARE TO THE BEST OF OUR KNOWLEDGE. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS.

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL TENANTS ARE PROVIDED A SAFE PLACE TO LIVE AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE US DEPARTMENT OF LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS, "CONSTRUCTION SAFETY ORDERS". THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S AND SUBCONTRACTOR'S COMPLIANCE WITH THE FEDERAL AND STATE REGULATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO REPORT DISCREPANCIES IN PLANS AND/OR FIELD CONDITIONS IMMEDIATELY TO THE CIVIL ENGINEER FOR RESOLUTION PRIOR TO CONSTRUCTION, AND SHALL BE RESPONSIBLE FOR DISCREPANCIES NOT SO REPORTED AND RESOLVED.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO ALL CALIFORNIA CODE REGULATIONS. ALL CONSTRUCTION SHALL MEET OR EXCEED THE CURRENT CALIFORNIA BUILDING CODES AT THE TIME OF CONSTRUCTION.

CODE

THIS PROJECT SHALL COMPLY WITH THE 2019 CALIFORNIA BUILDING CODE, WHICH ADOPTS THE 2018 IBC, 2018 UMC, 2018 UPC AND THE 2017 NEC.

CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

BASIS OF BEARINGS

BEING THE CENTERLINE OF GEORGIA STREET, PER PARCEL MAP, BOOK 1, PAGE 78, COUNTY OF SOLANO, A BEARING OF N87°52'18"W.

SCOPE OF WORK

THE PROPOSED IMPROVEMENTS HEREIN ARE TO MITIGATE EXISTING ACCESSIBLE PARKING SLOPE ISSUES, BRINGING THIS WORK AREA TO ADA COMPLIANCE. ASPHALT AND STRIPING MODIFICATIONS TO ACCOMMODATE ARE INCLUDED IN SAID IMPROVEMENTS.

BENCHMARK INFORMATION

THE OFF-SITE BENCHMARK IS BASED ON NAVD 1988 DATUM, BENCHMARK USED IS SOLANO COUNTY SURVEY CONTROL DESIGNATION JT2299. THE STATION MARK IS A STANDARD DISK STAMPED CAP 1959 CEMENTED IN A DRILL HOLE IN THE TOP OF THE CURB ON THE NORTH SIDE OF CAPITOL STREET. IT IS 99 FEET WEST OF THE CENTERLINE OF NAPA STREET, 20 FEET NORTH OF THE CENTERLINE OF CAPITOL STREET AND IN FRONT OF THE HOUSE AT 740 CAPITOL STREET. REFERENCE MARK STAMPED CAP NO 1 1959 CEMENTED IN A DRILL HOLE IN THE CENTRAL PART OF VALLEJO, ABOUT 1/4 MILE EAST OF THE CITY HALL TO REACH THE STATION FROM THE POST OFFICE IN VALLEJO, GO EAST ON CAROLINE STREET 0.3 MILE TO NAPA STREET, TURN RIGHT ONTO NAPA STREET AND GO SOUTH 0.05 MILE TO CAPITOL STREET AND STATION. ELEVATION= 154.0 FEET.

GENERAL ACCESSIBILITY NOTES

MODIFICATION MAY CONSIST OF TILES, BRICK OR DECORATIVE CONCRETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET ALL EXPECTATIONS OF OWNER WITH MATERIALS USED DURING ALTERATIONS.

IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO ADHERE TO ALL LOCAL, STATE AND FEDERAL REQUIREMENTS INCLUDING PERMITS IF APPLICABLE.

ALL MODIFICATIONS AND ALTERATIONS SHALL MEET 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE CURRENT TITLE 24 OF THE CALIFORNIA BUILDING CODE AT THE TIME OF CONSTRUCTION. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT CODE SHALL APPLY. DURING MODIFICATION AND ALTERATION, SOME MINOR CHANGES MAY OCCUR DUE TO EXISTING CONDITIONS AND THE ABILITY TO MEET FULL COMPLIANCE.

SITE ACCESS:

AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED WITHIN THE BOUNDARY OF THE SITE FROM PUBLIC TRANSPORTATION STOPS, ACCESSIBLE PARKING, AND ACCESSIBLE PASSENGER LOADING ZONES, AND PUBLIC STREETS OR SIDEWALKS. PROVIDE ACCESSIBLE ROUTE OF TRAVEL TO AND FROM ALL ACCESSIBLE BUILDINGS AND ACCESSIBLE FACILITIES. CBC 11B-206 / 28 CFR PART 36 APP. A - 4.3 / ADA 2010 STANDARDS: 206 ACCESSIBLE ROUTE.

PROVIDE COMPLIANT WALKS FOR ACCESSIBLE ROUTES WITH 48" MINIMUM WIDTH, 1:48 (2%) OR LESS CROSS SLOPES & 1:20 (5%) OR LESS RUNNING SLOPES. 11B-403 WALKING SURFACES / 28 CFR PART 36 APP. A - 4.3 / ADA 2010 STANDARDS: 403 WALKING SURFACES (LESS RESTRICTIVE)

11B-403.5.3 PASSING SPACES. AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH LESS THAN 60 INCHES SHALL PROVIDE PASSING SPACES AT INTERVALS OF 200 FEET MAXIMUM. PASSING SPACES SHALL BE EITHER: A SPACE 60 INCHES MINIMUM BY 60 INCHES MINIMUM; OR, AN INTERSECTION OF TWO WALKING SURFACES PROVIDING A T-SHAPED SPACE COMPLYING WITH 11B- 304.3.2 (T-SHAPED SPACE) WHERE THE BASE AND ARMS OF THE T-SHAPED SPACE EXTEND 48 INCHES MINIMUM BEYOND THE INTERSECTION. / 28 CFR PART 36 APP. A: 4.3.4 PASSING SPACES / ADA 2010 STANDARDS: 403.5.3 PASSING SPACES.

11B-302.3 OPENINGS. OPENINGS IN FLOOR OR GROUND SURFACES SHALL NOT ALLOW PASSAGE OF A SPHERE MORE THAN 1/8 INCH DIAMETER. / 28 CFR PART 36 APP. A - 4.5.4 / 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN - 302.3.

CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL AND WITHOUT EDGE TREATMENT. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN ONE UNIT VERTICAL IN 2 UNITS HORIZONTAL (50% SLOPE) CHANGES IN LEVEL GREATER 1/2" SHALL BE ACCOMPLISHED BY MEANS OF A CURB RAMP, RAMP, ELEVATOR OR PLATFORM LIFT. CBC 11B-303 CHANGES IN LEVEL / 28 CFR PART 36 APP. A - 4.3.8 CHANGES IN LEVEL. / ADA 2010 STANDARDS: 303 CHANGES IN LEVEL. / LEVELS EXCEEDING 4" SHALL BE IDENTIFIED BY A 6" HIGH CURB OR HAND RAILING - WARNING CURBS 11B-303.5

11B-307.2 PROTRUSION LIMITS. OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES AND NOT MORE THAN 80 INCHES ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH. / 28 CFR PART 36 APP. A: 4.4 PROTRUDING OBJECTS / ADA 2010 STANDARDS: 307 PROTRUDING OBJECTS 11B-307.3

POST-MOUNTED OBJECTS. FREE-STANDING OBJECTS MOUNTED ON POSTS OR PYLONS SHALL OVERHANG CIRCULATION PATHS 12 INCHES MAXIMUM WHEN LOCATED 27 INCHES MINIMUM AND 80 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. WHERE A SIGN OR OTHER OBSTRUCTION IS MOUNTED BETWEEN POSTS OR PYLONS AND THE CLEAR DISTANCE BETWEEN THE POSTS OR PYLONS IS GREATER THAN 12 INCHES, THE LOWEST EDGE OF SUCH SIGN OR OBSTRUCTION SHALL BE 27 INCHES MAXIMUM OR 80 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

DETECTABLE WARNING DEVICES SHALL BE PROVIDED (36" MINIMUM WIDTH) AT HAZARDOUS VEHICULAR AREAS PER CBC ONLY. THE COLOR SHALL BE YELLOW CONFORMING TO FS 33538 OF FEDERAL STANDARD 959C CBC 11B-705.1.2.5 / ADA 2010 STANDARDS (ONLY AT BOARDING PLATFORMS CURRENTLY)

PARKING:

PARKING SHALL CONNECT TO THE SHORTEST POSSIBLE ACCESSIBLE ROUTE TO THE ACCESSIBLE ENTRANCE/S. CBC 11B-502.7 / 28 CFR PART 36 APP. A - 4.6.2 LOCATION. / ADA 2010 STANDARDS: 208.3 LOCATION.

11B-208.1 GENERAL. WHERE PARKING SPACES ARE PROVIDED, PARKING SPACES SHALL BE PROVIDED IN ACCORDANCE WITH 11B-208.

11B-208.2 MINIMUM NUMBER. PARKING SPACES COMPLYING WITH 11B-502 (PARKING SPACES) SHALL BE PROVIDED IN ACCORDANCE WITH TABLE 11B-208.2 EXCEPT AS REQUIRED BY 11B-208.2.1 (HOSPITAL OUTPATIENT FACILITIES) 11B-208.2.2 (REHABILITATION FACILITIES AND OUTPATIENT PHYSICAL THERAPY FACILITIES) AND 11B- 208.2.3 (REHABILITATION FACILITIES AND OUTPATIENT PHYSICAL THERAPY FACILITIES) WHERE MORE THAN ONE PARKING FACILITY IS PROVIDED ON A SITE, THE NUMBER OF ACCESSIBLE SPACES PROVIDED ON THE SITE SHALL BE CALCULATED ACCORDING TO THE NUMBER OF SPACES REQUIRED FOR EACH PARKING FACILITY.

11B-502.5 VERTICAL CLEARANCE. PARKING SPACES, ACCESS AISLES AND VEHICULAR ROUTES SERVING THEM SHALL PROVIDE A VERTICAL CLEARANCE OF 98 INCHES MINIMUM. / 28 CFR PART 36 APP. A: 4.6.5 / ADA 2010 STANDARDS: 502.5 VERTICAL CLEARANCE.

A BUMPER OR CURB MUST BE PLACED TO PREVENT ENCROACHMENT OF CARS. THE SPACES MUST BE LOCATED SO A PERSON WITH A DISABILITY IS NOT COMPELLED TO WHEEL OR WALK BEHIND PARKING SPACES OTHER THAN THAT PERSON'S OWN

SPACE. CBC 11B-502.7 / 28 CFR PART 36 APP. A: 4.6 / ADA 2010 STANDARDS: 502.7 RELATIONSHIP TO ACCESSIBLE ROUTES.

PROVIDE SIGNS AT SPACES FOR EACH PARKING STALL SPACE FOR PERSONS WITH DISABILITIES. SIGNS SHALL BE IDENTIFIED BY A REFLECTIVE SIGN NO LESS THAN 70 SQUARE INCHES WITH A WHITE ISA ON BLUE BACKGROUND AND ADDITIONAL LANGUAGE BELOW THE SYMBOL OF ACCESSIBILITY STATING "MINIMUM FINE \$250". VAN SPACES MUST HAVE A SIGN READING "VAN ACCESSIBLE." BOTTOM OF SIGN MUST BE MOUNTED MINIMUM 80" ABOVE FINISH ELEVATION IN AREAS OF PEDESTRIAN ACCESS; 60" MIN. ABOVE FINISH ELEVATION IF CENTERED ON A WALL. 2013 CBC 11B-502.6. / 28 CFR PART 36 APP. A: 4.6.4 / ADA 2010 STANDARDS: 502.6 IDENTIFICATION.

SURFACES SHALL NOT EXCEED 1:48 (2%) MAX SLOPE IN ANY DIRECTION AT ACCESSIBLE PARKING SPACES AND ACCESS AISLE. CBC 11B-502.4 / 28 CFR PART 36 APP. A - 4.6 / ADA 2010 STANDARDS: 502.4 FLOOR AND GROUND SURFACES. CHANGES IN LEVEL ARE NOT PERMITTED.

STRIPE ACCESSIBLE PARKING SPACE WITH 36"x36" ISA (WHITE ON BLUE), 216" (18') LONG 108" (9') WIDE WITH BLUE BOARDER MEASURED CENTERLINE TO CENTERLINE. WHITE 12" "NO PARKING" IN ACCESS AISLE. DIAGONAL LINES IN ACCESS AISLE AT 36" O.C. ACCESS AISLE SHALL BE 60" (5') WIDE FOR STANDARD ACCESSIBLE STALL. A VAN SPACE WIDTH SHALL BE 144" WITH A 60" WIDE ACCESS AISLE. EXCEPTION: PERMITTED TO BE 108" MIN WIDE WHEN THE ACCESS AISLE IS 96" (8') WIDE MIN. VAN ACCESS AISLE SHALL BE ON THE PASSENGER SIDE OF VEHICLE. CBC 11B.502 PARKING SPACES. / 28 CFR PART 36 APP. A: 4.6.3 PARKING SPACES (MODIFIED LAYOUT) / ADA 2010 STANDARDS: 502 PARKING SPACES.(MODIFIED LAYOUT)

CURB RAMPS:

CURB RAMP SHALL HAVE A SLOPE OF 1:12 (8.33%) OR LESS. CROSS SLOPE SHALL NOT EXCEED 1:48 (2%). CBC 11B-406 / 28 CFR PT36 APP A 4.3.7 SLOPE / 2010 ADA 406

CURB RAMP SHALL HAVE A 48" MINIMUM OPENING BY THE FULL LENGTH OF THE RAMP.. RAMP BOTTOM MUST BE FLUSH AND FREE FROM ABRUPT CHANGE. CBC 11B-406.5.8 CURB RAMPS / 28 CFR PART36 APP A - 4.7.2 / 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN - 406.2

11B-406.5.8 COUNTER SLOPE. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO AND WITHIN 24 INCHES OF THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS, AND STREETS SHALL BE AT THE SAME LEVEL. / ADA 2010 STANDARDS: 406.2 COUNTER SLOPE.

FLARED OR FANNED SIDES SHALL BE 10% OR LESS SLOPE. CBC 11B-406.2.2. / 28 CFR PART 36 APP. A - 4.7 / ADA 2010 STANDARDS 406.3 SIDES OF CURB RAMPS.

11B-406.3.2 TURNING SPACE. A TURNING SPACE 48 INCHES MINIMUM BY 48 INCHES MINIMUM SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP. THE SLOPE OF THE TURNING SPACE IN ALL DIRECTIONS SHALL BE 1:48 MAXIMUM. / 2010 ADA 406.3.2

LEVEL LANDINGS 48" BY THE WIDTH OF THE RAMP SHALL BE PROVIDED. BLENDED TRANSITIONS AT THE TOP OF PARALLEL CURB RAMPS SHALL NOT BE REQUIRED TO BE LEVEL WITH SLOPES NOT EXCEEDING 1:20 (5%) IN THE DIRECTION OF TRAVEL. CROSS SLOPES SHALL NOT EXCEED 1:48 (2%) CBC 11B-406 / ADA 2010 406 DETECTABLE WARNING SURFACES 36" MINIMUM DEEP BY FULL WIDTH OF CURB RAMP SHALL BE PROVIDED. PLACEMENT SHALL BE 6" MIN TO 8" MAX. FROM BOTTOM OF RAMP. CBC 11B-406.5.12 (11B-705) / CURRENTLY NOT REQUIRED IN 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

RAMPS:

SLOPES ON RAMP SHALL NOT EXCEED 1:12 (8.33%) AND MAXIMUM 1:48 (2%) CROSS SLOPE. CBC 11B-405 SLOPE - / 28 CFR PART 36 APP. A - 4.8 RAMPS / ADA 2010 STANDARDS: 405 RAMPS

RAMP LANDINGS SHALL PROVIDE LANDINGS WITH SLOPES NOT EXCEEDING 1:48 (2%) WITH TOP LANDINGS 60"x 60" MINIMUM. INTERMEDIATE LANDINGS WIDTH OF RAMP X 60". BOTTOM LANDINGS WIDTH OF RAMP X 72". CHANGES IN DIRECTIONS REQUIRE LANDING 72" LONG X 60" WIDE WITH THE 72" IN THE DIRECTION OF DOWNWARD TRAVEL. CBC 11B-405.7 / 28 CFR PART 36 APP. A - 4.8 RAMPS. / ADA 2010 STANDARDS: 405 RAMPS

RAMPS SHALL PROVIDE HAND RAILING ON EACH SIDE OF RAMP.. CBC 11B-405.8 HANDRAILS FOR RAMPS / 28 CFR PART 36 APP. A - 4.8.5 / ADA 2010 STANDARDS: 405.8 HANDRAILS

PROVIDE RAILING ON BOTH SIDES OF RAMP AT 34"-38" TO TOP OF RAILING FROM RAMP SURFACE AND CONSISTENT IN HEIGHT. CBC 11B-505.4 / 28 CFR PART 36 APP. A, 4.8.5 HANDRAILS. / ADA 2010 STANDARDS: 505 HANDRAILS

HANDRAIL SHALL EXTEND A MINIMUM OF 12" BEYOND THE TOP LANDING AND 12" AT THE BOTTOM LANDING. THE EXTENSION SHALL BE PARALLEL FOR 12" WITH THE FLOOR OR GROUND SURFACE. CBC 11B-505.10.1 / 28 CFR PART 36 APP. A - 4.8.5 / ADA 2010 STANDARD: 405.8 HANDRAILS

RAILING SHALL BE 1-1/4" MINIMUM TO 2" MAXIMUM OUTSIDE DIAMETER. FOR NON-CIRCULAR HANDRAIL, THE PERIMETER SHALL BE 4" - 6-1/2" WITH 2-1/4" MAXIMUM WIDTH. CBC 11B-505.7.1 / 28 CFR PART 36 APP. A: 4.26.2 / ADA 2010 STANDARDS: 505 HANDRAILS

HANDRAILS SHALL BE CONFIGURED SO THAT THE GRIPPING SURFACE IS CONTINUOUS ALONG THEIR LENGTH AND THEY SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOMS OF THE HANDRAIL SHALL NOT BE OBSTRUCTED FOR MORE THAN 20% OF THEIR LENGTH. CBC 11B-505.6 / ADA 2010 STANDARDS: 505.6 GRIPPING SURFACE

A CURB, 2" HIGH MINIMUM, OR A BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4" DIAMETER SPHERE FROM PASSING BETWEEN RAMP SURFACE AND RAILING. CBC 11B-405.9.2 / ADA 2010 STANDARDS: 405.9 EDGE PROTECTION

RAMP LANDINGS SHALL PROVIDE LANDINGS WITH SLOPES NOT EXCEEDING 1:48 (2%) WITH TOP LANDINGS 60"x 60" MINIMUM. INTERMEDIATE LANDINGS WIDTH OF RAMP X 60". BOTTOM LANDINGS WIDTH OF RAMP X 72". CHANGES IN DIRECTIONS REQUIRE LANDING 72" LONG X 60" WIDE WITH THE 72" IN THE DIRECTION OF DOWNWARD TRAVEL. CBC 11B-405.7 / 28 CFR PART 36 APP. A - 4.8 RAMPS. / ADA 2010 STANDARDS: 405 RAMPS

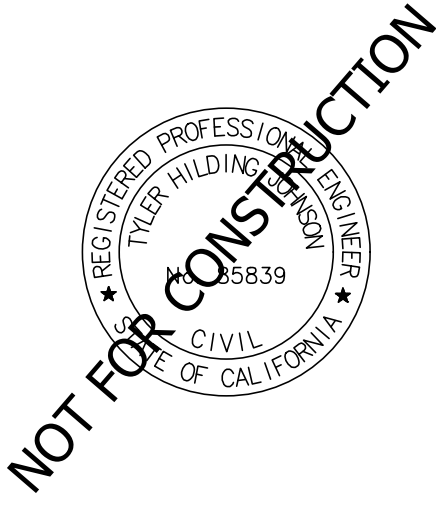
SHEET INDEX

SHEET 1	TITLE SHEET
SHEET 2	DEMOLITION & IMPROVEMENT PLAN - A
SHEET 3	DEMOLITION & IMPROVEMENT PLAN - B
SHEET 4	UTILITY PLAN
SHEET 5	OFF-SITE IMPROVEMENT PLAN
SHEET 6	DETAILS

GEORGIA STREET - SCHOOL ADA
241-255 GEORGIA STREET
CITY OF VALLEJO, COUNTY OF SOLANO
TITLE SHEET

PROJECT NUMBER: 22-049
PREPARED ON:
REVISED ON: 8/22/23
PREPARED BY: DDD
CHECKED BY: THJ

SHEET
1 OF 6



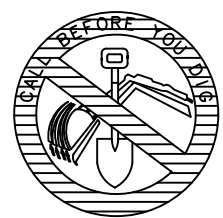
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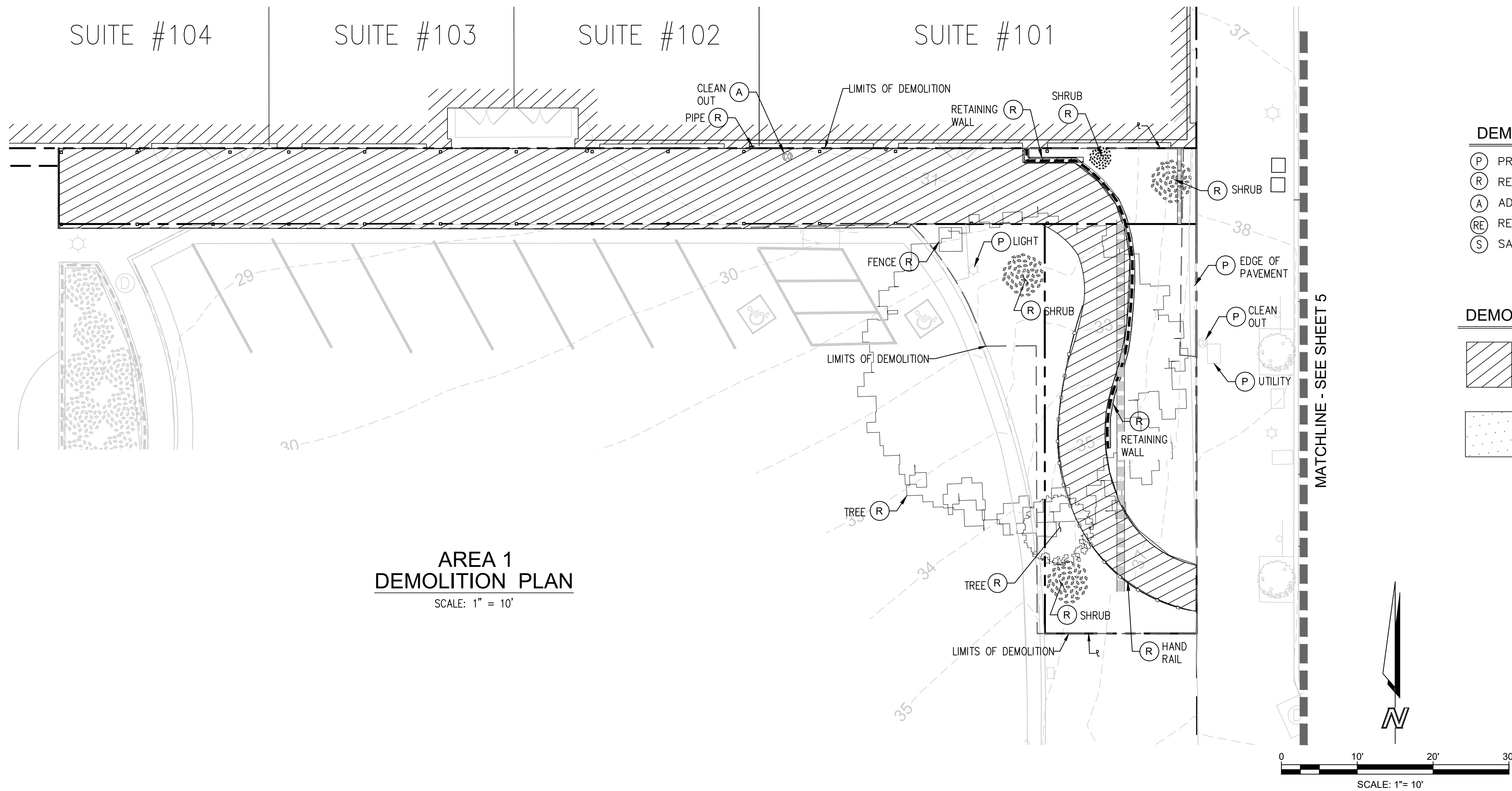


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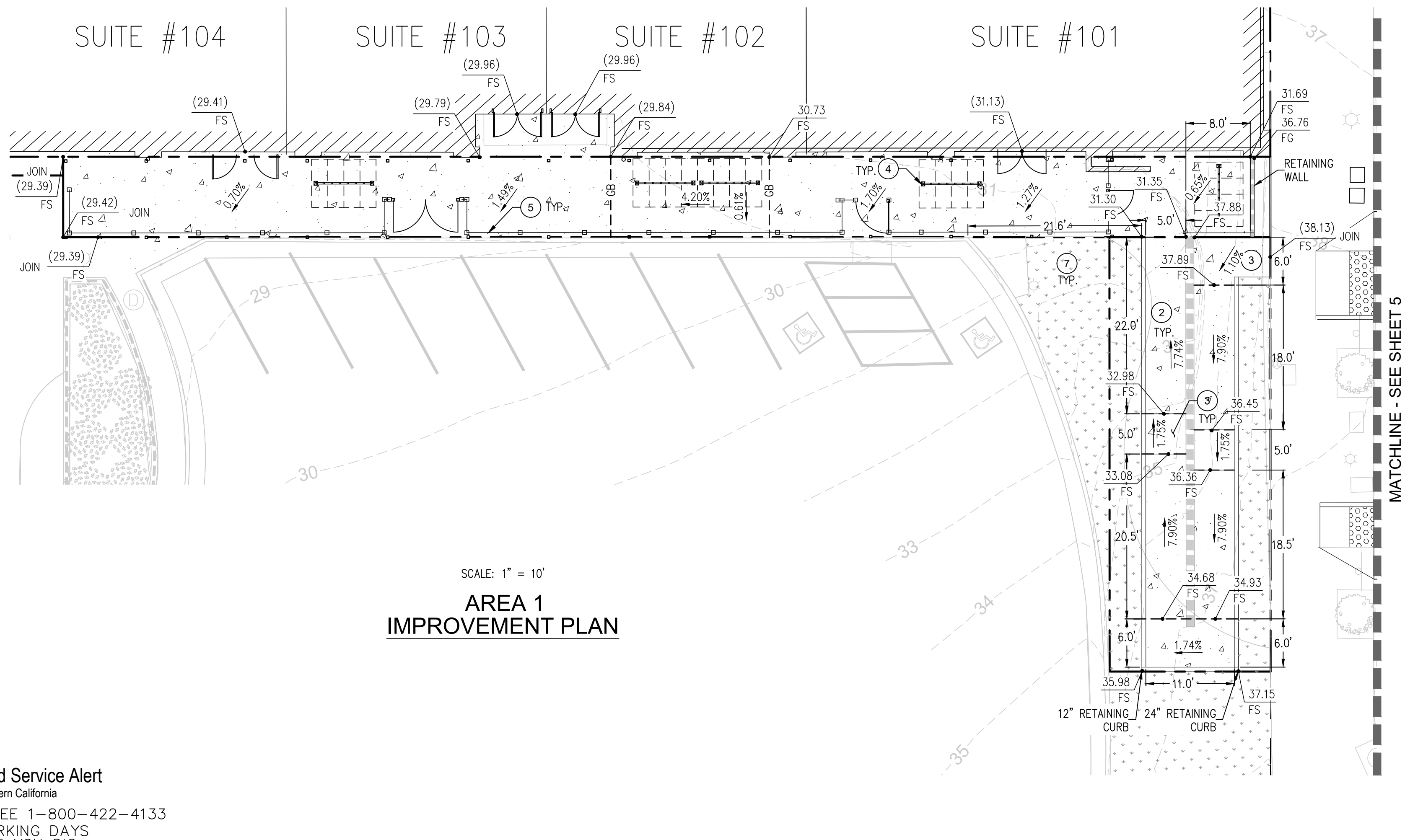
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- (R) REMOVE AND DISPOSE OF OFFSITE
- (A) ADJUST TO GRADE
- (RE) REMOVE AND RELOCATE
- (S) SAWCUT EXISTING PAVEMENT

DEMOLITION LEGEND

- LIMITS OF EXISTING PCC PAVEMENT DEMOLITION
- LIMITS OF EXISTING AC PAVEMENT DEMOLITION

UTILITY NOTE

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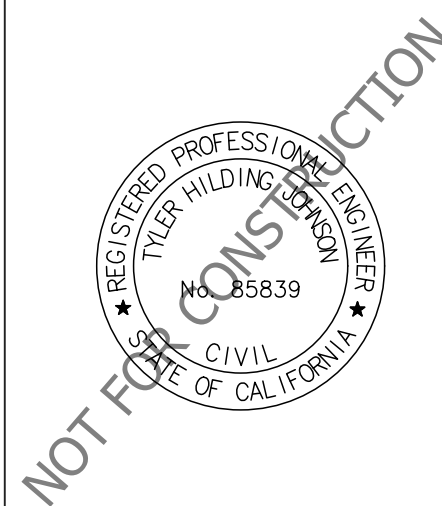
CONSTRUCTION NOTES

1. CONSTRUCT 6" CURB & GUTTER PER CITY OF VALLEJO STD. PLAN.
2. CONSTRUCT ACCESSIBLE RAMP WITH HANDRAILS.
3. CONSTRUCT ACCESSIBLE RAMP LANDING.
4. INSTALL BIKE RACKS PER ARCHITECTURAL PLAN.
5. CONSTRUCT W.I. FENCE PER ARCHITECTURAL PLAN.
6. INSTALL PATIO FURNITURE PER ARCHITECTURAL PLAN.
7. INSTALL LANDSCAPE PER LANDSCAPE PLAN.
8. CONSTRUCT STEPS WITH HANDRAILS.

GEORGIA STREET - SCHOOL ADA
241-255 GEORGIA STREET
CITY OF VALLEJO, COUNTY OF SOLANO
DEMOLITION & IMPROVEMENT PLAN - A

PROJECT NUMBER: 22-049
PREPARED ON:
REVISED ON: 8/22/23
PREPARED BY: DDD
CHECKED BY: THJ

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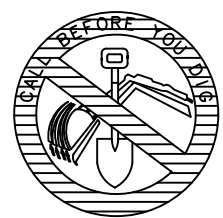
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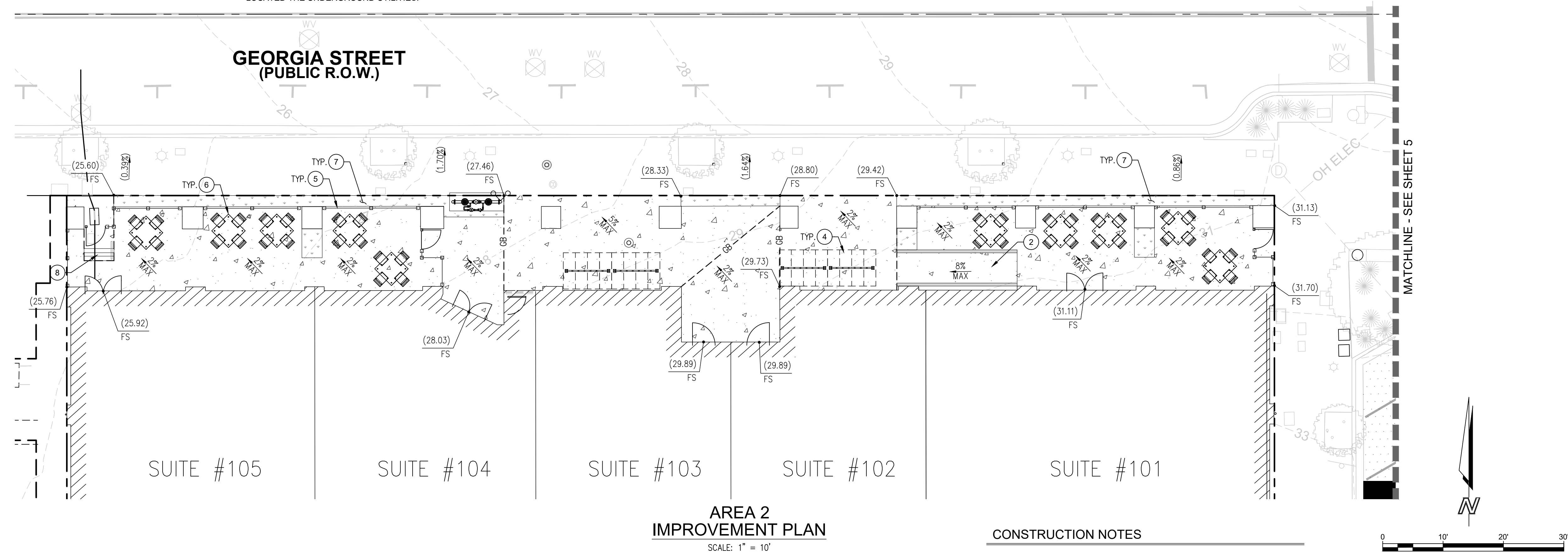
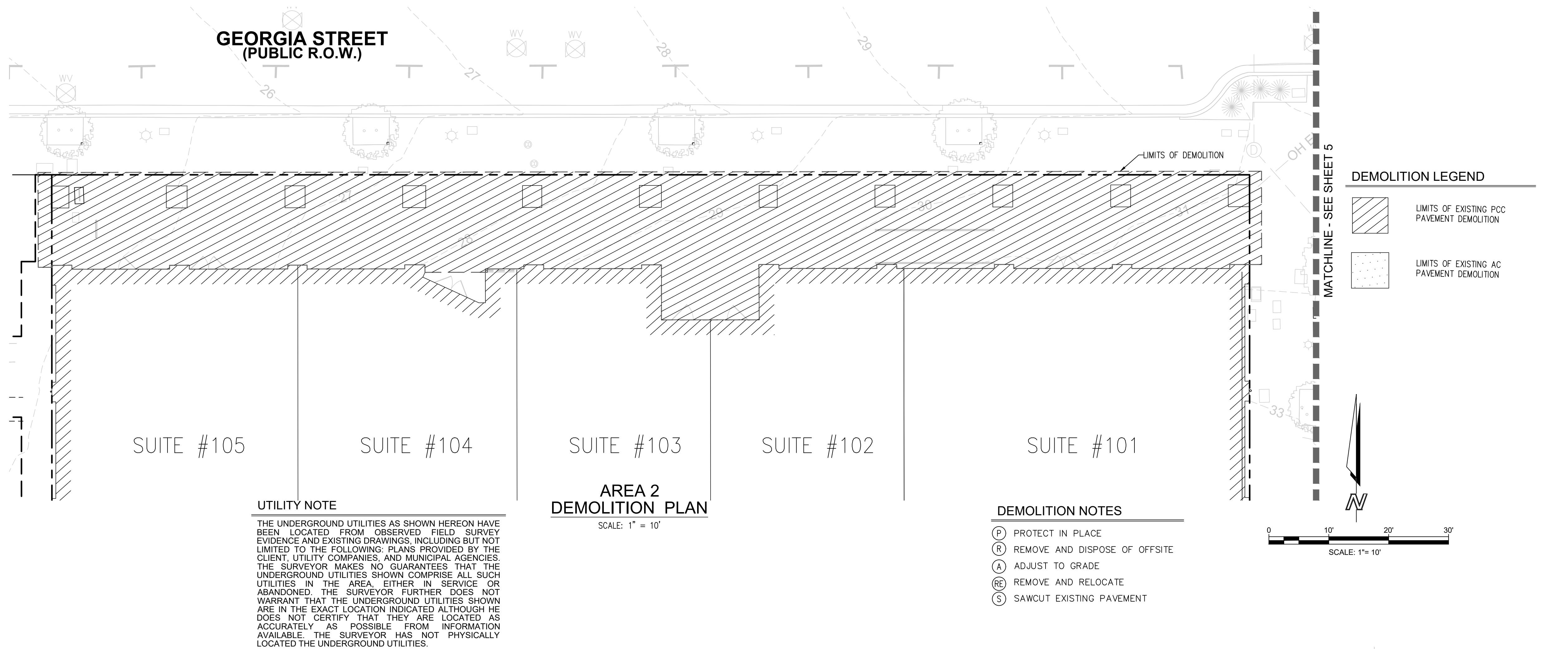
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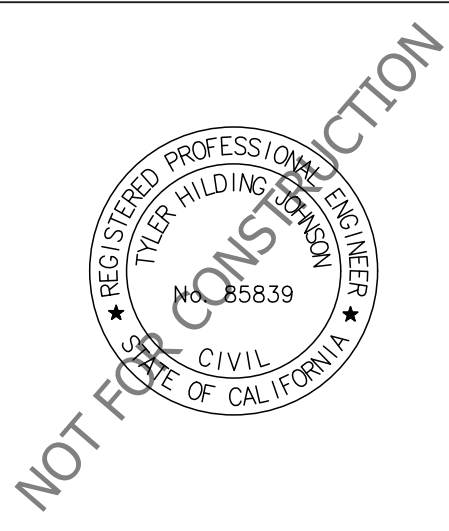


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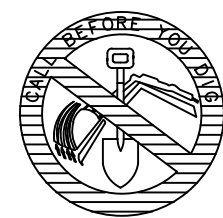
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241-255 GEORGIA STREET
CITY OF VALLEJO, COUNTY OF SOLANO

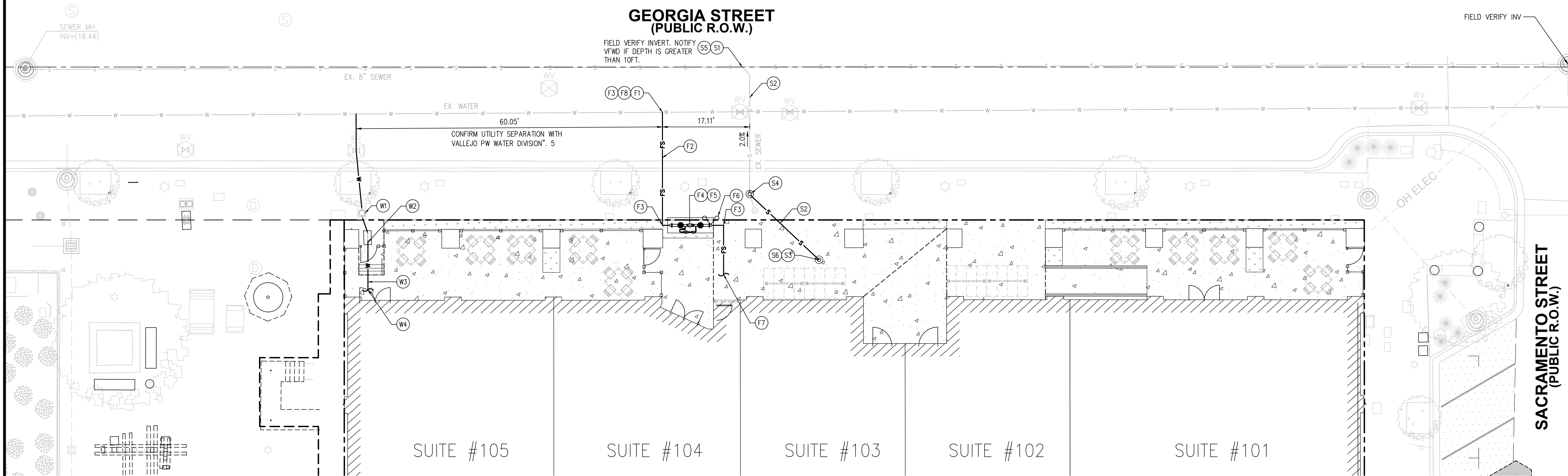
DEMOLITION & IMPROVEMENT PLAN - B

PROJECT NUMBER: 22-049
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REVISED ON: 8/22/23
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S:\LOCAL CLOUD\SHARED\2022\22-049 GEORGIA ST VALLEJO CIVIL\DWG SITE IMPROVEMENT PLANS\22-049 4 UTILITY PLANDING - PLOT DATE: August 22, 2023



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WATER CONSTRUCTION NOTES

- (W1) EXISTING 1.5" WATER METER AND SERVICE REPLACED WITH NEW 2".
- (W2) REPLACE EXISTING 1.5" REDUCED PRESSURE BACKFLOW ASSEMBLY WITH NEW 2" FOR DOMESTIC SERVICE.
- (W3) INSTALL NEW SCHED 80 PVC PIPE, SIZE PER PLUMBING PLAN.
- (W4) CONTINUATION PER PLUMBING PLAN.

SEWER CONSTRUCTION NOTES

- (S1) CONNECT TO EXISTING SEWER MAIN PER VFWD DETAIL SS-2.
- (S2) REPLACE EXISTING SEWER LATERAL WITH 6" SDR-26 PVC SEWER PIPE PER VFWD DETAIL SS-2.
- (S3) INSTALL SEWER CLEANOUT (2-WAY) PER VFWD DETAIL SS-4.
- (S4) INSTALL SEWER CLEANOUT (DISTRICT) PER VFWD DETAIL SS-3.
- (S5) TRENCH PER VFWD STANDARDS AND TO THE SATISFACTION OF CITY OF VALLEJO PUBLIC WORKS.
- (S6) CONTINUATION PER PLUMBING PLAN.

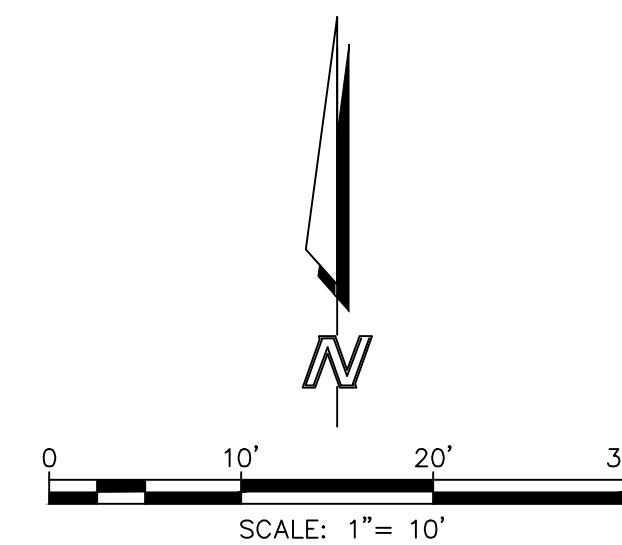
FIRE CONSTRUCTION NOTES

- (F1) CONNECT TO EXISTING WATER MAIN PER CITY OF VALLEJO STD. PLAN.
- (F2) INSTALL 6" FIRE WATER SERVICE PER CITY OF VALLEJO STD. PLAN.
- (F3) INSTALL CONCRETE THRUST BLOCK.
- (F4) INSTALL 6" DOUBLE DETECTOR CHECK ASSEMBLY PER CITY OF VALLEJO STD. PLAN.
- (F5) INSTALL POST INDICATOR VALVE.
- (F6) INSTALL FIRE DEPARTMENT CONNECTION.
- (F7) CONTINUE TO FIRE RISER ROOM PER FIRE PROTECTION SPRINKLER AND MECHANICAL PLANS.
- (F8) TRENCH PER CITY OF VALLEJO STD. PLAN.

PLUMBING FIXTURES - GROUND FLOOR			
TYPE	COUNT		
	EXISTING	NEW	DIFFERENCE
3 COMP SINK	-	1	1
BI-LEVEL WATER FOUNTAIN & FILLING SATION	-	1	1
FLOOR DRAIN	-	6	6
HAND SINK	10	14	4
HAND SINK HS-31	-	1	1
SHOWER	-	2	2
URINALS	2	3	1
WATER CLOSET	14	13	-1
KITCHEN SINK	6	-	-6

PLUMBING FIXTURES - SECOND FLOOR			
TYPE	COUNT		
	EXISTING	NEW	DIFFERENCE
FLOOR DRAIN	-	2	2
HAND SINK	10	6	-4
URINALS	-	-	-
WATER CLOSET	12	7	-5
KITCHEN SINK	3	3	-

NOTE - WATER CLOSETS ARE FLUSHOMETER VALVE OPERATED.

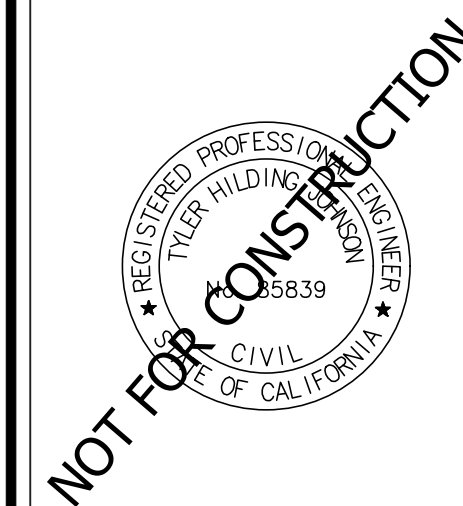


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CITY OF VALLEJO, COUNTY OF SOLANO

UTILITY PLAN

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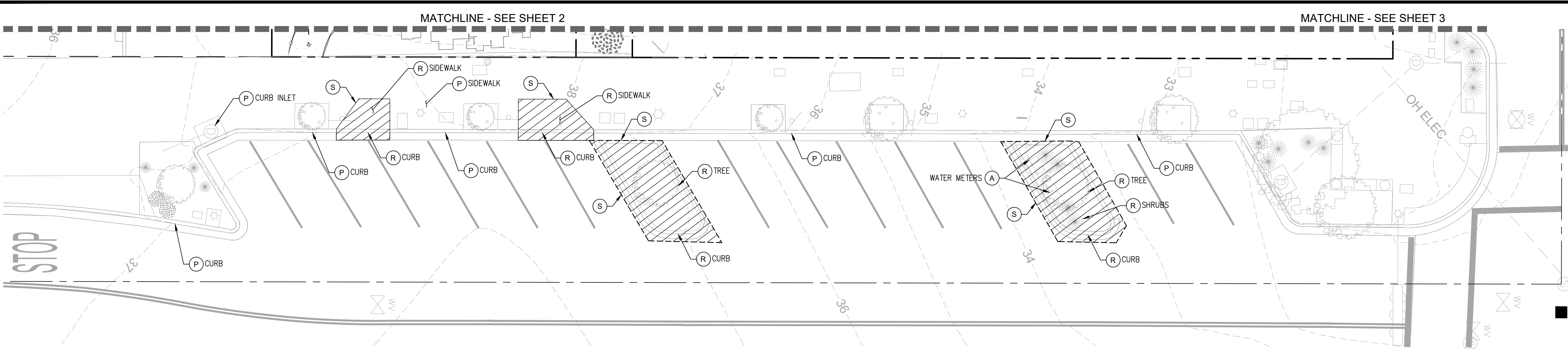
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DEMOLITION PLAN

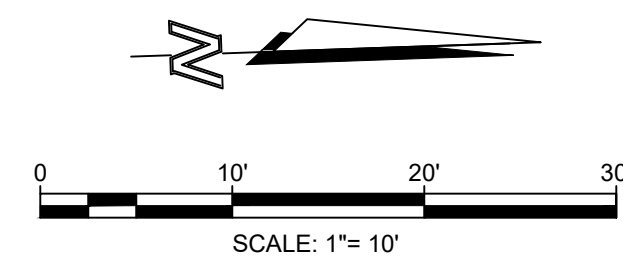
SCALE: 1" = 10'

DEMOLITION LEGEND



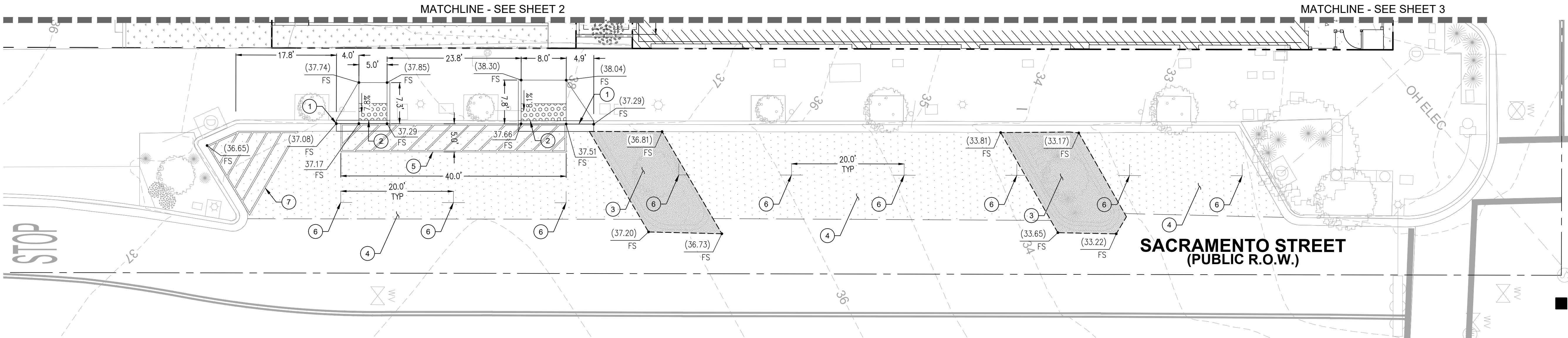
DEMOLITION NOTES

- (P) PROTECT IN PLACE
- (R) REMOVE AND DISPOSE OF OFFSITE
- (A) ADJUST TO GRADE
- (RE) REMOVE AND RELOCATE
- (S) SAWCUT EXISTING PAVEMENT



UTILITY NOTE

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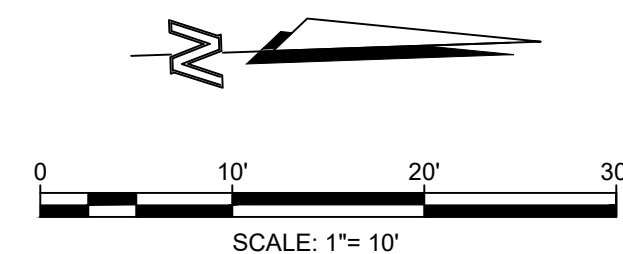


IMPROVEMENT PLAN

SCALE: 1" = 10'

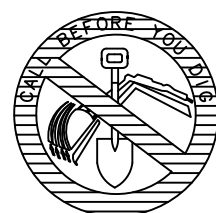
OFF-SITE CONSTRUCTION NOTES

1. CONSTRUCT 6" CURB & GUTTER PER CITY DWG. NO. 3-08 AND 3-09.
2. CONSTRUCT ACCESSIBLE RAMP PER CITY DWG. NO. 3-27.
3. CONSTRUCT 3" VEHICULAR A.C. PAVEMENT OVER 6" A.B. OR MATCH EXISTING ADJACENT PAVEMENT SECTION. LARGER SHALL BE USED. SCARIFY AND RECOMPACT SUBBASE 6" MIN.
4. APPLY SLURRY SEAL.
5. STRIPE DROP-OFF ZONE.
6. STRIPE PARALLEL PARKING STALL.
7. STRIPE NO PARKING ZONE.



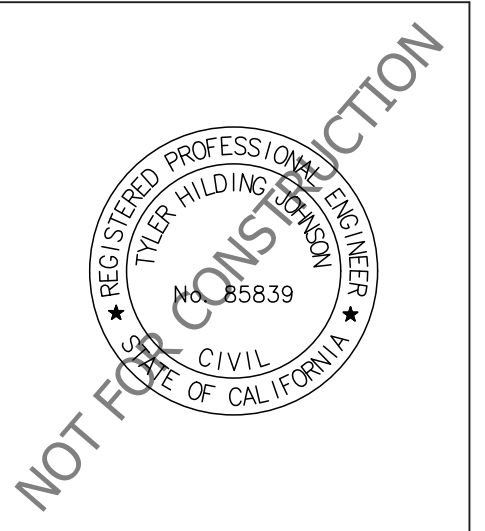
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OFF-SITE IMPROVEMENT PLAN

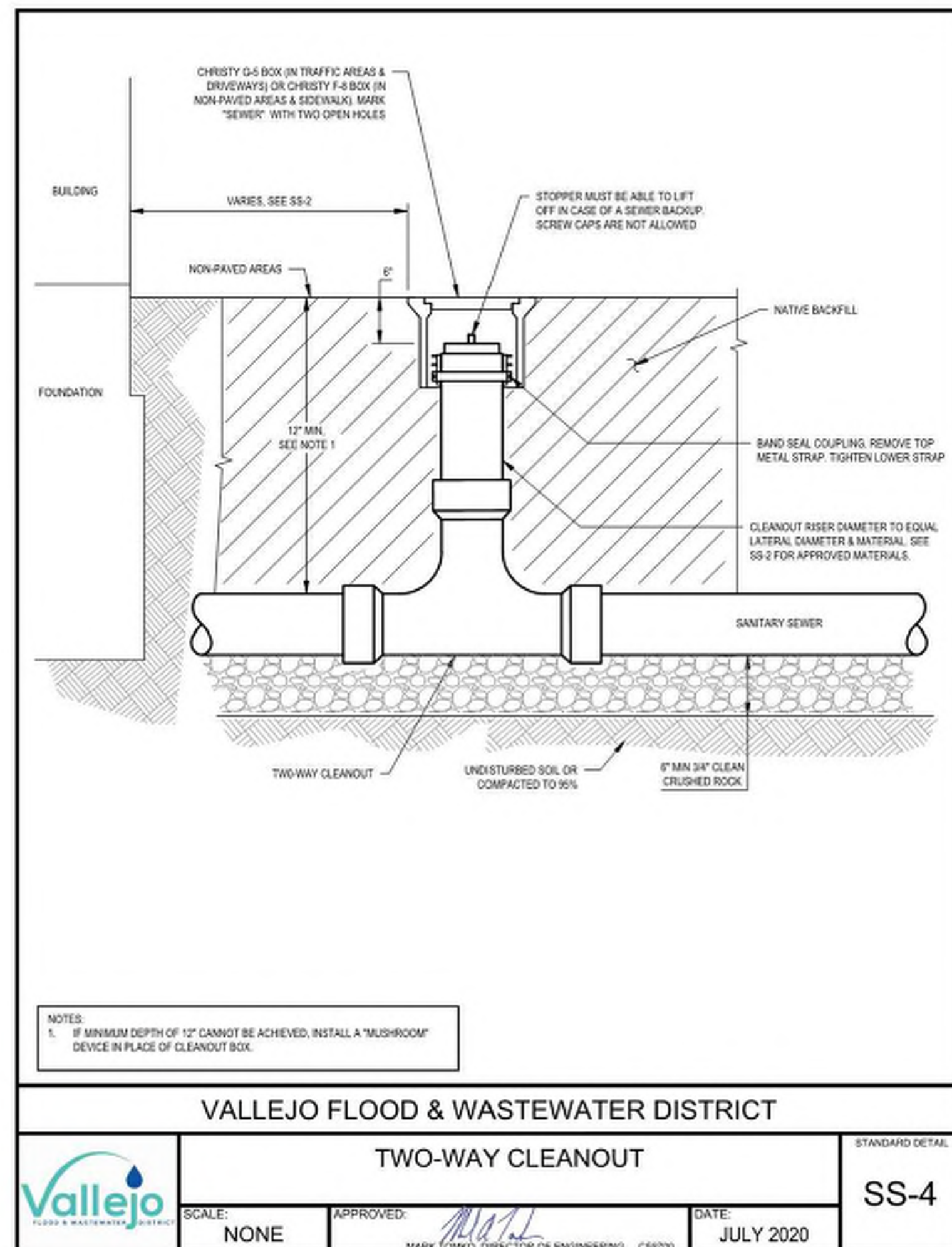
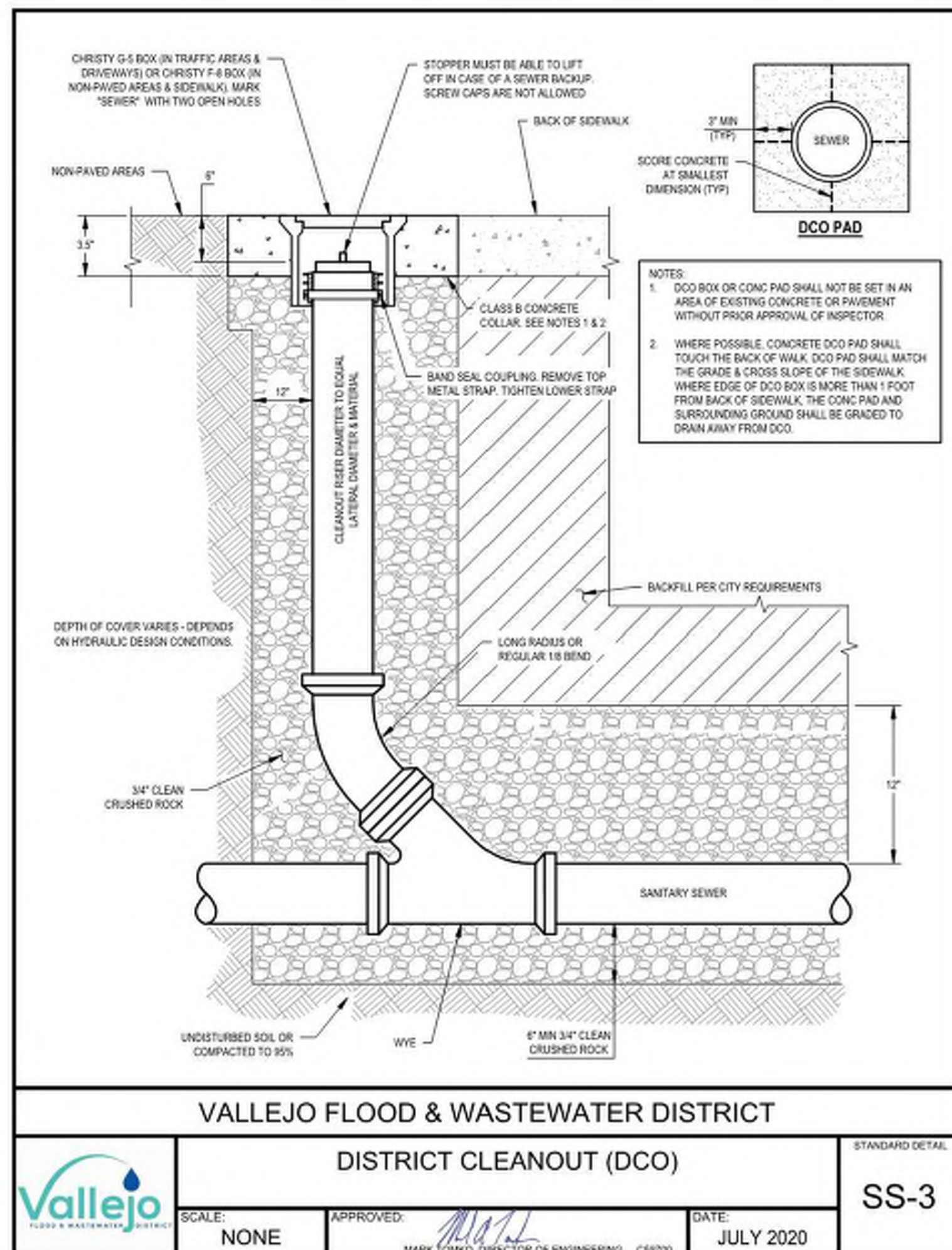
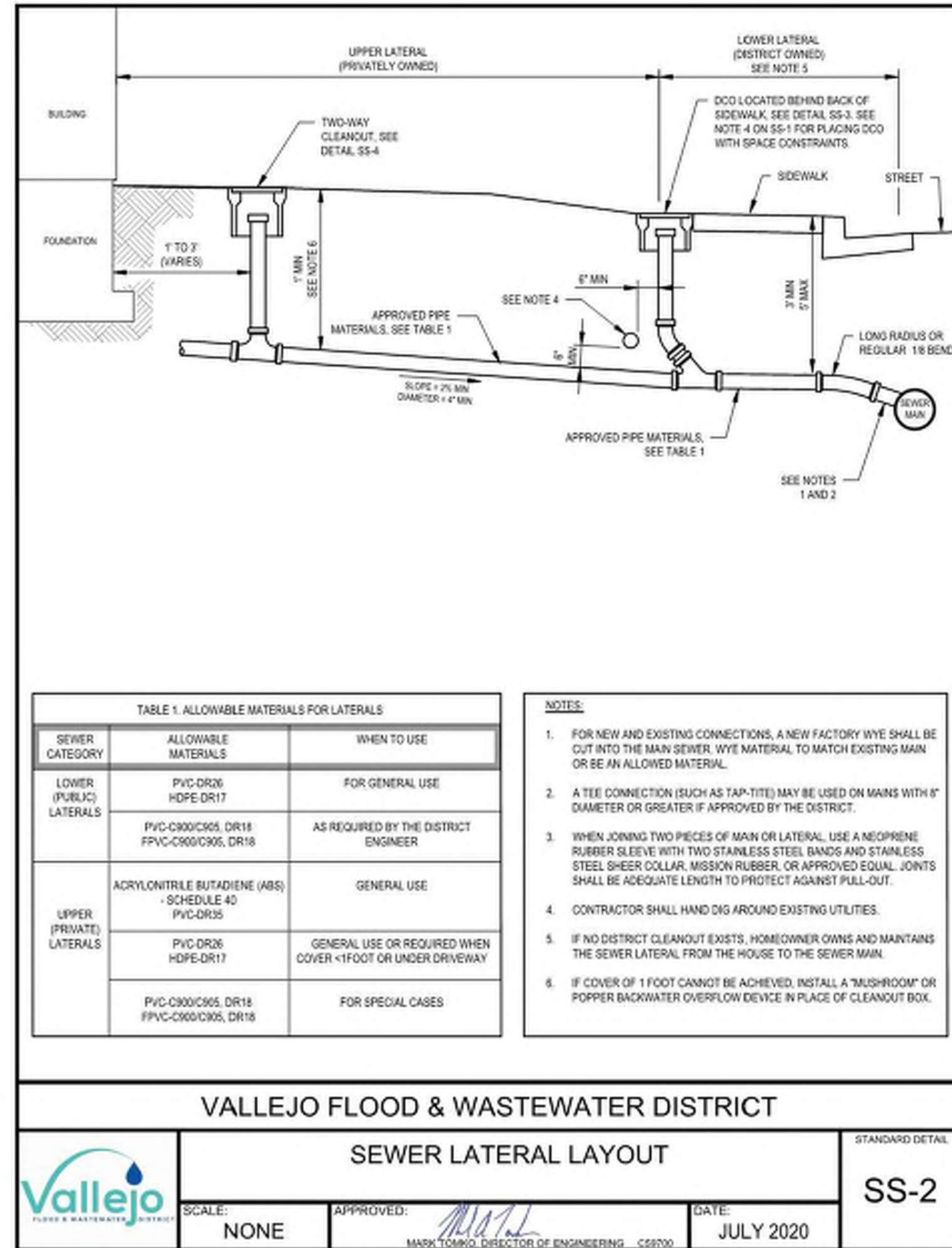
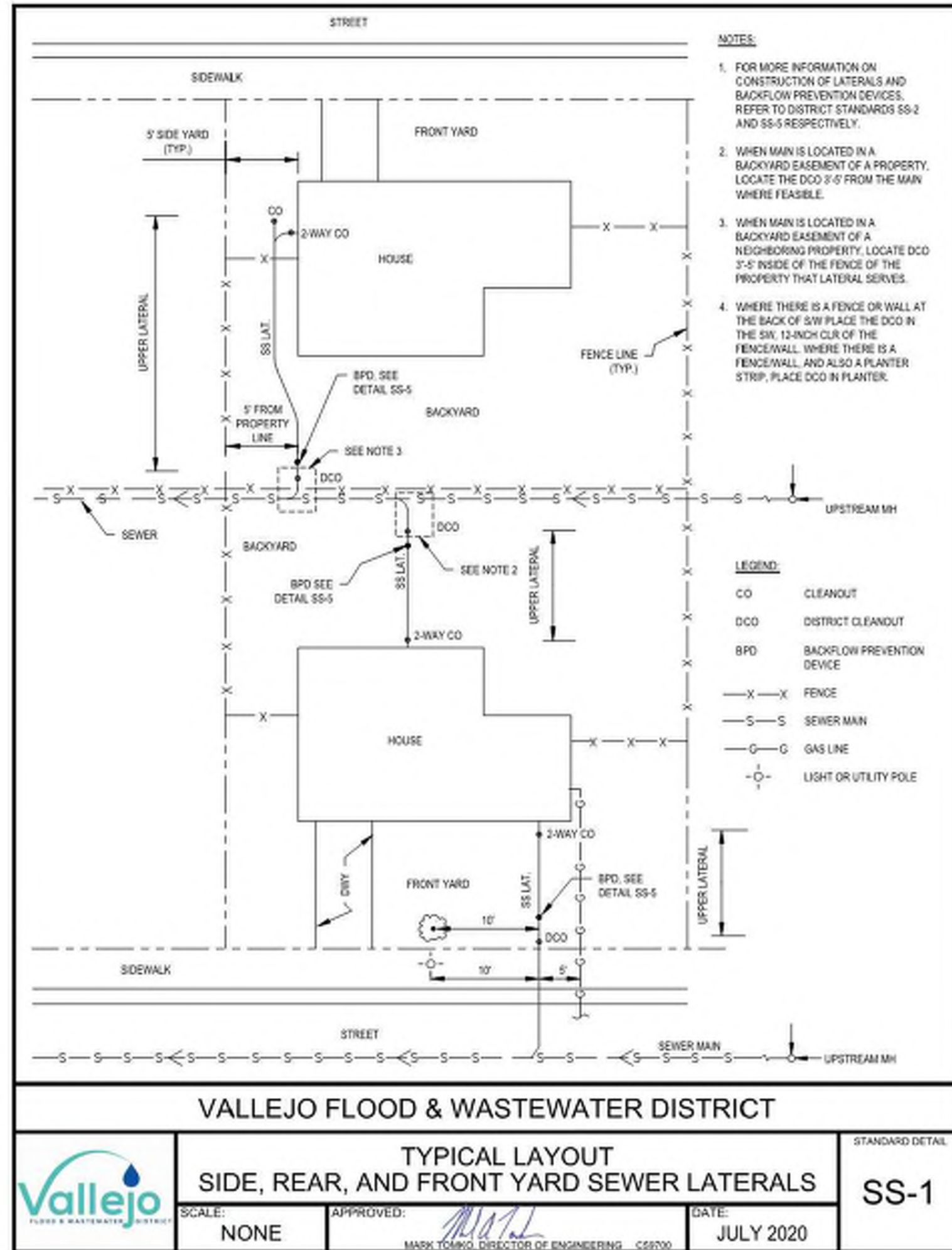
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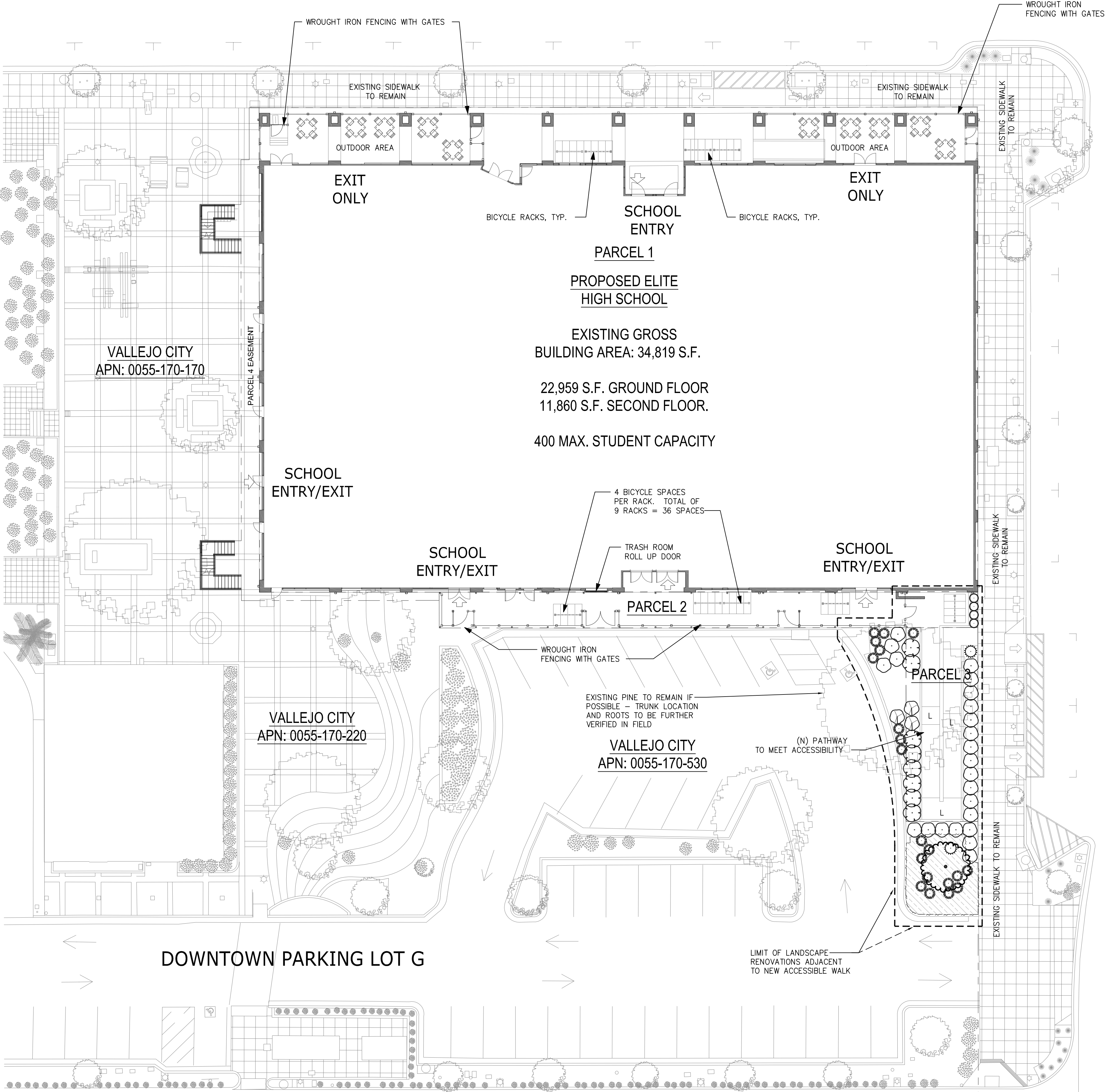
PRELIMINARY LANDSCAPE NOTES

1. CODE COMPLIANCE:
 - CITY OF VALLEJO, CA: THE WELO APPLIES TO PROJECTS THAT REQUIRE A BUILDING PERMIT, PLAN CHECK, OR DESIGN REVIEW APPROVAL, AND INCLUDE AT LEAST 500 SQUARE FEET (SF) OF NEW LANDSCAPE AREA OR AT LEAST 2,500 SF OF REHABILITATED LANDSCAPE AREA. (VALLEJO MUNICIPAL CODE CHAPTER 16.7 - WATER-EFFICIENT LANDSCAPING TERMS AND DEFINITIONS)
 - STATE OF CALIFORNIA: REHABILITATED LANDSCAPE PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 2,500 SQUARE FEET REQUIRING A BUILDING OR LANDSCAPE PERMIT, PLAN CHECK OR DESIGN REVIEW. (CALIFORNIA DEPARTMENT OF WATER RESOURCES CHAPTER 2.7 - MODEL WATER EFFICIENT LANDSCAPE ORDINANCE)
 - THIS PROJECT INCLUDES A REHABILITATED LANDSCAPE IN CONJUNCTION WITH AN EXISTING BUILDING REMODEL AND SITE MODIFICATIONS. THE REHABILITATED LANDSCAPE AREA IS APPROXIMATELY 1,452 SQUARE FEET AND THEREFORE NOT APPLICABLE TO THE CITY AND STATE LANDSCAPE AND WATER ORDINANCES. HOWEVER, THE INTENT OF THE LANDSCAPE WATER CONSERVATION ORDINANCES WILL BE CONSIDERED SUCH AS IN PLANT SELECTION AND BARK MULCH PLACEMENT.
2. PRELIMINARY LANDSCAPE DESIGN IS BASED ON THE PRELIMINARY SITE DESIGN. DURING THE CONSTRUCTION DRAWINGS PHASE, COORDINATION WITH CHANGES TO THE SITE PLAN FROM ARCHITECTURAL AND ENGINEERING IMPROVEMENTS, INCLUDING SITE UTILITIES, MAY CAUSE CHANGES TO THE LANDSCAPE AREAS AND REQUIRE CHANGES TO THIS PROPOSED DESIGN.
3. EXISTING IRRIGATION SHALL BE CHECKED FOR PROPER OPERATION AND, IF NECESSARY, REPAIRED FOR COMPLETE COVERAGE OF RENOVATED LANDSCAPE AREAS.
4. EXISTING IRRIGATION SHALL BE CAPPED, RELOCATED AND ADJUSTED TO PROVIDE AUTOMATIC IRRIGATION TO ALL PROPOSED NEW PLANT MATERIAL.
5. NEW AND DISTURBED PLANTING BEDS SHALL RECEIVE NEW PLANT MATERIAL TO BLEND WITH THE EXISTING FOR A UNIFORM LANDSCAPE APPEARANCE.
6. RENOVATED SHRUB BEDS SHALL RECEIVE A FRESH NEW LAYER OF BARK MULCH DRESSING.
7. REFER TO THE ARCHITECTURAL PLANS FOR BUILDING, PAVING, AND SITE AMENITIES.

PRELIMINARY PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	PLANTED SIZE	
	Lagerstroemia indica x fauriei 'Muskogee'	Muskogee Crape Myrtle	15 gal	Low	Ht: 6'-7' / Sp: 2'-3'	
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	PLANTED SIZE	
	Cistus x purpureus	Orchid Rockrose	5 gal	Low	Ht: 1'0"/Sp: 1'0'	
	Dietes vegeta	African Iris	5 gal	Low	Ht: 1'2"/Sp: 1'0'	
	Phormium tenax 'Firebird'	Fire Bird Flax	5 gal	Low	Ht: 1'8"/Sp: 1'4'	
	Pittosporum tobira 'Variegata'	Variegated Mock Orange	5 gal	Low	Ht: 1'4"/Sp: 1'4'	
	Raphiolepis indica 'Pink Lady'	Pink Lady Hawthorne Standard	5 gal	Low	Ht: 1'4"/Sp: 1'4'	
	Rosmarinus officinalis 'Tuscan Blue'	Tuscan Blue Rosemary	5 gal	Low	Ht: 1'2"/Sp: 1'0'	
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	PLANTED SIZE	SPACING
	Verbena peruviana 'Pink'	Pink Peruvian Verbena	1 gal	Low	Ht: 2'/Sp: 6"	36" o.c.

NOTE: PLANT WATER USE VALUES ARE PER THE "WATER USE CLASSIFICATION OF LANDSCAPE SPECIES" (WUCOLS)



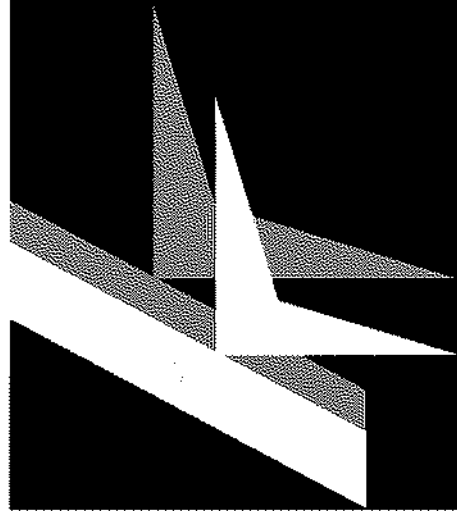
PRELIMINARY LANDSCAPE PLAN

0' 4' 8' 16' 32 FEET
1/16" = 1'-0"



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ELITE Public
Schools

Proposed ELITE Public Schools -

Vallejo

241-255 Georgia Street
Vallejo, CA

08/23/23

L1



Prepared by

FEHR  **PEERS**

100 Pringle Avenue
Suite 600
Walnut Creek, CA 94596

February 2024

Final
Transportation Impact Analysis

Elite Charter School Project

Prepared for:
City of Vallejo

FINAL

Elite Charter School

Transportation Impact Analysis

Prepared for:
City of Vallejo

February 2024

WC23-3967

FEHR  PEERS

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Executive Summary

This report presents the transportation impact analysis (TIA) prepared for the Elite Charter School Project (Project) in the City of Vallejo, California. This TIA includes a vehicle miles traveled (VMT) analysis, level of service (LOS) assessment, and site plan review and recommendations.

Project Description

The Project is located on a parcel at 241/255 Georgia Street, just north of the Vallejo Transit Center. The Project includes the relocation of an existing charter school that houses 400 students and 35 staff members occupying an existing 2-story, 34,819 square-foot commercial building on a 27,000 square-foot site with no existing off-street parking, but adjacent to City-owned parking lots.

VMT Analysis

The Project's effect on vehicle miles traveled was evaluated based on guidelines from the City of Vallejo's *CEQA Transportation Impact Analysis Guidelines* (Revised October 2020) and may be used for California Environmental Quality Act (CEQA) purposes. Consistent with the City's guidelines, the Project is not expected to have a VMT-related transportation impact because it is within a Transit Priority Area and is local-serving in nature, and is therefore screened out of additional VMT analysis.

LOS Analysis

Level of service analysis is no longer required under Senate Bill 743 (SB 743) and CEQA. However, to ensure consistency with the City's General Plan, the Project's effect on intersection operations was evaluated at eight study intersections. Under Opening Year and Cumulative conditions, the Project does not cause any study intersection to degrade to unacceptable conditions, based on the City's level of service policies. Therefore, the Project is not required to provide intersection improvements under Opening Year Plus Project and Cumulative Plus Project conditions.

Site Plan Review

A detailed site plan review was conducted, and recommendations identified to improve site access and circulation for vehicles, pedestrians, bicycles, and transit. A comparison of the proposed parking supply versus ITE parking demand and City code requirements for school projects indicate that the proposed vehicle parking supply would meet demand; however, two more bicycle parking spaces are required. The loading and unloading zones for the Project were also evaluated: although the morning drop-off period would not cause adverse effects, afternoon pick-up along Sacramento Street may cause queuing into the Georgia Street/Sacramento Street intersection. Therefore, it is recommended that the school provide a parking plan in which parents/guardians are initially directed to the Georgia Street loading/unloading zone when dropping off or picking up their student. Other recommendations to improve pick-up and drop-off operations are also provided.



1. Introduction

This report documents the transportation impact analysis prepared for the Elite Charter School Project located in the City of Vallejo, California. The TIA includes level of service analysis, a vehicle miles traveled assessment, and site plan review and recommendations.

1.1 Purpose

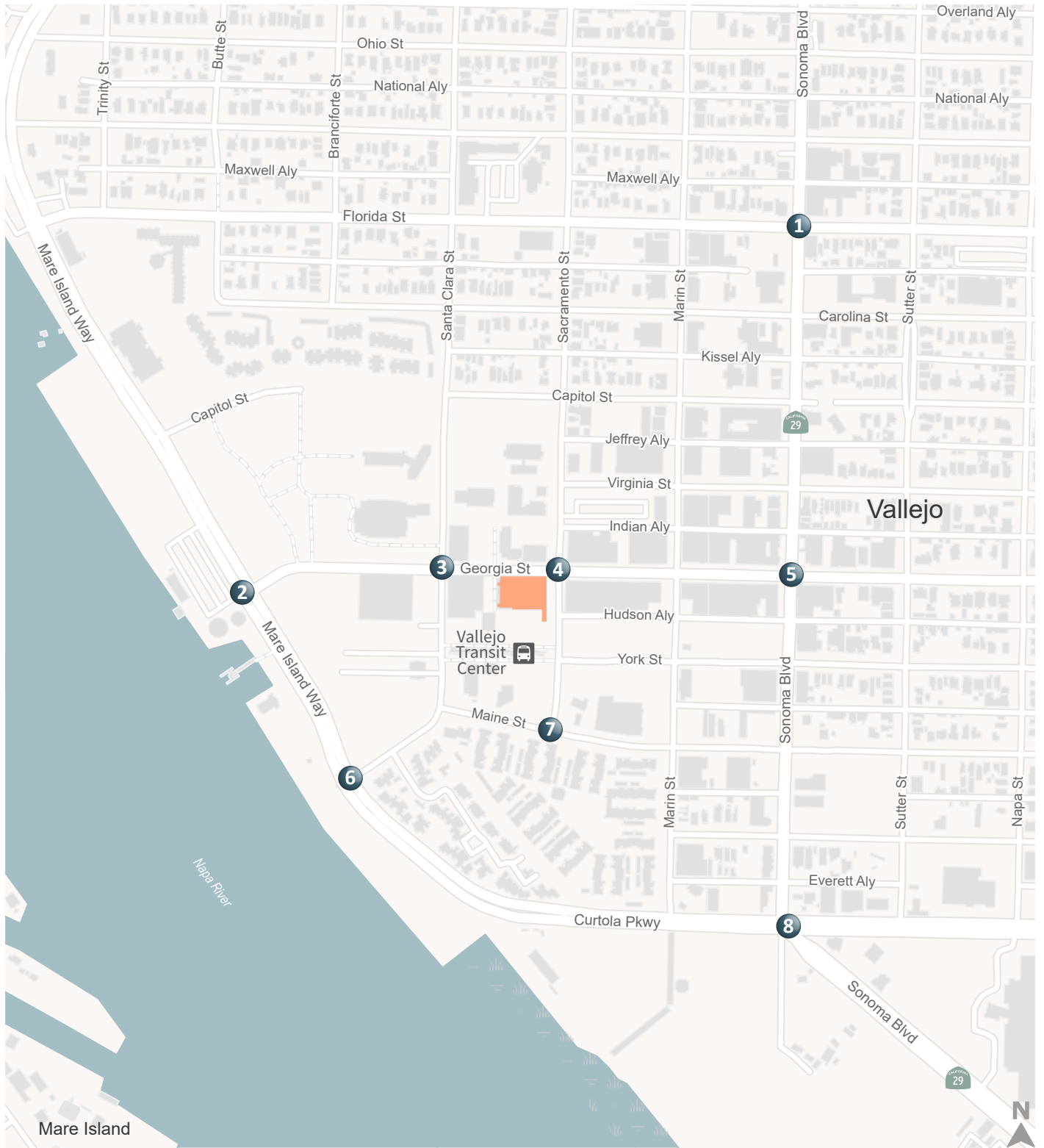
The purpose of this document is to summarize the effects of the Project on the local transportation network. The California Environmental Quality Act (CEQA) Guidelines were updated in 2020 per Senate Bill 743 (SB 743) to require the use of VMT to evaluate a project's environmental effect on the transportation system. The passage of SB 743 eliminates automobile delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining a project's impacts to the transportation system. However, lead agencies may elect to utilize LOS for informational purposes or non-CEQA analysis.

The analysis was prepared based on the City of Vallejo's *CEQA Transportation Impact Analysis Guidelines* (Revised October 2020) and the Traffic Impact Analysis/Study Guidelines which includes methodology and guidelines for a VMT and LOS analysis, respectively. The LOS analysis can also be used to support indirect CEQA impact analysis of traffic generation (air pollution, noise, stormwater runoff, etc.). The City will continue to address congestion, as necessary, but will not rely on traffic LOS analysis as a direct impact within the context of CEQA documentation. This report summarizes the Project's effect on VMT for CEQA purposes and LOS analysis for informational/non-CEQA analysis to ensure General Plan consistency.

1.2 Project Description

The 2.4-acre Project site is located at 241/255 Georgia Street in the City of Vallejo, bounded by the Vallejo Housing Authority to the north, Vallejo Transit Center to the south, Santa Clara Street to the west, and Sacramento Street to the east, as shown in **Figure 1**. An existing 2-story, 34,819 square-foot commercial building currently occupies the 27,000 square-foot site; the Project proposes to relocate an existing charter high school that houses 400 students and 35 staff members. The Project proposes the implementation of loading and unloading zones along Georgia Street and Sacramento Street. The existing parallel on-street parking on Georgia Street will remain the same, however, no parking will be allowed during drop-off and pick-up periods before and after school. The 16 existing angled parking spaces on Sacramento Street will be removed and replaced with 7 parallel parking spaces to allow for loading and unloading during drop-off and pick-up periods. Parking will also be allowed on Sacramento Street outside of the drop-off and pick-up periods. The Project site plan is shown on **Figure 2**.





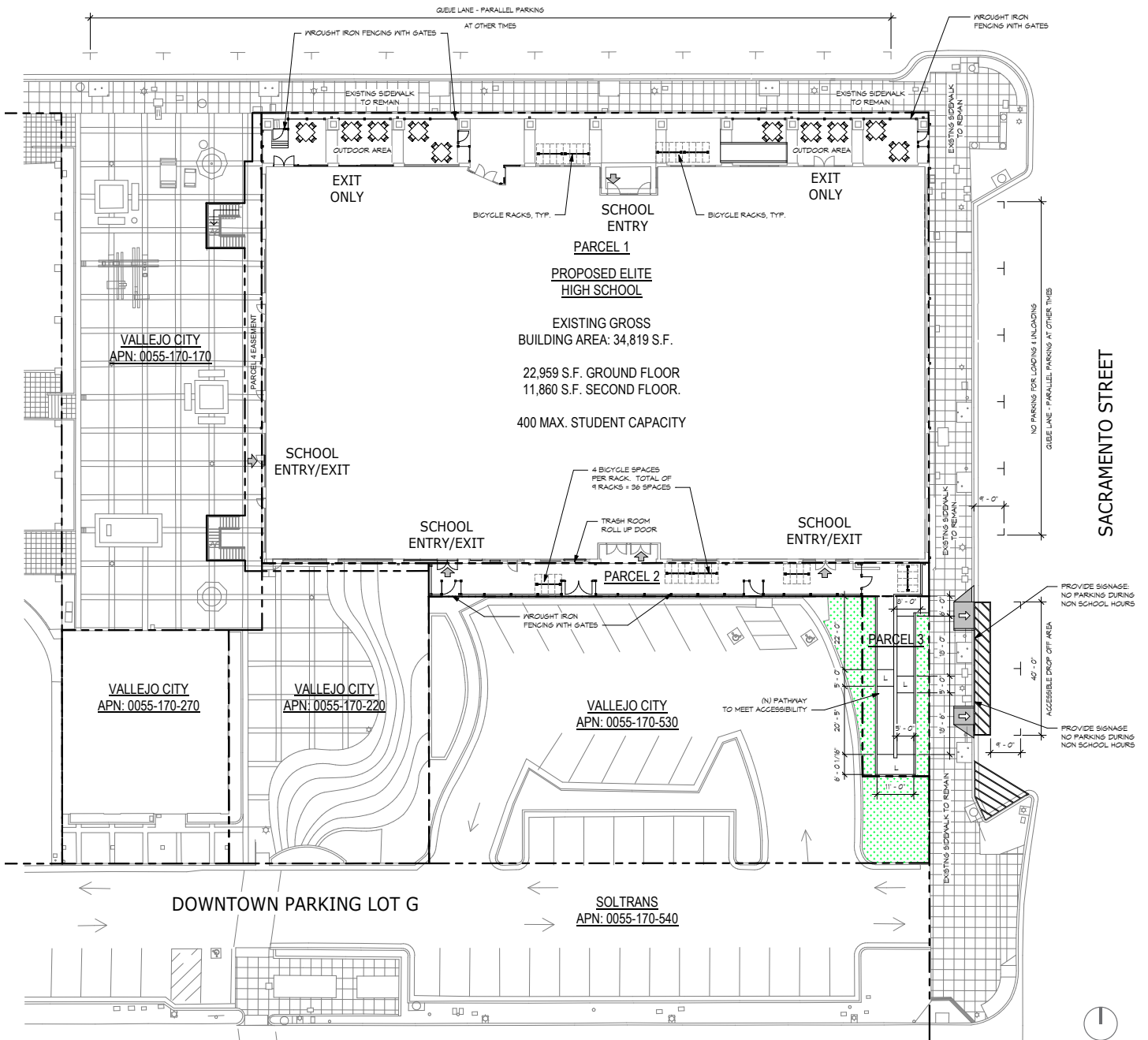
Project Site
 Study Intersection



Figure 1

Project Site and Study Locations

GEORGIA STREET



Site Plan Source: Kinyon + Kim Architects, Inc., 09/26/2023.

Figure 2

Project Site Plan

2. Analysis Approach

This section describes the assumptions and methodologies utilized in the vehicle miles traveled analysis and level of service analysis.

2.1 Vehicle Miles Traveled (VMT) Analysis

The California Environmental Quality Act Guidelines were updated in 2020 per Senate Bill 743 to remove level of service from CEQA analysis and require the use of vehicle miles traveled to evaluate a project's environmental impact on the transportation system. VMT measures the amount of driving generated by a project and thereby its effects on the environment from those miles traveled. SB 743 changes the focus of transportation impact analysis in CEQA from measuring *impacts on drivers* to measuring the *environmental impact of driving*.

The relevant CEQA Guidelines Appendix G Transportation Section checklist questions are as follows:

Would the project

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

Criterion B is the formal implementation of the SB 743 requirement to analyze VMT as part of the CEQA Transportation section. Under SB 743, congestion-related project effects (such as those measured by LOS or similar metrics) are deemed an unsuitable basis on which to determine a significant environmental effect. The relevant subsection of CEQA Guidelines section 15064.3(b) for the project reads as follows:

- (1) **Land Use Projects.** Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one half-mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- (4) **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT, including whether to express the change in absolute terms, per capita, per household, or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the



project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

The City of Vallejo, exercising its discretion as lead agency, has the ability to select the methodology and CEQA significance criteria for use in the CEQA Transportation section. The City of Vallejo formally adopted locally applicable CEQA metrics, methodology, and significance criteria in July 2020, published in the City of Vallejo's *CEQA Transportation Impact Analysis Guidelines* (Revised October 2020) and summarized in the section below.

2.1.1 Analysis Methodology

The City of Vallejo *CEQA Transportation Impact Analysis Guidelines* state that VMT analysis should be prepared using the Solano-Napa Activity Based Travel Demand Model (SNABM) available at the time of analysis. The guidelines were prepared using the latest model updated in September 2018. Models are frequently updated over time to reflect new information, and the use of the latest available models in the CEQA analysis of a project is encouraged as CEQA analyses should use the latest and best data available (*Cleveland National Forest Foundation vs. San Diego Associations of Governments*, 2017).

2.1.1.1 VMT Screening Methodology

The City of Vallejo's *CEQA Transportation Impact Analysis Guidelines* (Revised October 2020) provide for a three step VMT screening process, as follows:

1. Step 1 – Transit Priority Area (TPA) Screening – Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary.
2. Step 2 – Low VMT Area Screening – Residential and office projects located within a low-VMT generating area of the City (i.e., lower than citywide average levels, based on the significance thresholds in this document) may be presumed to have a less than significant impact absent substantial evidence to the contrary.
3. Step 3 – Project Type Screening – Local-serving retail projects less than 50,000 square feet in size and other local-serving community uses with users drawn primarily from within the city limits may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Projects not screened through the steps above should complete a VMT analysis using the SNABM travel demand model to determine if they have a significant VMT impact.

2.1.1.2 VMT Analysis Methodology

Projects not screened through the three steps in **Section 2.1.1.1** should complete a VMT analysis using the latest Solano-Napa Activity Based Travel Demand model available. VMT calculations should be prepared for the following scenarios:

- Existing No Project: Project-generated VMT metrics from travel model estimates for the Existing condition based on the Solano-Napa Activity Based Travel Demand model without the Project.



- Existing Plus Project: Project-generated VMT metrics from travel model estimates for the Existing condition based on the Solano-Napa Activity Based Travel Demand model with the Project added to the transportation analysis zone.
- Cumulative No Project: Project effect on VMT metrics from travel model estimates for the Future year 2040 condition based on the Solano-Napa Activity Based Travel Demand model without the Project.
- Cumulative Plus Project: Project effect on VMT metrics from travel model estimates for the Future year 2040 condition based on the Solano-Napa Activity Based Travel Demand model with the Project added to the transportation analysis zone.

2.1.2 Thresholds of Significance

Impacts are identified based on a project's VMT compared to a percentage of a baseline value of VMT. The model VMT metric estimates are key in setting baseline values to be used in CEQA thresholds. It is noted, however, that the "base year" thresholds rely on a rolling baseline—that is, the base year baseline metric value should be reconsidered on a project-by-project basis when each project's Notice of Preparation is released.

The thresholds in the City of Vallejo's *CEQA Transportation Impact Analysis Guidelines* are stratified by project type and include the following thresholds for use in CEQA VMT analyses:

A project would result in a significant impact if:

- **Threshold 1: Project-Generated VMT (Residential and Office/Industrial Projects) – Baseline:** Project-generated Residential Tour VMT per resident (for residential projects), Home-Based-Work Tour VMT per employee (for office/industrial projects) or Total VMT per service population (for mixed-use projects) is no higher than the baseline citywide Residential Tour VMT per resident, Home-Based-Work Tour VMT per employee, or Total VMT per service population.
- **Threshold 2: Project Generated VMT (Residential and Office/Industrial Projects) – Cumulative:** Project-generated Residential Tour VMT per resident (for residential projects), Home-Based-Work Tour VMT per employee (for office/industrial projects), or Total VMT per service population (for mixed-use projects) is no higher than the cumulative citywide Residential Tour VMT per resident, Home-Based-Work Tour VMT per employee, or Total VMT per service population. This threshold does not apply if it can be demonstrated that VMT rates are declining at the time of the analysis.
- **Threshold 3: Project's Effect on VMT (Residential and Office/Industrial Projects) – Cumulative:** The Project reduces or has no effect on the citywide total VMT under cumulative conditions.
- **Threshold 4: Project-Generated VMT and Project's Effect on VMT (Other Project Types):** VMT thresholds for other project types, such as institutional, would be developed using considerations unique to the individual project. Projects that are not expected to generate VMT



above a relevant baseline level and/or are not expected to increase VMT in the cumulative condition would be considered to have a less than significant impact with respect to VMT.

Based on the proposed Project description, **Threshold 4 for Other Project Types** would apply. Projects that result in a significant impact under Baseline conditions or Cumulative conditions are required to identify mitigation measures. Projects that are unable to mitigate the impact to a less than significant impact with implementation of mitigation measures would result in a significant VMT impact.

2.2 Level of Service (LOS) Analysis

2.2.1 Study Locations

Intersections are generally the critical capacity-controlling elements of suburban roadway networks. Therefore, the operations of critical intersections surrounding the Project site are used as indicators of the adequacy of the vehicular circulation system. The following intersections, also shown on **Figure 1**, were selected in coordination with City of Vallejo staff as those most likely to be affected by the Project, and thus warrant analysis:

1. Sonoma Boulevard/Florida Street
2. Mare Island Way/Georgia Street
3. Santa Clara Street/Georgia Street
4. Sacramento Street/Georgia Street
5. Sonoma Boulevard/Georgia Street
6. Mare Island Way/Maine Street
7. Maine Street/Sacramento Street
8. Sonoma Boulevard/Curtola Parkway

2.2.2 Data Collection

Weekday AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak period intersection turning movement counts (vehicles, pedestrians, and bicycles) were collected in May 2023 on a clear day, when schools were in session. **Appendix A** includes a summary of the May 2023 weekday count data.

Signal timing data was collected from the City of Vallejo and Caltrans.

2.2.3 Study Scenarios

The following scenarios were evaluated for the weekday AM and PM peak hours:

- Existing – Existing conditions based on traffic counts at the study locations.
- Project Opening Year – Existing traffic counts plus traffic from approved projects expected to be developed prior to the opening of the project.
- Project Opening Year Plus Project – Opening year conditions plus traffic expected to be generated by the Project.



- Cumulative – Forecasts for the cumulative scenario are based on traffic growth trends as described in the Vallejo General Plan and supplemented by a check of traffic forecasts for the study area in the regional travel demand model.
- Cumulative Plus Project – Cumulative forecasts plus traffic expected to be generated by the Project.

2.2.4 LOS Analysis Methodology

Synchro software, using methodologies from the *Highway Capacity Manual*, was used to perform this analysis. The analysis results are summarized in vehicle delay in seconds and LOS. LOS is a qualitative description of operations ranging from LOS A, when the roadway facility has excess capacity and vehicles experience little or no delay, to LOS F, where the volume of vehicles exceeds the capacity, resulting in long queues and excessive delays. The study intersections LOS were established based on traffic analysis using the Transportation Research Board (TRB) method in the *Highway Capacity Manual*, 6th Edition.

For signalized intersections, LOS is based on the average delay experienced by all vehicles passing through the intersection. This methodology uses various intersection characteristics (such as traffic volumes, lane geometry, and signal phasing) to estimate the delay per vehicle. The delay per vehicle is a portion of the total delay attributed to the signal operations and includes initial deceleration, queue move up time, time stopped, and acceleration.

At unsignalized intersections, operations are defined by the average control delay per vehicle (measured in seconds) for each stop-controlled movement. This incorporates delay associated with deceleration, acceleration, stopping, and moving up in the queue. For all-way stop-controlled intersections, the LOS is represented by the average control delay for the whole intersection. For side-street stop-controlled intersections, the average delay and worst-case approach delay and associated LOS are reported in this study.

The average control delays and LOS designations for signalized and unsignalized intersections are summarized in **Table 1**.

Table 1: Intersection LOS and Average Control Delay (seconds/vehicle)

LOS	Signalized	Unsignalized
A	≤ 10.0	≤ 10.0
B	10.1 to 20.0	10.0 – 15.0
C	20.1 to 35.0	15.1 – 25.0
D	35.1 to 55.0	25.1 – 35.0
E	55.1 to 80.0	35.1 – 50.0
F	> 80.0	> 50.0

Source: *Highway Capacity Manual*, 6th Edition.



The City of Vallejo's General Plan and Traffic Impact Analysis/Study Guidelines were referenced to determine the criteria against which effects should be evaluated as part of this analysis, as described below:

Signalized Intersections – Project-related operational effects on the signalized study intersections in the City of Vallejo do not meet the City's LOS guidelines if:

1. Project-related traffic causes the level of service rating to deteriorate from LOS D (55 seconds) or better to LOS E or F.
2. Project-related traffic increases the volume-to-capacity ratio by more than 0.0100 for intersections already operating at an unacceptable LOS without the project.

Unsignalized Intersections – Project-related operational effects on unsignalized intersections do not meet the City's LOS guidelines if:

1. Project generated traffic causes the worst-case movement (or average of all movements for all-way stop-controlled intersections) to deteriorate from LOS D or better to LOS E or F.
2. Project-related traffic increases the volume-to-capacity ratio by more than 0.0100 for intersections already operating at an unacceptable LOS without the project.



3. Existing Conditions

This section describes the existing multimodal transportation system in the study area, including the street system, public transit service, and bicycle and pedestrian facilities. Existing operating conditions at study intersections are also summarized in this section.

3.1 Existing Transportation System

3.1.1 Vehicle Roadway System

Direct vehicular access to the Project site is provided along Georgia Street and Sacramento Street. Local access to the site is provided via Santa Clara Street, Maine Street, Florida Street, Mare Island Way, and Curtola Parkway. Regional access to the Project site is provided via Interstate 80 (I-80), Interstate 780 (I-780), and State Route 29 (SR 29). These facilities are described below.

3.1.1.1 Local Access

Georgia Street is an east-west two-lane roadway that extends from Columbus Parkway in the east to Mare Island Way in the west. Georgia Street provides access to the Project site for local businesses and essential services, as well as access to east Vallejo and I-80. The speed limit is 25 miles per hour and sidewalks are provided on both sides of the street, and parking is prohibited along the roadway.

Sacramento Street is a north-south two-lane roadway that extends from Maine Street in the south to Wilson Avenue to the north. Sacramento Street has direct access to the entrance and parking lot of the Project site and the Vallejo Transit Center. There is a posted speed limit of 25 miles per hour with sidewalks and parking provided on both sides of the street.

Santa Clara Street is a north-south two-lane roadway that extends from Maine Street in the south to Indiana Street to the north. Santa Clara Street has direct access to the entrance and parking lot of the Project site, City Hall, and the Vallejo Transit Center. There is a posted speed limit of 25 miles per hour with sidewalks and parking provided on both sides of the street.

Maine Street is an east-west two-lane roadway that extends from Solano Avenue in the east to Mare Island Way in the west. The posted speed limit is 25 miles per hour with sidewalks and parking present on both sides of the street.

Florida Street is an east-west two-lane roadway that extends from Solano Avenue in the east to Mare Island Way in the west. Florida Street has a speed limit of 25 miles per hour and connects east Vallejo to the Project site and provides access to I-80. Sidewalks and parking are provided on both sides of the street.

Mare Island Way is a north-south four-lane divided roadway that extends from Curtola Parkway in the south to Tennessee Street/Mare Island Causeway in the west. Mare Island Way provides access to services



and amenities such as Mare Island, Vallejo Ferry Terminal, the Waterfront, the Vallejo Yacht Club, and open green spaces. The posted speed limit is 35 miles per hour with sidewalks and parking present on both sides of the street.

Curtola Parkway is an east-west four-lane roadway that extends from Lemon Street and I-780 in the east and transitions into Mare Island Way in the west. East of Sonoma Boulevard, Curtola Parkway contains discontinuous median strips. West of Sonoma Boulevard, Curtola Parkway is missing median strips for almost two blocks until the street transitions into Mare Island Way. Curtola Parkway provides access to the I-80/I-780 interchange and Curtola Park & Ride and has a speed limit of 40 miles per hour with sidewalks on both sides of the street.

3.1.1.2 Regional Access

Interstate 80 (I-80) is a north-south freeway extending from San Francisco to the California-Nevada state line via Vallejo, Fairfield, and Sacramento. The facility connects the Project site to the San Francisco Bay Area, Napa Valley, and the Sacramento metropolitan area. Connection to the Project site is available through the Georgia Street interchange.

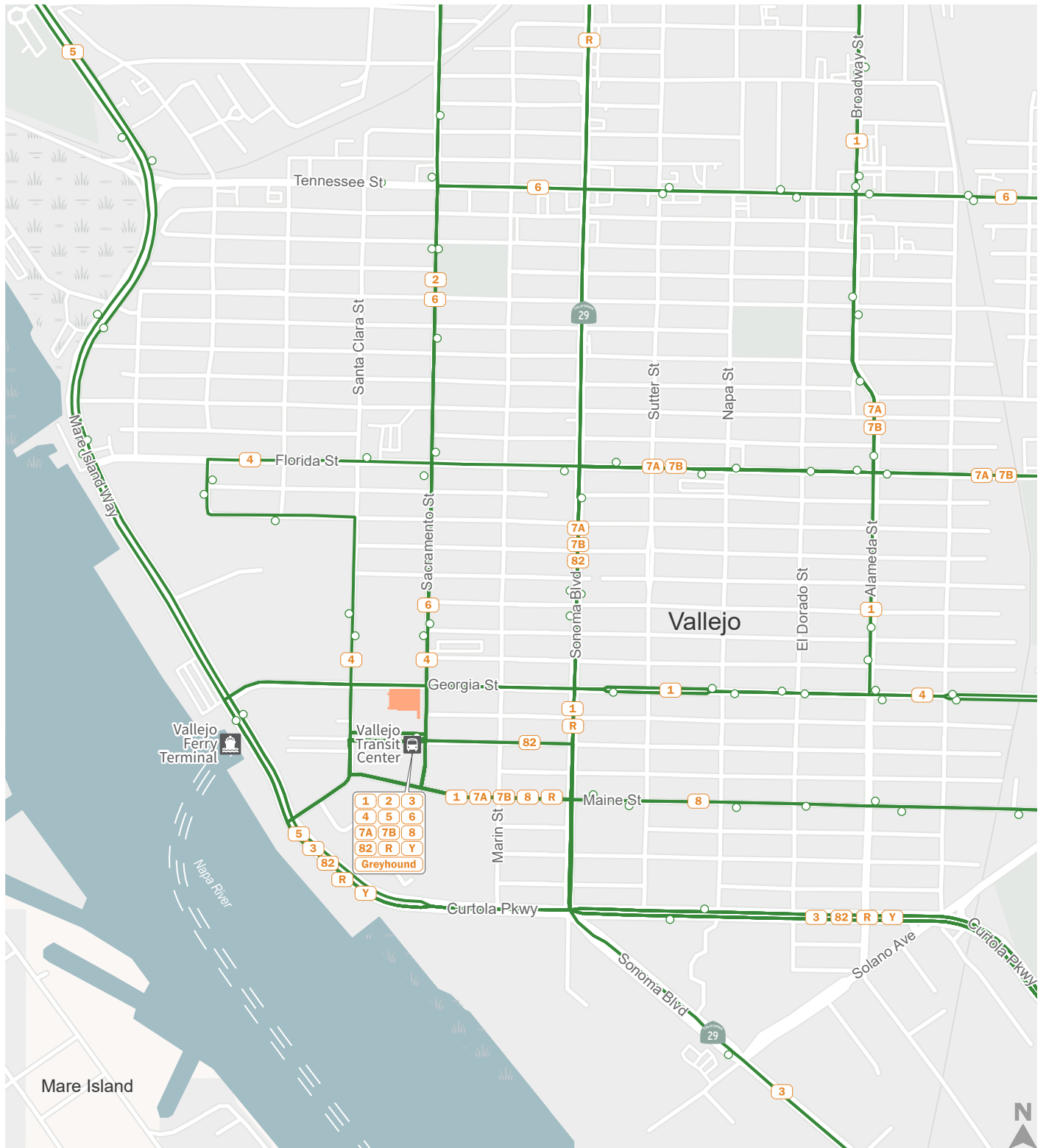
Interstate 780 (I-780) is an east-west, four-lane freeway extending from Vallejo to Benicia. The facility connects the Project site to the outer east San Francisco Bay region with further connections to the Central Valley. Connections to the Project site are available through the Curtola Parkway interchange.

Sonoma Boulevard/State Route 29 (SR 29) is a north-south four-lane roadway that extends from I-80 in the south and transitions into Napa Valley Highway in the north. Sonoma Boulevard is the main arterial connecting Napa County to the rest of the Bay Area and provides access to many local businesses and attractions. The posted speed limit is 30 miles per hour with sidewalks and parking present on both sides of the street.

3.1.2 Transit Services and Connectivity

Transit service is provided in the Project area by Solano County Transit (SolTrans), which provides regional bus service. The nearest bus stop is directly south of and adjacent to the Project site, located on York Street between Santa Clara Street and Sacramento Street. The stop is located within the Vallejo Transit Center, which provides access to all SolTrans routes and connections to the municipalities within Solano County as well as the El Cerrito Del Norte and Walnut Creek BART Stations. The existing transit routes and stops in the study area are shown on **Figure 3**.





Project Site SolTrans Bus Route Bus Stop

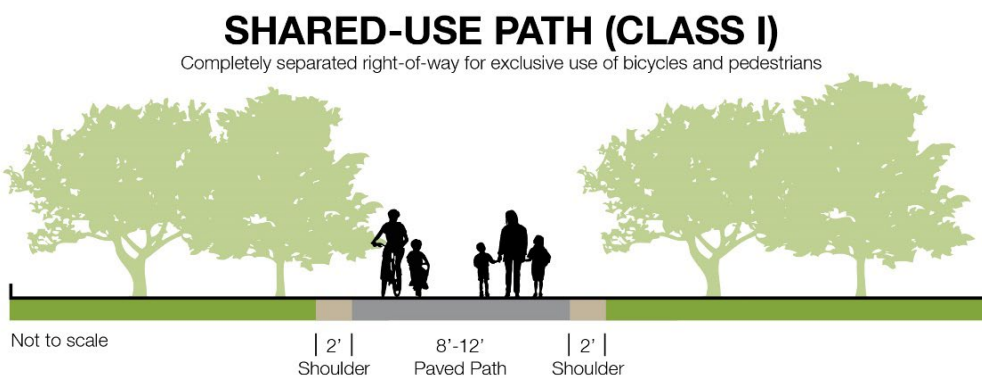
Figure 3

Existing Transit Routes

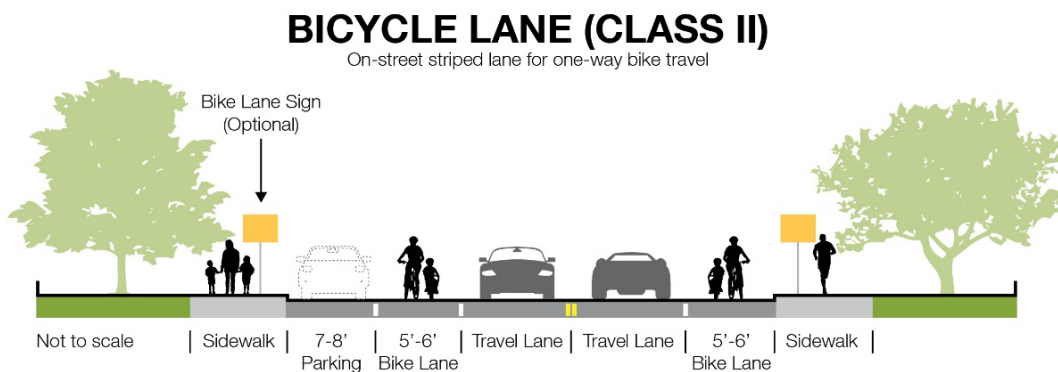
3.1.3 Bicycle Facilities

Bikeway planning and design in California typically relies on guidelines and design standards established by California Department of Transportation (Caltrans) in the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design). Caltrans provides examples for four distinct types of bikeway facilities, as described below and shown in the accompanying figures.

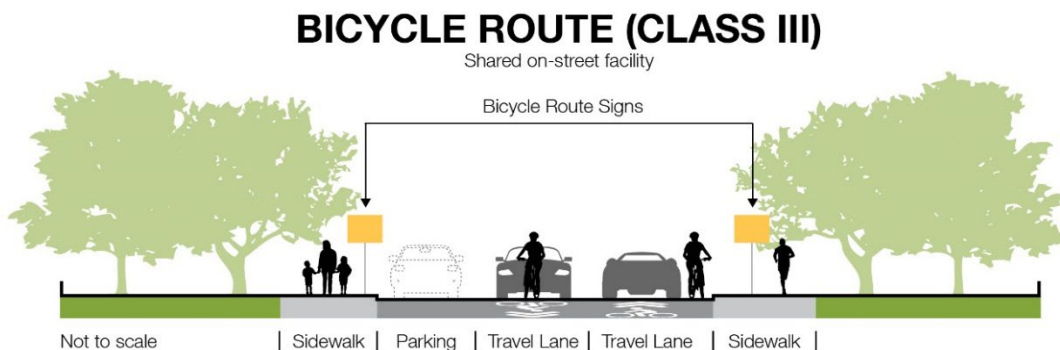
Class I Bikeways (Shared-Use Paths) provide a separate right-of-way and are designated for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian cross-flow minimized. In general, bike paths serve corridors where on-street facilities are not feasible or where sufficient right-of-way exists to allow them to be constructed.



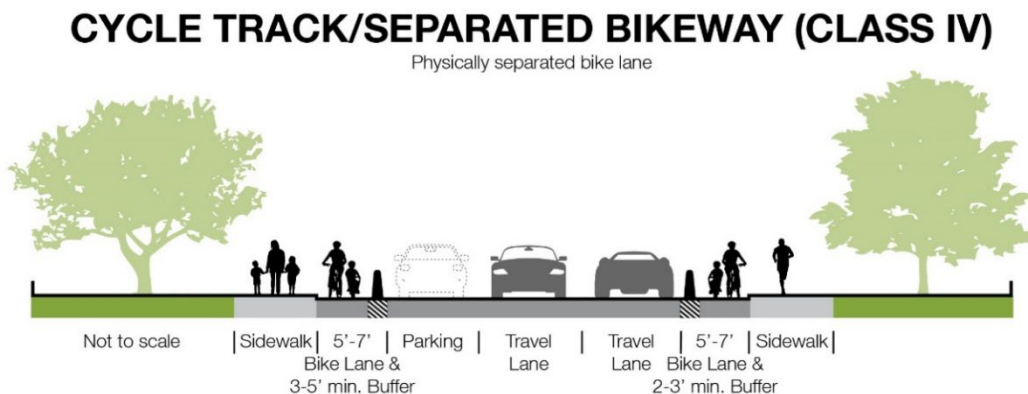
Class II Bikeways (Bicycle Lanes) are dedicated lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are typically five feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.



Class III Bikeways (Bicycle Routes) are designated by signs or pavement markings for shared use with pedestrians or motor vehicles but have no separated bike right-of-way or lane striping. Bike routes serve either to a) provide a connection to other bicycle facilities where dedicated facilities are infeasible, or b) designate preferred routes through high-demand corridors.



Class IV Bikeways (cycle tracks or "separated" bikeways) provide a right-of-way designated exclusively for bicycle travel within a roadway and are protected from other vehicle traffic by physical barriers including, but not limited to, grade separation, flexible posts, inflexible vertical barriers such as raised curbs, or parked cars.



Cyclists may reach the Project site by utilizing the Class II bicycle facilities along Georgia Street from Amador Street to Sonoma Boulevard. Per the City of Vallejo General Plan 2020 Section 6, Class II bicycle facilities are proposed along Sonoma Boulevard, Curtola Parkway, and Marin Street, as well as Class III bicycle facilities along Georgia Street, Sacramento Street, and Maine Street. Existing and proposed bicycle facilities in the study area are displayed on **Figure 4**.



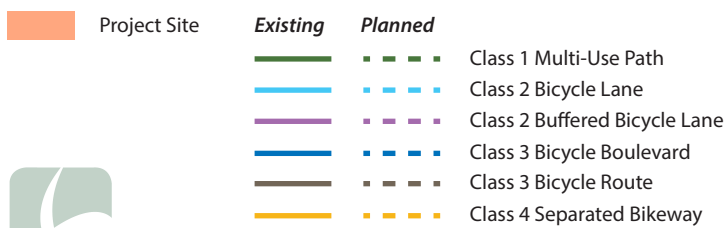


Figure 4

Existing and Planned Bicycle Facilities

3.1.4 Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. The pedestrian environment was evaluated on the connecting roadways that directly serve the Project site and adjacent roadways that connect to transit stops and/or nearby destinations in the greater study area.

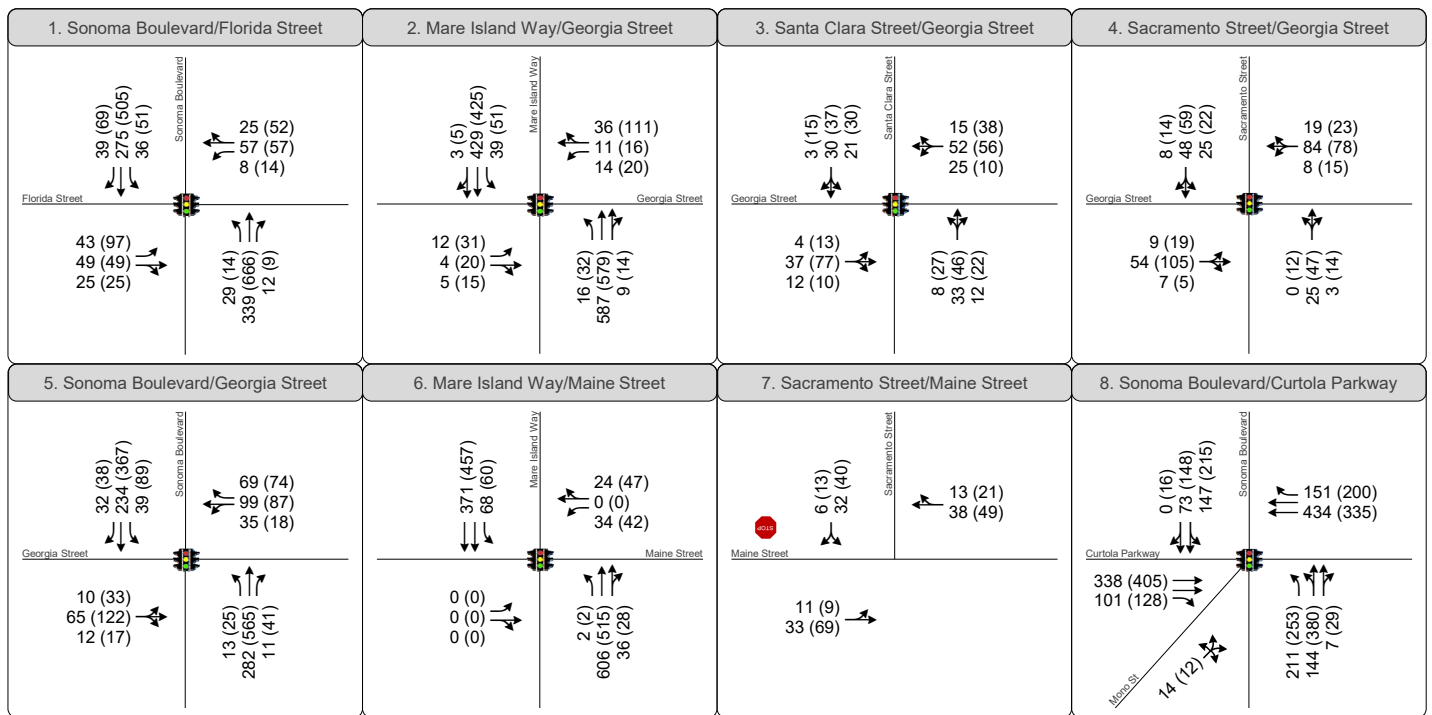
Pedestrian connectivity in the vicinity of the Project site is provided by a network of sidewalks and crosswalks that serve the Georgia Street, Sacramento Street, and Santa Clara Street corridors.

Crosswalks are provided to connect existing sidewalks at all study intersections. Pedestrian signals and actuated pushbuttons are also provided at signalized study intersections with crosswalks.

3.2 Intersection Operations

Existing intersection lane configurations and peak hour turning movement volumes, discussed in **Section 2.2.2**, and presented on **Figure 5**, were used to calculate the intersection LOS during the weekday AM and PM peak hours. For each study intersection, the 60-minute period with the highest traffic volumes during each two-hour count period was identified as the respective peak hour of traffic. **Table 2** presents the existing LOS analysis results using the analysis methodology described in the chapter above. Detailed calculation sheets are provided in **Appendix B**.





XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign Project Site Study Intersection



Figure 5
Existing Peak Hour
Intersection Control, Volumes, and Lane Configuration

Table 2: Existing Conditions LOS Results Summary

Intersection	Control ¹	Peak Period ²	LOS Standard	Existing	
				Delay ³	LOS ⁴
1. Sonoma Boulevard & Florida Street	Signal	AM PM	D	10.1 9.2	B A
2. Mare Island Way & Georgia Street	Signal	AM PM	D	11.4 13.4	B B
3. Santa Clara Street & Georgia Street	Signal	AM PM	D	5.3 5.8	A A
4. Sacramento Street & Georgia Street	Signal	AM PM	D	4.6 5.3	A A
5. Sonoma Boulevard & Georgia Street	Signal	AM PM	D	14.4 16.8	B B
6. Mare Island Way & Maine Street	Signal	AM PM	D	6.6 6.9	A A
7. Maine Street & Sacramento Street	SSSC	AM PM	D	3.2 (9.2) 2.9 (9.6)	A (A) A (A)
8. Sonoma Boulevard & Curtola Parkway	Signal	AM PM	D	7.4 8.0	A A

Notes:

1. Traffic control type (SSSC = Side-Street Stop-Controlled; Signal = Signalized).
2. AM = Weekday morning peak hour, PM = weekday evening peak hour.
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Approach Delay). Delay calculated per HCM 6th Edition methodologies.
4. LOS designation per HCM 6th Edition.

Source: Fehr & Peers, February 2024.

Under Existing Conditions, all intersections operate at LOS B or better during the AM and PM peak hours. Therefore, all intersections operate at an acceptable LOS under Existing No Project peak hour conditions.

3.2.1 Signal Warrant Analysis

The peak hour signal warrants (Warrant 3A and Warrant 3B) from the *Manual on Uniform Traffic Control Devices* (MUTCD) were used to determine if a traffic signal is warranted at the Maine Street/Sacramento Street intersection. Based on existing volumes, the existing unsignalized intersection of Main Street/Sacramento Street does not meet peak hour signal Warrant 3A and 3B. Detailed calculations are provided in **Appendix C**.

3.2.2 Vehicle Queues

Although all intersections currently operate within the city's standards of LOS D or better, there can be periodic vehicle spillback and delays for some individual movements. **Table 3** presents the AM and PM peak hour 95th percentile queues for the Santa Clara Street/Georgia Street and Sacramento Street/Georgia



Street intersections where vehicles queues may occasionally exceed the vehicle storage length. These queues are indicative of maximum design queues occurring during period of peak traffic. Queue worksheets are provided in **Appendix D**.

Table 3: Existing Conditions 95th Percentile Queue Summary

Intersection	Movement	Storage Length (ft)	AM Peak Period	PM Peak Period
3. Santa Clara Street & Georgia Street	EB	775	25	25
	WB	400	25	25
	NB	250	25	25
	SB	675	25	25
4. Sacramento Street & Georgia Street	EB	400	25	50
	WB	900	25	25
	NB	600	25	25
	SB	650	25	25

Notes:

Bold indicates queue potentially extends beyond available storage.

Source: Fehr & Peers, February 2024.

As shown in **Table 3**, 95th percentile queues at the Santa Clara Street/Georgia Street and Sacramento Street/Georgia Street intersections are currently within the available storage.



4. Project Characteristics

This section describes the trip-making characteristics of the Project. The amount of traffic associated with the Project was estimated using a three-step process:

1. **Trip Generation** – The *amount* of vehicle traffic entering/exiting the Project site was estimated.
2. **Trip Distribution** – The *direction* trips would use to approach and depart the site was projected.
3. **Trip Assignment** – Trips were then *assigned* to specific roadway segments and intersection turning movements.

4.1 Trip Generation

Trip generation refers to the process of estimating how much vehicular traffic a project would add to the surrounding roadway system. Project trip generation estimates are typically prepared for a 24-hour weekday period as well as the one-hour weekday morning and evening commute peak periods, when traffic volumes on adjacent streets are typically the highest. The school is expected to operate between the hours of 9:00 AM and 3:00 PM, four days a week, with early dismissal on Wednesdays at 1:00 PM. For the purposes of Project trip generation, the morning and evening peak hour represent the hour before and after school, respectively, when the school generates the most traffic (AM and PM peak hour of generator). The Institute of Transportation Engineers' (ITE) published weekday daily, morning, and evening trip generation rates in their *Trip Generation Manual*, 11th Edition. This manual is a national compilation of trip generation statistics for land uses of various sizes and types. The assessment makes use of data compiled for the "Private High School" (ITE Code 534) land use. Rates from this reference were used to assess the total number of trips associated with the proposed Project.

Table 4 presents the results of the trip generation analysis performed for the proposed Project. As shown, *ITE Trip Generation Manual* estimates that the Project will generate 868 daily trips, 276 morning peak hour trips, and 166 evening peak hour trips.

Table 4: Project Trip Generation Summary

Land Use	Quantity	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Private High School	400 students	868	172	104	276	64	102	166

Notes:

Trip Generation Calculations:

Daily: $T = 2.17 \times X$; 50% inbound, 50% outbound

AM Peak Hour: $T = 0.35 \times X + 135.16$; 62% inbound, 38% outbound (AM peak hour of generator)

PM Peak Hour: $T = 0.25 \times X + 65.82$; 39% inbound, 61% outbound (PM peak hour of generator)

Source: Fehr & Peers, February 2024; Institute of Transportation Engineers, *Trip Generation*, 11th Edition.



4.2 Trip Distribution and Assignment

Project trip distribution refers to the directions of approach and departure vehicles take to access and leave the site. Estimates of regional project trip distribution were developed based on existing travel patterns in the area, information from the SNABM travel demand model, and the location of complementary land uses and students' homes. The resulting trip distribution percentages are shown on **Figure 6**. The project trip generation, in combination with the expected trip distribution patterns, was used to assign the peak hour vehicle trips to the local roadway network and study intersections. The Project trip assignment is presented on **Figure 7**.



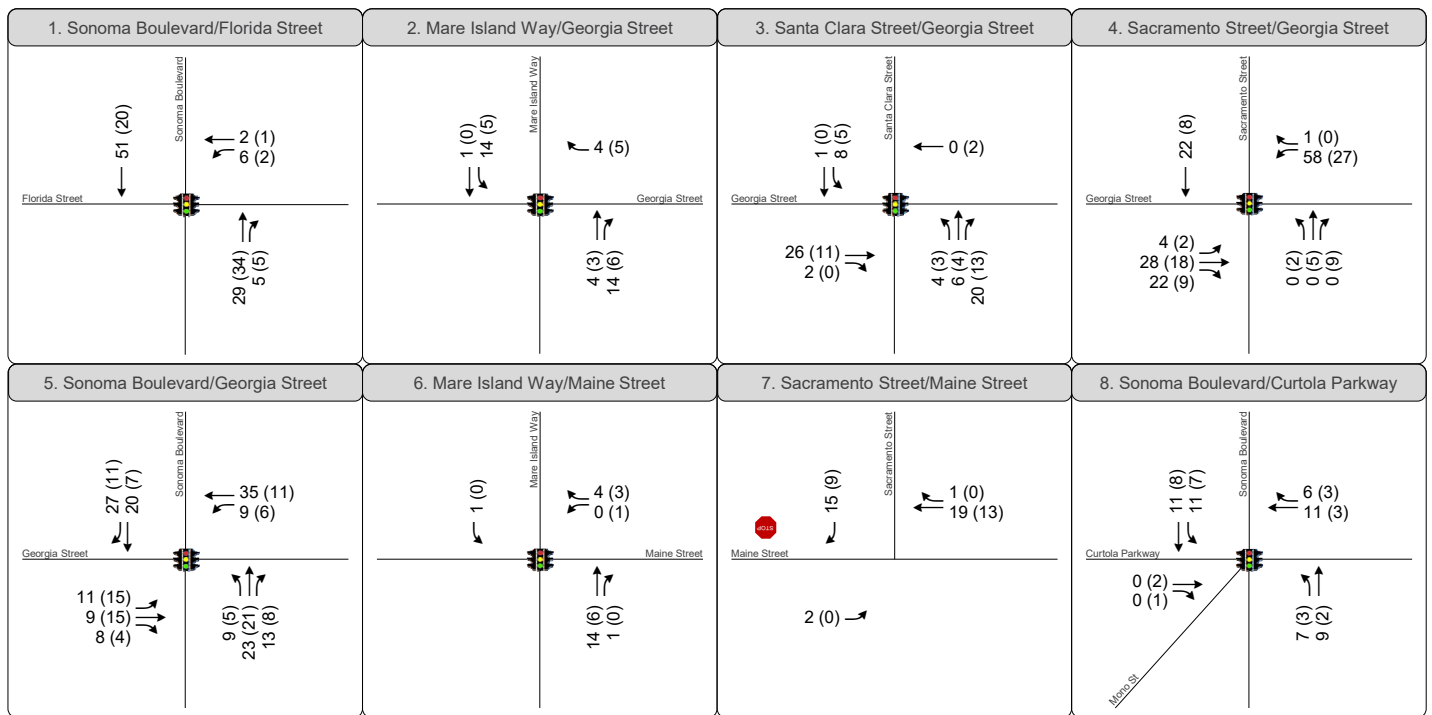


■ Project Site
 ◆ XX% Project Trip Distribution

Figure 6



Project Trip Distribution



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign Project Site Study Intersection



WC23-3967_X_Volumes

Figure 7

Project Trip Assignment

5. Vehicle Miles Traveled (VMT) Assessment

This section evaluates the Project's potential impacts with respect to VMT.

5.1 City of Vallejo VMT Screening Criteria

The City of Vallejo's *CEQA Transportation Impact Analysis Guidelines* (Revised October 2020) provide for a three step VMT screening process, as follows:

- Step 1 – Transit Priority Area (TPA) Screening – Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary.
- Step 2 – Low VMT Area Screening – Residential and office projects located within a low-VMT generating area of the City (i.e., lower than citywide average levels, based on the significance thresholds in this document) may be presumed to have a less than significant impact absent substantial evidence to the contrary.
- Step 3 – Project Type Screening – Local-serving retail projects less than 50,000 square feet in size and other local-serving community uses may be presumed to have a less than significant impact absent substantial evidence to the contrary.

5.2 VMT Screening Analysis

Steps 1 and 3 of the City of Vallejo's *CEQA Transportation Impact Analysis Guidelines* apply to the proposed Project. The Project is located within a TPA¹, just north of the Vallejo Transit Center, and as a high school, the Project is local-serving² in nature. Therefore, the Project is presumed not to have a VMT-related transportation impact under the City's guidelines and is screened out of additional VMT analysis.

The proposed Project satisfies the City-established screening criteria and is presumed to result in a less than significant VMT impact.

¹ A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor.

² "Local-serving" is defined as a project that demonstrates that its users (employees, customers, visitors) would come primarily from within the city limits. The project would therefore not generate new "demand" for the project land uses but would meet at existing demand that would shorten the distance existing residents, employees, customers, or visitors would need to travel.



6. Project Opening Year Traffic Conditions

This chapter discusses opening year traffic conditions with and without the addition of traffic generated by the Project. The Project Opening Year conditions analysis considers approved projects within the study area that are expected to be constructed and occupied in the next year. No roadway improvements were assumed at the study intersections for the analysis of Project Opening Year conditions as none are currently proposed or under consideration.

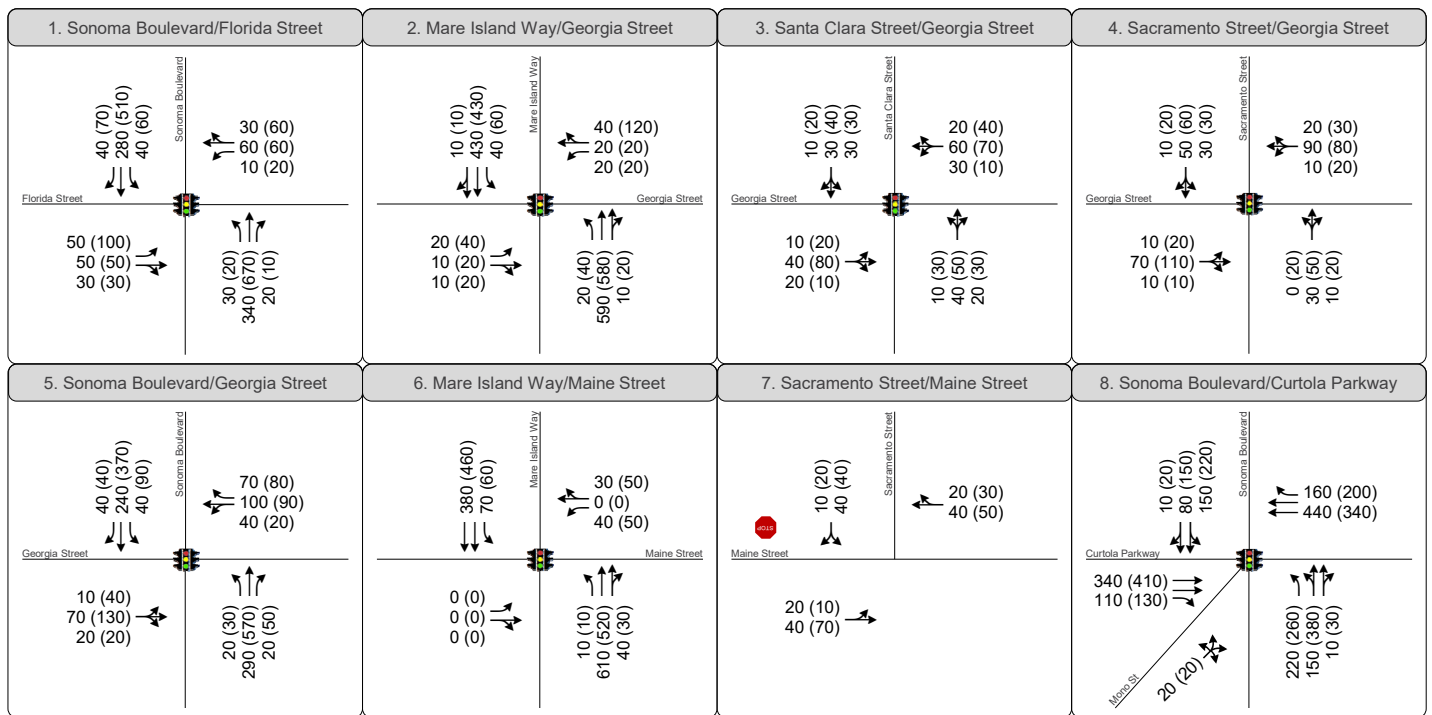
6.1 Project Opening Year Forecasts

To assess future growth with planned development in the City of Vallejo, several sources of data were reviewed, including the SNABM, and the traffic growth trends as described in Vallejo's General Plan. Traffic forecasts within the immediate study area were reviewed to ensure that known developments were adequately reflected in the forecasts. Minor adjustments were made to the forecasts to balance traffic volumes between closely spaced intersections in the study area. While there are no nearby approved projects expected to be constructed and occupied in the Project Opening Year timeline, growth rates from the regional model were applied to reflect expected increases in traffic. The resulting Project Opening Year forecasts are presented on **Figure 8**, which are representative of conditions over the next year. The Project volumes on **Figure 7** were added to the Project Opening Year traffic volumes to develop Project Opening Year Plus Project conditions, as presented on **Figure 9**.

6.2 Analysis of Project Opening Year Conditions

Project Opening Year without and with Project conditions were evaluated using methods described in Chapter 1. The analysis is summarized in **Table 5**, based on the traffic volumes and lane configurations on **Figure 8** and **Figure 9**. Detailed calculation sheets are provided in **Appendix B**.

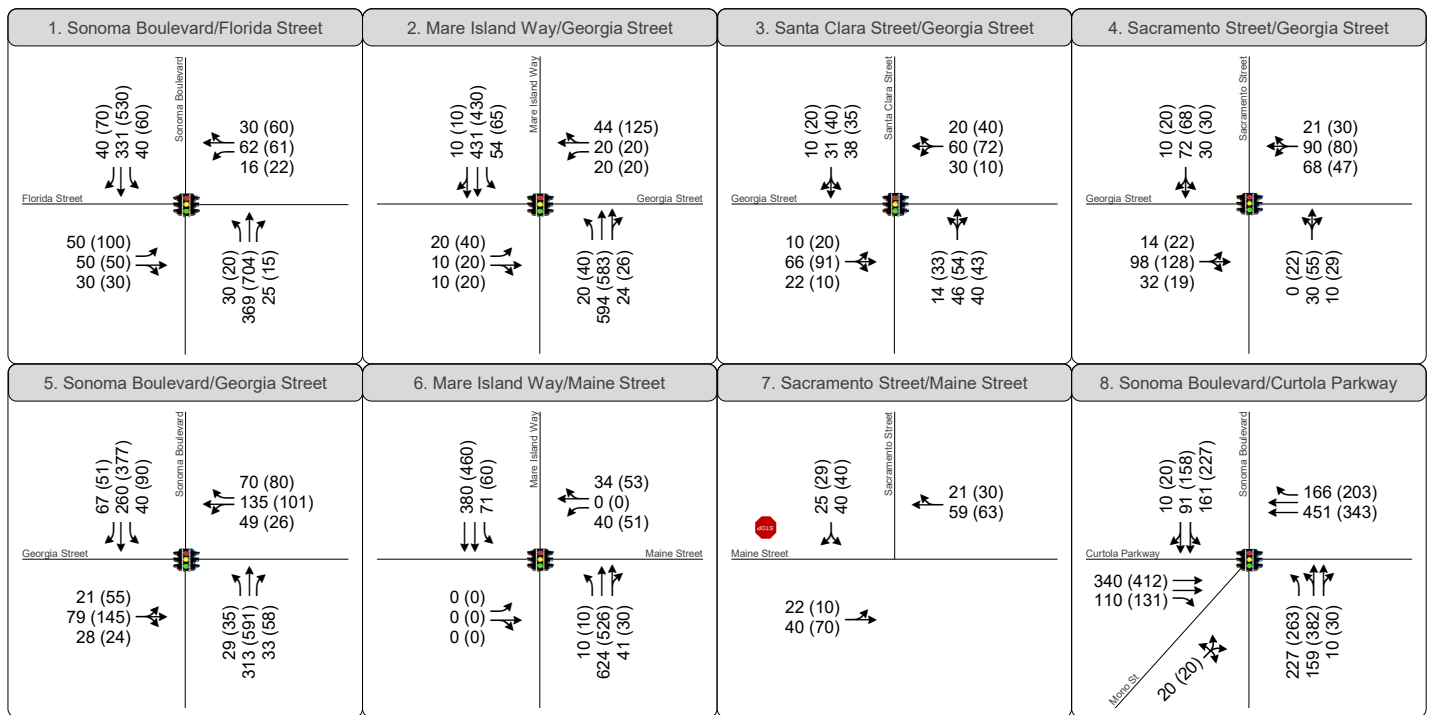




XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign Project Site Study Intersection



Figure 8
Project Opening Year Peak Hour
Intersection Control, Volumes, and Lane Configuration



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign Project Site Study Intersection



Figure 9
Project Opening Year Plus Project Peak Hour
Intersection Control, Volumes, and Lane Configuration

Table 5: Project Opening Year and Project Opening Year Plus Project Conditions LOS Results Summary

Intersection	Control ¹	Time Period	LOS Standard	Project Opening Year		Project Opening Year Plus Project	
				Delay ²	LOS ³	Delay ²	LOS ³
1. Sonoma Boulevard & Florida Street	Signal	AM PM	D	10.3 9.4	B A	10.3 9.5	B A
2. Mare Island Way & Georgia Street	Signal	AM PM	D	11.9 13.7	B B	12.1 13.8	B B
3. Santa Clara Street & Georgia Street	Signal	AM PM	D	5.4 5.9	A A	5.5 6.0	A A
4. Sacramento Street & Georgia Street	Signal	AM PM	D	4.7 5.4	A A	4.9 5.6	A A
5. Sonoma Boulevard & Georgia Street	Signal	AM PM	D	14.9 17.5	B B	16.2 18.9	B B
6. Mare Island Way & Maine Street	Signal	AM PM	D	7.1 7.3	A A	7.3 7.4	A A
7. Maine Street & Sacramento Street	SSSC	AM PM	D	3.7 (9.5) 3.0 (9.7)	A (A) A (A)	3.8 (9.6) 3.1 (9.7)	A (A) A (A)
8. Sonoma Boulevard & Curtola Parkway	Signal	AM PM	D	7.5 8.0	A A	7.6 8.1	A A

Notes:

1. Traffic control type (SSSC = Side-Street Stop-Controlled; Signal = Signalized).
2. AM = Weekday morning peak hour, PM = weekday evening peak hour.
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Approach Delay). Delay calculated per HCM 6th Edition methodologies.
4. LOS designation per HCM 6th Edition.

Source: Fehr & Peers, February 2024.

As shown in **Table 5**, all study intersections are expected to operate acceptably under the Opening Year and Opening Year Plus Project Conditions.

6.2.1 Signal Warrants Analysis

Similar to Existing Conditions, the peak hour signal warrants (Warrant 3A and Warrant 3B) from the MUTCD were used to determine if a traffic signal is warranted at the Maine Street/Sacramento Street intersection under Opening Year and Opening Year Plus Project conditions. Based on the peak hour signal warrant analysis the unsignalized study intersection does not meet peak hour signal warrants under either scenario. Therefore, traffic signal is not needed at the Maine Street/Sacramento Street intersection. Detailed calculations are provided in **Appendix C**.



6.2.2 Vehicle Queues

Table 6 presents AM and PM peak hour 95th percentile queues for movements where vehicle queues may occasionally exceed the vehicle storage length in the Opening Year and Opening Year Plus Project Conditions. These queues are indicative of maximum design queues occurring during the period of peak traffic. Queue calculation worksheets are provided in **Appendix D**.

Table 6: Opening Year Plus Project Conditions 95th Percentile Queue Summary

Intersection	Movement	Storage Length (ft)	Opening Year		Opening Year Plus Project	
			AM Peak Period	PM Peak Period	AM Peak Period	PM Peak Period
3. Santa Clara Street & Georgia Street	EB	775	25	25	25	75
	WB	400	25	25	25	25
	NB	250	25	25	25	50
	SB	675	25	25	25	25
4. Sacramento Street & Georgia Street	EB	400	25	50	50	50
	WB	900	25	25	50	75
	NB	600	25	25	25	25
	SB	650	25	25	50	50

Notes:

Bold indicates queue potentially extends beyond available storage.

Source: Fehr & Peers, February 2024.

As shown in **Table 6**, the 95th percentile queues at the Santa Clara Street/Georgia Street and Sacramento Street/Georgia Street intersections are expected to be within the available storage under Opening Year and Opening Year Plus Project Conditions.



7. Cumulative Traffic Conditions

This chapter discusses Cumulative traffic conditions both without and with traffic forecast to be generated by the Project. The future conditions analysis considers development within the City of Vallejo as described in the General Plan.

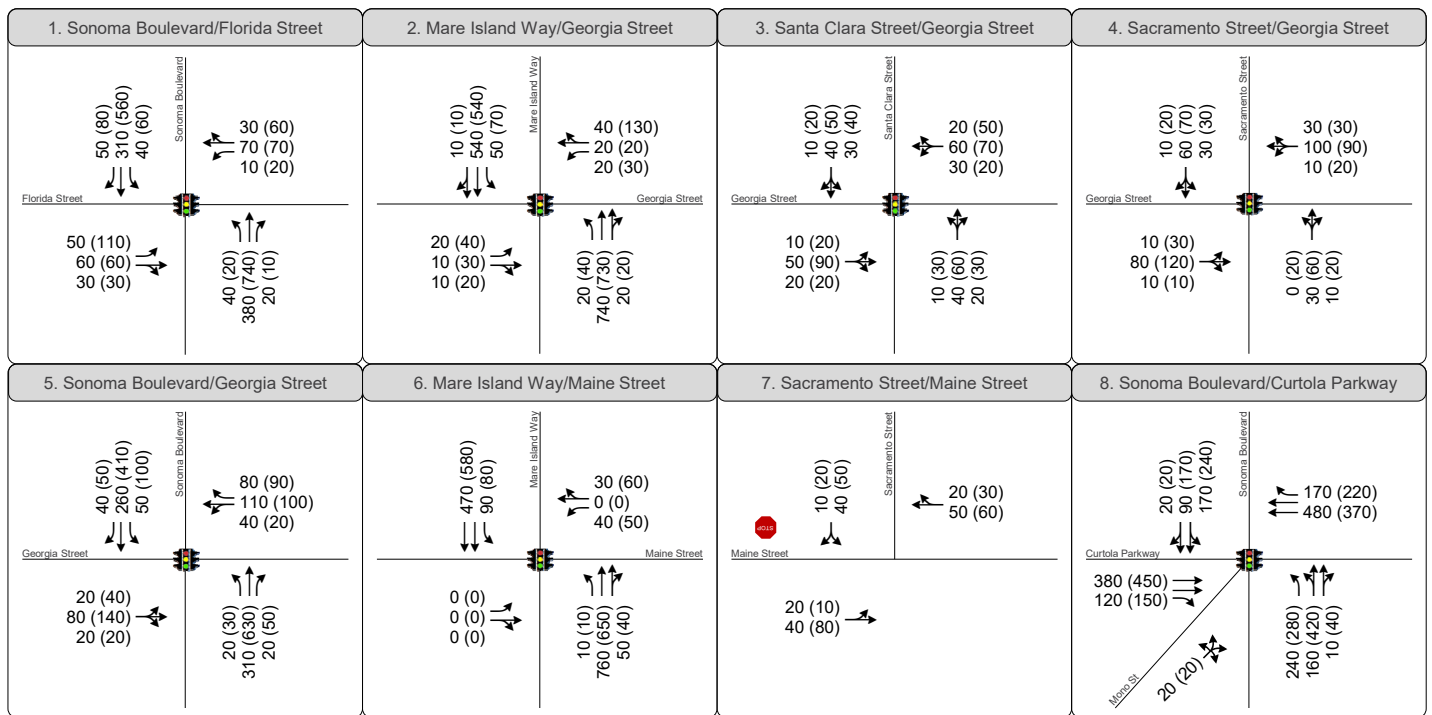
7.1 Cumulative Traffic Forecasts

To assess future growth with planned development in the City of Vallejo, several sources of data were reviewed, including SNABM, and the traffic growth trends as described in Vallejo's General Plan. Traffic forecasts within the immediate study area were reviewed to ensure that known developments were adequately reflected in the forecasts. Minor adjustments were made to the forecasts to balance traffic volumes between closely spaced intersections in the study area. The resulting Cumulative forecasts are presented on **Figure 10**, which are representative of conditions over the next 20 years, with buildout of the City's General Plan. The Project volumes on **Figure 7** were added to the Cumulative traffic volumes to develop Cumulative Plus Project conditions, as presented on **Figure 11**.

7.2 Analysis of Cumulative Conditions

Cumulative without and with Project conditions were evaluated using the methods described in Chapter 1. The analysis results are presented in **Table 7**, based on traffic volumes and lane configurations on **Figure 10** and **Figure 11**.

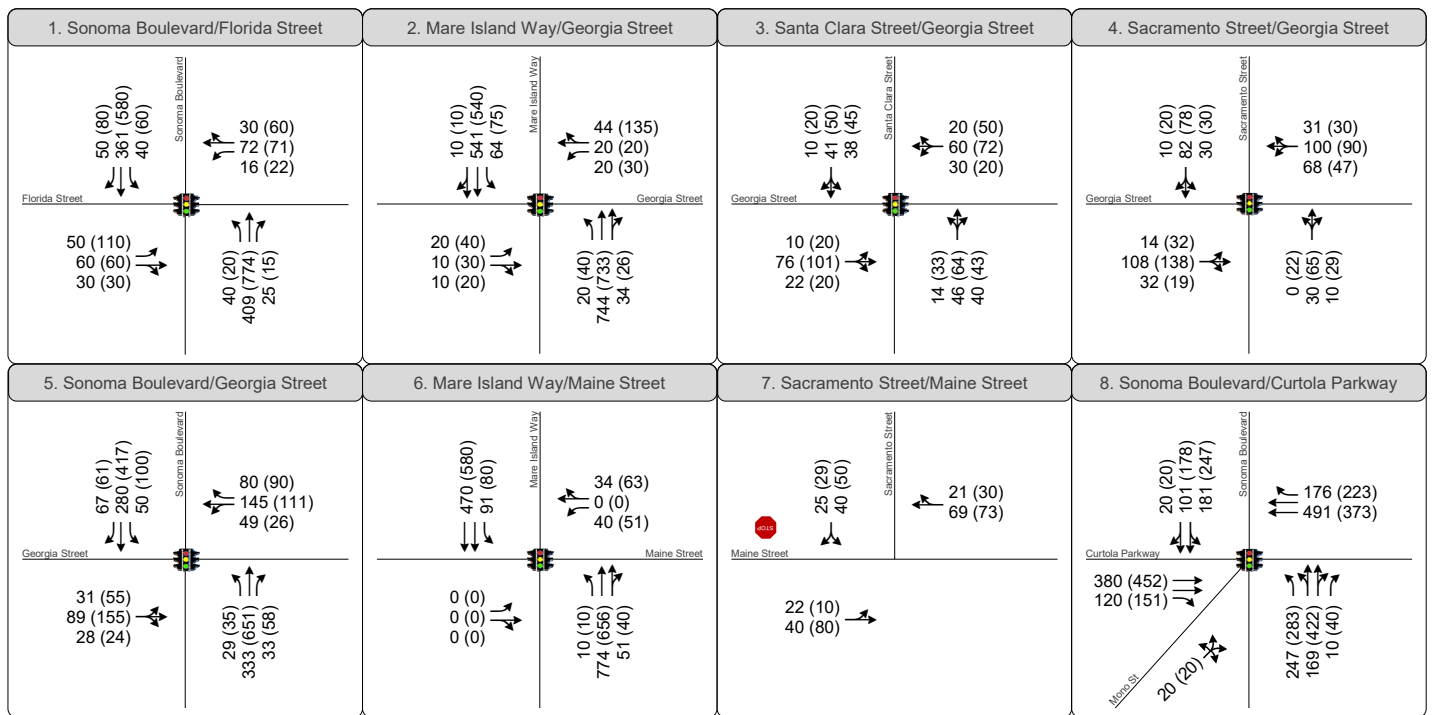




XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign Project Site Study Intersection



Figure 10
Cumulative Peak Hour
Intersection Control, Volumes, and Lane Configuration



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign Project Site Study Intersection



Figure 11
Cumulative Plus Project Peak Hour
Intersection Control, Volumes, and Lane Configuration

Table 7: Cumulative and Cumulative Plus Project Conditions LOS Results Summary

Intersection	Control ¹	Time Period	LOS Standard	Cumulative		Cumulative Plus Project	
				Delay ²	LOS ³	Delay ²	LOS ³
1. Sonoma Boulevard & Florida Street	Signal	AM	D	10.6	B	10.6	B
		PM		10.4	B	10.5	B
2. Mare Island Way & Georgia Street	Signal	AM	D	12.1	B	12.3	B
		PM		14.4	B	14.6	B
3. Santa Clara Street & Georgia Street	Signal	AM	D	5.5	A	5.6	A
		PM		6.1	A	6.2	A
4. Sacramento Street & Georgia Street	Signal	AM	D	4.8	A	5.0	A
		PM		5.6	A	5.8	A
5. Sonoma Boulevard & Georgia Street	Signal	AM	D	15.7	B	16.9	B
		PM		18.1	B	19.7	B
6. Mare Island Way & Maine Street	Signal	AM	D	7.6	A	7.7	A
		PM		7.8	A	7.8	A
7. Maine Street & Sacramento Street	SSSC	AM	D	3.5 (9.5)	A (A)	3.6 (9.6)	A (A)
		PM		3.1 (9.9)	A (A)	3.2 (10.0)	A (B)
8. Sonoma Boulevard & Curtola Parkway	Signal	AM	D	7.7	A	7.8	A
		PM		8.5	A	8.8	A

Notes:

1. Traffic control type (SSSC = Side-Street Stop-Controlled; Signal = Signalized).
2. AM = Weekday morning peak hour, PM = weekday evening peak hour.
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Approach Delay). Delay calculated per HCM 6th Edition methodologies.
4. LOS designation per HCM 6th Edition.

Source: Fehr & Peers, February 2024.

As shown in **Table 7**, all study intersections are expected to operate acceptably under the Cumulative and Cumulative Plus Project Conditions.

7.2.1 Signal Warrants Analysis

Similar to Existing Conditions, the peak hour signal warrants (Warrant 3A and Warrant 3B) from the MUTCD were used to determine if a traffic signal is warranted at the Maine Street/Sacramento Street intersection under Cumulative and Cumulative Plus Project conditions. Based on the peak hour signal warrant analysis the unsignalized study intersection does not meet peak hour signal warrants under either scenario. Therefore, a traffic signal is not needed at the Maine Street/Sacramento Street intersection. Detailed calculations are provided in **Appendix C**.

7.2.2 Vehicle Queues

Table 8 presents AM and PM peak hour 95th percentile queues for movements where vehicle queues may occasionally exceed the vehicle storage length in the Cumulative and Cumulative Plus Project



Conditions. These queues are indicative of maximum design queues occurring during period of peak traffic. Queue worksheets are provided in **Appendix D**.

Table 8: Cumulative Plus Project Conditions 95th Percentile Queue Summary

Intersection	Movement	Storage Length (ft)	Cumulative		Cumulative Plus Project	
			AM Peak Period	PM Peak Period	AM Peak Period	PM Peak Period
3. Santa Clara Street & Georgia Street	EB	775	25	50	25	75
	WB	400	25	50	25	50
	NB	250	25	50	25	50
	SB	675	25	50	25	50
4. Sacramento Street & Georgia Street	EB	400	25	50	50	50
	WB	900	25	50	50	75
	NB	600	25	25	25	50
	SB	650	25	50	50	50

Notes:

Bold indicates queue potentially extends beyond available storage.

Source: Fehr & Peers, February 2024.

As shown in **Table 8**, the 95th percentile queues at the Santa Clara Street/Georgia Street and Sacramento Street/Georgia Street intersections are expected to be within the available storage under Cumulative and Cumulative Plus Project Conditions.



8. Site Plan Review

This chapter evaluates the proposed Project site's access and circulation for vehicles, pedestrians, bicycles, and emergency vehicles based on the site plan presented previously on **Figure 2**.

8.1 Vehicle Access and Circulation

Vehicle access to the Project site will be provided via two proposed loading and unloading zones along Georgia Street and Sacramento Street. The existing 11 parallel parking spots directly in front of the Project on Georgia Street will remain as is and operate as a loading and unloading zone during pick-up and drop-off hours. The existing 16 angled parking spaces on Sacramento Street will be removed and replaced with seven parallel parking spots, two of which will be marked as accessible drop-off spots, that will also operate as a loading and unloading zone during pick-up and drop-off hours. Both loading and unloading zones would be available for parking during non-drop-off and pick-up hours, excluding the two accessible spots in which parking will not be allowed at any time of the day.

The posted speed limit along Georgia Street and Sacramento Street in the vicinity of the Project site is 25 miles per hour. According to Table 201.1 of the Caltrans *Highway Design Manual*, the stopping sight distance at 25 miles per hour is 150 feet. The observed sight distance along both streets is greater than 150 feet in both directions. Thus, the Project loading and unloading zones provide sufficient stopping sight distance so long as landscaping at the Project intersections is maintained. It is recommended that the final site improvement plan be reviewed for potential sight distance impediments including new signs, above ground utility boxes, or landscaping proposed in the sight triangle.

8.2 Pedestrian Access and Circulation

The Project would create a significant impact related to the pedestrian system if any of the following criteria are met (would the project):

- Disrupt existing pedestrian facilities; or
- Interfere with planned pedestrian facilities; or
- Create inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

The proposed site plan indicates the sidewalks along Georgia Street and Sacramento Street will remain intact. The Georgia Street/Sacramento Street and Sacramento Street/York Street intersections—as well as the Santa Clara Street mid-block crossing—are all equipped with ADA accessible provisions, including curb ramps and truncated domes that afford physical warnings to people with visual disabilities as well as accessible pedestrian signal (APS) push buttons.

The Project proposes no features that would be hazardous to pedestrian travel and does not conflict with any pedestrian facilities plans or programs. The Project is not expected to result in significant adverse impacts related to pedestrian facilities.



8.3 Bicycle Access and Circulation

The Project would create a significant impact related to the bicycle system if any of the following criteria are met (would the project):

- Disrupt existing bicycle facilities; or
- Interfere with planned bicycle facilities; or
- Create inconsistencies with adopted bicycle system plans, guidelines, policies, or standards.

While the Project does not propose any designated bicycle facilities (lanes, routes, or paths), bicycles would be permitted on site. The Project proposes no features that would be hazardous to bicycle travel and does not conflict with any bicycle facilities plans or programs. The Project is not expected to result in significant adverse impacts related to bicycle facilities.

8.4 Emergency Vehicle Access

Several factors determine whether a project has enough access for emergency vehicles, including the following:

1. Number of access points (both public and emergency access only)
2. Width of access points
3. Width of internal roadways

Emergency vehicle access to the site is provided by Georgia Street and Sacramento Street, as well as in the parking lot located on the south side of the building. Emergency response within the City of Vallejo is provided by the Vallejo Fire Department. The final site plan should be reviewed and approved by the City's Fire Chief prior to issuance of building permits.

Temporary back ups into the Georgia Street/Sacramento Street and Santa Clara Street/Georgia Street intersections during periods of peak loading and unloading at the school could present delays to emergency vehicle response. The improvement measures described in Section 8.7.1, including the installation of signage and operational controls, should be implemented to minimize the potential for this to occur.

8.5 Transit Access

The Project would create a significant impact to transit service if the following criteria are met:

- The project interferes with existing transit facilities or precludes the construction of planned transit facilities.

The Project proposes no features which conflict with existing or planned transit services. The Project is not expected to result in increases in ridership on local or regional transit facilities that would exceed their capacity. Significant adverse Project impacts related to transit were not identified.



8.6 Parking

The Project will not provide on-site parking; staff, students, and visitors are expected to use City-owned and publicly available parking within the surrounding area. Staff, students, and visitors will be responsible for paying for their parking spots. Surveys of weekday parking lot occupancy were conducted at publicly available facilities within two blocks of the Project site in May 2023. The following parking lots were included in the occupancy survey:

- Lot D is located at the southeast corner of Santa Clara Street/Capitol Street about 500 feet northwest of the Project site.
- Lot G2 is located adjacent to the Project just south of the site.
- Lot H is located at the southeast corner of Sacramento Street/York Street about 440 feet south of the Project site.
- Lot I is located at the southeast corner of Marin Street/York Street about 830 feet southeast of the Project site.
- Lot J is located at the southeast corner of Sacramento Street/Virginia Street about 360 feet northeast of the Project site.
- Lot K is located on the northwest corner of Marin Street/York Street about 470 feet southeast of the Project site.

The occupancy surveys were conducted on a normal mid-weekday during the midday period when Project parking demand in the area is at its peak. Lot A3 is also within two blocks of the Project but is located within the Waterfront parking district, which carries a higher cost. Project parking demand is expected to be satisfied within the availability within the Downtown parking district, which costs less.

Table 9 below presents the findings of the occupancy surveys.

Table 9: Existing Parking Lot Occupancy

Parking Lot	Supply	Occupied Spaces	Available Spaces	Percent Available
Lot D	86	20	66	77%
Lot G2	20	9	11	55%
Lot H	113	6	107	95%
Lot I	63	8	55	87%
Lot J	87	49	38	44%
Lot K	46	18	28	61%
Total	415	110	305	73%

Source: Fehr & Peers, February 2024.

As presented in **Table 9**, the publicly available parking lots in the vicinity of the Project site have considerable availability.



The estimated peak parking demand was predicted using data and rates from the *Parking Generation Manual*, 5th Edition (2019), published by the Institute of Transportation Engineers (ITE). Based on the ITE methodology, the Project is expected to generate a total peak demand of approximately 111 spaces. There are currently no parking requirements for a high school under the City of Vallejo's Municipal Code.

Per the available parking spaces in the City-owned parking lots, the Project would have sufficient parking to satisfy the anticipated parking demand.

Although the City's Municipal Code does not have a requirement for vehicle parking spaces for schools, it does have a short-term bicycle parking requirement. Schools are required to provide two short-term parking spaces per classroom, or six percent of the student capacity plus staff, whichever is greater. The Project proposes 19 classrooms and 435 students and staff altogether. Thus, the Project is required to provide 38 bicycle parking spaces on-site. Currently, the site plan proposes 36 bicycle parking spaces; therefore, the Project must include an additional two bicycle parking spaces to satisfy the City's requirements.

8.7 Site Loading and Unloading Zones

The Project will implement vehicle drop-off and pick-up zones in front of the school along Georgia Street and along the east side of the building on Sacramento Street, as shown on **Figure 2**. The loading and unloading zones will be provided for parents and guardians to drop-off and pick-up their students. Parking in the loading and unloading zones will be allowed during non-drop-off and pick-up times from approximately 9:00 AM to 3:00 PM and from 5:00 PM to 7:00 AM, excluding the two accessible spots along Sacramento Street.

Per the trip generation calculations presented in **Table 3**, the maximum total vehicles anticipated to use the loading zones is 104 during the morning drop-off and 64 during the afternoon pick-up. Based on observations at similar existing high schools, peak morning drop-off and peak afternoon pick-up occur roughly 15 minutes before the first bell and 15 minutes after the last bell, respectively; and approximately 75 percent of the total drop-offs and 95 percent of the pick-ups occur in their respective 15-minute peak periods. Usually, one to two students, at most, are usually dropped off or picked up per vehicle.

The anticipated number of vehicles using the loading zones during the peak period was calculated. It was also assumed that about 35 percent of the vehicles would use the loading and unloading zone along Georgia Street, and about 65 percent would use the loading and unloading zone along Sacramento Street based on the location of the Project and the forecast trip distribution. The results of this assessment are shown in **Table 10**.



Table 10: Total Number of Vehicles Dropping-Off and Picking-Up per Loading Zone

Loading Zone	8:00 AM Morning 15-Minute Peak Period	3:30 PM Afternoon 15-Minute Peak Period
Georgia Street	27	21
Sacramento Street	51	40
Total	78	61

Source: Fehr & Peers, February 2024.

8.7.1 Drop-Off and Pick-Up Queuing

A queuing analysis was conducted to determine whether queue spillback would occur in either of the two loading and unloading zones during the morning drop-off and afternoon pick-up periods. The number of vehicles entering the loading and unloading zones each minute were analyzed in the respective morning and afternoon 15-minute peak periods during drop-off and pick-up times.

As seen on **Figure 12**, the loading and unloading zone along Georgia Street will provide 11 spots for vehicles to drop-off and pick-up their students. There is no dedicated space for queuing behind the loading zone, however, about five parking spots are available behind the Georgia Street loading zone in which vehicles can wait in the queue if no vehicle is already parked there before getting to the marked loading and unloading zone. If these five parking spots are already in use, then the vehicles would either wait at the Santa Clara Street/Georgia Street intersection before entering the loading and unloading zone or drive around the perimeter of the site until they can enter the loading zone. The loading and unloading zone along Sacramento Street provides about seven spots for vehicles to drop-off and pick-up their students. There is no space for queuing behind the dedicated loading zone on Sacramento Street; therefore, excess vehicles would need to wait at the Sacramento Street/Georgia Street intersection before entering the loading and unloading zone.

In the morning drop-off period, the queue of vehicles is not expected to spill out of the drop-off zones. In the afternoon pick-up period, some vehicles are expected to arrive early and park in the loading zone and begin to queue before students are released from school. The expected 95th percentile queue (outside of the designated loading and unloading zones) during the afternoon pick-up period along Georgia Street and Sacramento Street is approximately five vehicles and four vehicles, respectively. With no dedicated queuing area for either loading zone, capacity at each loading zone will be exceeded during these peak periods. Vehicles trying to access the loading zone on Sacramento Street but do not find a spot to pull into may drive around the perimeter of the site to get to the loading zone on Georgia Street, and vice versa, or may choose to park in the streets or nearby parking lots to pick-up their students instead.

8.7.2 Improvement Recommendations

Although the morning drop-off period is not anticipated to experience queue spillback at either loading zone, the loading zones are expected to experience queuing issues during the afternoon pick-up period.



Implementation of the following recommendations will improve conditions in the loading and unloading zones during peak periods:

- Add "No parking from 7 to 9 AM and 3 to 5 PM on weekdays - violators will be towed" signs along both loading zones. Paint the curbs white in both loading and unloading zones. The school should work with the City and local towing operators to actively enforce the no parking restriction.
- Install Manual on Uniform Traffic Control Devices (MUTCD) compliant R10-7 "DO NOT BLOCK INTERSECTION" signs on all four approaches to the Santa Clara Street/Georgia Street and Sacramento Street/Georgia Street intersections. Signs shall be mast arm mounted if possible with existing equipment (street mounted/installed if not possible on the existing signal mast arms). If consistent blockage of these intersections occurs, school operations staff shall take appropriate measures to eliminate the activity.
- Staff should be stationed at unique locations at the loading zones and meet vehicles at the curb to help direct drivers entering/exiting the loading areas. At least six staff members should be stationed on Georgia Street and three on Sacramento Street. At least one staff member should be stationed at the southwest corner of Georgia Street/Sacramento Street to ensure vehicles are not blocking the intersection.
- In the morning, staff should be stationed at the loading zones at least one hour before the first morning bell and stay approximately 10 minutes after the start of school. In the afternoon, staff should be stationed at the loading zones at least 10 minutes before the last afternoon bell and stay approximately five minutes after the queues have dissipated.
- Vehicles are to pull forward in the loading zones as far as possible to allow for the maximum number of vehicles to drop-off/pick-up their student(s).
- Parents/guardians are to stay in their vehicles at all times while students exit/enter via the right side of the vehicles when greeted by the staff member.
- The school should create a written drop-off and pick-up procedure with supporting graphics that can be communicated with the students' parents/guardians via handouts and shared electronically through the school's website.



Appendix A: Data Collection

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sonoma Blvd & Florida St
City: Vallejo
Control: Signalized

Project ID: 23-080131-007
Date: 5/4/2023

Data - Totals

NS/EW Streets:	Sonoma Blvd				Sonoma Blvd				Florida St				Florida St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	2	47	0	0	0	72	3	0	6	2	3	0	2	5	4	0	146
7:15 AM	3	66	2	0	5	59	3	0	9	5	3	0	2	3	5	0	165
7:30 AM	9	64	1	0	4	59	8	0	4	2	7	0	2	6	2	0	168
7:45 AM	8	98	4	0	7	69	4	0	9	12	4	0	2	11	6	0	234
8:00 AM	12	73	4	0	7	61	18	0	11	13	13	0	1	26	11	0	250
8:15 AM	5	90	3	0	12	77	8	0	11	10	5	0	1	11	5	0	238
8:30 AM	4	78	1	0	10	68	9	0	12	14	3	0	4	9	3	0	215
8:45 AM	2	89	3	0	8	78	6	0	11	5	2	0	3	14	4	0	225
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	45	605	18	0	53	543	59	0	73	63	40	0	17	85	40	0	1641
	6.74%	90.57%	2.69%	0.00%	8.09%	82.90%	9.01%	0.00%	41.48%	35.80%	22.73%	0.00%	11.97%	59.86%	28.17%	0.00%	
PEAK HR:	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL:	29	339	12	0	36	275	39	0	43	49	25	0	8	57	25	0	937
PEAK HR FACTOR:	0.604	0.865	0.750	0.000	0.750	0.893	0.542	0.000	0.896	0.875	0.481	0.000	0.500	0.548	0.568	0.000	0.937
			0.864				0.902				0.791				0.592		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	3	159	0	0	14	103	24	1	26	13	5	0	2	13	12	0	375
4:15 PM	1	145	3	0	10	139	20	0	21	13	2	0	6	15	14	0	389
4:30 PM	8	136	2	0	13	123	20	0	16	15	7	0	10	11	11	0	372
4:45 PM	4	152	4	0	14	124	20	0	21	15	5	0	1	13	18	0	391
5:00 PM	3	175	0	0	11	117	16	0	26	17	2	0	6	11	13	0	397
5:15 PM	4	150	5	0	16	125	19	0	15	13	10	0	2	16	14	0	389
5:30 PM	3	171	1	0	9	140	20	0	28	9	5	0	4	19	14	0	423
5:45 PM	4	170	3	0	13	123	14	2	28	10	8	0	2	11	11	0	399
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	30	1258	18	0	100	994	153	3	181	105	44	0	33	109	107	0	3135
	2.30%	96.32%	1.38%	0.00%	8.00%	79.52%	12.24%	0.24%	54.85%	31.82%	13.33%	0.00%	13.25%	43.78%	42.97%	0.00%	
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	14	666	9	0	49	505	69	2	97	49	25	0	14	57	52	0	1608
PEAK HR FACTOR:	0.875	0.951	0.450	0.000	0.766	0.902	0.863	0.250	0.866	0.721	0.625	0.000	0.583	0.750	0.929	0.000	0.950
			0.968				0.925				0.929				0.831		

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sonoma Blvd & Florida St

City: Vallejo

Control: Signalized

Project ID: 23-080131-007

Date: 5/4/2023

Data - Bikes

NS/EW Streets:		Sonoma Blvd				Sonoma Blvd				Florida St				Florida St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0	0	0	0	2
PEAK HR :		07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :		0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR :		05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sonoma Blvd & Florida St
City: Vallejo

Project ID: 23-080131-007
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Sonoma Blvd		Sonoma Blvd		Florida St		Florida St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	1	1	0	2
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	1	0	1	0	0	2
7:45 AM	0	0	0	0	1	0	0	0	1
8:00 AM	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	1	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	1	1	3	4	1	0	10
			50.00%	50.00%	42.86%	57.14%	100.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	0	3	1	0	0	4
PEAK HR FACTOR :					0.750	0.250			1.000
					1.000				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	2	1	3
4:15 PM	0	0	0	0	1	0	0	2	3
4:30 PM	0	0	1	0	0	2	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	1	1	0	3
5:15 PM	0	0	0	0	0	3	1	0	4
5:30 PM	2	0	0	3	1	1	1	0	8
5:45 PM	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	2	0	1	4	3	7	5	3	25
	100.00%	0.00%	20.00%	80.00%	30.00%	70.00%	62.50%	37.50%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	0	0	4	2	5	3	0	16
PEAK HR FACTOR :	0.250			0.333	0.500	0.417	0.750		0.500
	0.250		0.333		0.583		0.750		

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Mare Island Way & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-003
Date: 5/4/2023

Data - Totals

NS/EW Streets:		Mare Island Way				Mare Island Way				Georgia St				Georgia St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
	7:00 AM	4	95	3	1	19	92	0	0	8	1	6	0	8	5	6	0	248
	7:15 AM	2	99	2	0	11	114	0	0	1	2	1	0	5	2	4	0	243
	7:30 AM	2	125	3	1	8	113	0	0	4	0	3	0	4	3	4	0	270
	7:45 AM	3	149	4	1	16	104	1	0	3	1	1	0	3	2	8	0	296
	8:00 AM	3	163	2	4	9	112	0	0	2	1	1	0	5	3	10	0	315
	8:15 AM	2	150	0	0	6	100	2	0	3	2	0	0	2	3	14	0	284
	8:30 AM	1	113	3	0	10	94	2	0	1	1	2	0	3	5	10	0	245
	8:45 AM	3	110	3	0	11	81	1	0	3	1	2	0	5	2	10	0	232
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:		20	1004	20	7	90	810	6	0	25	9	16	0	35	25	66	0	2133
PEAK HR:		1.90%	95.53%	1.90%	0.67%	9.93%	89.40%	0.66%	0.00%	50.00%	18.00%	32.00%	0.00%	27.78%	19.84%	52.38%	0.00%	
PEAK HR VOL:		07:30 AM - 08:30 AM																TOTAL
PEAK HR FACTOR:		10	587	9	6	39	429	3	0	12	4	5	0	14	11	36	0	1165
		0.833	0.900	0.563	0.375	0.609	0.949	0.375	0.000	0.750	0.500	0.417	0.000	0.700	0.917	0.643	0.000	0.925
		0.890				0.973				0.750				0.803				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
	4:00 PM	3	119	5	1	18	88	2	0	4	5	4	0	3	3	15	0	270
	4:15 PM	4	106	3	0	13	112	0	0	2	5	2	0	4	0	15	0	266
	4:30 PM	0	114	2	2	7	105	1	0	5	2	5	0	1	3	20	0	267
	4:45 PM	7	158	4	3	16	86	2	0	12	9	4	0	5	3	40	0	349
	5:00 PM	3	135	7	2	11	128	1	0	8	4	3	0	4	3	27	1	337
	5:15 PM	2	143	3	4	12	108	1	0	4	1	2	0	1	6	10	0	297
	5:30 PM	8	143	0	3	12	103	1	0	7	6	6	0	9	4	34	0	336
	5:45 PM	10	148	4	1	10	97	1	1	5	7	3	0	8	5	22	0	322
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:		37	1066	28	16	99	827	9	1	47	39	29	0	35	27	183	1	2444
PEAK HR:		3.23%	92.94%	2.44%	1.39%	10.58%	88.35%	0.96%	0.11%	40.87%	33.91%	25.22%	0.00%	14.23%	10.98%	74.39%	0.41%	
PEAK HR VOL:		04:45 PM - 05:45 PM																TOTAL
PEAK HR FACTOR:		20	579	14	12	51	425	5	0	31	20	15	0	19	16	111	1	1319
		0.625	0.916	0.500	0.750	0.797	0.830	0.625	0.000	0.646	0.556	0.625	0.000	0.528	0.667	0.694	0.250	0.945
		0.908				0.859				0.660				0.766				

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Mare Island Way & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-003
Date: 5/4/2023

Data - Bikes

NS/EW Streets:		Mare Island Way				Mare Island Way				Georgia St				Georgia St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
	7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
	7:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	1	0	0	0	5	0	0	0	0	0	0	3	0	0	0	9
PEAK HR :		07:30 AM - 08:30 AM				0.00%				100.00%				100.00%				TOTAL
PEAK HR VOL :		0	1	0	0	0	4	0	0	0	0	0	0	2	0	0	0	7
PEAK HR FACTOR :		0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.583
		0.250				0.500				0.500				0.500				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3
	5:30 PM	0	1	6	0	0	0	0	0	1	0	0	0	0	0	0	0	8
	5:45 PM	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	3
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	3	6	0	1	0	0	0	1	2	0	0	0	0	1	0	14
PEAK HR :		04:45 PM - 05:45 PM				0.00%				33.33%				100.00%				TOTAL
PEAK HR VOL :		0	2	6	0	0	0	0	0	1	1	0	0	0	0	1	0	11
PEAK HR FACTOR :		0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.344
		0.286				0.500				0.500				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Mare Island Way & Georgia St
City: Vallejo

Project ID: 23-080131-003
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Mare Island Way		Mare Island Way		Georgia St		Georgia St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	21	0	1	0	4	26
7:15 AM	0	0	1	5	1	0	0	0	7
7:30 AM	0	0	2	9	0	0	0	1	12
7:45 AM	0	0	5	7	1	2	0	0	15
8:00 AM	0	0	1	9	0	0	1	1	12
8:15 AM	0	0	0	2	0	0	1	1	4
8:30 AM	0	0	2	1	6	2	7	0	18
8:45 AM	0	0	2	1	0	0	0	2	5
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	13	55	8	5	9	9	99
			19.12%	80.88%	61.54%	38.46%	50.00%	50.00%	
PEAK HR :	07:30 AM - 08:30 AM		07:30 AM	38	-1	-1	2	3	TOTAL
PEAK HR VOL :	0	0	8	27	1	2	0.500	0.750	43
PEAK HR FACTOR :			0.400	0.750	0.250	0.250	0.500	0.625	0.717
			0.729		0.250				

	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	3	2	0	0	1	0	6
4:15 PM	0	0	0	2	1	0	2	0	5
4:30 PM	0	0	5	1	1	0	3	3	13
4:45 PM	0	0	28	1	0	0	3	0	32
5:00 PM	0	0	2	1	0	0	0	0	3
5:15 PM	0	0	2	6	1	0	0	0	9
5:30 PM	0	0	27	0	2	0	6	0	35
5:45 PM	0	0	6	3	0	1	1	0	11
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	73	16	5	1	16	3	114
			82.02%	17.98%	83.33%	16.67%	84.21%	15.79%	
PEAK HR :	04:45 PM - 05:45 PM		59	8	3	0	9	0	TOTAL
PEAK HR VOL :	0	0	0.527	0.333	0.375		0.375		79
PEAK HR FACTOR :			0.578		0.375		0.375		0.564

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Santa Clara St & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-001
Date: 5/4/2023

Data - Totals

NS/EW Streets:		Santa Clara St				Santa Clara St				Georgia St				Georgia St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	7:00 AM	1	2	5	0	9	9	1	0	0	8	4	0	6	19	7	0	71
	7:15 AM	1	4	2	0	1	4	1	0	0	5	2	0	2	8	1	0	31
	7:30 AM	1	9	4	0	5	6	0	0	1	3	5	0	15	10	2	0	61
	7:45 AM	2	8	1	0	2	6	0	1	1	14	3	0	5	11	3	0	57
	8:00 AM	2	16	6	0	7	8	0	0	1	8	4	0	3	15	3	0	73
	8:15 AM	3	0	1	0	6	10	3	0	1	7	0	0	2	16	7	0	56
	8:30 AM	2	9	1	0	4	8	3	0	1	9	3	0	0	13	7	0	60
	8:45 AM	2	6	4	0	4	2	1	0	2	10	2	0	1	15	4	0	53
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:		14	54	24	0	38	53	9	1	7	64	23	0	34	107	34	0	462
PEAK HR:		07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:		8	33	12	0	20	30	3	1	4	32	12	0	25	52	15	0	247
PEAK HR FACTOR:		0.667	0.516	0.500	0.000	0.714	0.750	0.250	0.250	1.000	0.571	0.600	0.000	0.417	0.813	0.536	0.000	0.846
		0.552				0.711				0.667				0.852				

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	4:00 PM	6	7	1	0	9	11	3	0	5	16	6	0	2	14	8	1	89
	4:15 PM	0	7	3	0	3	10	4	0	1	19	2	0	1	12	11	0	73
	4:30 PM	6	12	2	0	4	12	2	0	4	9	1	0	1	15	9	0	77
	4:45 PM	11	13	8	0	6	12	5	0	3	31	3	1	3	10	11	0	117
	5:00 PM	10	11	5	0	11	8	3	0	4	19	1	1	2	21	14	0	110
	5:15 PM	1	9	4	0	8	9	1	0	2	9	4	0	3	15	10	0	75
	5:30 PM	5	13	5	0	5	8	6	0	2	18	2	0	2	10	3	0	79
	5:45 PM	2	9	6	0	10	7	2	0	5	18	3	0	0	18	7	0	87
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:		41	81	34	0	56	77	26	0	26	139	22	2	14	115	73	1	707
PEAK HR:		04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL:		27	46	22	0	30	37	15	0	11	77	10	2	10	56	38	0	381
PEAK HR FACTOR:		0.614	0.885	0.688	0.000	0.682	0.771	0.625	0.000	0.688	0.621	0.625	0.500	0.833	0.667	0.679	0.000	0.814
		0.742				0.891				0.658				0.703				

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Santa Clara St & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-001
Date: 5/4/2023

Data - Bikes

NS/EW Streets:	Santa Clara St				Santa Clara St				Georgia St				Georgia St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0	0	5
PEAK HR :	07:30 AM - 08:30 AM				0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.375
	0.250				0.250				0.250				0.500				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	9
4:00 PM	4	0	0	0	0	0	0	0	0	1	3	1	0	0	0	0	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	5	0	0	0	0	1	0	0	0	8	3	1	0	1	0	0	19
PEAK HR :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	25.00%	8.33%	0.00%	100.00%	0.00%	0.00%	
PEAK HR VOL :	1	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	7
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.313	0.000	0.000	0.000	0.000	0.000	0.000	0.438
	0.250				0.250				0.313								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Clara St & Georgia St
City: Vallejo

Project ID: 23-080131-001
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Santa Clara St		Santa Clara St		Georgia St		Georgia St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	1	0	1	0	2	0	0	4
7:15 AM	0	0	1	0	1	0	0	2	4
7:30 AM	0	1	0	3	0	0	0	0	4
7:45 AM	0	2	4	0	0	0	0	0	6
8:00 AM	1	0	1	1	0	0	0	0	3
8:15 AM	0	0	0	2	0	1	0	1	4
8:30 AM	0	0	1	1	0	1	4	0	7
8:45 AM	0	2	1	0	1	0	2	1	7
TOTAL VOLUMES :	EB 1	WB 6	EB 8	WB 8	NB 2	SB 4	NB 6	SB 4	TOTAL 39
APPROACH %'s :	14.29%	85.71%	50.00%	50.00%	33.33%	66.67%	60.00%	40.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	1	3	5	6	0	1	0	1	17
PEAK HR FACTOR :	0.250	0.375	0.313	0.500	0.250	0.250	0.250	0.250	0.708
	0.500		0.688		0.250		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	3	1	1	0	0	1	0	3	9
4:30 PM	2	1	0	0	1	0	0	0	4
4:45 PM	1	1	5	2	0	1	4	0	14
5:00 PM	0	1	1	1	2	0	0	2	7
5:15 PM	6	6	1	0	4	0	1	0	18
5:30 PM	0	2	0	1	2	0	2	1	8
5:45 PM	1	0	3	4	0	0	3	0	11
TOTAL VOLUMES :	EB 13	WB 12	EB 11	WB 8	NB 9	SB 2	NB 10	SB 6	TOTAL 71
APPROACH %'s :	52.00%	48.00%	57.89%	42.11%	81.82%	18.18%	62.50%	37.50%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	7	10	7	4	8	1	7	3	47
PEAK HR FACTOR :	0.292	0.417	0.350	0.500	0.500	0.250	0.438	0.375	0.653
	0.354		0.393		0.563		0.625		

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sacramento St & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-002
Date: 5/4/2023

Data - Totals

NS/EW Streets:	Sacramento St				Sacramento St				Georgia St				Georgia St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	2	4	0	0	2	10	3	0	4	16	2	0	2	28	2	0	75
7:15 AM	0	2	0	0	4	13	5	0	1	7	0	0	3	7	3	0	45
7:30 AM	0	5	1	0	2	12	4	0	1	10	1	0	1	23	2	0	62
7:45 AM	1	6	2	0	2	12	2	0	2	14	3	0	2	17	3	0	66
8:00 AM	0	7	1	0	8	15	4	0	3	18	1	0	1	19	4	0	81
8:15 AM	0	7	0	0	9	9	4	0	2	11	3	0	4	22	3	0	74
8:30 AM	0	7	1	0	3	10	0	1	1	10	3	0	1	21	4	0	62
8:45 AM	0	4	1	0	4	14	0	0	3	15	0	0	1	22	8	1	73
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	3	42	6	0	34	95	22	1	17	101	13	0	15	159	29	1	538
PEAK HR :	5.88%	82.35%	11.76%	0.00%	22.37%	62.50%	14.47%	0.66%	12.98%	77.10%	9.92%	0.00%	7.35%	77.94%	14.22%	0.49%	
PEAK HR VOL :	08:00 AM - 09:00 AM				24	48	8	1	9	54	7	0	7	84	19	1	290
PEAK HR FACTOR :	0.000	0.893	0.750	0.000	0.667	0.800	0.500	0.250	0.750	0.750	0.583	0.000	0.438	0.955	0.594	0.250	0.895
	0.875				0.750				0.795				0.867				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	5	11	2	0	7	12	12	0	3	23	0	0	0	9	6	0	90
4:15 PM	2	7	3	0	4	22	5	0	7	15	3	0	3	18	6	0	95
4:30 PM	4	12	6	0	7	9	3	0	3	12	1	0	8	14	4	1	84
4:45 PM	3	14	6	0	8	11	4	0	9	34	1	0	3	16	7	1	117
5:00 PM	5	5	1	0	4	18	4	0	3	28	4	0	3	28	5	0	108
5:15 PM	3	17	3	0	5	12	5	0	6	15	0	0	5	21	4	0	96
5:30 PM	1	11	4	0	5	18	1	0	1	28	0	0	3	12	7	0	91
5:45 PM	1	9	4	0	10	11	5	0	3	31	2	0	3	21	11	1	112
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	24	86	29	0	50	113	39	0	35	186	11	0	28	139	50	3	793
PEAK HR :	17.27%	61.87%	20.86%	0.00%	24.75%	55.94%	19.31%	0.00%	15.09%	80.17%	4.74%	0.00%	12.73%	63.18%	22.73%	1.36%	
PEAK HR VOL :	04:45 PM - 05:45 PM				22	59	14	0	19	105	5	0	14	77	23	1	412
PEAK HR FACTOR :	0.600	0.691	0.583	0.000	0.688	0.819	0.700	0.000	0.528	0.772	0.313	0.000	0.700	0.688	0.821	0.250	0.880
	0.793				0.913				0.733				0.799				

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sacramento St & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-002
Date: 5/4/2023

Data - Bikes

NS/EW Streets:	Sacramento St				Sacramento St				Georgia St				Georgia St			
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :	0	2	0	0	0	1	0	0	0	2	0	0	0	4	0	0
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
PEAK HR :	08:00 AM - 09:00 AM															
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000
									0.500				0.500			
TOTAL																
9																
4																
0.500																

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :	0	1	0	0	0	3	0	0	0	8	0	0	0	2	0	0
	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
PEAK HR :	04:45 PM - 05:45 PM															
PEAK HR VOL :	0	0	0	0	0	3	0	0	0	4	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000
									0.375				0.250			
TOTAL																
14																
7																
0.350																

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sacramento St & Georgia St
City: Vallejo

Project ID: 23-080131-002
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Sacramento St		Sacramento St		Georgia St		Georgia St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	1	0	0	0	1	0	1	3
7:15 AM	1	1	1	0	3	0	0	1	7
7:30 AM	0	1	1	2	0	0	0	0	4
7:45 AM	2	0	2	0	0	1	0	1	6
8:00 AM	0	0	1	2	0	0	1	2	6
8:15 AM	1	1	2	3	0	0	1	1	9
8:30 AM	0	0	0	0	1	0	0	1	2
8:45 AM	2	1	0	1	1	1	1	1	8
TOTAL VOLUMES :	EB 6	WB 5	EB 7	WB 8	NB 5	SB 3	NB 3	SB 8	TOTAL 45
APPROACH %'s :	54.55%	45.45%	46.67%	53.33%	62.50%	37.50%	27.27%	72.73%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	3	2	3	6	2	1	3	5	25
PEAK HR FACTOR :	0.375	0.500	0.375	0.500	0.500	0.250	0.750	0.625	0.694
	0.417		0.450		0.375		0.667		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	1	3	2	3	0	2	0	11
4:15 PM	3	0	0	0	2	7	2	0	14
4:30 PM	1	1	0	0	4	1	1	0	8
4:45 PM	1	4	6	2	8	5	0	1	27
5:00 PM	1	1	0	1	1	2	1	1	8
5:15 PM	4	3	3	1	2	5	2	2	22
5:30 PM	2	1	0	3	1	3	2	1	13
5:45 PM	3	1	0	3	3	1	3	0	14
TOTAL VOLUMES :	EB 15	WB 12	EB 12	WB 12	NB 24	SB 24	NB 13	SB 5	TOTAL 117
APPROACH %'s :	55.56%	44.44%	50.00%	50.00%	50.00%	50.00%	72.22%	27.78%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	8	9	9	7	12	15	5	5	70
PEAK HR FACTOR :	0.500	0.563	0.375	0.583	0.375	0.750	0.625	0.625	0.648
	0.607		0.500		0.519		0.625		

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sonoma Blvd & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-004
Date: 5/4/2023

Data - Totals

NS/EW Streets:	Sonoma Blvd				Sonoma Blvd				Georgia St				Georgia St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
7:00 AM	2	37	1	0	6	58	11	0	4	9	4	0	1	21	7	0	161
7:15 AM	1	53	2	0	3	55	2	0	3	6	1	0	3	11	13	0	153
7:30 AM	1	63	5	0	3	54	3	0	1	11	3	0	4	22	14	0	184
7:45 AM	1	83	0	0	7	61	6	0	3	10	3	0	4	20	17	0	215
8:00 AM	3	78	3	0	8	57	6	0	2	25	3	0	12	23	17	0	237
8:15 AM	1	71	1	0	8	60	11	0	2	11	3	0	10	28	17	0	223
8:30 AM	5	54	5	0	12	54	6	0	4	13	2	0	7	24	14	0	200
8:45 AM	4	79	2	0	11	63	9	0	2	16	4	0	6	24	21	0	241
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	18	518	19	0	58	462	54	0	21	101	23	0	47	173	120	0	1614
	3.24%	93.33%	3.42%	0.00%	10.10%	80.49%	9.41%	0.00%	14.48%	69.66%	15.86%	0.00%	13.82%	50.88%	35.29%	0.00%	
PEAK HR:	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL:	13	282	11	0	39	234	32	0	10	65	12	0	35	99	69	0	901
PEAK HR FACTOR:	0.650	0.892	0.550	0.000	0.813	0.929	0.727	0.000	0.625	0.650	0.750	0.000	0.729	0.884	0.821	0.000	0.935
	0.900				0.919				0.725				0.923				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
4:00 PM	3	125	4	0	17	69	9	0	6	30	8	0	4	17	19	0	311
4:15 PM	8	99	5	0	20	92	8	0	9	19	4	0	9	24	26	0	323
4:30 PM	4	114	8	0	18	90	12	0	10	26	4	0	2	15	20	0	323
4:45 PM	0	126	5	0	20	88	6	0	15	34	7	0	1	17	19	0	338
5:00 PM	11	146	8	0	20	88	9	0	8	30	9	0	6	24	16	0	375
5:15 PM	5	128	8	0	26	99	12	0	7	25	3	0	5	21	16	0	355
5:30 PM	5	147	12	0	24	87	9	0	7	30	5	0	4	16	24	0	370
5:45 PM	4	144	13	0	19	93	8	0	11	37	0	0	3	26	18	0	376
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	40	1029	63	0	164	706	73	0	73	231	40	0	34	160	158	0	2771
	3.53%	90.90%	5.57%	0.00%	17.39%	74.87%	7.74%	0.00%	21.22%	67.15%	11.63%	0.00%	9.66%	45.45%	44.89%	0.00%	
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	25	565	41	0	89	367	38	0	33	122	17	0	18	87	74	0	1476
PEAK HR FACTOR:	0.568	0.961	0.788	0.000	0.856	0.927	0.792	0.000	0.750	0.824	0.472	0.000	0.750	0.837	0.771	0.000	0.981
	0.956				0.901				0.896				0.952				

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sonoma Blvd & Georgia St
City: Vallejo
Control: Signalized

Project ID: 23-080131-004
Date: 5/4/2023

Data - Bikes

NS/EW Streets:	Sonoma Blvd				Sonoma Blvd				Georgia St				Georgia St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0.00%	ST 100.00%	SR 0.00%	SU 0.00%	EL 0	ET 0	ER 0	EU 0	WL 0.00%	WT 3 100.00%	WR 0 0.00%	WU 0 0.00%	TOTAL 4
PEAK HR :	08:00 AM - 09:00 AM																TOTAL 1
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0.00%	ST 0	SR 100.00%	SU 0.00%	EL 0.00%	ET 3 75.00%	ER 1 25.00%	EU 0.00%	WL 0.00%	WT 1 50.00%	WR 1 50.00%	WU 0 0.00%	TOTAL 7
PEAK HR :	05:00 PM - 06:00 PM																TOTAL 4
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	2	1	0	0	0	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.333

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sonoma Blvd & Georgia St
City: Vallejo

Project ID: 23-080131-004
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Sonoma Blvd		Sonoma Blvd		Georgia St		Georgia St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	2	2
7:30 AM	1	1	0	0	0	0	1	1	4
7:45 AM	0	0	1	0	0	0	0	1	2
8:00 AM	0	0	0	1	0	0	0	1	2
8:15 AM	0	0	1	2	0	0	0	0	3
8:30 AM	1	0	0	0	0	1	0	0	2
8:45 AM	1	0	1	0	0	0	0	0	2
TOTAL VOLUMES :	EB 3	WB 1	EB 3	WB 4	NB 0	SB 1	NB 1	SB 5	TOTAL 18
APPROACH %'s :	75.00%	25.00%	42.86%	57.14%	0.00%	100.00%	16.67%	83.33%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	2	0	2	3	0	1	0	1	9
PEAK HR FACTOR :	0.500		0.500	0.375	0.250	0.250	0.250	0.250	0.750
	0.500		0.417		0.250		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	1	2	1	0	2	0	0	1	7
4:15 PM	0	0	1	0	0	2	0	1	4
4:30 PM	1	1	0	0	0	2	1	0	5
4:45 PM	3	3	2	1	0	0	1	0	10
5:00 PM	1	0	1	1	0	1	0	0	4
5:15 PM	0	5	1	0	0	0	1	0	7
5:30 PM	0	1	3	1	2	0	0	0	7
5:45 PM	2	0	0	0	1	0	0	0	3
TOTAL VOLUMES :	EB 8	WB 12	EB 9	WB 3	NB 5	SB 5	NB 3	SB 2	TOTAL 47
APPROACH %'s :	40.00%	60.00%	75.00%	25.00%	50.00%	50.00%	60.00%	40.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	3	6	5	2	3	1	1	0	21
PEAK HR FACTOR :	0.375	0.300	0.417	0.500	0.375	0.250	0.250	0.250	0.750
	0.450		0.438		0.500		0.250		

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Mare Island Way & Maine St
City: Vallejo
Control: Signalized

Project ID: 23-080131-005
Date: 5/4/2023

Data - Totals

NS/EW Streets:	Mare Island Way				Mare Island Way				Maine St				Maine St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1.5 NT	0.5 NR	1 NU	1 SL	2 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1 WL	0 WT	1 WR	0 WU	
7:00 AM	0	103	10	0	8	74	0	6	0	0	0	0	6	0	4	0	211
7:15 AM	0	108	4	0	7	88	0	4	0	0	0	0	7	0	5	0	223
7:30 AM	0	131	10	0	11	91	0	14	0	0	0	0	9	0	4	0	270
7:45 AM	0	156	5	0	6	88	0	1	0	0	0	0	8	0	4	0	268
8:00 AM	0	179	15	1	13	100	0	9	0	0	0	0	8	0	9	0	334
8:15 AM	0	140	6	1	10	92	0	4	0	0	0	0	9	0	7	0	269
8:30 AM	0	115	12	0	6	85	0	0	0	0	0	0	1	0	7	0	226
8:45 AM	0	112	9	1	10	77	0	4	0	0	0	0	5	0	5	0	223
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1044	71	3	71	695	0	42	0	0	0	0	53	0	45	0	2024
PEAK HR :	07:30 AM - 08:30 AM				8.79%	86.01%	0.00%	5.20%	54.08%	0.00%	45.92%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PEAK HR VOL :	0	606	36	2	40	371	0	28	0	0	0	0	34	0	24	0	1141
PEAK HR FACTOR :	0.000	0.846	0.600	0.500	0.769	0.928	0.000	0.500	0.000	0.000	0.000	0.000	0.944	0.000	0.667	0.000	0.854
	0.826				0.900								0.853				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1.5 NT	0.5 NR	1 NU	1 SL	2 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1 WL	0 WT	1 WR	0 WU	
4:00 PM	0	122	6	2	3	94	0	0	0	0	0	0	7	0	8	0	242
4:15 PM	0	101	5	1	5	103	0	1	0	0	0	0	8	0	6	0	230
4:30 PM	0	113	7	0	3	102	0	2	0	0	0	0	7	0	11	0	245
4:45 PM	0	117	9	1	10	122	0	9	0	0	0	0	10	0	13	0	291
5:00 PM	0	134	8	0	9	130	0	2	0	0	0	0	11	0	15	0	309
5:15 PM	0	141	4	1	6	90	0	3	0	0	0	0	4	0	10	0	259
5:30 PM	0	123	7	0	7	115	0	14	0	0	0	0	17	0	9	0	292
5:45 PM	0	124	4	1	5	120	0	3	0	0	0	0	11	0	5	0	273
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	975	50	6	48	876	0	34	0	0	0	0	75	0	77	0	2141
PEAK HR :	0.00%	94.57%	4.85%	0.58%	5.01%	91.44%	0.00%	3.55%	49.34%	0.00%	50.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PEAK HR VOL :	0	515	28	2	32	457	0	28	0	0	0	0	42	0	47	0	1151
PEAK HR FACTOR :	0.000	0.913	0.778	0.500	0.800	0.879	0.000	0.500	0.000	0.000	0.000	0.000	0.618	0.000	0.783	0.000	0.931
	0.933				0.917								0.856				

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Mare Island Way & Maine St
City: Vallejo
Control: Signalized

Project ID: 23-080131-005
Date: 5/4/2023

Data - Bikes

NS/EW Streets:	Mare Island Way				Mare Island Way				Maine St				Maine St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1.5 NT	0.5 NR	1 NU	1 SL	2 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1 WL	0 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
PEAK HR :	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0	0	0	0	100.00%	0.00%	0.00%	0.00%	0.375
PEAK HR VOL :	07:30 AM - 08:30 AM																TOTAL
PEAK HR FACTOR :	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.375
	0.250												0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1.5 NT	0.5 NR	1 NU	1 SL	2 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1 WL	0 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2	0	4
PEAK HR :	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0	0	0	0	33.33%	0.00%	66.67%	0.00%	0.500
PEAK HR VOL :	04:45 PM - 05:45 PM																TOTAL
PEAK HR FACTOR :	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500
	0.250												0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Mare Island Way & Maine St
City: Vallejo

Project ID: 23-080131-005
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Mare Island Way		Mare Island Way		Maine St		Maine St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	1	1	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	4	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 1	WB 2	EB 0	WB 0	NB 4	SB 1	NB 0	SB 0	TOTAL 8
APPROACH %'s :	33.33%	66.67%			80.00%	20.00%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.250		0.250		0.250		0.250		0.500

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	1
4:45 PM	1	0	2	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 1	WB 2	EB 2	WB 0	NB 2	SB 0	NB 0	SB 0	TOTAL 7
APPROACH %'s :	33.33%	66.67%	100.00%	0.00%	100.00%	0.00%			
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	1	0	2	0	1	0	0	0	4
PEAK HR FACTOR :	0.250		0.250		0.250		0.250		0.333

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sacramento St & Maine St
City: Vallejo
Control: 1-Way Stop(SB)

Project ID: 23-080131-008
Date: 5/4/2023

Data - Totals

NS/EW Streets:		Sacramento St				Sacramento St				Maine St				Maine St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	7:00 AM	0	0	0	0	7	0	1	0	1	5	0	0	0	7	1	0	22
	7:15 AM	0	0	0	0	12	0	1	0	0	4	0	0	0	2	0	0	19
	7:30 AM	0	0	0	0	8	0	0	0	4	9	0	0	0	10	2	0	33
	7:45 AM	0	0	0	0	11	0	1	0	2	5	0	0	0	7	5	0	31
	8:00 AM	0	0	0	0	6	0	4	0	2	9	0	0	0	12	4	0	37
	8:15 AM	0	0	0	0	7	0	1	0	3	10	0	0	0	9	2	0	32
	8:30 AM	0	0	0	0	2	0	1	0	1	15	0	0	0	4	3	0	26
	8:45 AM	0	0	0	0	8	0	3	0	2	4	0	0	0	4	3	0	24
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	61	0	12	0	15	61	0	0	0	55	20	0	224
PEAK HR :		07:30 AM - 08:30 AM				83.56%	0.00%	16.44%	0.00%	19.74%	80.26%	0.00%	0.00%	0.00%	73.33%	26.67%	0.00%	
PEAK HR VOL :		0	0	0	0	32	0	6	0	11	33	0	0	0	38	13	0	133
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.727	0.000	0.375	0.000	0.688	0.825	0.000	0.000	0.000	0.792	0.650	0.000	0.899
						0.792				0.846				0.797				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	4:00 PM	0	0	0	0	11	0	4	0	6	21	0	0	0	12	4	0	58
	4:15 PM	0	0	0	0	15	0	3	0	0	14	0	0	0	9	5	0	46
	4:30 PM	0	0	0	0	5	0	4	0	1	14	0	0	0	14	5	0	43
	4:45 PM	0	0	0	0	9	0	2	0	2	20	0	0	0	14	7	0	54
	5:00 PM	0	0	0	0	15	0	4	0	1	16	0	0	0	8	5	0	49
	5:15 PM	0	0	0	0	6	0	0	0	2	19	0	0	0	17	8	0	52
	5:30 PM	0	0	0	0	9	0	5	0	2	16	0	0	0	10	3	0	45
	5:45 PM	0	0	0	0	10	0	1	0	2	9	0	0	0	6	2	0	30
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	80	0	23	0	16	129	0	0	0	90	39	0	377
PEAK HR :		04:00 PM - 05:00 PM				77.67%	0.00%	22.33%	0.00%	11.03%	88.97%	0.00%	0.00%	0.00%	69.77%	30.23%	0.00%	
PEAK HR VOL :		0	0	0	0	40	0	13	0	9	69	0	0	0	49	21	0	201
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.667	0.000	0.813	0.000	0.375	0.821	0.000	0.000	0.000	0.875	0.750	0.000	0.866
						0.736				0.722				0.833				

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sacramento St & Maine St
City: Vallejo
Control: 1-Way Stop(SB)

Project ID: 23-080131-008
Date: 5/4/2023

Data - Bikes

NS/EW Streets:		Sacramento St				Sacramento St				Maine St				Maine St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	4
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	5
PEAK HR :		07:30 AM - 08:30 AM				100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%	TOTAL
PEAK HR VOL :		0	0	0	0	1	0	0	0	0	1	0	0	0	1	2	0	5
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.313
						0.250				0.250				0.375				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	3	0	0	0	0	2	0	0	0	2	2	0	9
PEAK HR :		04:00 PM - 05:00 PM				100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	3
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.375
										0.250				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Sacramento St & Maine St
City: Vallejo

Project ID: 23-080131-008
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Sacramento St		Sacramento St		Maine St		Maine St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	1	0	0	1	0	1	0	3
7:15 AM	1	0	0	0	0	0	2	0	3
7:30 AM	0	0	0	0	0	0	2	0	2
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	3	0	3
8:45 AM	0	0	0	0	0	0	1	1	2
TOTAL VOLUMES :	EB 1	WB 1	EB 0	WB 0	NB 1	SB 0	NB 9	SB 1	TOTAL 13
APPROACH %'s :	50.00%	50.00%			100.00%	0.00%	90.00%	10.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	0	2
PEAK HR FACTOR :							0.250	0.250	0.250

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	2	2	0	0	0	1	2	5	12
4:15 PM	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	2	1	0	0	4
5:15 PM	2	0	0	0	0	1	3	0	6
5:30 PM	0	0	0	0	0	2	1	2	5
5:45 PM	1	0	0	0	0	0	1	1	3
TOTAL VOLUMES :	EB 5	WB 3	EB 0	WB 0	NB 2	SB 6	NB 7	SB 8	TOTAL 31
APPROACH %'s :	62.50%	37.50%			25.00%	75.00%	46.67%	53.33%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	2	2	0	0	0	2	2	5	13
PEAK HR FACTOR :	0.250	0.250			0.500	0.500	0.250	0.250	0.271

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Sonoma Blvd/Mono St & Mare Island Way/Curtola Pkwy
City: Vallejo
Control: Signalized

Project ID: 23-080131-006
Date: 5/4/2023

Data - Totals

NS/EW Streets:	Sonoma Blvd/Mono St					Sonoma Blvd/Mono St					Mare Island Way/Curtola Pkwy					Mare Island Way/Curtola Pkwy							
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					NORTHBOUND2		TOTAL
	1	2	0	0	0	0	2	0	0	0	0	1.5	1.5	0	0	0	2	1	0	0	0	0	
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L2	N2U2	
7:00 AM	33	20	2	0	7	28	23	2	0	1	0	58	7	0	0	0	78	18	0	0	0	0	278
7:15 AM	31	23	1	0	6	48	22	0	0	0	0	73	15	0	0	0	71	15	0	0	0	0	305
7:30 AM	40	36	2	0	4	32	13	0	0	0	0	94	23	0	0	0	114	28	0	0	0	0	386
7:45 AM	52	48	1	0	1	45	26	1	0	0	0	76	24	0	0	0	102	36	0	0	0	4	416
8:00 AM	64	33	3	0	1	31	18	4	0	1	0	83	26	0	1	0	129	44	0	0	0	5	443
8:15 AM	55	27	1	0	0	39	16	5	0	0	0	85	28	0	0	0	89	43	0	0	0	5	393
8:30 AM	41	28	3	0	1	25	27	0	0	1	1	73	26	0	0	0	102	30	0	0	0	3	361
8:45 AM	35	56	1	0	0	39	23	3	0	0	0	67	22	0	0	0	85	29	0	0	0	6	366
TOTAL VOLUMES :	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L2	N2U2	TOTAL
APPROACH %'s :	351	271	14	0	20	287	168	15	0	3	1	609	171	0	1	0	770	243	0	0	0	24	2948
	53.51%	41.31%	2.13%	0.00%	3.05%	60.68%	35.52%	3.17%	0.00%	0.63%	0.13%	77.88%	21.87%	0.00%	0.13%	0.00%	76.01%	23.99%	0.00%	0.00%	0.00%	100.00%	
PEAK HR :	07:30 AM - 08:30 AM																						TOTAL
PEAK HR VOL :	211	144	7	0	6	147	73	10	0	1	0	338	101	0	1	0	434	151	0	0	0	14	1638
PEAK HR FACTOR :	0.824	0.750	0.583	0.000	0.375	0.817	0.702	0.500	0.000	0.250	0.000	0.899	0.902	0.000	0.250	0.000	0.841	0.858	0.000	0.000	0.000	0.700	0.924
			0.902					0.802					0.940					0.845					

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					0	0	TOTAL
	1	2	0	0	0	0	2	0	0	0	0	1.5	1.5	0	0	0	2	1	0	0	0	0	0
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L2	N2U2	TOTAL
4:00 PM	63	59	1	0	0	42	43	3	0	0	0	81	25	0	0	0	69	43	0	0	0	0	429
4:15 PM	48	55	2	0	0	40	39	6	0	0	0	97	21	0	0	0	72	46	0	0	0	1	427
4:30 PM	53	77	7	0	0	61	39	2	1	0	0	83	27	0	0	1	74	38	0	0	0	11	474
4:45 PM	50	81	6	0	1	47	37	6	0	0	1	117	24	0	0	0	85	60	0	1	1	8	524
5:00 PM	80	84	4	0	0	53	44	4	0	0	0	99	35	0	0	1	80	62	0	0	0	6	552
5:15 PM	57	72	4	0	0	59	32	4	0	0	1	84	31	0	0	1	100	48	0	0	0	3	496
5:30 PM	60	115	11	0	1	47	26	5	0	0	0	111	32	0	0	0	80	38	0	0	0	2	528
5:45 PM	56	109	10	0	1	56	46	3	0	0	0	111	30	0	0	0	75	52	0	0	0	1	550
TOTAL VOLUMES :	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L2	N2U2	TOTAL
APPROACH %'s :	467	652	45	0	3	405	306	33	1	0	1	783	225	0	0	3	635	387	0	1	1	32	3980
	40.02%	55.87%	3.86%	0.00%	0.26%	54.36%	41.07%	4.43%	0.13%	0.00%	0.10%	77.60%	22.30%	0.00%	0.00%	0.29%	61.89%	37.72%	0.00%	0.10%	3.03%	96.97%	
PEAK HR :	06:00 PM - 06:00 PM																						TOTAL
PEAK HR VOL :	253	380	29	0	2	215	148	16	0	0	1	405	128	0	0	2	335	200	0	0	0	12	2126
PEAK HR FACTOR :	0.791	0.826	0.659	0.000	0.500	0.911	0.804	0.800	0.000	0.000	0.250	0.912	0.914	0.000	0.000	0.500	0.838	0.806	0.000	0.000	0.000	0.500	0.963
			0.888					0.902					0.934					0.901					

Intersection Turning Movement Count

Location: Sonoma Blvd/Mono St & Mare Island Way/Curtola Pkwy
City: Vallejo
Control: Signalized

Project ID: 23-080131-006
Date: 5/4/2023

Data - Bikes

NS/EW Streets:		Sonoma Blvd/Mono St					Sonoma Blvd/Mono St					Mare Island Way/Curtola Pkwy					Mare Island Way/Curtola Pkwy									
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					NORTHBOUND2		TOTAL			
	1 NL	2 NT	0 NR	0 NU	0 NU2	0 SL	2 ST	0 SR	0 SU	0 ST2	0 EL	1.5 ET	1.5 ER	0 EU	0 ER2	0 WL	2 WT	0 WR	0 WU	0 WL2	0 N2L2	0 N2U2				
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	7:30 AM	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2				
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1				
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
TOTAL VOLUMES :		NL 0	NT 0	NR 0	NU 0	NU2 0	SL 1	ST 1	SR 0	SU 0	ST2 0	EL 0	ET 0	ER 2	EU 0	ER2 0	WL 0	WT 1	WR 0	WU 0	WL2 0	N2L2 0	N2U2 0	TOTAL 4		
APPROACH %'s :		100.00%					0.00%					100.00%					0.00%					0.00%				
PEAK HR :		07:30 AM - 08:30 AM																				TOTAL 4				
PEAK HR VOL :		0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0		
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500		

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND										
	1 NL	2 NT	0 NR	0 NU	0 NU2	0 SL	2 ST	0 SR	0 SU	0 ST2	0 EL	1.5 ET	1.5 ER	0 EU	0 ER2	0 WL	2 WT	1 WR	0 WU	0 WL2	0 N2L2	0 N2U2				
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	4:45 PM	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2				
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	5:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
	5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
	5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
TOTAL VOLUMES :		NL 3	NT 0	NR 0	NU 0	NU2 0	SL 0	ST 1	SR 0	SU 0	ST2 0	EL 0	ET 1	ER 0	EU 0	ER2 0	WL 0	WT 0	WR 0	WU 0	WL2 0	N2L2 0	N2U2 0	TOTAL 5		
APPROACH %'s :		100.00%					0.00%					100.00%					0.00%					0.00%				
PEAK HR :		05:00 PM - 06:00 PM																				TOTAL 3				
PEAK HR VOL :		2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PEAK HR FACTOR :		0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750			

National Data & Surveying Services Intersection Turning Movement Count

Location: Sonoma Blvd/Mono St & Mare Island Way/Curtola Pkwy
City: Vallejo

Project ID: 23-080131-006
Date: 5/4/2023

Data - Pedestrians (Crosswalks)

NS/EW Streets:		Sonoma Blvd/Mono St		Sonoma Blvd/Mono St		Mare Island Way/Curtola Pkwy		Mare Island Way/Curtola Pkwy			
AM		NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2	
		EB	WB	EB	WB	NB	SB	NB	SB	EB	WB
7:00 AM		0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	1	0	0	0	0
7:30 AM		0	0	0	0	0	2	0	0	0	0
7:45 AM		1	0	0	0	0	2	0	0	0	0
8:00 AM		1	1	0	0	1	0	0	0	1	2
8:15 AM		0	1	0	0	1	0	1	0	0	2
8:30 AM		0	1	0	0	0	1	1	0	1	3
8:45 AM		0	0	0	0	1	0	0	0	0	0
TOTAL VOLUMES :		EB 2	WB 3	EB 0	WB 0	NB 3	SB 6	NB 2	SB 0	EB 2	WB 7
APPROACH %'s :		40.00%	60.00%			33.33%	66.67%	100.00%	0.00%	22.22%	77.78%
PEAK HR :		07:30 AM - 08:30 AM									
PEAK HR VOL :		2	2	0	0	2	4	1	0	1	4
PEAK HR FACTOR :		0.500	0.500			0.500	0.500	0.250	0.250	0.250	0.500
		0.500				0.750		0.250		0.417	

PM		NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2		TOTAL
		EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	
4:00 PM		0	0	0	0	0	0	0	0	0	0	0
4:15 PM		0	0	0	0	0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	1	0	0	1	2
4:45 PM		0	0	0	0	0	0	0	0	0	0	0
5:00 PM		0	1	0	0	1	0	0	0	1	2	5
5:15 PM		0	0	0	0	0	0	0	0	1	0	1
5:30 PM		0	0	0	0	0	0	0	0	1	0	1
5:45 PM		1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :		EB 1	WB 1	EB 0	WB 0	NB 1	SB 0	NB 1	SB 0	EB 3	WB 3	10
APPROACH %'s :		50.00%	50.00%			100.00%	0.00%	100.00%	0.00%	50.00%	50.00%	
PEAK HR :		05:00 PM - 06:00 PM										
PEAK HR VOL :		1	1	0	0	1	0	0	0	3	2	8
PEAK HR FACTOR :		0.250	0.250			0.250				0.750	0.250	0.400
		0.500				0.250				0.417		

Appendix B:

LOS Calculations

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	49	25	8	57	25	29	339	12	36	275	39
Future Volume (veh/h)	43	49	25	8	57	25	29	339	12	36	275	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	46	52	4	9	61	4	31	361	9	38	293	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	267	272	21	274	276	18	798	1341	1133	705	1341	1133
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.48	0.48	0.48	0.72	0.72	0.72
Sat Flow, veh/h	1326	1701	131	1337	1722	113	1047	1856	1568	1003	1856	1568
Grp Volume(v), veh/h	46	0	56	9	0	65	31	361	9	38	293	30
Grp Sat Flow(s),veh/h/ln	1326	0	1832	1337	0	1835	1047	1856	1568	1003	1856	1568
Q Serve(g_s), s	2.3	0.0	2.0	0.4	0.0	2.3	1.2	8.7	0.2	1.2	3.9	0.4
Cycle Q Clear(g_c), s	4.7	0.0	2.0	2.4	0.0	2.3	5.1	8.7	0.2	9.8	3.9	0.4
Prop In Lane	1.00		0.07	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	0	293	274	0	294	798	1341	1133	705	1341	1133
V/C Ratio(X)	0.17	0.00	0.19	0.03	0.00	0.22	0.04	0.27	0.01	0.05	0.22	0.03
Avail Cap(c_a), veh/h	444	0	537	453	0	538	798	1341	1133	705	1341	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	27.3	28.3	0.0	27.4	7.8	7.6	5.4	6.0	3.4	2.9
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.5	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.9	0.1	0.0	1.0	0.3	3.4	0.1	0.2	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	27.4	28.4	0.0	27.6	7.9	8.1	5.4	6.0	3.5	2.9
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		102			74			401			361	
Approach Delay, s/veh		28.4			27.7			8.0			3.7	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.8		16.2		58.8		16.2				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		44.2		* 22		44.2		* 22				
Max Q Clear Time (g_c+I1), s		10.7		6.7		11.8		4.4				
Green Ext Time (p_c), s		0.4		0.0		0.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	4	5	14	11	36	16	587	9	39	429	3
Future Volume (veh/h)	12	4	5	14	11	36	16	587	9	39	429	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.91	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	13	4	0	15	12	2	17	638	9	42	466	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	24	134	0	28	113	19	31	964	14	68	1052	5
Arrive On Green	0.01	0.07	0.00	0.02	0.07	0.07	0.02	0.27	0.27	0.04	0.29	0.29
Sat Flow, veh/h	1767	1856	0	1767	1527	254	1767	3557	50	1767	3599	15
Grp Volume(v), veh/h	13	4	0	15	0	14	17	316	331	42	228	240
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1767	0	1781	1767	1763	1845	1767	1763	1852
Q Serve(g_s), s	0.2	0.1	0.0	0.3	0.0	0.2	0.3	5.3	5.3	0.8	3.5	3.5
Cycle Q Clear(g_c), s	0.2	0.1	0.0	0.3	0.0	0.2	0.3	5.3	5.3	0.8	3.5	3.5
Prop In Lane	1.00		0.00	1.00		0.14	1.00		0.03	1.00		0.01
Lane Grp Cap(c), veh/h	24	134	0	28	0	132	31	478	500	68	515	541
V/C Ratio(X)	0.54	0.03	0.00	0.55	0.00	0.11	0.55	0.66	0.66	0.61	0.44	0.44
Avail Cap(c_a), veh/h	798	838	0	798	0	805	479	1805	1889	479	1805	1897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	14.3	0.0	16.2	0.0	14.3	16.2	10.7	10.7	15.7	9.6	9.6
Incr Delay (d2), s/veh	6.8	0.0	0.0	6.1	0.0	0.1	5.6	0.6	0.6	3.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.1	0.2	1.5	1.5	0.3	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	14.4	0.0	22.3	0.0	14.5	21.7	11.3	11.3	19.0	9.8	9.8
LnGrp LOS	C	B	A	C	A	B	C	B	B	B	A	A
Approach Vol, veh/h	17			29			664			510		
Approach Delay, s/veh	21.0			18.5			11.6			10.5		
Approach LOS	C			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	14.0	5.5	7.4	5.6	14.7	5.5	7.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+12, s)	7.3	7.3	2.3	2.1	2.3	5.5	2.2	2.2				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 11.4

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	4	37	12	25	52	15	8	33	12	21	30	3
Future Volume (veh/h)	4	37	12	25	52	15	8	33	12	21	30	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	44	9	29	61	11	9	39	1	25	35	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	219	620	118	345	541	80	253	164	4	339	112	0
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.12	0.12	0.12	0.12	0.12	0.00
Sat Flow, veh/h	48	1451	275	258	1266	186	320	1404	36	687	962	0
Grp Volume(v), veh/h	58	0	0	101	0	0	49	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	0	1711	0	0	1760	0	0	1649	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	0.7	0.0	0.0	0.5	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.09		0.16	0.29		0.11	0.18		0.02	0.42		0.00
Lane Grp Cap(c), veh/h	956	0	0	965	0	0	421	0	0	451	0	0
V/C Ratio(X)	0.06	0.00	0.00	0.10	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	3290	0	0	3160	0	0	2678	0	0	2543	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	0.0	0.0	3.4	0.0	0.0	7.9	0.0	0.0	8.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.4	0.0	0.0	3.5	0.0	0.0	8.0	0.0	0.0	8.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		58			101			49			60	
Approach Delay, s/veh		3.4			3.5			8.0			8.1	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.9		6.8		12.9		6.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		35.0		28.0		35.0		28.0				
Max Q Clear Time (g_c+I1), s		2.7		2.5		2.4		2.6				
Green Ext Time (p_c), s		0.6		0.2		0.3		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				5.3								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA

Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	9	54	7	8	84	19	0	25	3	25	48	8
Future Volume (veh/h)	9	54	7	8	84	19	0	25	3	25	48	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		1.00	0.98		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	10	60	2	9	93	5	0	28	0	28	53	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	323	408	13	294	421	22	0	349	0	431	209	4
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.00	0.19	0.00	0.19	0.19	0.19
Sat Flow, veh/h	154	1571	49	94	1619	84	0	1856	0	520	1113	20
Grp Volume(v), veh/h	72	0	0	107	0	0	0	28	0	82	0	0
Grp Sat Flow(s),veh/h/ln1774	0	0	0	1798	0	0	0	1856	0	1654	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.6	0.0	0.0
Prop In Lane	0.14		0.03	0.08		0.05	0.00		0.00	0.34		0.01
Lane Grp Cap(c), veh/h	744	0	0	737	0	0	0	349	0	644	0	0
V/C Ratio(X)	0.10	0.00	0.00	0.15	0.00	0.00	0.00	0.08	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	3883	0	0	3950	0	0	0	3201	0	3163	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.1	0.0	0.0	4.2	0.0	0.0	0.0	4.9	0.0	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.2	0.0	0.0	4.3	0.0	0.0	0.0	4.9	0.0	5.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	72					107		28		82		
Approach Delay, s/veh	4.2					4.3		4.9		5.1		
Approach LOS	A					A		A		A		
Timer - Assigned Phs	2		4			6		8				
Phs Duration (G+Y+Rc), s	7.8		6.7			7.8		6.7				
Change Period (Y+Rc), s	4.0		4.0			4.0		4.0				
Max Green Setting (Gmax), s	30.0		25.0			30.0		25.0				
Max Q Clear Time (g_c+I1), s	2.7		2.2			2.4		2.6				
Green Ext Time (p_c), s	0.6		0.1			0.3		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			4.6									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	10	65	12	35	99	69	13	282	11	39	234	32
Future Volume (veh/h)	10	65	12	35	99	69	13	282	11	39	234	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	70	3	38	106	9	14	303	7	42	252	23
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	65	176	7	103	175	184	60	1175	995	137	1257	1064
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	0.63	0.63	0.08	0.68	0.68
Sat Flow, veh/h	89	1440	57	343	1431	1505	1767	1856	1571	1767	1856	1571
Grp Volume(v), veh/h	84	0	0	144	0	9	14	303	7	42	252	23
Grp Sat Flow(s), veh/h/ln	1585	0	0	1774	0	1505	1767	1856	1571	1767	1856	1571
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.4	0.6	5.4	0.1	1.7	3.8	0.4
Cycle Q Clear(g_c), s	5.6	0.0	0.0	5.6	0.0	0.4	0.6	5.4	0.1	1.7	3.8	0.4
Prop In Lane	0.13		0.04	0.26		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	0	0	277	0	184	60	1175	995	137	1257	1064
V/C Ratio(X)	0.34	0.00	0.00	0.52	0.00	0.05	0.23	0.26	0.01	0.31	0.20	0.02
Avail Cap(c_a), veh/h	637	0	0	652	0	522	259	1175	995	259	1257	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	30.3	0.0	0.0	31.3	0.0	29.1	35.3	6.0	5.1	32.7	4.5	4.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.6	0.0	0.0	0.7	0.5	0.0	0.5	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.4	0.0	0.0	2.5	0.0	0.1	0.3	1.9	0.0	0.7	1.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.6	0.0	0.0	31.9	0.0	29.1	36.0	6.6	5.1	33.1	4.9	4.0
LnGrp LOS	C	A	A	C	A	C	D	A	A	C	A	A
Approach Vol, veh/h	84			153			324			317		
Approach Delay, s/veh	30.6			31.7			7.8			8.6		
Approach LOS	C			C			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	52.1			13.4	6.2	55.4		13.4				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	1.0	25.5		* 26	11.0	25.5		* 26				
Max Q Clear Time (g_c+13), s	7.4			7.6	2.6	5.8		7.6				
Green Ext Time (p_c), s	0.0	0.3		0.1	0.0	0.2		0.1				

Intersection Summary

HCM 6th Ctrl Delay 14.4

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 6: Mare Island Way & Maine Street

Elite Charter School TIA
Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	34	0	24	2	606	36	68	371	0
Future Volume (veh/h)	0	0	0	34	0	24	2	606	36	68	371	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1856	1870	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	40	0	28	2	713	37	80	436	0
Peak Hour Factor	0.92	0.92	0.92	0.85	0.92	0.85	0.92	0.85	0.85	0.85	0.85	0.92
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	0
Cap, veh/h	224	190	0	404	0	161	6	1622	84	140	1950	0
Arrive On Green	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.48	0.48	0.08	0.55	0.00
Sat Flow, veh/h	1382	1870	0	1767	0	1583	1781	3405	177	1767	3618	0
Grp Volume(v), veh/h	0	0	0	40	0	28	2	369	381	80	436	0
Grp Sat Flow(s), veh/h/ln	1382	1870	0	1767	0	1583	1781	1763	1819	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.5	0.0	4.4	4.5	1.4	2.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.7	0.0	0.5	0.0	4.4	4.5	1.4	2.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	224	190	0	404	0	161	6	840	867	140	1950	0
V/C Ratio(X)	0.00	0.00	0.00	0.10	0.00	0.17	0.36	0.44	0.44	0.57	0.22	0.00
Avail Cap(c_a), veh/h	945	1165	0	1325	0	986	666	1647	1700	991	3294	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.3	0.0	13.2	16.0	5.6	5.6	14.2	3.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.5	35.2	0.8	0.8	3.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.2	0.1	0.9	0.9	0.6	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	13.4	0.0	13.7	51.2	6.3	6.3	17.9	3.8	0.0
LnGrp LOS	A	A	A	B	A	B	D	A	A	B	A	A
Approach Vol, veh/h	0			68			752			516		
Approach Delay, s/veh	0.0			13.5			6.4			6.0		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	19.3		6.8	3.6	21.8		6.8				
Change Period (Y+Rc), s	3.5	4.0		3.5	3.5	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+13.4), s	6.5	6.5		0.0	2.0	4.0		2.7				
Green Ext Time (p_c), s	0.1	8.8		0.0	0.0	5.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

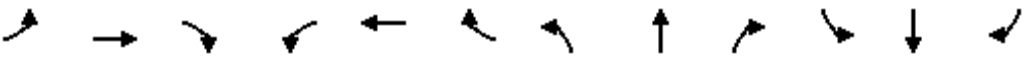
User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	33	38	13	32	6
Future Vol, veh/h	11	33	38	13	32	6
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	12	37	42	14	36	7
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	56	0	-	0	110	51
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1542	-	-	-	885	1014
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1542	-	-	-	878	1012
Mov Cap-2 Maneuver	-	-	-	-	878	-
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	959	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.8	0		9.2		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1542	-	-	-	897	
HCM Lane V/C Ratio	0.008	-	-	-	0.047	
HCM Control Delay (s)	7.4	0	-	-	9.2	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑	↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	338	101	0	434	151	211	144	7	147	73	10
Future Volume (veh/h)	0	338	101	0	434	151	211	144	7	147	73	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	367	110	0	472	44	131	295	0	160	79	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1255	525	0	1193	523	658	1330		565	540	55
Arrive On Green	0.00	0.34	0.34	0.00	0.34	0.34	0.36	0.36	0.00	0.36	0.36	0.36
Sat Flow, veh/h	0	3711	1552	0	3618	1547	1294	3711	0	907	1508	153
Grp Volume(v), veh/h	0	367	110	0	472	44	131	295	0	160	0	87
Grp Sat Flow(s),veh/h/ln	0	1856	1552	0	1763	1547	1294	1856	0	907	0	1660
Q Serve(g_s), s	0.0	2.2	1.5	0.0	3.1	0.6	2.3	1.7	0.0	3.7	0.0	1.1
Cycle Q Clear(g_c), s	0.0	2.2	1.5	0.0	3.1	0.6	3.4	1.7	0.0	5.3	0.0	1.1
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	0	1255	525	0	1193	523	658	1330		565	0	595
V/C Ratio(X)	0.00	0.29	0.21	0.00	0.40	0.08	0.20	0.22		0.28	0.00	0.15
Avail Cap(c_a), veh/h	0	3710	1551	0	3524	1547	1272	3091		1109	0	1438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.3	7.1	0.0	7.6	6.8	7.7	6.7	0.0	8.6	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.3	0.0	0.7	0.1	0.4	0.4	0.0	0.6	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.3	7.1	0.0	7.7	6.8	7.7	6.7	0.0	8.7	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A		A	A	A
Approach Vol, veh/h		477			516			426	A		247	
Approach Delay, s/veh		7.3			7.6			7.0			7.9	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.1		15.0		15.1		15.0				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.2		7.3		5.1		5.4				
Green Ext Time (p_c), s		0.4		0.4		0.6		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			7.4									
HCM 6th LOS			A									
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	49	25	14	57	52	14	666	9	51	505	69
Future Volume (veh/h)	97	49	25	14	57	52	14	666	9	51	505	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	102	52	4	15	60	11	15	701	7	54	532	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	227	246	19	240	220	40	618	1395	1177	526	1395	1177
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1304	1699	131	1321	1522	279	817	1856	1565	734	1856	1565
Grp Volume(v), veh/h	102	0	56	15	0	71	15	701	7	54	532	61
Grp Sat Flow(s),veh/h/ln	1304	0	1830	1321	0	1801	817	1856	1565	734	1856	1565
Q Serve(g_s), s	6.4	0.0	2.3	0.9	0.0	3.0	0.6	12.8	0.1	2.7	8.5	0.9
Cycle Q Clear(g_c), s	9.4	0.0	2.3	3.2	0.0	3.0	9.0	12.8	0.1	15.5	8.5	0.9
Prop In Lane	1.00		0.07	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	264	240	0	260	618	1395	1177	526	1395	1177
V/C Ratio(X)	0.45	0.00	0.21	0.06	0.00	0.27	0.02	0.50	0.01	0.10	0.38	0.05
Avail Cap(c_a), veh/h	376	0	474	391	0	466	618	1395	1177	526	1395	1177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	0.0	32.1	33.5	0.0	32.4	5.2	4.2	2.6	7.3	3.7	2.7
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.0	0.0	0.2	0.1	1.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.0	0.3	0.0	1.3	0.1	4.0	0.0	0.4	2.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	0.0	32.2	33.5	0.0	32.6	5.3	5.3	2.6	7.3	3.7	2.7
LnGrp LOS	D	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		158			86			723			647	
Approach Delay, s/veh		35.4			32.8			5.3			3.9	
Approach LOS		D			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.5		16.5		68.5		16.5				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		54.2		* 22		54.2		* 22				
Max Q Clear Time (g_c+I1), s		14.8		11.4		17.5		5.2				
Green Ext Time (p_c), s		1.0		0.0		0.8		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			9.2									
HCM 6th LOS			A									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	20	15	20	16	111	32	579	14	51	425	5
Future Volume (veh/h)	31	20	15	20	16	111	32	579	14	51	425	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	1.00		0.83	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	21	2	21	17	12	34	616	13	54	452	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	55	222	21	37	116	82	56	937	20	81	1001	9
Arrive On Green	0.03	0.14	0.14	0.02	0.13	0.13	0.03	0.27	0.27	0.05	0.28	0.28
Sat Flow, veh/h	1767	1637	156	1767	926	654	1767	3526	74	1767	3580	32
Grp Volume(v), veh/h	33	0	23	21	0	29	34	308	321	54	222	234
Grp Sat Flow(s),veh/h/ln	1767	0	1793	1767	0	1580	1767	1763	1838	1767	1763	1849
Q Serve(g_s), s	0.7	0.0	0.4	0.4	0.0	0.6	0.7	5.8	5.8	1.1	3.9	3.9
Cycle Q Clear(g_c), s	0.7	0.0	0.4	0.4	0.0	0.6	0.7	5.8	5.8	1.1	3.9	3.9
Prop In Lane	1.00		0.09	1.00		0.41	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	55	0	243	37	0	198	56	468	488	81	493	517
V/C Ratio(X)	0.60	0.00	0.09	0.57	0.00	0.15	0.61	0.66	0.66	0.67	0.45	0.45
Avail Cap(c_a), veh/h	705	0	715	705	0	630	423	1594	1662	423	1594	1672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	14.2	18.2	0.0	14.6	18.0	12.3	12.3	17.7	11.2	11.2
Incr Delay (d2), s/veh	3.9	0.0	0.1	5.0	0.0	0.1	3.9	0.6	0.6	3.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	0.2	0.0	0.2	0.3	1.8	1.9	0.5	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	14.3	23.2	0.0	14.8	21.8	12.9	12.9	21.1	11.4	11.4
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h	56		50			663			510			
Approach Delay, s/veh	18.8		18.3			13.3			12.4			
Approach LOS	B		B			B			B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	15.0	5.8	10.1	6.2	15.5	6.2	9.7				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+I1), s	7.8	7.8	2.4	2.4	2.7	5.9	2.7	2.6				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	0.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 13.4

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	13	77	10	10	56	38	27	46	22	30	37	15
Future Volume (veh/h)	13	77	10	10	56	38	27	46	22	30	37	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.98	0.98		0.99	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	95	7	12	69	24	33	57	5	37	46	2
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	225	632	42	213	506	159	302	219	17	335	201	7
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	96	1585	106	74	1268	397	421	1157	88	523	1065	38
Grp Volume(v), veh/h	118	0	0	105	0	0	95	0	0	85	0	0
Grp Sat Flow(s),veh/h/ln	1786	0	0	1739	0	0	1666	0	0	1625	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.8	0.0	0.0	1.0	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.14		0.06	0.11		0.23	0.35		0.05	0.44		0.02
Lane Grp Cap(c), veh/h	900	0	0	878	0	0	537	0	0	544	0	0
V/C Ratio(X)	0.13	0.00	0.00	0.12	0.00	0.00	0.18	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	2973	0	0	2905	0	0	2296	0	0	2246	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.2	0.0	0.0	4.2	0.0	0.0	7.6	0.0	0.0	7.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.3	0.0	0.0	4.3	0.0	0.0	7.7	0.0	0.0	7.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		118			105			95			85	
Approach Delay, s/veh		4.3			4.3			7.7			7.7	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.2		8.6		13.2		8.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		35.0		28.0		35.0		28.0				
Max Q Clear Time (g_c+I1), s		2.8		3.0		2.9		2.9				
Green Ext Time (p_c), s		0.6		0.5		0.7		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				5.8								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	105	5	15	78	23	12	47	14	22	59	14
Future Volume (veh/h)	19	105	5	15	78	23	12	47	14	22	59	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.97	0.96		0.95	0.96		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	119	3	17	89	8	14	53	2	25	67	2
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	249	494	11	245	466	38	265	455	15	299	429	11
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	139	1604	37	127	1514	124	170	1544	51	245	1455	37
Grp Volume(v), veh/h	144	0	0	114	0	0	69	0	0	94	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	0	1765	0	0	1765	0	0	1737	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.9	0.0	0.0	0.6	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.15		0.02	0.15		0.07	0.20		0.03	0.27		0.02
Lane Grp Cap(c), veh/h	754	0	0	749	0	0	735	0	0	738	0	0
V/C Ratio(X)	0.19	0.00	0.00	0.15	0.00	0.00	0.09	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	2792	0	0	2763	0	0	2334	0	0	2303	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.2	0.0	0.0	5.1	0.0	0.0	5.2	0.0	0.0	5.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.4	0.0	0.0	5.2	0.0	0.0	5.3	0.0	0.0	5.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	144		114			69			94			
Approach Delay, s/veh	5.4		5.2			5.3			5.3			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	10.2		9.9			10.2			9.9			
Change Period (Y+Rc), s	4.0		4.0			4.0			4.0			
Max Green Setting (Gmax), s	30.0		25.0			30.0			25.0			
Max Q Clear Time (g_c+I1), s	2.9		2.6			3.2			2.8			
Green Ext Time (p_c), s	0.6		0.3			0.8			0.4			
Intersection Summary												
HCM 6th Ctrl Delay	5.3											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↑	↔	↔	↑	↔
Traffic Volume (veh/h)	33	122	17	18	87	74	25	565	41	89	367	38
Future Volume (veh/h)	33	122	17	18	87	74	25	565	41	89	367	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	34	124	11	18	89	11	26	577	26	91	374	26
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	79	176	14	72	228	210	95	1134	958	184	1227	1015
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.05	0.61	0.61	0.10	0.66	0.66
Sat Flow, veh/h	207	1273	103	165	1650	1521	1767	1856	1567	1767	1856	1536
Grp Volume(v), veh/h	169	0	0	107	0	11	26	577	26	91	374	26
Grp Sat Flow(s), veh/h/ln	1584	0	0	1815	0	1521	1767	1856	1567	1767	1856	1536
Q Serve(g_s), s	4.4	0.0	0.0	0.0	0.0	0.5	1.2	14.9	0.6	4.1	7.3	0.5
Cycle Q Clear(g_c), s	8.9	0.0	0.0	4.5	0.0	0.5	1.2	14.9	0.6	4.1	7.3	0.5
Prop In Lane	0.20		0.07	0.17		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	0	0	300	0	210	95	1134	958	184	1227	1015
V/C Ratio(X)	0.63	0.00	0.00	0.36	0.00	0.05	0.27	0.51	0.03	0.50	0.30	0.03
Avail Cap(c_a), veh/h	550	0	0	587	0	465	249	1134	958	249	1227	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	35.4	0.0	0.0	33.5	0.0	31.8	38.6	9.3	6.5	36.0	6.1	5.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.3	0.0	0.0	0.6	1.6	0.1	0.7	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.4	0.0	0.0	2.0	0.0	0.2	0.5	5.8	0.2	1.8	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.3	0.0	0.0	33.8	0.0	31.9	39.2	11.0	6.6	36.7	6.7	5.0
LnGrp LOS	D	A	A	C	A	C	D	B	A	D	A	A
Approach Vol, veh/h	169			118			629			491		
Approach Delay, s/veh	36.3			33.6			11.9			12.2		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.5	56.5		15.9	8.3	60.8		15.9				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	2.0	34.5		* 26	12.0	34.5		* 26				
Max Q Clear Time (g_c+10, s)	16.9			10.9	3.2	9.3		6.5				
Green Ext Time (p_c), s	0.0	0.6		0.2	0.0	0.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay 16.8

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	42	0	47	2	515	28	60	457	0
Future Volume (veh/h)	0	0	0	42	0	47	2	515	28	60	457	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	45	0	51	2	554	27	65	491	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	0
Cap, veh/h	248	250	0	485	0	211	6	1420	69	124	1642	0
Arrive On Green	0.00	0.00	0.00	0.13	0.00	0.13	0.00	0.42	0.42	0.07	0.47	0.00
Sat Flow, veh/h	1343	1856	0	1759	0	1569	1767	3418	166	1767	3618	0
Grp Volume(v), veh/h	0	0	0	45	0	51	2	285	296	65	491	0
Grp Sat Flow(s), veh/h/ln	1343	1856	0	1759	0	1569	1767	1763	1821	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.8	0.0	3.3	3.3	1.0	2.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.7	0.0	0.8	0.0	3.3	3.3	1.0	2.5	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	248	250	0	485	0	211	6	732	757	124	1642	0
V/C Ratio(X)	0.00	0.00	0.00	0.09	0.00	0.24	0.33	0.39	0.39	0.52	0.30	0.00
Avail Cap(c_a), veh/h	995	1281	0	1463	0	1083	732	1825	1885	1098	3650	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.1	0.0	11.2	14.4	5.9	5.9	13.0	4.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.6	28.4	0.7	0.7	3.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.3	0.1	0.7	0.7	0.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	11.2	0.0	11.8	42.9	6.6	6.6	16.4	5.0	0.0
LnGrp LOS	A	A	A	B	A	B	D	A	A	B	A	A
Approach Vol, veh/h	0			96			583			556		
Approach Delay, s/veh	0.0			11.5			6.7			6.3		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	16.0		7.4	4.1	17.5		7.4				
Change Period (Y+Rc), s	3.5	4.0		3.5	4.0	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+13), s	5.3	5.3		0.0	2.0	4.5		2.8				
Green Ext Time (p_c), s	0.1	6.7		0.0	0.0	6.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	69	49	21	40	13
Future Vol, veh/h	9	69	49	21	40	13
Conflicting Peds, #/hr	4	0	0	4	2	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	10	79	56	24	46	15
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	84	0	-	0	173	79
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1506	-	-	-	815	979
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	921	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1500	-	-	-	803	969
Mov Cap-2 Maneuver	-	-	-	-	803	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	917	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		9.6		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1500	-	-	-	838	
HCM Lane V/C Ratio	0.007	-	-	-	0.073	
HCM Control Delay (s)	7.4	0	-	-	9.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.2	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑	↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	405	128	0	335	200	253	380	29	215	148	16
Future Volume (veh/h)	0	405	128	0	335	200	253	380	29	215	148	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	422	133	0	349	66	228	447	0	224	154	12
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1208	512	0	1147	511	610	1413		509	588	46
Arrive On Green	0.00	0.33	0.33	0.00	0.33	0.33	0.38	0.38	0.00	0.38	0.38	0.38
Sat Flow, veh/h	0	3711	1572	0	3618	1570	1209	3711	0	727	1545	120
Grp Volume(v), veh/h	0	422	133	0	349	66	228	447	0	224	0	166
Grp Sat Flow(s), veh/h/ln	0	1856	1572	0	1763	1570	1209	1856	0	727	0	1665
Q Serve(g_s), s	0.0	2.7	1.9	0.0	2.3	0.9	4.9	2.6	0.0	6.9	0.0	2.1
Cycle Q Clear(g_c), s	0.0	2.7	1.9	0.0	2.3	0.9	7.1	2.6	0.0	9.5	0.0	2.1
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.07
Lane Grp Cap(c), veh/h	0	1208	512	0	1147	511	610	1413		509	0	634
V/C Ratio(X)	0.00	0.35	0.26	0.00	0.30	0.13	0.37	0.32		0.44	0.00	0.26
Avail Cap(c_a), veh/h	0	3595	1523	0	3415	1520	1126	2996		938	0	1398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.0	7.7	0.0	7.8	7.4	9.0	6.8	0.0	10.1	0.0	6.6
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.4	0.0	0.5	0.2	0.9	0.6	0.0	1.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.0	7.8	0.0	7.9	7.4	9.2	6.8	0.0	10.3	0.0	6.7
LnGrp LOS	A	A	A	A	A	A	A	A		B	A	A
Approach Vol, veh/h		555			415			675	A		390	
Approach Delay, s/veh		8.0			7.8			7.6			8.8	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.0		16.0		15.0		16.0				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.7		11.5		4.3		9.1				
Green Ext Time (p_c), s		0.5		0.7		0.4		0.6				

Intersection Summary

HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Opening Year AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	50	30	10	60	30	30	340	20	40	280	40
Future Volume (veh/h)	50	50	30	10	60	30	30	340	20	40	280	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	53	53	5	11	64	5	32	362	15	43	298	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	264	267	25	273	272	21	793	1341	1133	701	1341	1133
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.48	0.48	0.48	0.72	0.72	0.72
Sat Flow, veh/h	1321	1670	158	1334	1699	133	1041	1856	1568	997	1856	1568
Grp Volume(v), veh/h	53	0	58	11	0	69	32	362	15	43	298	31
Grp Sat Flow(s),veh/h/ln	1321	0	1827	1334	0	1832	1041	1856	1568	997	1856	1568
Q Serve(g_s), s	2.7	0.0	2.1	0.5	0.0	2.5	1.3	8.7	0.4	1.3	4.0	0.4
Cycle Q Clear(g_c), s	5.2	0.0	2.1	2.6	0.0	2.5	5.3	8.7	0.4	10.0	4.0	0.4
Prop In Lane	1.00		0.09	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	0	292	273	0	293	793	1341	1133	701	1341	1133
V/C Ratio(X)	0.20	0.00	0.20	0.04	0.00	0.24	0.04	0.27	0.01	0.06	0.22	0.03
Avail Cap(c_a), veh/h	440	0	536	451	0	537	793	1341	1133	701	1341	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	27.3	28.5	0.0	27.5	7.8	7.6	5.5	6.1	3.4	2.9
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	0.2	0.1	0.5	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.9	0.2	0.0	1.1	0.3	3.5	0.1	0.2	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	27.4	28.5	0.0	27.6	7.9	8.1	5.5	6.1	3.5	2.9
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		111			80			409			372	
Approach Delay, s/veh		28.6			27.8			8.0			3.7	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.8		16.2		58.8		16.2				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		44.2		* 22		44.2		* 22				
Max Q Clear Time (g_c+I1), s		10.7		7.2		12.0		4.6				
Green Ext Time (p_c), s		0.4		0.0		0.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Opening Year AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	10	20	20	40	20	590	10	40	430	10
Future Volume (veh/h)	20	10	10	20	20	40	20	590	10	40	430	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	11	1	22	22	3	22	641	10	43	467	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	39	131	12	39	125	17	39	961	15	69	1017	20
Arrive On Green	0.02	0.08	0.08	0.02	0.08	0.08	0.02	0.27	0.27	0.04	0.29	0.29
Sat Flow, veh/h	1767	1660	151	1767	1577	215	1767	3551	55	1767	3535	68
Grp Volume(v), veh/h	22	0	12	22	0	25	22	318	333	43	233	243
Grp Sat Flow(s),veh/h/ln	1767	0	1811	1767	0	1792	1767	1763	1844	1767	1763	1840
Q Serve(g_s), s	0.4	0.0	0.2	0.4	0.0	0.4	0.4	5.5	5.5	0.8	3.7	3.7
Cycle Q Clear(g_c), s	0.4	0.0	0.2	0.4	0.0	0.4	0.4	5.5	5.5	0.8	3.7	3.7
Prop In Lane	1.00		0.08	1.00		0.12	1.00		0.03	1.00		0.04
Lane Grp Cap(c), veh/h	39	0	143	39	0	142	39	477	499	69	507	530
V/C Ratio(X)	0.56	0.00	0.08	0.56	0.00	0.18	0.56	0.67	0.67	0.62	0.46	0.46
Avail Cap(c_a), veh/h	781	0	800	781	0	792	468	1765	1846	468	1765	1843
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	14.5	16.4	0.0	14.6	16.4	11.0	11.0	16.1	9.9	9.9
Incr Delay (d2), s/veh	4.7	0.0	0.1	4.7	0.0	0.2	4.7	0.6	0.6	3.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.2	0.2	1.5	1.6	0.3	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	14.6	21.1	0.0	14.8	21.1	11.6	11.6	19.4	10.2	10.2
LnGrp LOS	C	A	B	C	A	B	C	B	B	B	B	B
Approach Vol, veh/h	34				47		673				519	
Approach Delay, s/veh	18.8				17.8		11.9				10.9	
Approach LOS	B				B		B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	14.2	5.7	7.7	5.7	14.8	5.7	7.7				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+I), s	7.5	7.5	2.4	2.2	2.4	5.7	2.4	2.4				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 11.9

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	10	40	20	30	60	20	10	40	20	30	30	10
Future Volume (veh/h)	10	40	20	30	60	20	10	40	20	30	30	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	12	47	13	35	71	15	12	47	0	35	35	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	253	553	132	340	516	88	258	192	0	373	106	3
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.13	0.13	0.00	0.13	0.13	0.13
Sat Flow, veh/h	106	1319	314	260	1231	211	317	1442	0	795	795	23
Grp Volume(v), veh/h	72	0	0	121	0	0	59	0	0	71	0	0
Grp Sat Flow(s),veh/h/ln	1739	0	0	1702	0	0	1759	0	0	1612	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.8	0.0	0.0	0.6	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.17		0.18	0.29		0.12	0.20		0.00	0.49		0.01
Lane Grp Cap(c), veh/h	938	0	0	944	0	0	450	0	0	482	0	0
V/C Ratio(X)	0.08	0.00	0.00	0.13	0.00	0.00	0.13	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	3139	0	0	3083	0	0	2623	0	0	2444	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	3.6	0.0	0.0	7.8	0.0	0.0	7.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.6	0.0	0.0	3.7	0.0	0.0	7.9	0.0	0.0	8.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h												
72												
Approach Delay, s/veh												
3.6												
Approach LOS												
A												
Timer - Assigned Phs												
2												
4												
6												
8												
Phs Duration (G+Y+Rc), s												
12.9												
7.2												
12.9												
7.2												
Change Period (Y+Rc), s												
4.5												
4.5												
4.5												
Max Green Setting (Gmax), s												
35.0												
28.0												
35.0												
28.0												
Max Q Clear Time (g_c+I1), s												
2.8												
2.6												
2.5												
2.7												
Green Ext Time (p_c), s												
0.7												
0.3												
0.4												
0.3												
Intersection Summary												
HCM 6th Ctrl Delay												
5.4												
HCM 6th LOS												
A												

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Opening Year AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	10	70	10	10	90	20	0	30	10	30	50	10
Future Volume (veh/h)	10	70	10	10	90	20	0	30	10	30	50	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	0.98		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	78	2	11	100	4	0	33	2	33	56	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	298	447	11	286	450	17	0	349	21	424	222	7
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	125	1623	39	100	1635	63	0	1731	105	511	1103	36
Grp Volume(v), veh/h	91	0	0	115	0	0	0	0	35	91	0	0
Grp Sat Flow(s),veh/h/ln	1788	0	0	1798	0	0	0	0	1835	1651	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.2	0.7	0.0	0.0
Prop In Lane	0.12		0.02	0.10		0.03	0.00		0.06	0.36		0.02
Lane Grp Cap(c), veh/h	756	0	0	753	0	0	0	0	370	654	0	0
V/C Ratio(X)	0.12	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.09	0.14	0.00	0.00
Avail Cap(c_a), veh/h	3705	0	0	3735	0	0	0	0	3001	2978	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.2	0.0	0.0	4.3	0.0	0.0	0.0	0.0	5.0	5.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.3	0.0	0.0	4.4	0.0	0.0	0.0	0.0	5.1	5.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h												
91												
Approach Delay, s/veh												
4.3												
Approach LOS												
A												
Timer - Assigned Phs												
2												
4												
6												
8												
Phs Duration (G+Y+Rc), s												
8.2												
7.1												
8.2												
7.1												
Change Period (Y+Rc), s												
4.0												
4.0												
4.0												
Max Green Setting (Gmax), s												
30.0												
25.0												
30.0												
25.0												
Max Q Clear Time (g_c+I1), s												
2.7												
2.2												
2.6												
2.7												
Green Ext Time (p_c), s												
0.6												
0.1												
0.5												
0.4												
Intersection Summary												
HCM 6th Ctrl Delay												
4.7												
HCM 6th LOS												
A												

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Opening Year AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	10	70	20	40	100	70	20	290	20	40	240	40
Future Volume (veh/h)	10	70	20	40	100	70	20	290	20	40	240	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	75	6	43	108	10	22	312	13	43	258	27
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	63	166	12	109	170	185	87	1172	992	139	1227	1039
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.05	0.63	0.63	0.08	0.66	0.66
Sat Flow, veh/h	74	1350	99	383	1381	1505	1767	1856	1571	1767	1856	1571
Grp Volume(v), veh/h	92	0	0	151	0	10	22	312	13	43	258	27
Grp Sat Flow(s), veh/h/ln	1523	0	0	1764	0	1505	1767	1856	1571	1767	1856	1571
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.4	0.9	5.6	0.2	1.7	4.1	0.4
Cycle Q Clear(g_c), s	6.0	0.0	0.0	5.9	0.0	0.4	0.9	5.6	0.2	1.7	4.1	0.4
Prop In Lane	0.12		0.07	0.28		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	0	0	279	0	185	87	1172	992	139	1227	1039
V/C Ratio(X)	0.38	0.00	0.00	0.54	0.00	0.05	0.25	0.27	0.01	0.31	0.21	0.03
Avail Cap(c_a), veh/h	629	0	0	648	0	522	259	1172	992	259	1227	1039
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	30.4	0.0	0.0	31.4	0.0	29.0	34.3	6.1	5.1	32.6	5.0	4.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.6	0.0	0.0	0.6	0.6	0.0	0.5	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.5	0.0	0.0	2.6	0.0	0.2	0.4	2.0	0.1	0.7	1.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.8	0.0	0.0	32.0	0.0	29.1	34.9	6.7	5.2	33.1	5.4	4.4
LnGrp LOS	C	A	A	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h	92			161			347			328		
Approach Delay, s/veh	30.8			31.9			8.4			8.9		
Approach LOS	C			C			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	52.0		13.4	7.4	54.2		13.4				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	1.0	25.5		* 26	11.0	25.5		* 26				
Max Q Clear Time (g_c+I), s	1.0	7.6		8.0	2.9	6.1		7.9				
Green Ext Time (p_c), s	0.0	0.3		0.1	0.0	0.2		0.2				

Intersection Summary

HCM 6th Ctrl Delay 14.9

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Opening Year AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	0	30	10	610	40	70	380	0
Future Volume (veh/h)	0	0	0	40	0	30	10	610	40	70	380	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1856	1870	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	47	0	35	11	718	42	82	447	0
Peak Hour Factor	0.92	0.92	0.92	0.85	0.92	0.85	0.92	0.85	0.85	0.85	0.85	0.92
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	0
Cap, veh/h	218	214	0	420	0	181	26	1598	93	141	1898	0
Arrive On Green	0.00	0.00	0.00	0.11	0.00	0.11	0.01	0.47	0.47	0.08	0.54	0.00
Sat Flow, veh/h	1373	1870	0	1767	0	1583	1781	3380	198	1767	3618	0
Grp Volume(v), veh/h	0	0	0	47	0	35	11	374	386	82	447	0
Grp Sat Flow(s), veh/h/ln	1373	1870	0	1767	0	1583	1781	1763	1815	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.7	0.2	4.7	4.7	1.5	2.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.8	0.0	0.7	0.2	4.7	4.7	1.5	2.2	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	218	214	0	420	0	181	26	834	858	141	1898	0
V/C Ratio(X)	0.00	0.00	0.00	0.11	0.00	0.19	0.42	0.45	0.45	0.58	0.24	0.00
Avail Cap(c_a), veh/h	892	1131	0	1287	0	958	647	1600	1647	962	3199	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.3	0.0	13.3	16.2	5.8	5.8	14.7	4.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.5	10.7	0.8	0.8	3.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.2	0.1	1.0	1.0	0.6	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	13.4	0.0	13.8	26.8	6.6	6.6	18.4	4.2	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h	0			82			771			529		
Approach Delay, s/veh	0.0			13.6			6.9			6.4		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	19.6		7.3	4.0	21.8		7.3				
Change Period (Y+Rc), s	3.5	4.0		3.5	3.5	4.0		3.5				
Max Green Setting (Gmax), s	18.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+I), s	13.5	6.7		0.0	2.2	4.2		2.8				
Green Ext Time (p_c), s	0.1	8.9		0.0	0.0	5.5		0.2				

Intersection Summary

HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

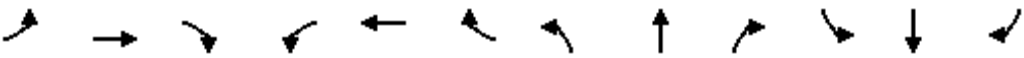
User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	40	40	20	40	10
Future Vol, veh/h	20	40	40	20	40	10
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	22	44	44	22	44	11
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	66	0	-	0	143	57
Stage 1	-	-	-	-	55	-
Stage 2	-	-	-	-	88	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1529	-	-	-	847	1006
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	933	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1529	-	-	-	834	1004
Mov Cap-2 Maneuver	-	-	-	-	834	-
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	933	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.5	0		9.5		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1529	-	-	-	863	
HCM Lane V/C Ratio	0.015	-	-	-	0.064	
HCM Control Delay (s)	7.4	0	-	-	9.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.2	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Opening Year AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑	↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	340	110	0	440	160	220	150	10	150	80	10
Future Volume (veh/h)	0	340	110	0	440	160	220	150	10	150	80	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	370	120	0	478	48	137	306	0	163	87	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1249	522	0	1187	521	654	1342		562	551	51
Arrive On Green	0.00	0.34	0.34	0.00	0.34	0.34	0.36	0.36	0.00	0.36	0.36	0.36
Sat Flow, veh/h	0	3711	1552	0	3618	1547	1285	3711	0	893	1523	140
Grp Volume(v), veh/h	0	370	120	0	478	48	137	306	0	163	0	95
Grp Sat Flow(s),veh/h/ln	0	1856	1552	0	1763	1547	1285	1856	0	893	0	1663
Q Serve(g_s), s	0.0	2.2	1.7	0.0	3.1	0.6	2.4	1.7	0.0	3.8	0.0	1.2
Cycle Q Clear(g_c), s	0.0	2.2	1.7	0.0	3.1	0.6	3.6	1.7	0.0	5.5	0.0	1.2
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	0	1249	522	0	1187	521	654	1342		562	0	601
V/C Ratio(X)	0.00	0.30	0.23	0.00	0.40	0.09	0.21	0.23		0.29	0.00	0.16
Avail Cap(c_a), veh/h	0	3692	1543	0	3507	1539	1254	3076		1093	0	1433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.4	7.2	0.0	7.7	6.8	7.7	6.7	0.0	8.6	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.3	0.0	0.7	0.1	0.4	0.4	0.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.4	7.3	0.0	7.8	6.9	7.8	6.7	0.0	8.7	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A		A	A	A
Approach Vol, veh/h		490			526			443			258	
Approach Delay, s/veh		7.4			7.7			7.1			7.9	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.1		15.1		15.1		15.1				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.2		7.5		5.1		5.6				
Green Ext Time (p_c), s		0.4		0.4		0.6		0.4				

Intersection Summary

HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Opening Year PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	50	30	20	60	60	20	670	10	60	510	70
Future Volume (veh/h)	100	50	30	20	60	60	20	670	10	60	510	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	105	53	5	21	63	15	21	705	8	63	537	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	222	242	23	239	210	50	613	1394	1176	523	1394	1176
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1296	1667	157	1319	1444	344	812	1856	1565	731	1856	1565
Grp Volume(v), veh/h	105	0	58	21	0	78	21	705	8	63	537	62
Grp Sat Flow(s),veh/h/ln	1296	0	1825	1319	0	1788	812	1856	1565	731	1856	1565
Q Serve(g_s), s	6.7	0.0	2.4	1.2	0.0	3.3	0.8	12.9	0.1	3.2	8.6	0.9
Cycle Q Clear(g_c), s	10.0	0.0	2.4	3.6	0.0	3.3	9.4	12.9	0.1	16.2	8.6	0.9
Prop In Lane	1.00		0.09	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	0	265	239	0	259	613	1394	1176	523	1394	1176
V/C Ratio(X)	0.47	0.00	0.22	0.09	0.00	0.30	0.03	0.51	0.01	0.12	0.39	0.05
Avail Cap(c_a), veh/h	370	0	472	389	0	463	613	1394	1176	523	1394	1176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	32.1	33.7	0.0	32.5	5.3	4.2	2.6	7.5	3.7	2.7
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.1	0.0	0.2	0.1	1.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.1	0.4	0.0	1.4	0.1	4.1	0.0	0.5	2.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	0.0	32.2	33.7	0.0	32.7	5.4	5.4	2.6	7.5	3.8	2.7
LnGrp LOS	D	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		163			99			734			662	
Approach Delay, s/veh		35.6			32.9			5.4			4.0	
Approach LOS		D			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.5		16.5		68.5		16.5				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		54.2		* 22		54.2		* 22				
Max Q Clear Time (g_c+I1), s		14.9		12.0		18.2		5.6				
Green Ext Time (p_c), s		1.0		0.0		0.8		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Opening Year PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	20	20	20	20	120	40	580	20	60	430	10
Future Volume (veh/h)	40	20	20	20	20	120	40	580	20	60	430	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	1.00		0.82	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	21	3	21	21	13	43	617	18	64	457	9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	68	210	30	37	116	72	68	931	27	91	990	19
Arrive On Green	0.04	0.14	0.14	0.02	0.12	0.12	0.04	0.27	0.27	0.05	0.28	0.28
Sat Flow, veh/h	1767	1546	221	1767	982	608	1767	3492	102	1767	3535	70
Grp Volume(v), veh/h	43	0	24	21	0	34	43	311	324	64	228	238
Grp Sat Flow(s),veh/h/ln	1767	0	1767	1767	0	1589	1767	1763	1831	1767	1763	1842
Q Serve(g_s), s	0.9	0.0	0.5	0.4	0.0	0.7	0.9	6.0	6.0	1.4	4.1	4.1
Cycle Q Clear(g_c), s	0.9	0.0	0.5	0.4	0.0	0.7	0.9	6.0	6.0	1.4	4.1	4.1
Prop In Lane	1.00		0.13	1.00		0.38	1.00		0.06	1.00		0.04
Lane Grp Cap(c), veh/h	68	0	240	37	0	188	68	470	488	91	494	516
V/C Ratio(X)	0.63	0.00	0.10	0.57	0.00	0.18	0.63	0.66	0.66	0.70	0.46	0.46
Avail Cap(c_a), veh/h	696	0	695	696	0	626	417	1573	1634	417	1573	1643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	14.4	18.5	0.0	15.1	18.1	12.4	12.4	17.8	11.3	11.3
Incr Delay (d2), s/veh	3.6	0.0	0.1	5.0	0.0	0.2	3.6	0.6	0.6	3.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	0.2	0.0	0.2	0.4	1.8	1.9	0.6	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	14.5	23.5	0.0	15.3	21.7	13.0	13.0	21.4	11.6	11.6
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h	67		55				678		530			
Approach Delay, s/veh	19.1		18.4				13.6		12.8			
Approach LOS	B		B				B		B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	15.2	5.8	10.2	6.5	15.7	6.5	9.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+13.4), s	8.0	8.0	2.4	2.5	2.9	6.1	2.9	2.7				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	0.9	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 13.7

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	20	80	10	10	70	40	30	50	30	30	40	20
Future Volume (veh/h)	20	80	10	10	70	40	30	50	30	30	40	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.98	0.98		0.99	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	25	99	7	12	86	23	37	62	12	37	49	8
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	250	594	37	203	530	130	294	226	37	316	216	29
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	148	1519	94	65	1357	334	385	1095	179	443	1048	139
Grp Volume(v), veh/h	131	0	0	121	0	0	111	0	0	94	0	0
Grp Sat Flow(s),veh/h/ln	1762	0	0	1756	0	0	1659	0	0	1630	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.0	0.0	0.0	1.2	0.0	0.0	1.0	0.0	0.0
Prop In Lane	0.19		0.05	0.10		0.19	0.33		0.11	0.39		0.09
Lane Grp Cap(c), veh/h	881	0	0	863	0	0	557	0	0	561	0	0
V/C Ratio(X)	0.15	0.00	0.00	0.14	0.00	0.00	0.20	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	2856	0	0	2871	0	0	2231	0	0	2192	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	0.0	0.0	4.4	0.0	0.0	7.5	0.0	0.0	7.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	0.0	0.0	4.5	0.0	0.0	7.7	0.0	0.0	7.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		131			121			111			94	
Approach Delay, s/veh		4.5			4.5			7.7			7.6	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.2		9.1		13.2		9.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		35.0		28.0		35.0		28.0				
Max Q Clear Time (g_c+I1), s		3.0		3.2		3.0		3.0				
Green Ext Time (p_c), s		0.7		0.6		0.8		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				5.9								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Opening Year PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	20	110	10	20	80	30	20	50	20	30	60	20
Future Volume (veh/h)	20	110	10	20	80	30	20	50	20	30	60	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.97	0.96		0.96	0.96		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	125	6	23	91	11	23	57	4	34	68	5
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	241	486	21	255	442	47	293	431	25	319	405	24
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	135	1570	69	161	1426	153	236	1408	82	296	1326	80
Grp Volume(v), veh/h	154	0	0	125	0	0	84	0	0	107	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	0	1740	0	0	1727	0	0	1701	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.1	0.0	0.0	0.7	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.15		0.04	0.18		0.09	0.27		0.05	0.32		0.05
Lane Grp Cap(c), veh/h	748	0	0	744	0	0	748	0	0	748	0	0
V/C Ratio(X)	0.21	0.00	0.00	0.17	0.00	0.00	0.11	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	2691	0	0	2630	0	0	2209	0	0	2187	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.4	0.0	0.0	5.3	0.0	0.0	5.3	0.0	0.0	5.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	0.0	0.0	5.4	0.0	0.0	5.3	0.0	0.0	5.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	154		125			84			107			
Approach Delay, s/veh	5.5		5.4			5.3			5.4			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	10.4		10.4			10.4			10.4			
Change Period (Y+Rc), s	4.0		4.0			4.0			4.0			
Max Green Setting (Gmax), s	30.0		25.0			30.0			25.0			
Max Q Clear Time (g_c+I1), s	3.1		2.7			3.3			2.9			
Green Ext Time (p_c), s	0.7		0.4			0.9			0.5			
Intersection Summary												
HCM 6th Ctrl Delay			5.4									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Opening Year PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	40	130	20	20	90	80	30	570	50	90	370	40
Future Volume (veh/h)	40	130	20	20	90	80	30	570	50	90	370	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.99		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	41	133	14	20	92	12	31	582	31	92	378	27
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	86	183	18	76	245	230	108	1109	937	184	1189	984
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.60	0.60	0.10	0.64	0.64
Sat Flow, veh/h	231	1212	116	175	1624	1526	1767	1856	1567	1767	1856	1535
Grp Volume(v), veh/h	188	0	0	112	0	12	31	582	31	92	378	27
Grp Sat Flow(s), veh/h/ln	1559	0	0	1799	0	1526	1767	1856	1567	1767	1856	1535
Q Serve(g_s), s	5.5	0.0	0.0	0.0	0.0	0.6	1.4	15.6	0.7	4.2	7.8	0.5
Cycle Q Clear(g_c), s	10.1	0.0	0.0	4.6	0.0	0.6	1.4	15.6	0.7	4.2	7.8	0.5
Prop In Lane	0.22		0.07	0.18		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	287	0	0	322	0	230	108	1109	937	184	1189	984
V/C Ratio(X)	0.65	0.00	0.00	0.35	0.00	0.05	0.29	0.52	0.03	0.50	0.32	0.03
Avail Cap(c_a), veh/h	543	0	0	585	0	467	249	1109	937	249	1189	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	34.9	0.0	0.0	32.6	0.0	30.9	38.1	10.0	7.0	36.0	6.9	5.6
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.0	0.0	0.5	1.8	0.1	0.7	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.8	0.0	0.0	2.1	0.0	0.2	0.6	6.1	0.2	1.8	2.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.8	0.0	0.0	32.8	0.0	30.9	38.7	11.8	7.1	36.7	7.5	5.6
LnGrp LOS	D	A	A	C	A	C	D	B	A	D	A	A
Approach Vol, veh/h	188			124			644			497		
Approach Delay, s/veh	35.8			32.7			12.9			12.8		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.6	55.4		17.0	8.9	59.1		17.0				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	2.0	34.5		* 26	12.0	34.5		* 26				
Max Q Clear Time (g_c+10), s	10.2	17.6		12.1	3.4	9.8		6.6				
Green Ext Time (p_c), s	0.0	0.6		0.2	0.0	0.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Opening Year PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	0	50	10	520	30	60	460	0
Future Volume (veh/h)	0	0	0	50	0	50	10	520	30	60	460	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	54	0	54	11	559	29	65	495	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	0
Cap, veh/h	244	267	0	496	0	225	26	1411	73	124	1596	0
Arrive On Green	0.00	0.00	0.00	0.14	0.00	0.14	0.01	0.41	0.41	0.07	0.45	0.00
Sat Flow, veh/h	1339	1856	0	1760	0	1569	1767	3405	176	1767	3618	0
Grp Volume(v), veh/h	0	0	0	54	0	54	11	289	299	65	495	0
Grp Sat Flow(s), veh/h/ln	1339	1856	0	1760	0	1569	1767	1763	1819	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.9	0.2	3.4	3.4	1.0	2.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.8	0.0	0.9	0.2	3.4	3.4	1.0	2.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	244	267	0	496	0	225	26	730	754	124	1596	0
V/C Ratio(X)	0.00	0.00	0.00	0.11	0.00	0.24	0.43	0.40	0.40	0.53	0.31	0.00
Avail Cap(c_a), veh/h	957	1255	0	1434	0	1061	717	1789	1846	1076	3577	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.2	0.0	11.2	14.4	6.1	6.1	13.3	5.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.5	10.7	0.7	0.7	3.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.3	0.1	0.7	0.8	0.4	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	11.3	0.0	11.8	25.2	6.8	6.8	16.7	5.4	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h	0			108			599			560		
Approach Delay, s/veh	0.0			11.5			7.1			6.7		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	16.2		7.7	4.4	17.4		7.7				
Change Period (Y+Rc), s	3.5	4.0		3.5	4.0	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+13, s)	5.4	5.4		0.0	2.2	4.6		2.9				
Green Ext Time (p_c), s	0.1	6.8		0.0	0.0	6.1		0.3				

Intersection Summary

HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	70	50	30	40	20
Future Vol, veh/h	10	70	50	30	40	20
Conflicting Peds, #/hr	4	0	0	4	2	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	80	57	34	46	23
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	95	0	-	0	182	85
Stage 1	-	-	-	-	78	-
Stage 2	-	-	-	-	104	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1493	-	-	-	805	971
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	918	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1487	-	-	-	792	961
Mov Cap-2 Maneuver	-	-	-	-	792	-
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	914	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		9.7		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1487	-	-	-	841	
HCM Lane V/C Ratio	0.008	-	-	-	0.082	
HCM Control Delay (s)	7.4	0	-	-	9.7	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.3	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Opening Year PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑	↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	410	130	0	340	200	260	380	30	220	150	20
Future Volume (veh/h)	0	410	130	0	340	200	260	380	30	220	150	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	427	135	0	354	65	230	453	0	229	156	15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1194	506	0	1134	505	612	1440		512	588	57
Arrive On Green	0.00	0.32	0.32	0.00	0.32	0.32	0.39	0.39	0.00	0.39	0.39	0.39
Sat Flow, veh/h	0	3711	1572	0	3618	1570	1204	3711	0	726	1514	146
Grp Volume(v), veh/h	0	427	135	0	354	65	230	453	0	229	0	171
Grp Sat Flow(s), veh/h/ln	0	1856	1572	0	1763	1570	1204	1856	0	726	0	1660
Q Serve(g_s), s	0.0	2.8	2.0	0.0	2.4	0.9	5.1	2.7	0.0	7.1	0.0	2.2
Cycle Q Clear(g_c), s	0.0	2.8	2.0	0.0	2.4	0.9	7.3	2.7	0.0	9.8	0.0	2.2
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	0	1194	506	0	1134	505	612	1440		512	0	644
V/C Ratio(X)	0.00	0.36	0.27	0.00	0.31	0.13	0.38	0.31		0.45	0.00	0.27
Avail Cap(c_a), veh/h	0	3552	1505	0	3375	1502	1105	2960		922	0	1377
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.1	7.9	0.0	8.0	7.5	9.0	6.7	0.0	10.1	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.4	0.0	0.6	0.2	0.9	0.6	0.0	1.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.2	8.0	0.0	8.1	7.6	9.2	6.7	0.0	10.3	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A		B	A	A
Approach Vol, veh/h		562			419			683	A		400	
Approach Delay, s/veh		8.2			8.0			7.5			8.7	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.0		16.4		15.0		16.4				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.8		11.8		4.4		9.3				
Green Ext Time (p_c), s		0.5		0.7		0.4		0.6				

Intersection Summary

HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Opening Year Plus Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	50	30	16	62	30	30	369	25	40	331	40
Future Volume (veh/h)	50	50	30	16	62	30	30	369	25	40	331	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	53	53	5	17	66	5	32	393	20	43	352	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	262	267	25	273	273	21	748	1341	1133	670	1341	1133
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.48	0.48	0.48	0.72	0.72	0.72
Sat Flow, veh/h	1319	1670	158	1334	1703	129	991	1856	1568	965	1856	1568
Grp Volume(v), veh/h	53	0	58	17	0	71	32	393	20	43	352	31
Grp Sat Flow(s),veh/h/ln	1319	0	1827	1334	0	1832	991	1856	1568	965	1856	1568
Q Serve(g_s), s	2.7	0.0	2.1	0.8	0.0	2.5	1.4	9.5	0.5	1.4	4.9	0.4
Cycle Q Clear(g_c), s	5.3	0.0	2.1	2.9	0.0	2.5	6.3	9.5	0.5	11.0	4.9	0.4
Prop In Lane	1.00		0.09	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	0	292	273	0	293	748	1341	1133	670	1341	1133
V/C Ratio(X)	0.20	0.00	0.20	0.06	0.00	0.24	0.04	0.29	0.02	0.06	0.26	0.03
Avail Cap(c_a), veh/h	438	0	536	451	0	537	748	1341	1133	670	1341	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	27.3	28.6	0.0	27.5	8.4	7.8	5.5	6.4	3.6	2.9
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	0.2	0.1	0.5	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.9	0.3	0.0	1.1	0.3	3.9	0.1	0.3	1.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	0.0	27.4	28.6	0.0	27.7	8.5	8.4	5.5	6.4	3.6	2.9
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		111			88			445			426	
Approach Delay, s/veh		28.7			27.9			8.2			3.8	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.8		16.2		58.8		16.2				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		44.2		* 22		44.2		* 22				
Max Q Clear Time (g_c+I1), s		11.5		7.3		13.0		4.9				
Green Ext Time (p_c), s		0.5		0.0		0.4		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.2								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Opening Year Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	10	20	20	44	20	594	24	54	431	10
Future Volume (veh/h)	20	10	10	20	20	44	20	594	24	54	431	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	11	1	22	22	5	22	646	23	59	468	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	39	131	12	39	113	26	39	953	34	88	1070	21
Arrive On Green	0.02	0.08	0.08	0.02	0.08	0.08	0.02	0.27	0.27	0.05	0.30	0.30
Sat Flow, veh/h	1767	1660	151	1767	1433	326	1767	3468	123	1767	3535	68
Grp Volume(v), veh/h	22	0	12	22	0	27	22	328	341	59	233	244
Grp Sat Flow(s),veh/h/ln	1767	0	1810	1767	0	1758	1767	1763	1829	1767	1763	1841
Q Serve(g_s), s	0.4	0.0	0.2	0.4	0.0	0.5	0.4	5.8	5.8	1.1	3.7	3.7
Cycle Q Clear(g_c), s	0.4	0.0	0.2	0.4	0.0	0.5	0.4	5.8	5.8	1.1	3.7	3.7
Prop In Lane	1.00		0.08	1.00		0.19	1.00		0.07	1.00		0.04
Lane Grp Cap(c), veh/h	39	0	143	39	0	139	39	484	503	88	534	557
V/C Ratio(X)	0.57	0.00	0.08	0.57	0.00	0.19	0.57	0.68	0.68	0.67	0.44	0.44
Avail Cap(c_a), veh/h	761	0	780	761	0	757	457	1721	1785	457	1721	1797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	0.0	14.9	16.9	0.0	15.0	16.9	11.3	11.3	16.3	9.8	9.8
Incr Delay (d2), s/veh	4.7	0.0	0.1	4.7	0.0	0.3	4.7	0.6	0.6	3.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.2	0.2	1.7	1.7	0.4	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	0.0	15.0	21.6	0.0	15.3	21.6	11.9	11.9	19.5	10.0	10.0
LnGrp LOS	C	A	B	C	A	B	C	B	B	B	A	A
Approach Vol, veh/h	34			49			691			536		
Approach Delay, s/veh	19.2			18.1			12.2			11.0		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	14.6	5.8	7.7	5.8	15.5	5.8	7.7				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+I1), s	7.8	7.8	2.4	2.2	2.4	5.7	2.4	2.5				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 12.1

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	10	66	22	30	60	20	14	46	40	38	31	10
Future Volume (veh/h)	10	66	22	30	60	20	14	46	40	38	31	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	12	78	14	35	71	13	16	54	5	45	36	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	227	600	98	337	513	76	258	196	17	396	109	3
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	76	1455	238	265	1245	185	305	1318	116	836	737	19
Grp Volume(v), veh/h	104	0	0	119	0	0	75	0	0	82	0	0
Grp Sat Flow(s),veh/h/ln	1769	0	0	1695	0	0	1738	0	0	1592	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.8	0.0	0.0	0.7	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.12		0.13	0.29		0.11	0.21		0.07	0.55		0.01
Lane Grp Cap(c), veh/h	925	0	0	926	0	0	472	0	0	509	0	0
V/C Ratio(X)	0.11	0.00	0.00	0.13	0.00	0.00	0.16	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	3152	0	0	3006	0	0	2544	0	0	2363	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.8	0.0	0.0	3.8	0.0	0.0	7.7	0.0	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.8	0.0	0.0	3.9	0.0	0.0	7.9	0.0	0.0	7.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	104		119			75			82			
Approach Delay, s/veh	3.8		3.9			7.9			7.9			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	12.9		7.5		12.9		7.5					
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	35.0		28.0		35.0		28.0					
Max Q Clear Time (g_c+I1), s	2.8		2.7		2.7		2.8					
Green Ext Time (p_c), s	0.7		0.4		0.6		0.4					
Intersection Summary												
HCM 6th Ctrl Delay	5.5											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Opening Year Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	14	98	32	68	90	21	0	30	10	30	72	10
Future Volume (veh/h)	14	98	32	68	90	21	0	30	10	30	72	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	0.98		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	109	17	76	100	14	0	33	2	33	80	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	264	463	67	434	334	38	0	376	23	346	280	13
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.00	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	101	1449	211	445	1045	119	0	1730	105	361	1286	58
Grp Volume(v), veh/h	142	0	0	190	0	0	0	0	35	117	0	0
Grp Sat Flow(s),veh/h/ln	1761	0	0	1609	0	0	0	0	1835	1705	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.3	0.9	0.0	0.0
Prop In Lane	0.11		0.12	0.40		0.07	0.00		0.06	0.28		0.03
Lane Grp Cap(c), veh/h	795	0	0	806	0	0	0	0	399	638	0	0
V/C Ratio(X)	0.18	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.09	0.18	0.00	0.00
Avail Cap(c_a), veh/h	3227	0	0	2970	0	0	0	0	2655	2683	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	4.5	0.0	0.0	0.0	0.0	5.4	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.4	0.0	0.0	4.6	0.0	0.0	0.0	0.0	5.5	5.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	142		190			35			117			
Approach Delay, s/veh	4.4		4.6			5.5			5.8			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	9.5		7.8			9.5			7.8			
Change Period (Y+Rc), s	4.0		4.0			4.0			4.0			
Max Green Setting (Gmax), s	30.0		25.0			30.0			25.0			
Max Q Clear Time (g_c+I1), s	3.4		2.3			3.0			2.9			
Green Ext Time (p_c), s	1.2		0.1			0.8			0.6			
Intersection Summary												
HCM 6th Ctrl Delay			4.9									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Opening Year Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↑	↔	↔	↑	↔
Traffic Volume (veh/h)	21	79	28	49	135	70	29	313	33	40	260	67
Future Volume (veh/h)	21	79	28	49	135	70	29	313	33	40	260	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	85	13	53	145	12	31	337	21	43	280	45
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	68	137	18	111	196	227	112	1121	949	139	1150	974
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.60	0.60	0.08	0.62	0.62
Sat Flow, veh/h	69	913	118	334	1303	1512	1767	1856	1571	1767	1856	1571
Grp Volume(v), veh/h	121	0	0	198	0	12	31	337	21	43	280	45
Grp Sat Flow(s), veh/h/ln100	0	0	0	1637	0	1512	1767	1856	1571	1767	1856	1571
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	0.5	1.3	6.6	0.4	1.7	5.1	0.8
Cycle Q Clear(g_c), s	9.1	0.0	0.0	8.8	0.0	0.5	1.3	6.6	0.4	1.7	5.1	0.8
Prop In Lane	0.19		0.11	0.27		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	0	0	307	0	227	112	1121	949	139	1150	974
V/C Ratio(X)	0.54	0.00	0.00	0.65	0.00	0.05	0.28	0.30	0.02	0.31	0.24	0.05
Avail Cap(c_a), veh/h	547	0	0	632	0	524	259	1121	949	259	1150	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	29.1	0.0	0.0	30.7	0.0	27.3	33.5	7.2	6.0	32.6	6.4	5.6
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.8	0.0	0.0	0.5	0.7	0.0	0.5	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	3.5	0.0	0.2	0.5	2.4	0.1	0.7	1.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	0.0	31.5	0.0	27.3	34.0	7.9	6.0	33.1	6.9	5.7
LnGrp LOS	C	A	A	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h	121			210			389			368		
Approach Delay, s/veh	29.9			31.3			9.8			9.8		
Approach LOS	C			C			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	49.9			15.5	8.5	51.1		15.5				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	25.5			* 26	11.0	25.5		* 26				
Max Q Clear Time (g_c+1/3), s	8.6			11.1	3.3	7.1		10.8				
Green Ext Time (p_c), s	0.0	0.3		0.1	0.0	0.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay 16.2

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Opening Year Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	0	34	10	624	41	71	380	0
Future Volume (veh/h)	0	0	0	40	0	34	10	624	41	71	380	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1856	1870	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	47	0	40	11	734	43	84	447	0
Peak Hour Factor	0.92	0.92	0.92	0.85	0.92	0.85	0.92	0.85	0.85	0.85	0.85	0.92
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	0
Cap, veh/h	213	221	0	422	0	187	26	1606	94	143	1909	0
Arrive On Green	0.00	0.00	0.00	0.12	0.00	0.12	0.01	0.48	0.48	0.08	0.54	0.00
Sat Flow, veh/h	1367	1870	0	1767	0	1583	1781	3379	198	1767	3618	0
Grp Volume(v), veh/h	0	0	0	47	0	40	11	383	394	84	447	0
Grp Sat Flow(s), veh/h/ln	1367	1870	0	1767	0	1583	1781	1763	1815	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.8	0.2	4.9	4.9	1.5	2.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.8	0.0	0.8	0.2	4.9	4.9	1.5	2.2	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	213	221	0	422	0	187	26	838	862	143	1909	0
V/C Ratio(X)	0.00	0.00	0.00	0.11	0.00	0.21	0.43	0.46	0.46	0.59	0.23	0.00
Avail Cap(c_a), veh/h	863	1109	0	1261	0	938	634	1568	1614	943	3135	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.5	0.0	13.5	16.5	5.9	5.9	15.0	4.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.6	10.7	0.8	0.8	3.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.3	0.1	1.1	1.1	0.6	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	13.6	0.0	14.0	27.2	6.8	6.7	18.8	4.2	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h	0			87			788			531		
Approach Delay, s/veh	0.0			13.8			7.0			6.5		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	20.0		7.5	4.0	22.3		7.5				
Change Period (Y+Rc), s	3.5	4.0		3.5	3.5	4.0		3.5				
Max Green Setting (Gmax), s	18.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+I), s	13.5	6.9		0.0	2.2	4.2		2.8				
Green Ext Time (p_c), s	0.1	9.1		0.0	0.0	5.5		0.3				

Intersection Summary

HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	40	59	21	40	25
Future Vol, veh/h	22	40	59	21	40	25
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	24	44	66	23	44	28
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	89	0	-	0	170	80
Stage 1	-	-	-	-	78	-
Stage 2	-	-	-	-	92	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1500	-	-	-	818	977
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	929	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1500	-	-	-	805	975
Mov Cap-2 Maneuver	-	-	-	-	805	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	929	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.6	0		9.6		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1500	-	-	-	863	
HCM Lane V/C Ratio	0.016	-	-	-	0.084	
HCM Control Delay (s)	7.4	0	-	-	9.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Opening Year Plus Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑	↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	340	110	0	451	166	227	159	10	161	91	10
Future Volume (veh/h)	0	340	110	0	451	166	227	159	10	161	91	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	370	120	0	490	53	143	319	0	175	99	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1238	518	0	1176	516	648	1363		560	566	46
Arrive On Green	0.00	0.33	0.33	0.00	0.33	0.33	0.37	0.37	0.00	0.37	0.37	0.37
Sat Flow, veh/h	0	3711	1552	0	3618	1547	1271	3711	0	879	1541	125
Grp Volume(v), veh/h	0	370	120	0	490	53	143	319	0	175	0	107
Grp Sat Flow(s),veh/h/ln	0	1856	1552	0	1763	1547	1271	1856	0	879	0	1665
Q Serve(g_s), s	0.0	2.2	1.7	0.0	3.3	0.7	2.6	1.8	0.0	4.2	0.0	1.3
Cycle Q Clear(g_c), s	0.0	2.2	1.7	0.0	3.3	0.7	3.9	1.8	0.0	6.0	0.0	1.3
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.07
Lane Grp Cap(c), veh/h	0	1238	518	0	1176	516	648	1363		560	0	612
V/C Ratio(X)	0.00	0.30	0.23	0.00	0.42	0.10	0.22	0.23		0.31	0.00	0.17
Avail Cap(c_a), veh/h	0	3659	1530	0	3476	1525	1226	3049		1071	0	1423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.5	7.3	0.0	7.8	7.0	7.8	6.7	0.0	8.7	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.3	0.0	0.7	0.1	0.5	0.4	0.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.6	7.4	0.0	7.9	7.0	7.9	6.7	0.0	8.9	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A		A	A	A
Approach Vol, veh/h		490			543			462			282	
Approach Delay, s/veh		7.5			7.8			7.1			8.0	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.1		15.4		15.1		15.4				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.2		8.0		5.3		5.9				
Green Ext Time (p_c), s		0.4		0.4		0.6		0.4				

Intersection Summary

HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Opening Year Plus Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	50	30	22	61	60	20	704	15	60	530	70
Future Volume (veh/h)	100	50	30	22	61	60	20	704	15	60	530	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	105	53	5	23	64	15	21	741	12	63	558	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	222	243	23	240	211	49	598	1393	1175	497	1393	1175
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1295	1667	157	1319	1449	340	797	1856	1565	704	1856	1565
Grp Volume(v), veh/h	105	0	58	23	0	79	21	741	12	63	558	62
Grp Sat Flow(s),veh/h/ln	1295	0	1825	1319	0	1789	797	1856	1565	704	1856	1565
Q Serve(g_s), s	6.7	0.0	2.4	1.3	0.0	3.4	0.8	14.1	0.2	3.5	9.1	0.9
Cycle Q Clear(g_c), s	10.1	0.0	2.4	3.7	0.0	3.4	9.9	14.1	0.2	17.5	9.1	0.9
Prop In Lane	1.00		0.09	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	0	266	240	0	260	598	1393	1175	497	1393	1175
V/C Ratio(X)	0.47	0.00	0.22	0.10	0.00	0.30	0.04	0.53	0.01	0.13	0.40	0.05
Avail Cap(c_a), veh/h	369	0	472	389	0	463	598	1393	1175	497	1393	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	32.0	33.7	0.0	32.5	5.5	4.4	2.7	8.0	3.8	2.7
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.1	0.0	0.2	0.1	1.2	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.1	0.4	0.0	1.5	0.1	4.5	0.0	0.5	2.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	0.0	32.2	33.7	0.0	32.7	5.6	5.6	2.7	8.1	3.8	2.8
LnGrp LOS	D	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		163			102			774			683	
Approach Delay, s/veh		35.6			32.9			5.6			4.1	
Approach LOS		D			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.4		16.6		68.4		16.6				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		54.2		* 22		54.2		* 22				
Max Q Clear Time (g_c+I1), s		16.1		12.1		19.5		5.7				
Green Ext Time (p_c), s		1.0		0.0		0.8		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Opening Year Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	20	20	20	20	125	40	583	26	65	430	10
Future Volume (veh/h)	40	20	20	20	20	125	40	583	26	65	430	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	1.00		0.82	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	21	3	21	21	14	43	620	25	69	457	9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	68	210	30	37	112	75	68	928	37	96	1009	20
Arrive On Green	0.04	0.14	0.14	0.02	0.12	0.12	0.04	0.27	0.27	0.05	0.29	0.29
Sat Flow, veh/h	1767	1546	221	1767	947	631	1767	3446	139	1767	3535	70
Grp Volume(v), veh/h	43	0	24	21	0	35	43	317	328	69	228	238
Grp Sat Flow(s),veh/h/ln	1767	0	1767	1767	0	1578	1767	1763	1822	1767	1763	1842
Q Serve(g_s), s	0.9	0.0	0.5	0.5	0.0	0.8	0.9	6.2	6.2	1.5	4.1	4.1
Cycle Q Clear(g_c), s	0.9	0.0	0.5	0.5	0.0	0.8	0.9	6.2	6.2	1.5	4.1	4.1
Prop In Lane	1.00		0.13	1.00		0.40	1.00		0.08	1.00		0.04
Lane Grp Cap(c), veh/h	68	0	240	37	0	187	68	475	491	96	503	525
V/C Ratio(X)	0.64	0.00	0.10	0.57	0.00	0.19	0.64	0.67	0.67	0.72	0.45	0.45
Avail Cap(c_a), veh/h	689	0	689	689	0	615	413	1558	1611	413	1558	1628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	14.6	18.7	0.0	15.3	18.2	12.5	12.5	17.9	11.3	11.3
Incr Delay (d2), s/veh	3.6	0.0	0.1	5.0	0.0	0.2	3.6	0.6	0.6	3.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	0.2	0.0	0.3	0.4	1.9	2.0	0.6	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	14.6	23.7	0.0	15.5	21.9	13.1	13.1	21.7	11.5	11.5
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h	67				56		688				535	
Approach Delay, s/veh	19.3				18.6		13.7				12.8	
Approach LOS	B				B		B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	15.4	5.8	10.2	6.5	16.0	6.5	9.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+13), s	8.2	8.2	2.5	2.5	2.9	6.1	2.9	2.8				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.9	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 13.8

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	20	91	10	10	72	40	33	54	43	35	40	20
Future Volume (veh/h)	20	91	10	10	72	40	33	54	43	35	40	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.98	0.98		0.99	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	25	112	7	12	89	24	41	67	20	43	49	6
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	238	593	33	197	519	129	288	231	57	333	231	22
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	137	1546	86	63	1355	337	359	1038	259	477	1041	99
Grp Volume(v), veh/h	144	0	0	125	0	0	128	0	0	98	0	0
Grp Sat Flow(s),veh/h/ln	1768	0	0	1755	0	0	1656	0	0	1617	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	1.1	0.0	0.0	1.4	0.0	0.0	1.0	0.0	0.0
Prop In Lane	0.17		0.05	0.10		0.19	0.32		0.16	0.44		0.06
Lane Grp Cap(c), veh/h	863	0	0	846	0	0	576	0	0	586	0	0
V/C Ratio(X)	0.17	0.00	0.00	0.15	0.00	0.00	0.22	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	2811	0	0	2809	0	0	2180	0	0	2125	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	4.7	0.0	0.0	7.4	0.0	0.0	7.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.8	0.0	0.0	4.7	0.0	0.0	7.6	0.0	0.0	7.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		144			125			128			98	
Approach Delay, s/veh		4.8			4.7			7.6			7.4	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.2		9.6		13.2		9.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		35.0		28.0		35.0		28.0				
Max Q Clear Time (g_c+I1), s		3.1		3.4		3.2		3.0				
Green Ext Time (p_c), s		0.8		0.7		0.9		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				6.0								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Opening Year Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	22	128	19	47	80	30	22	55	29	30	68	20
Future Volume (veh/h)	22	128	19	47	80	30	22	55	29	30	68	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.97	0.96		0.96	0.96		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	25	145	12	53	91	15	25	62	8	34	77	8
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	229	487	37	326	371	49	280	419	45	296	413	36
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	122	1529	117	325	1164	155	225	1346	144	262	1328	115
Grp Volume(v), veh/h	182	0	0	159	0	0	95	0	0	119	0	0
Grp Sat Flow(s),veh/h/ln	1768	0	0	1644	0	0	1715	0	0	1705	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.4	0.0	0.0	0.8	0.0	0.0	1.0	0.0	0.0
Prop In Lane	0.14		0.07	0.33		0.09	0.26		0.08	0.29		0.07
Lane Grp Cap(c), veh/h	753	0	0	746	0	0	744	0	0	745	0	0
V/C Ratio(X)	0.24	0.00	0.00	0.21	0.00	0.00	0.13	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	2587	0	0	2395	0	0	2114	0	0	2111	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	0.0	5.5	0.0	0.0	5.4	0.0	0.0	5.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.7	0.0	0.0	5.6	0.0	0.0	5.5	0.0	0.0	5.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		182			159			95			119	
Approach Delay, s/veh		5.7			5.6			5.5			5.6	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.9		10.7		10.9		10.7				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		25.0		30.0		25.0				
Max Q Clear Time (g_c+I1), s		3.4		2.8		3.6		3.0				
Green Ext Time (p_c), s		1.0		0.4		1.1		0.6				
Intersection Summary												
HCM 6th Ctrl Delay				5.6								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Opening Year Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	55	145	24	26	101	80	35	591	58	90	377	51
Future Volume (veh/h)	55	145	24	26	101	80	35	591	58	90	377	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.99		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	56	148	18	27	103	14	36	603	33	92	385	32
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	101	195	21	88	272	274	119	1057	893	184	1126	931
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.07	0.57	0.57	0.10	0.61	0.61
Sat Flow, veh/h	268	1090	120	206	1522	1533	1767	1856	1567	1767	1856	1535
Grp Volume(v), veh/h	222	0	0	130	0	14	36	603	33	92	385	32
Grp Sat Flow(s), veh/h/ln	1478	0	0	1728	0	1533	1767	1856	1567	1767	1856	1535
Q Serve(g_s), s	7.4	0.0	0.0	0.0	0.0	0.6	1.6	17.6	0.8	4.2	8.8	0.7
Cycle Q Clear(g_c), s	12.6	0.0	0.0	5.3	0.0	0.6	1.6	17.6	0.8	4.2	8.8	0.7
Prop In Lane	0.25		0.08	0.21		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	0	0	360	0	274	119	1057	893	184	1126	931
V/C Ratio(X)	0.70	0.00	0.00	0.36	0.00	0.05	0.30	0.57	0.04	0.50	0.34	0.03
Avail Cap(c_a), veh/h	524	0	0	572	0	469	249	1057	893	249	1126	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	34.0	0.0	0.0	30.8	0.0	28.9	37.7	11.7	8.0	36.0	8.3	6.7
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.2	0.0	0.0	0.5	2.2	0.1	0.7	0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	4.5	0.0	0.0	2.4	0.0	0.2	0.7	7.2	0.3	1.8	3.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.0	0.0	0.0	31.0	0.0	28.9	38.3	13.9	8.1	36.7	9.1	6.8
LnGrp LOS	C	A	A	C	A	C	D	B	A	D	A	A
Approach Vol, veh/h	222			144			672			509		
Approach Delay, s/veh	35.0			30.8			14.9			13.9		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.6	53.0		19.4	9.4	56.2		19.4				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	2.0	34.5		* 26	12.0	34.5		* 26				
Max Q Clear Time (g_c+10.2)	19.6			14.6	3.6	10.8		7.3				
Green Ext Time (p_c), s	0.0	0.6		0.2	0.0	0.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay 18.9
HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Opening Year Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	51	0	53	10	526	30	60	460	0
Future Volume (veh/h)	0	0	0	51	0	53	10	526	30	60	460	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	55	0	57	11	566	28	65	495	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	0
Cap, veh/h	241	272	0	499	0	230	26	1418	70	123	1599	0
Arrive On Green	0.00	0.00	0.00	0.15	0.00	0.15	0.01	0.42	0.42	0.07	0.45	0.00
Sat Flow, veh/h	1336	1856	0	1760	0	1568	1767	3415	169	1767	3618	0
Grp Volume(v), veh/h	0	0	0	55	0	57	11	292	302	65	495	0
Grp Sat Flow(s), veh/h/ln	1336	1856	0	1760	0	1568	1767	1763	1821	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	1.0	0.2	3.5	3.5	1.1	2.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.8	0.0	1.0	0.2	3.5	3.5	1.1	2.7	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	241	272	0	499	0	230	26	732	756	123	1599	0
V/C Ratio(X)	0.00	0.00	0.00	0.11	0.00	0.25	0.43	0.40	0.40	0.53	0.31	0.00
Avail Cap(c_a), veh/h	941	1244	0	1421	0	1052	711	1773	1831	1066	3546	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.2	0.0	11.3	14.6	6.1	6.1	13.4	5.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.6	10.8	0.8	0.7	3.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.3	0.1	0.8	0.8	0.4	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	11.3	0.0	11.8	25.3	6.9	6.9	16.9	5.4	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h	0			112			605			560		
Approach Delay, s/veh	0.0			11.6			7.2			6.7		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	16.4		7.9	4.4	17.5		7.9				
Change Period (Y+Rc), s	3.5	4.0		3.5	4.0	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+13, s)	5.5			0.0	2.2	4.7		3.0				
Green Ext Time (p_c), s	0.1	6.9		0.0	0.0	6.1		0.4				

Intersection Summary

HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	70	63	30	40	29
Future Vol, veh/h	10	70	63	30	40	29
Conflicting Peds, #/hr	4	0	0	4	2	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	80	72	34	46	33
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	110	0	-	0	197	100
Stage 1	-	-	-	-	93	-
Stage 2	-	-	-	-	104	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1474	-	-	-	789	953
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	918	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1468	-	-	-	776	943
Mov Cap-2 Maneuver	-	-	-	-	776	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	914	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		9.7		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1468	-	-	-	838	
HCM Lane V/C Ratio	0.008	-	-	-	0.095	
HCM Control Delay (s)	7.5	0	-	-	9.7	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.3	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Opening Year Plus Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	412	131	0	343	203	263	382	30	227	158	20
Future Volume (veh/h)	0	412	131	0	343	203	263	382	30	227	158	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	429	136	0	357	66	232	457	0	236	165	15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1177	499	0	1118	498	613	1472		516	604	55
Arrive On Green	0.00	0.32	0.32	0.00	0.32	0.32	0.40	0.40	0.00	0.40	0.40	0.40
Sat Flow, veh/h	0	3711	1572	0	3618	1570	1194	3711	0	729	1523	138
Grp Volume(v), veh/h	0	429	136	0	357	66	232	457	0	236	0	180
Grp Sat Flow(s),veh/h/ln	0	1856	1572	0	1763	1570	1194	1856	0	729	0	1661
Q Serve(g_s), s	0.0	2.8	2.1	0.0	2.4	1.0	5.2	2.7	0.0	7.5	0.0	2.3
Cycle Q Clear(g_c), s	0.0	2.8	2.1	0.0	2.4	1.0	7.5	2.7	0.0	10.2	0.0	2.3
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	0	1177	499	0	1118	498	613	1472		516	0	659
V/C Ratio(X)	0.00	0.36	0.27	0.00	0.32	0.13	0.38	0.31		0.46	0.00	0.27
Avail Cap(c_a), veh/h	0	3502	1484	0	3327	1481	1078	2918		906	0	1359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.4	8.1	0.0	8.2	7.7	9.0	6.6	0.0	10.1	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.5	0.0	0.6	0.2	0.9	0.6	0.0	1.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.5	8.2	0.0	8.3	7.8	9.2	6.6	0.0	10.3	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A		B	A	A
Approach Vol, veh/h		565			423			689	A		416	
Approach Delay, s/veh		8.4			8.2			7.5			8.7	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.0		16.8		15.0		16.8				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.8		12.2		4.4		9.5				
Green Ext Time (p_c), s		0.5		0.7		0.4		0.6				

Intersection Summary

HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Cumulative AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	60	30	10	70	30	40	380	20	40	310	50
Future Volume (veh/h)	50	60	30	10	70	30	40	380	20	40	310	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	53	64	5	11	74	8	43	404	16	43	330	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	253	272	21	264	263	28	762	1341	1133	663	1341	1133
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.48	0.48	0.48	0.72	0.72	0.72
Sat Flow, veh/h	1306	1699	133	1321	1646	178	1005	1856	1568	959	1856	1568
Grp Volume(v), veh/h	53	0	69	11	0	82	43	404	16	43	330	38
Grp Sat Flow(s),veh/h/ln	1306	0	1832	1321	0	1824	1005	1856	1568	959	1856	1568
Q Serve(g_s), s	2.8	0.0	2.5	0.5	0.0	3.0	1.8	9.9	0.4	1.4	4.5	0.5
Cycle Q Clear(g_c), s	5.8	0.0	2.5	3.0	0.0	3.0	6.3	9.9	0.4	11.3	4.5	0.5
Prop In Lane	1.00		0.07	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	0	293	264	0	292	762	1341	1133	663	1341	1133
V/C Ratio(X)	0.21	0.00	0.24	0.04	0.00	0.28	0.06	0.30	0.01	0.06	0.25	0.03
Avail Cap(c_a), veh/h	427	0	537	440	0	535	762	1341	1133	663	1341	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	27.5	28.8	0.0	27.7	8.3	7.9	5.5	6.6	3.5	3.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.0	0.0	0.2	0.1	0.6	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.1	0.2	0.0	1.3	0.4	4.1	0.1	0.3	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	0.0	27.6	28.8	0.0	27.9	8.4	8.5	5.5	6.6	3.5	3.0
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		122			93			463			411	
Approach Delay, s/veh		28.8			28.0			8.4			3.8	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.8		16.2		58.8		16.2				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		44.2		* 22		44.2		* 22				
Max Q Clear Time (g_c+I1), s		11.9		7.8		13.3		5.0				
Green Ext Time (p_c), s		0.5		0.1		0.4		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.6								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Cumulative AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	10	20	20	40	20	740	20	50	540	10
Future Volume (veh/h)	20	10	10	20	20	40	20	740	20	50	540	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	11	1	22	22	3	22	804	20	54	587	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	39	130	12	39	123	17	39	1105	27	81	1201	20
Arrive On Green	0.02	0.08	0.08	0.02	0.08	0.08	0.02	0.31	0.31	0.05	0.34	0.34
Sat Flow, veh/h	1767	1658	151	1767	1575	215	1767	3512	87	1767	3545	60
Grp Volume(v), veh/h	22	0	12	22	0	25	22	403	421	54	292	305
Grp Sat Flow(s),veh/h/ln	1767	0	1809	1767	0	1790	1767	1763	1837	1767	1763	1842
Q Serve(g_s), s	0.5	0.0	0.2	0.5	0.0	0.5	0.5	7.5	7.5	1.1	4.9	4.9
Cycle Q Clear(g_c), s	0.5	0.0	0.2	0.5	0.0	0.5	0.5	7.5	7.5	1.1	4.9	4.9
Prop In Lane	1.00		0.08	1.00		0.12	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	39	0	142	39	0	140	39	555	578	81	597	624
V/C Ratio(X)	0.57	0.00	0.08	0.57	0.00	0.18	0.57	0.73	0.73	0.66	0.49	0.49
Avail Cap(c_a), veh/h	714	0	731	714	0	723	429	1615	1683	429	1615	1688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	15.9	18.0	0.0	16.0	18.0	11.3	11.3	17.4	9.7	9.7
Incr Delay (d2), s/veh	4.8	0.0	0.1	4.8	0.0	0.2	4.8	0.7	0.7	3.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.2	0.2	2.2	2.3	0.5	1.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.0	16.0	22.8	0.0	16.2	22.8	12.0	12.0	20.8	9.9	9.9
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	A	A
Approach Vol, veh/h	34			47			846			651		
Approach Delay, s/veh	20.4			19.3			12.3			10.8		
Approach LOS	C			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	16.7	5.8	7.9	5.8	17.6	5.8	7.9				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+13, s)	9.5	9.5	2.5	2.2	2.5	6.9	2.5	2.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	0.0	0.0	1.1	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 12.1

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	10	50	20	30	60	20	10	40	20	30	40	10
Future Volume (veh/h)	10	50	20	30	60	20	10	40	20	30	40	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	12	59	13	35	71	13	12	47	3	35	47	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	239	572	112	337	513	76	249	210	13	344	149	3
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	93	1390	272	267	1248	186	266	1398	85	628	993	20
Grp Volume(v), veh/h	84	0	0	119	0	0	62	0	0	83	0	0
Grp Sat Flow(s),veh/h/ln	1755	0	0	1701	0	0	1749	0	0	1641	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.8	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.14		0.15	0.29		0.11	0.19		0.05	0.42		0.01
Lane Grp Cap(c), veh/h	922	0	0	927	0	0	472	0	0	495	0	0
V/C Ratio(X)	0.09	0.00	0.00	0.13	0.00	0.00	0.13	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	3112	0	0	3017	0	0	2554	0	0	2432	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	3.8	0.0	0.0	7.7	0.0	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.8	0.0	0.0	3.9	0.0	0.0	7.8	0.0	0.0	7.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	84		119			62			83			
Approach Delay, s/veh	3.8		3.9			7.8			7.9			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	12.9		7.6		12.9		7.6					
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	35.0		28.0		35.0		28.0					
Max Q Clear Time (g_c+I1), s	2.8		2.6		2.6		2.9					
Green Ext Time (p_c), s	0.7		0.3		0.5		0.4					
Intersection Summary												
HCM 6th Ctrl Delay	5.5											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Cumulative AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	10	80	10	10	100	30	0	30	10	30	60	10
Future Volume (veh/h)	10	80	10	10	100	30	0	30	10	30	60	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	0.98		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	89	3	11	111	12	0	33	2	33	67	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	279	474	15	267	447	46	0	364	22	388	252	10
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.00	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	103	1637	52	80	1545	160	0	1730	105	432	1198	49
Grp Volume(v), veh/h	103	0	0	134	0	0	0	0	35	103	0	0
Grp Sat Flow(s),veh/h/ln	1793	0	0	1784	0	0	0	0	1835	1679	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.2	0.8	0.0	0.0
Prop In Lane	0.11		0.03	0.08		0.09	0.00		0.06	0.32		0.03
Lane Grp Cap(c), veh/h	768	0	0	760	0	0	0	0	386	650	0	0
V/C Ratio(X)	0.13	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.09	0.16	0.00	0.00
Avail Cap(c_a), veh/h	3547	0	0	3545	0	0	0	0	2869	2873	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	4.4	0.0	0.0	0.0	0.0	5.1	5.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.4	0.0	0.0	4.5	0.0	0.0	0.0	0.0	5.2	5.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		103			134			35			103	
Approach Delay, s/veh		4.4			4.5			5.2			5.4	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		8.6		7.4		8.6		7.4				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		30.0		25.0		30.0		25.0				
Max Q Clear Time (g_c+I1), s		2.9		2.2		2.7		2.8				
Green Ext Time (p_c), s		0.8		0.1		0.5		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				4.8								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Cumulative AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	20	80	20	40	110	80	20	310	20	50	260	40
Future Volume (veh/h)	20	80	20	40	110	80	20	310	20	50	260	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	86	9	43	118	13	22	333	13	54	280	27
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	69	130	12	104	174	193	87	1141	966	159	1217	1031
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.05	0.61	0.61	0.09	0.66	0.66
Sat Flow, veh/h	93	1010	92	337	1359	1507	1767	1856	1571	1767	1856	1571
Grp Volume(v), veh/h	117	0	0	161	0	13	22	333	13	54	280	27
Grp Sat Flow(s), veh/h/ln	1195	0	0	1696	0	1507	1767	1856	1571	1767	1856	1571
Q Serve(g_s), s	1.1	0.0	0.0	0.0	0.0	0.6	0.9	6.3	0.2	2.2	4.6	0.5
Cycle Q Clear(g_c), s	7.9	0.0	0.0	6.8	0.0	0.6	0.9	6.3	0.2	2.2	4.6	0.5
Prop In Lane	0.19		0.08	0.27		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	0	0	278	0	193	87	1141	966	159	1217	1031
V/C Ratio(X)	0.56	0.00	0.00	0.58	0.00	0.07	0.25	0.29	0.01	0.34	0.23	0.03
Avail Cap(c_a), veh/h	576	0	0	640	0	522	259	1141	966	259	1217	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	31.0	0.0	0.0	31.4	0.0	28.7	34.3	6.8	5.6	32.0	5.2	4.5
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.7	0.0	0.1	0.6	0.6	0.0	0.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	2.8	0.0	0.2	0.4	2.3	0.1	0.9	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	0.0	0.0	32.1	0.0	28.8	34.9	7.4	5.6	32.5	5.7	4.6
LnGrp LOS	C	A	A	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h	117			174			368			361		
Approach Delay, s/veh	31.9			31.8			9.0			9.6		
Approach LOS	C			C			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	50.7			13.8	7.4	53.8		13.8				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	25.5			* 26	11.0	25.5		* 26				
Max Q Clear Time (g_c+14), s	8.3			9.9	2.9	6.6		8.8				
Green Ext Time (p_c), s	0.0	0.3		0.1	0.0	0.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay 15.7

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Cumulative AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	0	30	10	760	50	90	470	0
Future Volume (veh/h)	0	0	0	40	0	30	10	760	50	90	470	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1856	1870	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	47	0	35	11	894	54	106	553	0
Peak Hour Factor	0.92	0.92	0.92	0.85	0.92	0.85	0.92	0.85	0.85	0.85	0.85	0.92
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	0
Cap, veh/h	189	204	0	382	0	172	26	1731	105	157	2071	0
Arrive On Green	0.00	0.00	0.00	0.11	0.00	0.11	0.01	0.51	0.51	0.09	0.59	0.00
Sat Flow, veh/h	1373	1870	0	1767	0	1582	1781	3372	204	1767	3618	0
Grp Volume(v), veh/h	0	0	0	47	0	35	11	467	481	106	553	0
Grp Sat Flow(s), veh/h/ln	1373	1870	0	1767	0	1582	1781	1763	1813	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.8	0.2	6.7	6.7	2.2	2.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9	0.0	0.8	0.2	6.7	6.7	2.2	2.9	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	189	204	0	382	0	172	26	905	931	157	2071	0
V/C Ratio(X)	0.00	0.00	0.00	0.12	0.00	0.20	0.43	0.52	0.52	0.68	0.27	0.00
Avail Cap(c_a), veh/h	762	984	0	1119	0	832	562	1390	1430	836	2781	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	15.5	0.0	15.4	18.6	6.1	6.1	16.8	3.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.6	10.9	1.0	1.0	5.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.3	0.2	1.5	1.6	1.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	15.7	0.0	16.0	29.5	7.1	7.1	21.8	4.0	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h	0			82			959			659		
Approach Delay, s/veh	0.0			15.8			7.4			6.9		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	23.5		7.6	4.0	26.3		7.6				
Change Period (Y+Rc), s	3.5	4.0		3.5	3.5	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+14), s	8.7	8.7		0.0	2.2	4.9		2.9				
Green Ext Time (p_c), s	0.2	10.8		0.0	0.0	6.9		0.2				

Intersection Summary

HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	40	50	20	40	10
Future Vol, veh/h	20	40	50	20	40	10
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	22	44	56	22	44	11
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	78	0	-	0	155	69
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	88	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1514	-	-	-	834	991
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	933	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1514	-	-	-	821	989
Mov Cap-2 Maneuver	-	-	-	-	821	-
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	933	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.5	0		9.5		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1514	-	-	-	850	
HCM Lane V/C Ratio	0.015	-	-	-	0.065	
HCM Control Delay (s)	7.4	0	-	-	9.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.2	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Cumulative AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	380	120	0	480	170	240	160	10	170	90	20
Future Volume (veh/h)	0	380	120	0	480	170	240	160	10	170	90	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	413	130	0	522	63	308	109	0	185	98	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1232	515	0	1171	514	1288	687		656	529	81
Arrive On Green	0.00	0.33	0.33	0.00	0.33	0.33	0.37	0.37	0.00	0.37	0.37	0.37
Sat Flow, veh/h	0	3711	1552	0	3618	1547	2523	1856	0	1135	1429	219
Grp Volume(v), veh/h	0	413	130	0	522	63	308	109	0	185	0	113
Grp Sat Flow(s),veh/h/ln	0	1856	1552	0	1763	1547	1261	1856	0	1135	0	1648
Q Serve(g_s), s	0.0	2.6	1.9	0.0	3.6	0.9	2.9	1.2	0.0	3.5	0.0	1.4
Cycle Q Clear(g_c), s	0.0	2.6	1.9	0.0	3.6	0.9	4.3	1.2	0.0	4.7	0.0	1.4
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.13
Lane Grp Cap(c), veh/h	0	1232	515	0	1171	514	1288	687		656	0	610
V/C Ratio(X)	0.00	0.34	0.25	0.00	0.45	0.12	0.24	0.16		0.28	0.00	0.19
Avail Cap(c_a), veh/h	0	3641	1522	0	3459	1518	2416	1517		1265	0	1401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.7	7.4	0.0	8.0	7.1	8.0	6.4	0.0	8.0	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.4	0.0	0.8	0.2	0.5	0.3	0.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.7	7.5	0.0	8.1	7.2	8.0	6.5	0.0	8.1	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A		A	A	A
Approach Vol, veh/h		543			585			417	A		298	
Approach Delay, s/veh		7.7			8.0			7.6			7.5	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.1		15.5		15.1		15.5				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.6		6.7		5.6		6.3				
Green Ext Time (p_c), s		0.5		0.3		0.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Cumulative PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	60	30	20	70	60	20	740	10	60	560	80
Future Volume (veh/h)	110	60	30	20	70	60	20	740	10	60	560	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	116	63	8	21	74	22	21	779	8	63	589	71
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	232	262	33	253	223	66	553	1361	1148	454	1361	1148
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1277	1611	205	1306	1369	407	768	1856	1565	683	1856	1565
Grp Volume(v), veh/h	116	0	71	21	0	96	21	779	8	63	589	71
Grp Sat Flow(s),veh/h/ln	1277	0	1816	1306	0	1776	768	1856	1565	683	1856	1565
Q Serve(g_s), s	7.5	0.0	2.9	1.2	0.0	4.1	0.9	16.4	0.1	4.0	10.5	1.1
Cycle Q Clear(g_c), s	11.6	0.0	2.9	4.1	0.0	4.1	11.5	16.4	0.1	20.3	10.5	1.1
Prop In Lane	1.00		0.11	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	0	296	253	0	289	553	1361	1148	454	1361	1148
V/C Ratio(X)	0.50	0.00	0.24	0.08	0.00	0.33	0.04	0.57	0.01	0.14	0.43	0.06
Avail Cap(c_a), veh/h	354	0	470	378	0	460	553	1361	1148	454	1361	1148
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	0.0	31.0	32.8	0.0	31.5	6.7	5.2	3.0	9.9	4.4	3.2
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.1	0.0	0.2	0.1	1.5	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.3	0.4	0.0	1.8	0.2	5.4	0.0	0.6	3.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	0.0	31.2	32.8	0.0	31.7	6.8	6.7	3.0	9.9	4.5	3.2
LnGrp LOS	D	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		187			117			808			723	
Approach Delay, s/veh		34.9			31.9			6.6			4.8	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		67.0		18.0		67.0		18.0				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		54.2		* 22		54.2		* 22				
Max Q Clear Time (g_c+I1), s		18.4		13.6		22.3		6.1				
Green Ext Time (p_c), s		1.1		0.1		0.9		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.4								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Cumulative PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	20	30	20	130	40	730	20	70	540	10
Future Volume (veh/h)	40	30	20	30	20	130	40	730	20	70	540	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	1.00		0.84	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	32	2	32	21	14	43	777	19	74	574	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	66	236	15	52	124	83	66	1068	26	97	1139	20
Arrive On Green	0.04	0.14	0.14	0.03	0.13	0.13	0.04	0.30	0.30	0.05	0.32	0.32
Sat Flow, veh/h	1767	1706	107	1767	956	637	1767	3512	86	1767	3544	62
Grp Volume(v), veh/h	43	0	34	32	0	35	43	390	406	74	285	299
Grp Sat Flow(s),veh/h/ln	1767	0	1813	1767	0	1593	1767	1763	1835	1767	1763	1843
Q Serve(g_s), s	1.0	0.0	0.7	0.8	0.0	0.8	1.0	8.4	8.4	1.7	5.5	5.5
Cycle Q Clear(g_c), s	1.0	0.0	0.7	0.8	0.0	0.8	1.0	8.4	8.4	1.7	5.5	5.5
Prop In Lane	1.00		0.06	1.00		0.40	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	66	0	250	52	0	207	66	536	558	97	567	593
V/C Ratio(X)	0.65	0.00	0.14	0.61	0.00	0.17	0.65	0.73	0.73	0.76	0.50	0.50
Avail Cap(c_a), veh/h	627	0	644	627	0	565	376	1418	1477	376	1418	1483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	16.0	20.3	0.0	16.3	20.1	13.1	13.1	19.7	11.6	11.6
Incr Delay (d2), s/veh	3.9	0.0	0.1	4.2	0.0	0.1	3.9	0.7	0.7	4.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	0.3	0.0	0.3	0.4	2.6	2.7	0.7	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	0.0	16.1	24.5	0.0	16.5	24.0	13.9	13.8	24.3	11.9	11.9
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h	77				67		839				658	
Approach Delay, s/veh	20.5				20.3		14.4				13.3	
Approach LOS	C				C		B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	17.8	6.3	10.8	6.6	18.6	6.6	10.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+13.5), s	10.4	10.4	2.8	2.7	3.0	7.5	3.0	2.8				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	1.1	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 14.4

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	20	90	20	20	70	50	30	60	30	40	50	20
Future Volume (veh/h)	20	90	20	20	70	50	30	60	30	40	50	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.98	0.98		0.99	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	25	111	15	25	86	34	37	74	15	49	62	10
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	234	556	67	236	452	154	277	253	44	324	225	29
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	129	1447	174	131	1176	400	327	1148	199	460	1023	134
Grp Volume(v), veh/h	151	0	0	145	0	0	126	0	0	121	0	0
Grp Sat Flow(s),veh/h/ln	1750	0	0	1707	0	0	1674	0	0	1616	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.3	0.0	0.0	1.3	0.0	0.0	1.3	0.0	0.0
Prop In Lane	0.17		0.10	0.17		0.23	0.29		0.12	0.40		0.08
Lane Grp Cap(c), veh/h	857	0	0	841	0	0	574	0	0	578	0	0
V/C Ratio(X)	0.18	0.00	0.00	0.17	0.00	0.00	0.22	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	2792	0	0	2726	0	0	2202	0	0	2136	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	4.7	0.0	0.0	7.4	0.0	0.0	7.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.8	0.0	0.0	4.8	0.0	0.0	7.6	0.0	0.0	7.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	151					145		126		121		
Approach Delay, s/veh	4.8					4.8		7.6		7.6		
Approach LOS	A					A		A		A		
Timer - Assigned Phs	2		4			6		8				
Phs Duration (G+Y+Rc), s	13.2		9.5			13.2		9.5				
Change Period (Y+Rc), s	4.5		4.5			4.5		4.5				
Max Green Setting (Gmax), s	35.0		28.0			35.0		28.0				
Max Q Clear Time (g_c+I1), s	3.3		3.3			3.3		3.3				
Green Ext Time (p_c), s	0.9		0.7			0.9		0.7				
Intersection Summary												
HCM 6th Ctrl Delay	6.1											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Cumulative PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	30	120	10	20	90	30	20	60	20	30	70	20
Future Volume (veh/h)	30	120	10	20	90	30	20	60	20	30	70	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.97	0.97		0.96	0.96		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	34	136	6	23	102	12	23	68	6	34	80	9
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	258	472	19	241	454	48	270	448	34	293	417	39
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	184	1506	60	145	1448	153	201	1426	107	253	1327	125
Grp Volume(v), veh/h	176	0	0	137	0	0	97	0	0	123	0	0
Grp Sat Flow(s),veh/h/ln	1750	0	0	1746	0	0	1734	0	0	1705	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.2	0.0	0.0	0.8	0.0	0.0	1.1	0.0	0.0
Prop In Lane	0.19		0.03	0.17		0.09	0.24		0.06	0.28		0.07
Lane Grp Cap(c), veh/h	749	0	0	743	0	0	752	0	0	750	0	0
V/C Ratio(X)	0.24	0.00	0.00	0.18	0.00	0.00	0.13	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	2568	0	0	2556	0	0	2148	0	0	2122	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	0.0	5.5	0.0	0.0	5.3	0.0	0.0	5.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	0.0	0.0	5.6	0.0	0.0	5.4	0.0	0.0	5.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	176		137			97			123			
Approach Delay, s/veh	5.8		5.6			5.4			5.5			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	10.7		10.8		10.7		10.8					
Change Period (Y+Rc), s	4.0		4.0		4.0		4.0					
Max Green Setting (Gmax), s	30.0		25.0		30.0		25.0					
Max Q Clear Time (g_c+I1), s	3.2		2.8		3.6		3.1					
Green Ext Time (p_c), s	0.8		0.4		1.1		0.6					
Intersection Summary												
HCM 6th Ctrl Delay	5.6											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Cumulative PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	40	140	20	20	100	90	30	630	50	100	410	50
Future Volume (veh/h)	40	140	20	20	100	90	30	630	50	100	410	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.99		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	41	143	14	20	102	15	31	643	30	102	418	33
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	85	194	17	74	259	241	108	1091	922	189	1176	973
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.06	0.59	0.59	0.11	0.63	0.63
Sat Flow, veh/h	215	1226	110	158	1640	1528	1767	1856	1567	1767	1856	1535
Grp Volume(v), veh/h	198	0	0	122	0	15	31	643	30	102	418	33
Grp Sat Flow(s), veh/h/ln	1551	0	0	1798	0	1528	1767	1856	1567	1767	1856	1535
Q Serve(g_s), s	5.7	0.0	0.0	0.0	0.0	0.7	1.4	18.6	0.7	4.6	9.0	0.7
Cycle Q Clear(g_c), s	10.7	0.0	0.0	5.0	0.0	0.7	1.4	18.6	0.7	4.6	9.0	0.7
Prop In Lane	0.21		0.07	0.16		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	0	0	333	0	241	108	1091	922	189	1176	973
V/C Ratio(X)	0.67	0.00	0.00	0.37	0.00	0.06	0.29	0.59	0.03	0.54	0.36	0.03
Avail Cap(c_a), veh/h	541	0	0	586	0	467	249	1091	922	249	1176	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	34.6	0.0	0.0	32.3	0.0	30.4	38.1	11.0	7.4	36.0	7.3	5.8
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.0	0.0	0.5	2.3	0.1	0.8	0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	4.0	0.0	0.0	2.3	0.0	0.3	0.6	7.4	0.2	2.0	3.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.6	0.0	0.0	32.5	0.0	30.5	38.7	13.4	7.4	36.8	8.1	5.9
LnGrp LOS	D	A	A	C	A	C	D	B	A	D	A	A
Approach Vol, veh/h	198			137			704			553		
Approach Delay, s/veh	35.6			32.3			14.2			13.3		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.8	54.6		17.6	8.9	58.5		17.6				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	2.8	34.5		* 26	12.0	34.5		* 26				
Max Q Clear Time (g_c+I), s	10.6	20.6		12.7	3.4	11.0		7.0				
Green Ext Time (p_c), s	0.0	0.7		0.2	0.0	0.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay 18.1

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 6: Mare Island Way & Maine Street

Elite Charter School TIA
Cumulative PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	50	0	60	10	650	40	80	580	0
Future Volume (veh/h)	0	0	0	50	0	60	10	650	40	80	580	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	54	0	65	11	699	39	86	624	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	0
Cap, veh/h	211	265	0	463	0	224	26	1536	86	144	1782	0
Arrive On Green	0.00	0.00	0.00	0.14	0.00	0.14	0.01	0.45	0.45	0.08	0.51	0.00
Sat Flow, veh/h	1326	1856	0	1760	0	1568	1767	3390	189	1767	3618	0
Grp Volume(v), veh/h	0	0	0	54	0	65	11	363	375	86	624	0
Grp Sat Flow(s), veh/h/ln	1326	1856	0	1760	0	1568	1767	1763	1817	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	1.3	0.2	4.8	4.9	1.6	3.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9	0.0	1.3	0.2	4.8	4.9	1.6	3.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	211	265	0	463	0	224	26	799	823	144	1782	0
V/C Ratio(X)	0.00	0.00	0.00	0.12	0.00	0.29	0.43	0.45	0.46	0.60	0.35	0.00
Avail Cap(c_a), veh/h	798	1087	0	1242	0	919	621	1549	1596	932	3098	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	12.9	0.0	13.1	16.7	6.4	6.4	15.1	5.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.7	10.9	0.9	0.8	3.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.4	0.1	1.1	1.2	0.7	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	13.0	0.0	13.8	27.6	7.3	7.3	19.0	5.3	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h	0			119			749			710		
Approach Delay, s/veh	0.0			13.4			7.6			7.0		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	19.5		8.4	4.5	21.3		8.4				
Change Period (Y+Rc), s	3.5	4.0		3.5	4.0	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+13.6)	6.9	6.9		0.0	2.2	5.6		3.3				
Green Ext Time (p_c), s	0.1	8.6		0.0	0.0	7.8		0.4				

Intersection Summary

HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	80	60	30	50	20
Future Vol, veh/h	10	80	60	30	50	20
Conflicting Peds, #/hr	4	0	0	4	2	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	92	69	34	57	23
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	107	0	-	0	206	97
Stage 1	-	-	-	-	90	-
Stage 2	-	-	-	-	116	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1478	-	-	-	780	956
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	906	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1472	-	-	-	768	946
Mov Cap-2 Maneuver	-	-	-	-	768	-
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	902	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		9.9		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1472	-	-	-	812	
HCM Lane V/C Ratio	0.008	-	-	-	0.099	
HCM Control Delay (s)	7.5	0	-	-	9.9	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.3	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Cumulative PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑	↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	450	150	0	370	220	280	420	40	240	170	20
Future Volume (veh/h)	0	450	150	0	370	220	280	420	40	240	170	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	469	156	0	385	69	255	490	0	250	177	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1127	478	0	1071	477	626	1567		517	644	58
Arrive On Green	0.00	0.30	0.30	0.00	0.30	0.30	0.42	0.42	0.00	0.42	0.42	0.42
Sat Flow, veh/h	0	3711	1572	0	3618	1569	1180	3711	0	712	1524	138
Grp Volume(v), veh/h	0	469	156	0	385	69	255	490	0	250	0	193
Grp Sat Flow(s),veh/h/ln	0	1856	1572	0	1763	1569	1180	1856	0	712	0	1662
Q Serve(g_s), s	0.0	3.3	2.5	0.0	2.8	1.1	6.0	2.9	0.0	8.5	0.0	2.5
Cycle Q Clear(g_c), s	0.0	3.3	2.5	0.0	2.8	1.1	8.5	2.9	0.0	11.4	0.0	2.5
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	0	1127	478	0	1071	477	626	1567		517	0	702
V/C Ratio(X)	0.00	0.42	0.33	0.00	0.36	0.14	0.41	0.31		0.48	0.00	0.28
Avail Cap(c_a), veh/h	0	3352	1421	0	3185	1418	1016	2794		842	0	1301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	8.9	0.0	9.0	8.4	9.0	6.4	0.0	10.2	0.0	6.3
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.6	0.0	0.7	0.2	1.1	0.7	0.0	1.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.3	9.1	0.0	9.1	8.5	9.2	6.4	0.0	10.4	0.0	6.3
LnGrp LOS	A	A	A	A	A	A	A	A		B	A	A
Approach Vol, veh/h		625			454			745	A		443	
Approach Delay, s/veh		9.3			9.0			7.4			8.7	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.0		18.2		15.0		18.2				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		5.3		13.4		4.8		10.5				
Green Ext Time (p_c), s		0.5		0.8		0.5		0.6				

Intersection Summary

HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Cumulative Plus Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	60	30	16	72	30	40	409	25	40	361	50
Future Volume (veh/h)	50	60	30	16	72	30	40	409	25	40	361	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	53	64	5	17	77	8	43	435	21	43	384	40
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	251	272	21	264	264	27	717	1341	1133	633	1341	1133
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.48	0.48	0.48	0.72	0.72	0.72
Sat Flow, veh/h	1302	1699	133	1321	1653	172	955	1856	1568	927	1856	1568
Grp Volume(v), veh/h	53	0	69	17	0	85	43	435	21	43	384	40
Grp Sat Flow(s),veh/h/ln	1302	0	1832	1321	0	1825	955	1856	1568	927	1856	1568
Q Serve(g_s), s	2.8	0.0	2.5	0.9	0.0	3.1	2.0	10.8	0.5	1.5	5.4	0.5
Cycle Q Clear(g_c), s	5.9	0.0	2.5	3.3	0.0	3.1	7.4	10.8	0.5	12.3	5.4	0.5
Prop In Lane	1.00		0.07	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	0	293	264	0	292	717	1341	1133	633	1341	1133
V/C Ratio(X)	0.21	0.00	0.24	0.06	0.00	0.29	0.06	0.32	0.02	0.07	0.29	0.04
Avail Cap(c_a), veh/h	425	0	537	440	0	535	717	1341	1133	633	1341	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	0.0	27.5	28.9	0.0	27.8	8.9	8.1	5.5	7.0	3.6	3.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.0	0.0	0.2	0.2	0.6	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.1	0.3	0.0	1.3	0.4	4.7	0.1	0.3	1.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	27.6	29.0	0.0	28.0	9.0	8.8	5.5	7.0	3.7	3.0
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		122			102			499			467	
Approach Delay, s/veh		28.9			28.1			8.6			3.9	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.8		16.2		58.8		16.2				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		44.2		* 22		44.2		* 22				
Max Q Clear Time (g_c+I1), s		12.8		7.9		14.3		5.3				
Green Ext Time (p_c), s		0.6		0.1		0.5		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.5								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Cumulative Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	10	20	20	44	20	744	34	64	541	10
Future Volume (veh/h)	20	10	10	20	20	44	20	744	34	64	541	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	11	1	22	22	3	22	809	33	70	588	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	39	130	12	39	123	17	39	1099	45	97	1248	21
Arrive On Green	0.02	0.08	0.08	0.02	0.08	0.08	0.02	0.32	0.32	0.05	0.35	0.35
Sat Flow, veh/h	1767	1658	151	1767	1574	215	1767	3447	141	1767	3545	60
Grp Volume(v), veh/h	22	0	12	22	0	25	22	414	428	70	292	306
Grp Sat Flow(s),veh/h/ln	1767	0	1809	1767	0	1789	1767	1763	1825	1767	1763	1842
Q Serve(g_s), s	0.5	0.0	0.2	0.5	0.0	0.5	0.5	7.9	7.9	1.5	4.9	4.9
Cycle Q Clear(g_c), s	0.5	0.0	0.2	0.5	0.0	0.5	0.5	7.9	7.9	1.5	4.9	4.9
Prop In Lane	1.00		0.08	1.00		0.12	1.00		0.08	1.00		0.03
Lane Grp Cap(c), veh/h	39	0	141	39	0	140	39	562	582	97	620	648
V/C Ratio(X)	0.57	0.00	0.08	0.57	0.00	0.18	0.57	0.74	0.74	0.72	0.47	0.47
Avail Cap(c_a), veh/h	697	0	714	697	0	706	418	1577	1633	418	1577	1648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	16.3	18.4	0.0	16.4	18.4	11.5	11.5	17.7	9.6	9.6
Incr Delay (d2), s/veh	4.9	0.0	0.1	4.9	0.0	0.2	4.9	0.7	0.7	3.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.2	0.2	2.3	2.4	0.6	1.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	0.0	16.4	23.3	0.0	16.6	23.3	12.2	12.2	21.4	9.8	9.8
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	A	A
Approach Vol, veh/h	34				47				864			
Approach Delay, s/veh	20.8				19.7				12.5			
Approach LOS	C				B				B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	17.1	5.8	8.0	5.8	18.4	5.8	8.0				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+13), s	9.9	9.9	2.5	2.2	2.5	6.9	2.5	2.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	0.0	0.0	1.2	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 12.3

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	10	76	22	30	60	20	14	46	40	38	41	10
Future Volume (veh/h)	10	76	22	30	60	20	14	46	40	38	41	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	12	89	14	35	71	13	16	54	5	45	48	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	219	604	88	330	503	75	255	220	19	366	151	3
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	70	1491	216	264	1242	185	276	1344	116	680	920	17
Grp Volume(v), veh/h	115	0	0	119	0	0	75	0	0	94	0	0
Grp Sat Flow(s),veh/h/ln	1777	0	0	1692	0	0	1736	0	0	1617	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.9	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0
Prop In Lane	0.10		0.12	0.29		0.11	0.21		0.07	0.48		0.01
Lane Grp Cap(c), veh/h	910	0	0	908	0	0	494	0	0	520	0	0
V/C Ratio(X)	0.13	0.00	0.00	0.13	0.00	0.00	0.15	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	3110	0	0	2941	0	0	2492	0	0	2355	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.9	0.0	0.0	4.0	0.0	0.0	7.6	0.0	0.0	7.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.0	0.0	0.0	4.0	0.0	0.0	7.7	0.0	0.0	7.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	115			119			75			94		
Approach Delay, s/veh	4.0			4.0			7.7			7.9		
Approach LOS	A			A			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	12.9			7.9			12.9			7.9		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	35.0			28.0			35.0			28.0		
Max Q Clear Time (g_c+I1), s	2.9			2.7			2.8			3.0		
Green Ext Time (p_c), s	0.7			0.4			0.7			0.5		

Intersection Summary

HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Cumulative Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	14	108	32	68	100	31	0	30	10	30	82	10
Future Volume (veh/h)	14	108	32	68	100	31	0	30	10	30	82	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		0.99	0.98		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	120	18	76	111	22	0	33	2	33	91	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	254	476	67	407	338	55	0	389	24	327	300	15
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.00	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	91	1467	206	401	1042	170	0	1730	105	319	1335	67
Grp Volume(v), veh/h	154	0	0	209	0	0	0	0	35	129	0	0
Grp Sat Flow(s),veh/h/ln	1764	0	0	1613	0	0	0	0	1835	1720	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.3	1.0	0.0	0.0
Prop In Lane	0.10		0.12	0.36		0.11	0.00		0.06	0.26		0.04
Lane Grp Cap(c), veh/h	796	0	0	800	0	0	0	0	412	641	0	0
V/C Ratio(X)	0.19	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.08	0.20	0.00	0.00
Avail Cap(c_a), veh/h	3150	0	0	2899	0	0	0	0	2588	2630	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	0.0	0.0	4.6	0.0	0.0	0.0	0.0	5.4	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	0.0	0.0	4.7	0.0	0.0	0.0	0.0	5.5	5.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	154		209			35			129			
Approach Delay, s/veh	4.5		4.7			5.5			5.9			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	9.7		8.0		9.7		8.0					
Change Period (Y+Rc), s	4.0		4.0		4.0		4.0					
Max Green Setting (Gmax), s	30.0		25.0		30.0		25.0					
Max Q Clear Time (g_c+I1), s	3.6		2.3		3.1		3.0					
Green Ext Time (p_c), s	1.3		0.1		0.9		0.7					
Intersection Summary												
HCM 6th Ctrl Delay	5.0											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Cumulative Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	31	89	28	49	145	80	29	333	33	50	280	67
Future Volume (veh/h)	31	89	28	49	145	80	29	333	33	50	280	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	96	16	53	156	15	31	358	20	54	301	44
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	76	144	20	111	221	256	112	1065	902	159	1115	944
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.06	0.57	0.57	0.09	0.60	0.60
Sat Flow, veh/h	100	854	118	300	1310	1515	1767	1856	1571	1767	1856	1571
Grp Volume(v), veh/h	145	0	0	209	0	15	31	358	20	54	301	44
Grp Sat Flow(s), veh/h/ln	1072	0	0	1610	0	1515	1767	1856	1571	1767	1856	1571
Q Serve(g_s), s	1.6	0.0	0.0	0.0	0.0	0.6	1.3	7.6	0.4	2.2	5.8	0.9
Cycle Q Clear(g_c), s	10.8	0.0	0.0	9.2	0.0	0.6	1.3	7.6	0.4	2.2	5.8	0.9
Prop In Lane	0.23		0.11	0.25		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	0	0	332	0	256	112	1065	902	159	1115	944
V/C Ratio(X)	0.60	0.00	0.00	0.63	0.00	0.06	0.28	0.34	0.02	0.34	0.27	0.05
Avail Cap(c_a), veh/h	528	0	0	627	0	525	259	1065	902	259	1115	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	29.1	0.0	0.0	29.5	0.0	26.2	33.5	8.4	6.9	32.0	7.1	6.1
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.7	0.0	0.0	0.5	0.9	0.0	0.5	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.6	0.0	0.0	3.6	0.0	0.2	0.5	2.9	0.1	0.9	2.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.0	0.0	0.0	30.3	0.0	26.2	34.0	9.3	6.9	32.5	7.7	6.2
LnGrp LOS	C	A	A	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h	145			224			409			399		
Approach Delay, s/veh	30.0			30.0			11.0			10.9		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	47.7			16.9	8.5	49.7		16.9				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	1.0	25.5		* 26	11.0	25.5		* 26				
Max Q Clear Time (g_c+14, s)	9.6			12.8	3.3	7.8		11.2				
Green Ext Time (p_c), s	0.0	0.3		0.1	0.0	0.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Cumulative Plus Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	0	34	10	774	51	91	470	0
Future Volume (veh/h)	0	0	0	40	0	34	10	774	51	91	470	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1856	1870	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	47	0	40	11	911	55	107	553	0
Peak Hour Factor	0.92	0.92	0.92	0.85	0.92	0.85	0.92	0.85	0.85	0.85	0.85	0.92
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	0
Cap, veh/h	186	210	0	384	0	177	26	1737	105	156	2077	0
Arrive On Green	0.00	0.00	0.00	0.11	0.00	0.11	0.01	0.52	0.52	0.09	0.59	0.00
Sat Flow, veh/h	1367	1870	0	1767	0	1582	1781	3373	204	1767	3618	0
Grp Volume(v), veh/h	0	0	0	47	0	40	11	476	490	107	553	0
Grp Sat Flow(s), veh/h/ln	1367	1870	0	1767	0	1582	1781	1763	1813	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.9	0.2	6.9	6.9	2.3	3.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9	0.0	0.9	0.2	6.9	6.9	2.3	3.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	186	210	0	384	0	177	26	908	934	156	2077	0
V/C Ratio(X)	0.00	0.00	0.00	0.12	0.00	0.23	0.43	0.52	0.52	0.69	0.27	0.00
Avail Cap(c_a), veh/h	740	967	0	1100	0	818	553	1367	1407	823	2735	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	15.7	0.0	15.6	18.9	6.2	6.2	17.1	3.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.6	10.9	1.0	1.0	5.2	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.3	0.2	1.6	1.7	1.0	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	15.8	0.0	16.3	29.8	7.2	7.2	22.3	4.0	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h	0			87			977			660		
Approach Delay, s/veh	0.0			16.0			7.5			7.0		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	23.9		7.8	4.1	26.8		7.8				
Change Period (Y+Rc), s	3.5	4.0		3.5	3.5	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+14), s	8.9	8.9		0.0	2.2	5.0		2.9				
Green Ext Time (p_c), s	0.2	11.0		0.0	0.0	6.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	40	69	21	40	25
Future Vol, veh/h	22	40	69	21	40	25
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	24	44	77	23	44	28
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	100	0	-	0	181	91
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	92	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1486	-	-	-	806	964
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	929	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	792	962
Mov Cap-2 Maneuver	-	-	-	-	792	-
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	929	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.6	0		9.6		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1486	-	-	-	850	
HCM Lane V/C Ratio	0.016	-	-	-	0.085	
HCM Control Delay (s)	7.5	0	-	-	9.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Cumulative Plus Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	380	120	0	491	176	247	169	10	181	101	20
Future Volume (veh/h)	0	380	120	0	491	176	247	169	10	181	101	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	413	130	0	534	62	302	137	0	197	110	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1225	512	0	1164	511	1276	694		635	549	70
Arrive On Green	0.00	0.33	0.33	0.00	0.33	0.33	0.37	0.37	0.00	0.37	0.37	0.37
Sat Flow, veh/h	0	3711	1552	0	3618	1547	2498	1856	1572	1072	1467	187
Grp Volume(v), veh/h	0	413	130	0	534	62	302	137	0	197	0	124
Grp Sat Flow(s),veh/h/ln	0	1856	1552	0	1763	1547	1249	1856	1572	1072	0	1654
Q Serve(g_s), s	0.0	2.6	1.9	0.0	3.7	0.9	2.9	1.5	0.0	3.9	0.0	1.6
Cycle Q Clear(g_c), s	0.0	2.6	1.9	0.0	3.7	0.9	4.4	1.5	0.0	5.5	0.0	1.6
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	0	1225	512	0	1164	511	1276	694		635	0	619
V/C Ratio(X)	0.00	0.34	0.25	0.00	0.46	0.12	0.24	0.20		0.31	0.00	0.20
Avail Cap(c_a), veh/h	0	3619	1513	0	3438	1509	2372	1508		1218	0	1398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.8	7.5	0.0	8.1	7.2	8.0	6.5	0.0	8.4	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.4	0.0	0.8	0.2	0.5	0.4	0.0	0.7	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.8	7.6	0.0	8.2	7.2	8.0	6.6	0.0	8.5	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A		A	A	A
Approach Vol, veh/h		543			596			439	A		321	
Approach Delay, s/veh		7.8			8.1			7.6			7.7	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.1		15.7		15.1		15.7				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		4.6		7.5		5.7		6.4				
Green Ext Time (p_c), s		0.5		0.4		0.7		0.2				

Intersection Summary

HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Sonoma Boulevard & Florida Street

Elite Charter School TIA
Cumulative Plus Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	60	30	22	71	60	20	774	15	60	580	80
Future Volume (veh/h)	110	60	30	22	71	60	20	774	15	60	580	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	116	63	8	23	75	23	21	815	12	63	611	71
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	231	264	34	254	223	68	537	1359	1146	429	1359	1146
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1275	1611	205	1306	1358	416	752	1856	1565	657	1856	1565
Grp Volume(v), veh/h	116	0	71	23	0	98	21	815	12	63	611	71
Grp Sat Flow(s),veh/h/ln	1275	0	1816	1306	0	1775	752	1856	1565	657	1856	1565
Q Serve(g_s), s	7.5	0.0	2.9	1.3	0.0	4.2	1.0	17.8	0.2	4.3	11.2	1.1
Cycle Q Clear(g_c), s	11.7	0.0	2.9	4.2	0.0	4.2	12.1	17.8	0.2	22.1	11.2	1.1
Prop In Lane	1.00		0.11	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	0	298	254	0	291	537	1359	1146	429	1359	1146
V/C Ratio(X)	0.50	0.00	0.24	0.09	0.00	0.34	0.04	0.60	0.01	0.15	0.45	0.06
Avail Cap(c_a), veh/h	352	0	470	378	0	459	537	1359	1146	429	1359	1146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	0.0	30.9	32.8	0.0	31.4	7.0	5.4	3.1	10.7	4.5	3.2
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.1	0.0	0.3	0.1	1.6	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.3	0.4	0.0	1.8	0.2	5.9	0.0	0.6	3.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	0.0	31.1	32.8	0.0	31.7	7.1	7.0	3.1	10.7	4.6	3.2
LnGrp LOS	D	A	C	C	A	C	A	A	A	B	A	A
Approach Vol, veh/h		187			121			848			745	
Approach Delay, s/veh		34.9			31.9			6.9			5.0	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.9		18.1		66.9		18.1				
Change Period (Y+Rc), s		4.6		* 4.2		4.6		* 4.2				
Max Green Setting (Gmax), s		54.2		* 22		54.2		* 22				
Max Q Clear Time (g_c+I1), s		19.8		13.7		24.1		6.2				
Green Ext Time (p_c), s		1.2		0.1		0.9		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.5								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

2: Mare Island Way & Georgia Street

Elite Charter School TIA
Cumulative Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	30	20	30	20	135	40	733	26	75	540	10
Future Volume (veh/h)	40	30	20	30	20	135	40	733	26	75	540	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	1.00		0.84	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	43	32	2	32	21	14	43	780	26	80	574	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	66	235	15	52	124	83	66	1065	36	101	1157	20
Arrive On Green	0.04	0.14	0.14	0.03	0.13	0.13	0.04	0.31	0.31	0.06	0.33	0.33
Sat Flow, veh/h	1767	1706	107	1767	956	637	1767	3475	116	1767	3544	62
Grp Volume(v), veh/h	43	0	34	32	0	35	43	396	410	80	285	299
Grp Sat Flow(s),veh/h/ln	1767	0	1813	1767	0	1593	1767	1763	1828	1767	1763	1843
Q Serve(g_s), s	1.0	0.0	0.7	0.8	0.0	0.8	1.0	8.6	8.6	1.9	5.6	5.6
Cycle Q Clear(g_c), s	1.0	0.0	0.7	0.8	0.0	0.8	1.0	8.6	8.6	1.9	5.6	5.6
Prop In Lane	1.00		0.06	1.00		0.40	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	66	0	250	52	0	207	66	540	560	101	576	602
V/C Ratio(X)	0.65	0.00	0.14	0.61	0.00	0.17	0.65	0.73	0.73	0.79	0.50	0.50
Avail Cap(c_a), veh/h	621	0	637	621	0	560	373	1404	1457	373	1404	1469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	16.2	20.5	0.0	16.5	20.3	13.2	13.2	19.9	11.5	11.5
Incr Delay (d2), s/veh	4.0	0.0	0.1	4.3	0.0	0.1	4.0	0.7	0.7	5.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	0.3	0.0	0.3	0.4	2.7	2.8	0.8	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.2	0.0	16.3	24.7	0.0	16.7	24.2	14.0	13.9	24.9	11.8	11.8
LnGrp LOS	C	A	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h	77		67				849			664		
Approach Delay, s/veh	20.7		20.5				14.5			13.4		
Approach LOS	C		C				B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.5	18.1	6.3	10.9	6.6	18.9	6.6	10.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	34.0	34.0	15.0	15.0	9.0	34.0	15.0	15.0				
Max Q Clear Time (g_c+13.5), s	10.6	10.6	2.8	2.7	3.0	7.6	3.0	2.8				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	1.1	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 14.6

HCM 6th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	20	101	20	20	72	50	33	64	43	45	50	20
Future Volume (veh/h)	20	101	20	20	72	50	33	64	43	45	50	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.98	0.98		0.99	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	25	125	16	25	89	34	41	79	25	56	62	11
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	223	553	64	230	447	148	271	253	68	336	232	32
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	119	1468	169	129	1186	392	307	1072	287	482	984	137
Grp Volume(v), veh/h	166	0	0	148	0	0	145	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1756	0	0	1707	0	0	1666	0	0	1602	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	0.0	1.3	0.0	0.0	1.6	0.0	0.0	1.4	0.0	0.0
Prop In Lane	0.15		0.10	0.17		0.23	0.28		0.17	0.43		0.09
Lane Grp Cap(c), veh/h	840	0	0	824	0	0	592	0	0	600	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.18	0.00	0.00	0.25	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	2747	0	0	2668	0	0	2146	0	0	2068	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.0	0.0	0.0	4.9	0.0	0.0	7.4	0.0	0.0	7.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	0.0	0.0	5.0	0.0	0.0	7.6	0.0	0.0	7.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	166		148			145			129			
Approach Delay, s/veh	5.1		5.0			7.6			7.5			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	13.3		10.0		13.3		10.0					
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	35.0		28.0		35.0		28.0					
Max Q Clear Time (g_c+I1), s	3.3		3.6		3.5		3.4					
Green Ext Time (p_c), s	0.9		0.8		1.0		0.7					
Intersection Summary												
HCM 6th Ctrl Delay			6.2									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

4: Sacramento Street & Georgia Street

Elite Charter School TIA
Cumulative Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	32	138	19	47	90	30	22	65	29	30	78	20
Future Volume (veh/h)	32	138	19	47	90	30	22	65	29	30	78	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.97	0.97		0.96	0.96		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	157	14	53	102	19	25	74	8	34	89	9
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	244	469	38	308	376	58	264	444	41	279	432	37
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	165	1461	118	297	1172	180	198	1400	129	235	1362	117
Grp Volume(v), veh/h	207	0	0	174	0	0	107	0	0	132	0	0
Grp Sat Flow(s),veh/h/ln	1744	0	0	1649	0	0	1728	0	0	1714	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.6	0.0	0.0	0.9	0.0	0.0	1.2	0.0	0.0
Prop In Lane	0.17		0.07	0.30		0.11	0.23		0.07	0.26		0.07
Lane Grp Cap(c), veh/h	751	0	0	742	0	0	749	0	0	748	0	0
V/C Ratio(X)	0.28	0.00	0.00	0.23	0.00	0.00	0.14	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	2493	0	0	2348	0	0	2082	0	0	2073	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	0.0	5.6	0.0	0.0	5.5	0.0	0.0	5.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	0.0	5.8	0.0	0.0	5.6	0.0	0.0	5.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	207		174			107			132			
Approach Delay, s/veh	5.9		5.8			5.6			5.7			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	11.1		11.0		11.1		11.0					
Change Period (Y+Rc), s	4.0		4.0		4.0		4.0					
Max Green Setting (Gmax), s	30.0		25.0		30.0		25.0					
Max Q Clear Time (g_c+I1), s	3.6		2.9		3.9		3.2					
Green Ext Time (p_c), s	1.1		0.5		1.3		0.7					
Intersection Summary												
HCM 6th Ctrl Delay	5.8											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

5: Sonoma Boulevard & Georgia Street

Elite Charter School TIA
Cumulative Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	55	155	24	26	111	90	35	651	58	100	417	61
Future Volume (veh/h)	55	155	24	26	111	90	35	651	58	100	417	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.99		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	56	158	18	27	113	16	36	664	33	102	426	36
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	100	205	21	86	286	285	119	1039	877	189	1113	920
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.56	0.56	0.11	0.60	0.60
Sat Flow, veh/h	253	1104	114	189	1538	1534	1767	1856	1567	1767	1856	1535
Grp Volume(v), veh/h	232	0	0	140	0	16	36	664	33	102	426	36
Grp Sat Flow(s), veh/h/ln	1471	0	0	1727	0	1534	1767	1856	1567	1767	1856	1535
Q Serve(g_s), s	7.6	0.0	0.0	0.0	0.0	0.7	1.6	20.8	0.8	4.6	10.1	0.8
Cycle Q Clear(g_c), s	13.3	0.0	0.0	5.6	0.0	0.7	1.6	20.8	0.8	4.6	10.1	0.8
Prop In Lane	0.24		0.08	0.19		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	0	372	0	285	119	1039	877	189	1113	920
V/C Ratio(X)	0.71	0.00	0.00	0.38	0.00	0.06	0.30	0.64	0.04	0.54	0.38	0.04
Avail Cap(c_a), veh/h	521	0	0	573	0	469	249	1039	877	249	1113	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	33.7	0.0	0.0	30.5	0.0	28.5	37.7	12.8	8.4	36.0	8.8	7.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.2	0.0	0.0	0.5	3.0	0.1	0.8	0.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	4.7	0.0	0.0	2.5	0.0	0.3	0.7	8.7	0.3	2.0	3.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.8	0.0	0.0	30.7	0.0	28.5	38.3	15.8	8.5	36.8	9.7	7.0
LnGrp LOS	C	A	A	C	A	C	D	B	A	D	A	A
Approach Vol, veh/h	232			156			733			564		
Approach Delay, s/veh	34.8			30.5			16.6			14.5		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.8	52.2		20.0	9.4	55.6		20.0				
Change Period (Y+Rc), s	3.7	4.6		* 4.2	3.7	4.6		* 4.2				
Max Green Setting (Gmax), s	2.8	34.5		* 26	12.0	34.5		* 26				
Max Q Clear Time (g_c+10), s	10.6	22.8		15.3	3.6	12.1		7.6				
Green Ext Time (p_c), s	0.0	0.7		0.2	0.0	0.4		0.1				

Intersection Summary

HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

6: Mare Island Way & Maine Street

Elite Charter School TIA
Cumulative Plus Project PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	51	0	63	10	656	40	80	580	0
Future Volume (veh/h)	0	0	0	51	0	63	10	656	40	80	580	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	0	0	0	55	0	68	11	705	39	86	624	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	0
Cap, veh/h	209	269	0	464	0	227	26	1539	85	144	1785	0
Arrive On Green	0.00	0.00	0.00	0.14	0.00	0.14	0.01	0.45	0.45	0.08	0.51	0.00
Sat Flow, veh/h	1322	1856	0	1760	0	1568	1767	3392	188	1767	3618	0
Grp Volume(v), veh/h	0	0	0	55	0	68	11	366	378	86	624	0
Grp Sat Flow(s), veh/h/ln	1322	1856	0	1760	0	1568	1767	1763	1817	1767	1763	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	1.3	0.2	4.9	4.9	1.6	3.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9	0.0	1.3	0.2	4.9	4.9	1.6	3.7	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	209	269	0	464	0	227	26	800	824	144	1785	0
V/C Ratio(X)	0.00	0.00	0.00	0.12	0.00	0.30	0.43	0.46	0.46	0.60	0.35	0.00
Avail Cap(c_a), veh/h	787	1079	0	1233	0	912	617	1537	1585	925	3075	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.0	0.0	13.1	16.8	6.5	6.5	15.3	5.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.7	10.9	0.9	0.9	3.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.4	0.1	1.2	1.2	0.7	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	13.1	0.0	13.9	27.8	7.4	7.3	19.2	5.3	0.0
LnGrp LOS	A	A	A	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h	0			123			755			710		
Approach Delay, s/veh	0.0			13.5			7.6			7.0		
Approach LOS				B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	19.6		8.5	4.5	21.4		8.5				
Change Period (Y+Rc), s	3.5	4.0		3.5	4.0	4.0		3.5				
Max Green Setting (Gmax), s	30.0	30.0		20.0	12.0	30.0		20.0				
Max Q Clear Time (g_c+13), s	6.9	6.9		0.0	2.2	5.7		3.3				
Green Ext Time (p_c), s	0.1	8.6		0.0	0.0	7.7		0.4				

Intersection Summary

HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

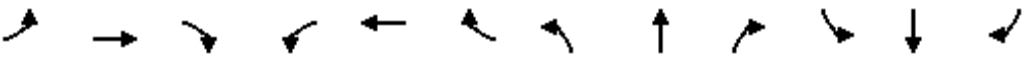
User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	80	73	30	50	29
Future Vol, veh/h	10	80	73	30	50	29
Conflicting Peds, #/hr	4	0	0	4	2	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	92	84	34	57	33
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	122	0	-	0	221	112
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	116	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1459	-	-	-	765	938
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	906	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1453	-	-	-	753	928
Mov Cap-2 Maneuver	-	-	-	-	753	-
Stage 1	-	-	-	-	906	-
Stage 2	-	-	-	-	902	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		10		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1453	-	-	-	809	
HCM Lane V/C Ratio	0.008	-	-	-	0.112	
HCM Control Delay (s)	7.5	0	-	-	10	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.4	

HCM 6th Signalized Intersection Summary

8: Sonoma Boulevard & Curtola Parkway

Elite Charter School TIA
Cumulative Plus Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑	↑	↑↑	↑		↑↑	
Traffic Volume (veh/h)	0	452	151	0	373	223	283	422	40	247	178	20
Future Volume (veh/h)	0	452	151	0	373	223	283	422	40	247	178	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	471	157	0	389	71	197	577	0	257	185	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3	3	3	3	3	3	3
Cap, veh/h	0	1051	445	0	998	444	656	1712		503	706	61
Arrive On Green	0.00	0.28	0.28	0.00	0.28	0.28	0.46	0.46	0.00	0.46	0.46	0.46
Sat Flow, veh/h	0	3711	1572	0	3618	1569	1171	3711	1572	651	1530	132
Grp Volume(v), veh/h	0	471	157	0	389	71	197	577	0	257	0	201
Grp Sat Flow(s),veh/h/ln	0	1856	1572	0	1763	1569	1171	1856	1572	651	0	1663
Q Serve(g_s), s	0.0	3.7	2.8	0.0	3.2	1.2	4.4	3.5	0.0	10.2	0.0	2.6
Cycle Q Clear(g_c), s	0.0	3.7	2.8	0.0	3.2	1.2	7.1	3.5	0.0	13.7	0.0	2.6
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	0	1051	445	0	998	444	656	1712		503	0	767
V/C Ratio(X)	0.00	0.45	0.35	0.00	0.39	0.16	0.30	0.34		0.51	0.00	0.26
Avail Cap(c_a), veh/h	0	3124	1324	0	2968	1321	937	2604		725	0	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.5	10.2	0.0	10.3	9.6	8.0	6.1	0.0	10.5	0.0	5.9
Incr Delay (d2), s/veh	0.0	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	0.7	0.0	0.9	0.3	0.8	0.8	0.0	1.3	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.6	10.3	0.0	10.4	9.6	8.1	6.2	0.0	10.8	0.0	5.9
LnGrp LOS	A	B	B	A	B	A	A	A		B	A	A
Approach Vol, veh/h		628			460			774	A		458	
Approach Delay, s/veh		10.5			10.3			6.7			8.7	
Approach LOS		B			B			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.0		20.6		15.0		20.6				
Change Period (Y+Rc), s		4.9		* 4.2		4.9		* 4.2				
Max Green Setting (Gmax), s		30.0		* 26		30.0		* 25				
Max Q Clear Time (g_c+I1), s		5.7		15.7		5.2		9.1				
Green Ext Time (p_c), s		0.5		0.9		0.5		0.8				

Intersection Summary

HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Appendix C: Signal Warrants



Major Street **Maine Street**
 Minor Street **Sacramento Street**

Project **Elite Charter School TIA**
 Scenario **Existing**
 Peak Hour **AM**

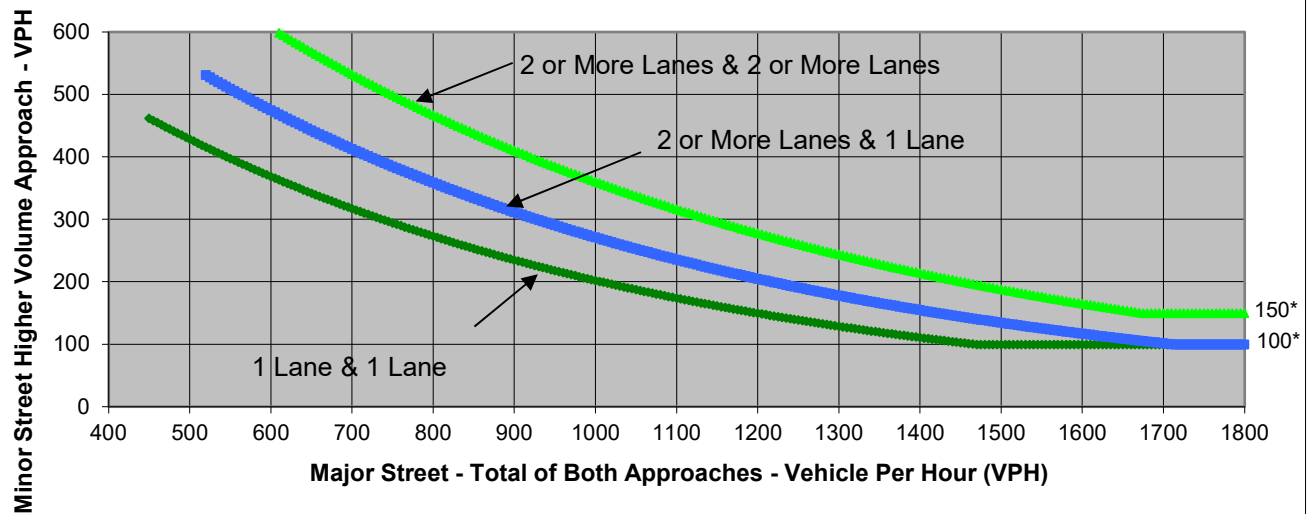
Turn Movement Volumes

	NB	SB	EB	WB
Left		32	11	
Through			33	38
Right		6		13
Total	0	38	44	51

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	95	38	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

Major Street Maine Street
 Minor Street Sacramento Street

Project Elite Charter School TIA
 Scenario Exisiting
 Peak Hour AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	32	11	0
Through	0	0	33	38
Right	0	6	0	13
Total	0	38	44	51

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	38

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Exisiting	0.1	38	133
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **Maine Street**
 Minor Street **Sacramento Street**

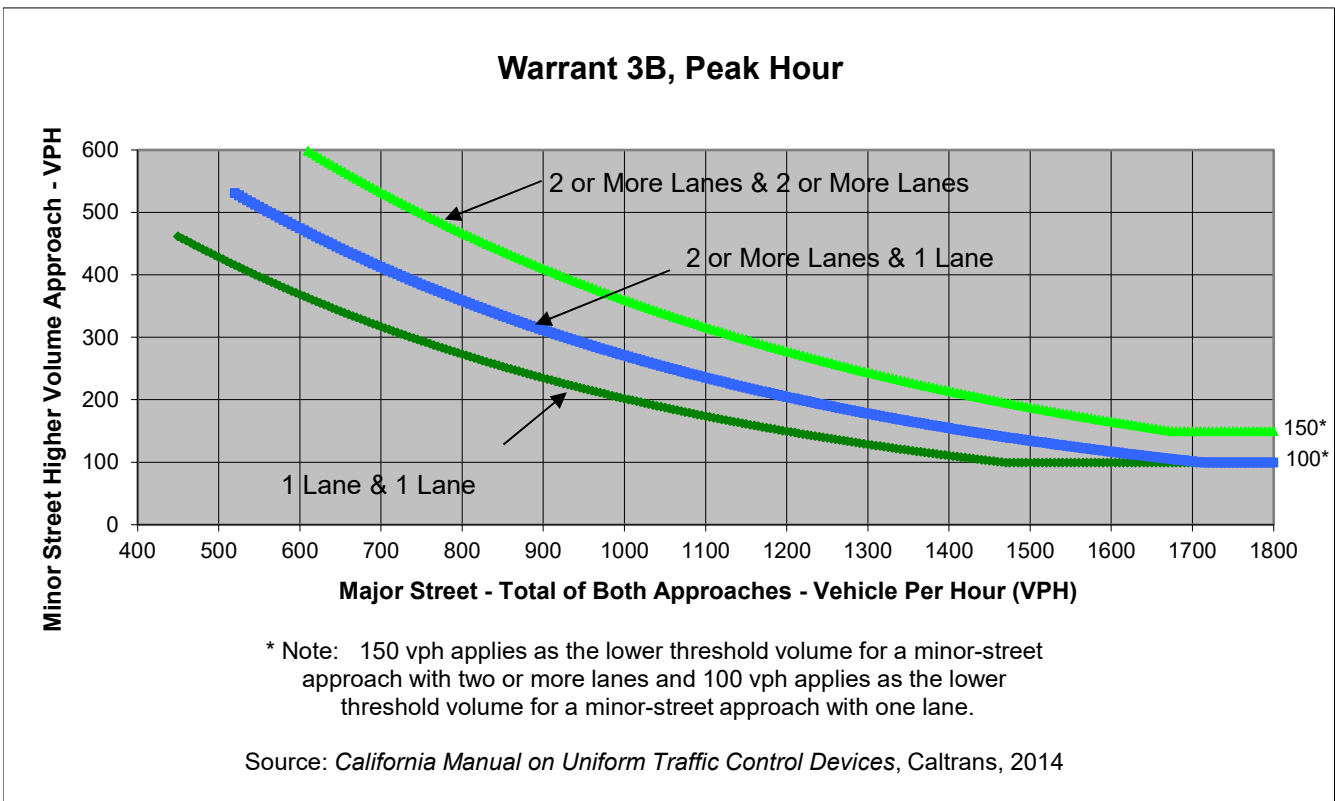
Project **Elite Charter School TIA**
 Scenario **Existing**
 Peak Hour **PM**

Turn Movement Volumes

	NB	SB	EB	WB
Left		40	9	
Through			69	49
Right		13		21
Total	0	53	78	70

Major Street Direction

	North/South
x	East/West



	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	148	53	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

FEHR & PEERS

Major Street Maine Street
Minor Street Sacramento Street

Project Elite Charter School TIA
Scenario Exisiting
Peak Hour PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	9	0
Through	0	0	69	49
Right	0	13	0	21
Total	0	53	78	70

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.6
Approach with Worst Case Delay	SB
Total Vehicles on Approach	53

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Exisiting	0.1	53	201
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **Maine Street**
 Minor Street **Sacramento Street**

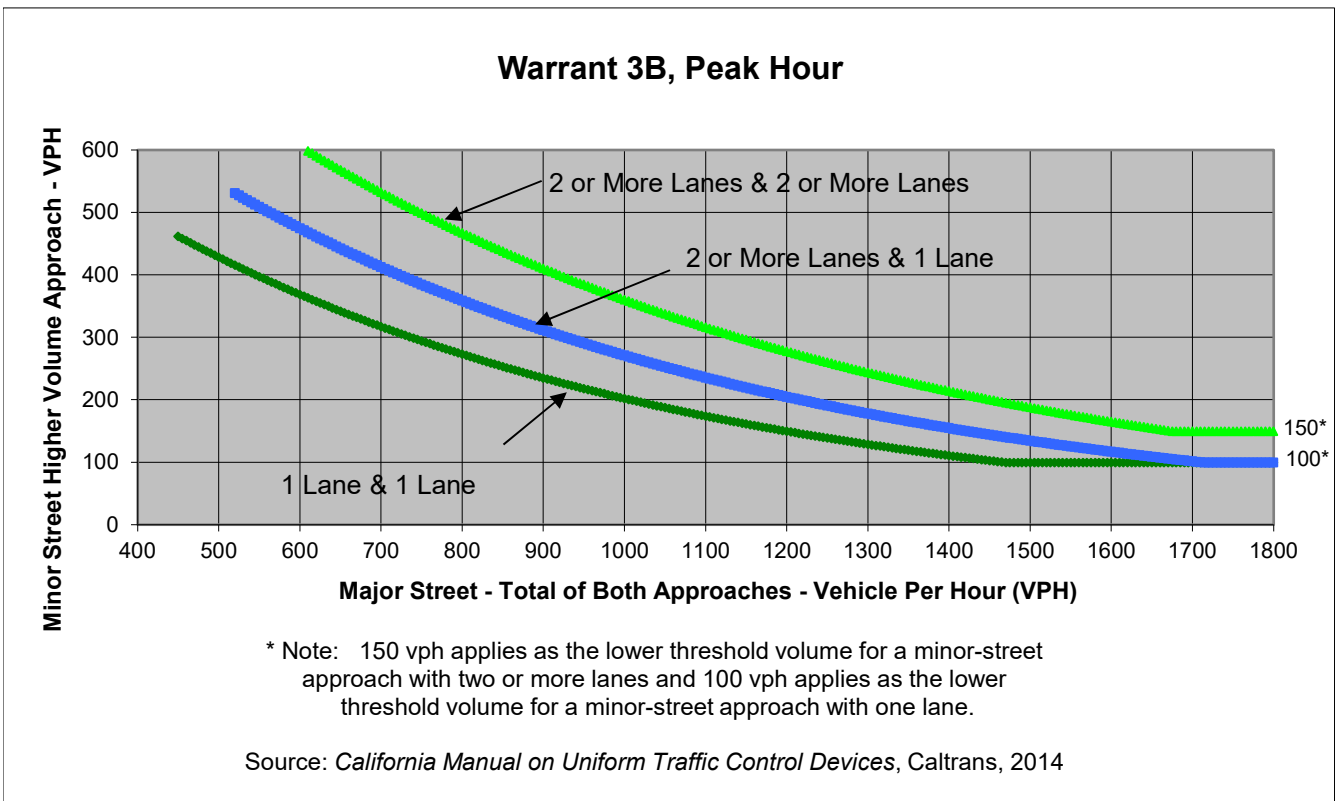
Project **Elite Charter School TIA**
 Scenario **Opening Year**
 Peak Hour **AM**

Turn Movement Volumes

	NB	SB	EB	WB
Left		40	20	
Through			40	40
Right		10		20
Total	0	50	60	60

Major Street Direction

	North/South
x	East/West



	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	120	50	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			



Major Street Maine Street
 Minor Street Sacramento Street

Project Elite Charter School TIA
 Scenario Opening Year
 Peak Hour AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	20	0
Through	0	0	40	40
Right	0	10	0	20
Total	0	50	60	60

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.5
Approach with Worst Case Delay	SB
Total Vehicles on Approach	50

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Opening Year	0.1	50	170
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **Maine Street**
 Minor Street **Sacramento Street**

Project **Elite Charter School TIA**
 Scenario **Opening Year**
 Peak Hour **PM**

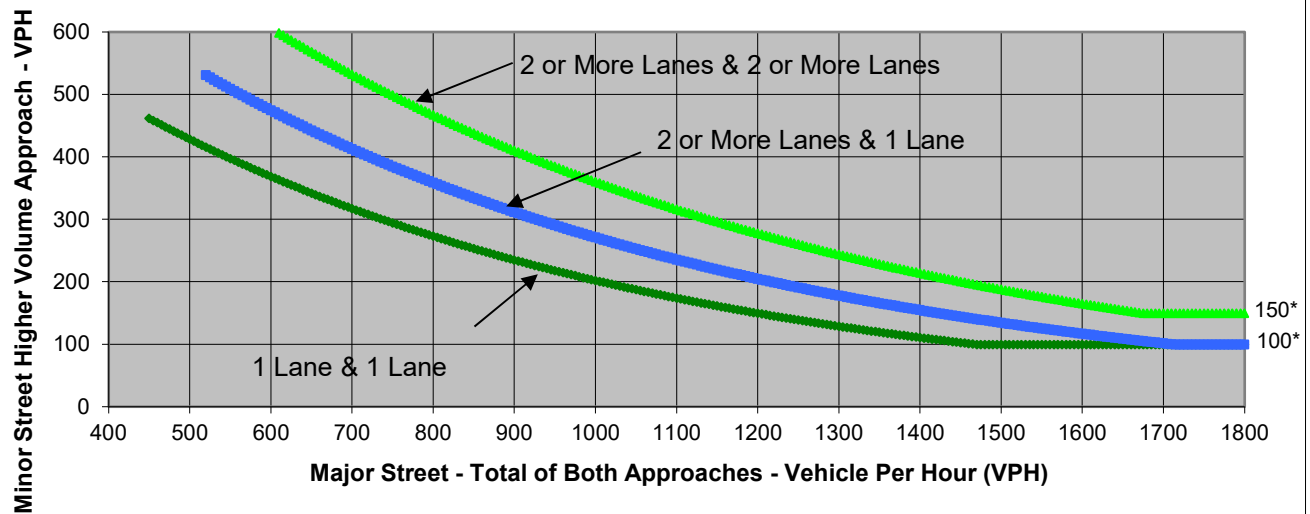
Turn Movement Volumes

	NB	SB	EB	WB
Left		40	10	
Through			70	50
Right		20		30
Total	0	60	80	80

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	160	60	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Maine Street
Minor Street Sacramento Street

Project Elite Charter School TIA
Scenario Opening Year
Peak Hour PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	10	0
Through	0	0	70	50
Right	0	20	0	30
Total	0	60	80	80

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street
Total Approaches

1
3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)
Approach with Worst Case Delay
Total Vehicles on Approach

9.7
SB
60

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Opening Year	0.2	60	220
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Maine Street**
 Minor Street **Sacramento Street**

Project **Elite Charter School TIA**
 Scenario **Opening Year Plus Project**
 Peak Hour **AM**

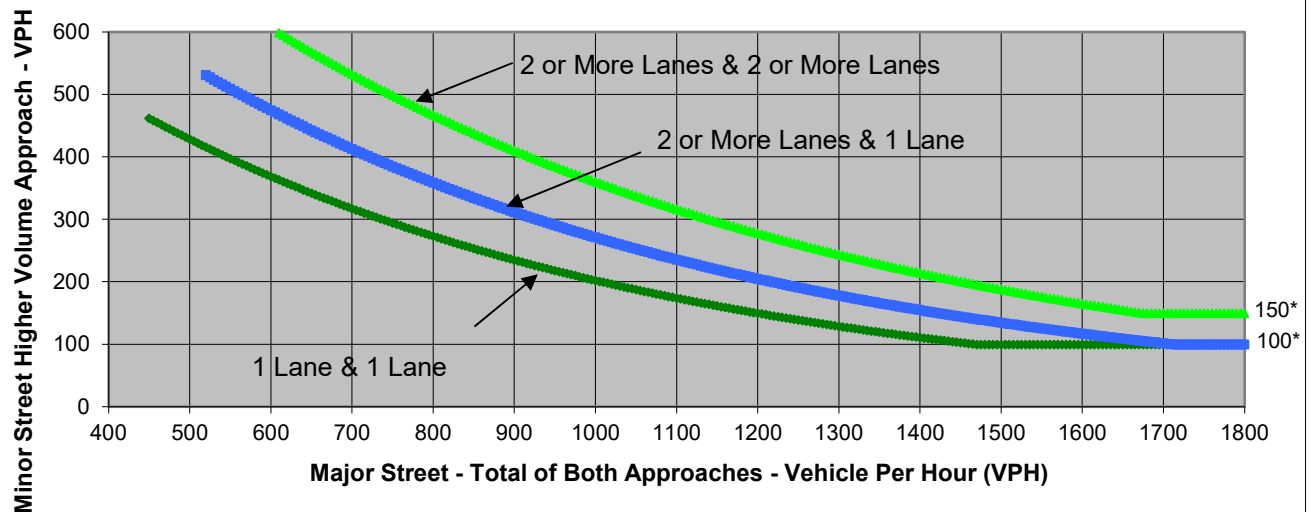
Turn Movement Volumes

	NB	SB	EB	WB
Left		40	22	
Through			40	59
Right		25		21
Total	0	65	62	80

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	142	65	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

FEHR & PEERS

Major Street Maine Street
 Minor Street Sacramento Street

Project Elite Charter School TIA
 Scenario Opening Year Plus Project
 Peak Hour AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	22	0
Through	0	0	40	59
Right	0	25	0	21
Total	0	65	62	80

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.6
Approach with Worst Case Delay	SB
Total Vehicles on Approach	65

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Opening Year Plus Project	0.2	65	207
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **Maine Street**
 Minor Street **Sacramento Street**

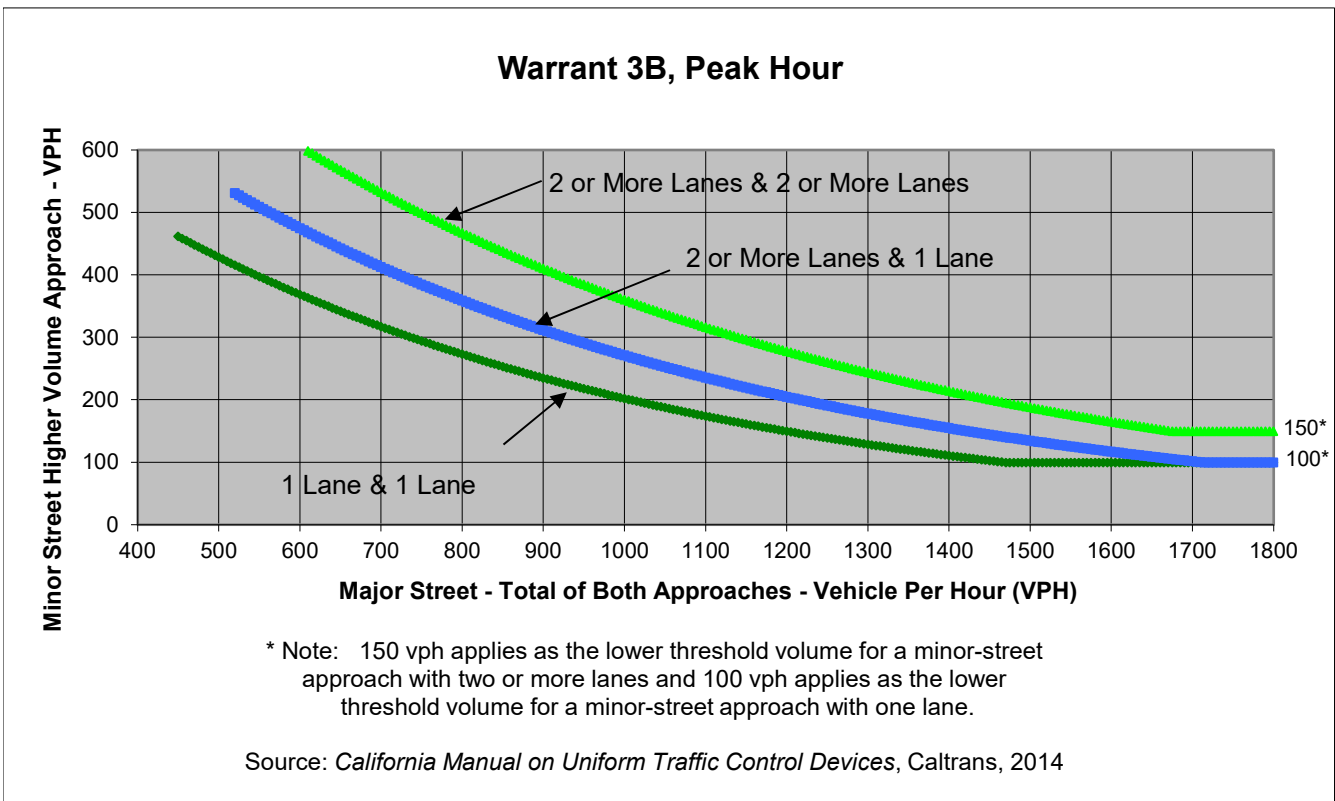
Project **Elite Charter School TIA**
 Scenario **Opening Year Plus Project**
 Peak Hour **PM**

Turn Movement Volumes

	NB	SB	EB	WB
Left		40	10	
Through			70	63
Right		29		30
Total	0	69	80	93

Major Street Direction

	North/South
x	East/West



	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	173	69	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

FEHR & PEERS

Major Street Maine Street
 Minor Street Sacramento Street

Project Elite Charter School TIA
 Scenario Opening Year Plus Project
 Peak Hour PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	10	0
Through	0	0	70	63
Right	0	29	0	30
Total	0	69	80	93

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.7
Approach with Worst Case Delay	SB
Total Vehicles on Approach	69

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Opening Year Plus Project	0.2	69	242
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Maine Street**
 Minor Street **Sacramento Street**

Project **Elite Charter School TIA**
 Scenario **Cumulative**
 Peak Hour **AM**

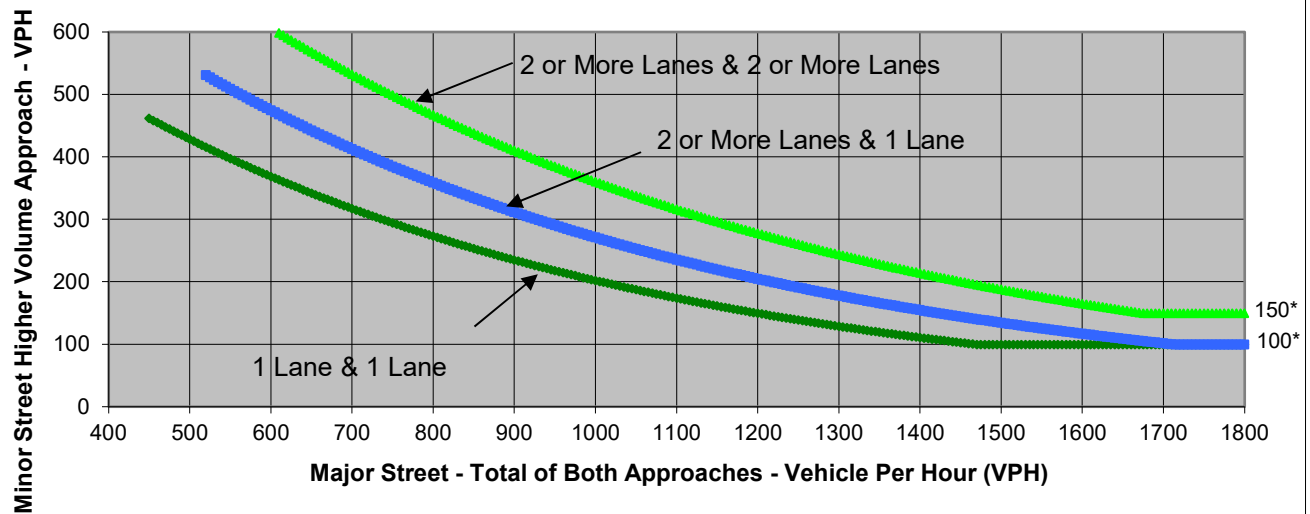
Turn Movement Volumes

	NB	SB	EB	WB
Left		40	20	
Through			40	50
Right		10		20
Total	0	50	60	70

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	130	50	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

FEHR & PEERS

Major Street Maine Street
 Minor Street Sacramento Street

Project Elite Charter School TIA
 Scenario Cumulative
 Peak Hour AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	20	0
Through	0	0	40	50
Right	0	10	0	20
Total	0	50	60	70

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.5
Approach with Worst Case Delay	SB
Total Vehicles on Approach	50

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Cumulative	0.1	50	180
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **Maine Street**
 Minor Street **Sacramento Street**

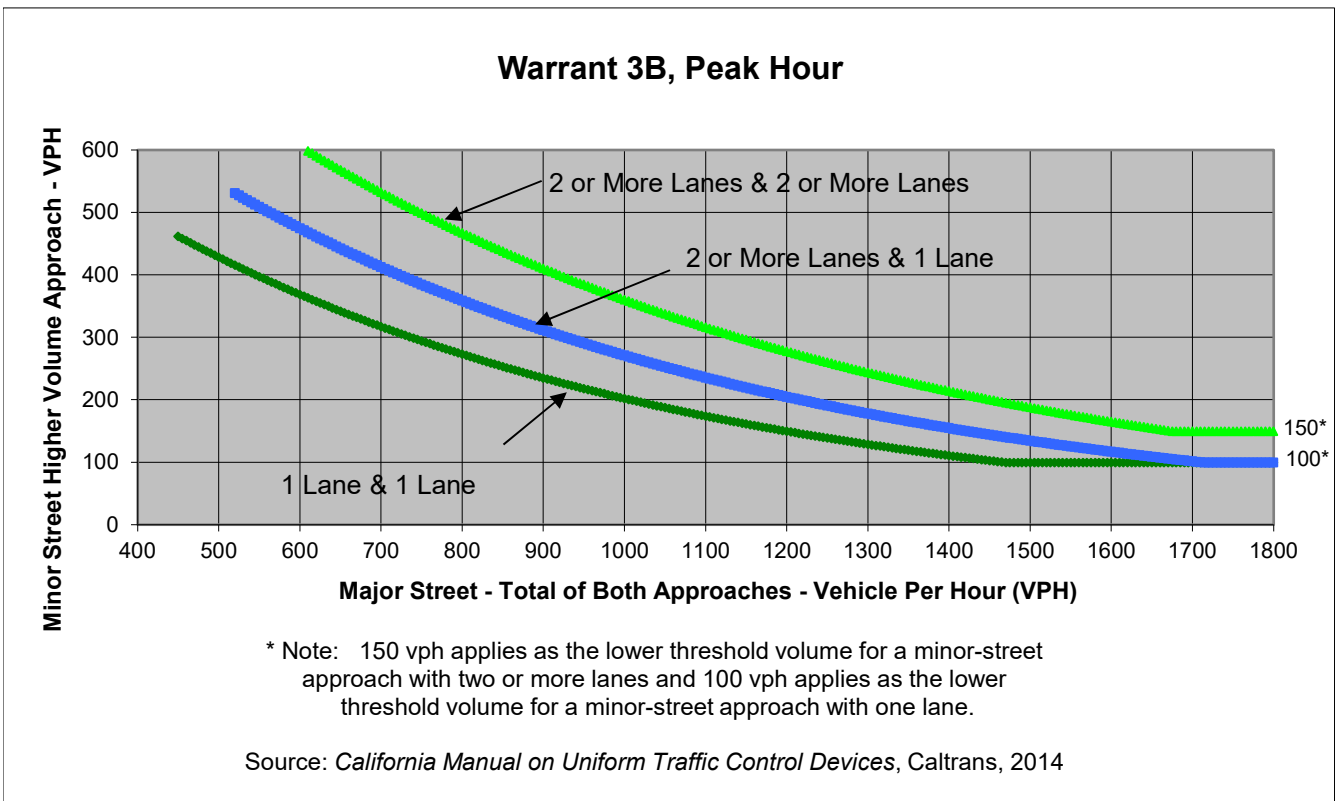
Project **Elite Charter School TIA**
 Scenario **Cumulative**
 Peak Hour **PM**

Turn Movement Volumes

	NB	SB	EB	WB
Left		50	10	
Through			80	60
Right		20		30
Total	0	70	90	90

Major Street Direction

	North/South
x	East/West



	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	180	70	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

FEHR & PEERS

Major Street Maine Street
 Minor Street Sacramento Street

Project Elite Charter School TIA
 Scenario Cumulative
 Peak Hour PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	50	10	0
Through	0	0	80	60
Right	0	20	0	30
Total	0	70	90	90

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.9
Approach with Worst Case Delay	SB
Total Vehicles on Approach	70

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Cumulative	0.2	70	250
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Maine Street**
 Minor Street **Sacramento Street**

Project **Elite Charter School TIA**
 Scenario **Cumulative Plus Project**
 Peak Hour **AM**

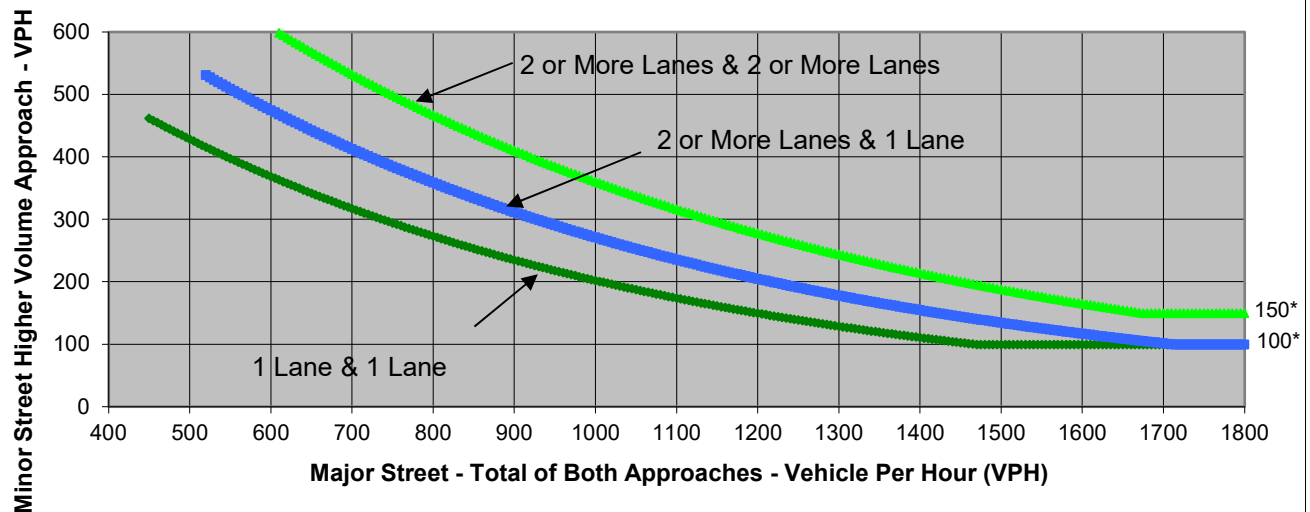
Turn Movement Volumes

	NB	SB	EB	WB
Left		40	22	
Through			40	69
Right		25		21
Total	0	65	62	90

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	152	65	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

FEHR & PEERS

Major Street Maine Street
Minor Street Sacramento Street

Project Elite Charter School TIA
Scenario Cumulative Plus Project
Peak Hour AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	22	0
Through	0	0	40	69
Right	0	25	0	21
Total	0	65	62	90

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.6
Approach with Worst Case Delay	SB
Total Vehicles on Approach	65

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Cumulative Plus Project	0.2	65	217
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Maine Street**
 Minor Street **Sacramento Street**

Project **Elite Charter School TIA**
 Scenario **Cumulative Plus Project**
 Peak Hour **PM**

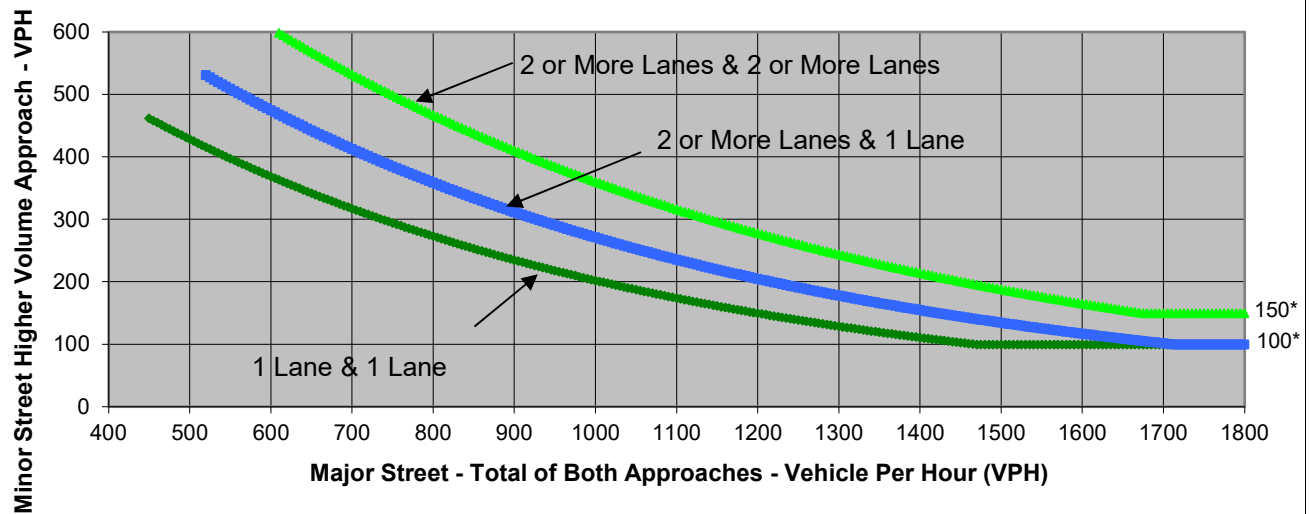
Turn Movement Volumes

	NB	SB	EB	WB
Left		50	10	
Through			80	30
Right		29		73
Total	0	79	90	103

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Maine Street	Sacramento Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	193	79	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			



Major Street Maine Street
 Minor Street Sacramento Street

Project Elite Charter School TIA
 Scenario Cumulative Plus Project
 Peak Hour PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	50	10	0
Through	0	0	80	30
Right	0	29	0	73
Total	0	79	90	103

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	10
Approach with Worst Case Delay	SB
Total Vehicles on Approach	79

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Cumulative Plus Project	0.2	79	272
Limiting Value	4	100	650
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Appendix D: Vehicle Queues

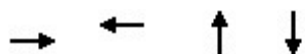
Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Existing AM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	63	108	62	64
v/c Ratio	0.04	0.07	0.10	0.10
Control Delay	2.7	2.7	4.2	4.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	2.7	2.7	4.2	4.8
Queue Length 50th (ft)	0	0	3	3
Queue Length 95th (ft)	12	19	12	13
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1745	1675	1780	1826
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.04	0.06	0.03	0.04
Intersection Summary				

4: Sacramento Street & Georgia Street

Existing AM



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	78	123	31	90
v/c Ratio	0.10	0.15	0.03	0.11
Control Delay	3.2	3.1	3.3	3.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.2	3.1	3.3	3.3
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	14	20	8	16
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1688	1729	1816	1810
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.05	0.07	0.02	0.05
Intersection Summary				

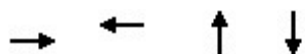
Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Existing PM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	123	128	117	102
v/c Ratio	0.10	0.10	0.19	0.15
Control Delay	4.5	3.8	5.2	5.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.5	3.8	5.2	5.1
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	21	18	20	18
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1739	1675	1562	1673
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.07	0.08	0.07	0.06
Intersection Summary				

4: Sacramento Street & Georgia Street

Existing PM



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	147	132	83	108
v/c Ratio	0.19	0.17	0.09	0.12
Control Delay	4.8	4.3	4.4	4.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.8	4.3	4.4	4.5
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	26	21	16	20
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1679	1646	1763	1773
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.09	0.08	0.05	0.06
Intersection Summary				

Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year AM

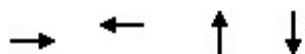
	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	83	130	83	82
v/c Ratio	0.06	0.09	0.10	0.10
Control Delay	2.5	2.6	3.4	3.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	2.5	2.6	3.4	3.8
Queue Length 50th (ft)	0	0	1	1
Queue Length 95th (ft)	14	22	15	16
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1689	1653	1761	1801
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.05	0.08	0.05	0.05
Intersection Summary				

Queues

Elite Charter School TIA

4: Sacramento Street & Georgia Street

Opening Year AM



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	100	133	44	100
v/c Ratio	0.13	0.17	0.05	0.13
Control Delay	4.4	4.4	4.1	4.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.4	4.4	4.1	4.6
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	18	22	10	18
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1746	1719	1771	1808
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.06	0.08	0.02	0.06
Intersection Summary				

Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year PM

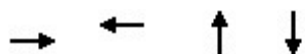
	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	136	147	136	111
v/c Ratio	0.13	0.14	0.25	0.21
Control Delay	5.9	4.8	6.4	6.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.9	4.8	6.4	6.2
Queue Length 50th (ft)	10	8	9	7
Queue Length 95th (ft)	25	21	23	20
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1696	1690	1526	1479
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.08	0.09	0.09	0.08
Intersection Summary				

Queues

Elite Charter School TIA

4: Sacramento Street & Georgia Street

Opening Year PM



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	159	148	103	125
v/c Ratio	0.18	0.17	0.11	0.16
Control Delay	4.6	4.1	4.4	4.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.6	4.1	4.4	4.7
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	28	24	19	23
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1670	1608	1739	1748
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.10	0.09	0.06	0.07
Intersection Summary				

Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year Plus Project AM

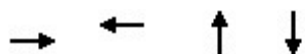
	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	116	130	117	93
v/c Ratio	0.09	0.11	0.18	0.13
Control Delay	4.1	4.3	4.5	5.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.1	4.3	4.5	5.3
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	19	22	19	18
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1723	1634	1616	1807
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.07	0.08	0.07	0.05
Intersection Summary				

Queues

Elite Charter School TIA

4: Sacramento Street & Georgia Street

Opening Year Plus Project AM



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	161	199	44	124
v/c Ratio	0.23	0.33	0.07	0.21
Control Delay	5.3	6.7	5.7	6.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.3	6.7	5.7	6.9
Queue Length 50th (ft)	9	13	2	9
Queue Length 95th (ft)	28	38	12	29
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1691	1472	1724	1581
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.10	0.14	0.03	0.08
Intersection Summary				

Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Opening Year Plus Project PM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	149	150	161	117
v/c Ratio	0.15	0.15	0.28	0.22
Control Delay	6.1	5.0	6.4	6.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.1	5.0	6.4	6.4
Queue Length 50th (ft)	12	8	10	8
Queue Length 95th (ft)	28	23	27	22
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1707	1691	1518	1433
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.09	0.09	0.11	0.08
Intersection Summary				

Queues

Elite Charter School TIA

4: Sacramento Street & Georgia Street

Opening Year Plus Project PM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	192	178	121	134
v/c Ratio	0.27	0.28	0.17	0.22
Control Delay	6.1	6.0	5.3	6.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.1	6.0	5.3	6.3
Queue Length 50th (ft)	13	11	6	8
Queue Length 95th (ft)	34	31	23	27
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1661	1473	1522	1521
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.12	0.12	0.08	0.09
Intersection Summary				

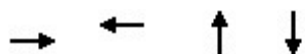
Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative AM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	95	130	83	94
v/c Ratio	0.08	0.11	0.14	0.16
Control Delay	4.0	4.3	5.0	5.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.0	4.3	5.0	5.8
Queue Length 50th (ft)	0	0	1	1
Queue Length 95th (ft)	16	22	15	18
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1705	1646	1638	1654
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.06	0.08	0.05	0.06
Intersection Summary				

4: Sacramento Street & Georgia Street

Cumulative AM



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	111	155	44	111
v/c Ratio	0.12	0.20	0.05	0.14
Control Delay	4.4	4.4	4.4	4.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.4	4.4	4.4	4.8
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	20	25	10	21
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1708	1713	1764	1805
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.06	0.09	0.02	0.06
Intersection Summary				

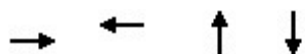
Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative PM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	161	173	148	136
v/c Ratio	0.16	0.17	0.26	0.25
Control Delay	5.8	5.0	6.7	7.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.8	5.0	6.7	7.0
Queue Length 50th (ft)	12	10	10	10
Queue Length 95th (ft)	29	26	27	26
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1687	1633	1530	1454
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.10	0.11	0.10	0.09
Intersection Summary				

4: Sacramento Street & Georgia Street

Cumulative PM



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	181	159	114	137
v/c Ratio	0.27	0.24	0.15	0.22
Control Delay	6.3	5.5	5.5	6.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.3	5.5	5.5	6.3
Queue Length 50th (ft)	12	9	7	8
Queue Length 95th (ft)	34	27	23	27
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1627	1614	1549	1529
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.11	0.10	0.07	0.09
Intersection Summary				

Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative Plus Project AM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	127	130	117	105
v/c Ratio	0.10	0.11	0.18	0.15
Control Delay	4.2	4.4	4.4	5.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.2	4.4	4.4	5.3
Queue Length 50th (ft)	0	0	0	0
Queue Length 95th (ft)	22	23	19	20
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1730	1629	1610	1784
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.07	0.08	0.07	0.06
Intersection Summary				

Queues

Elite Charter School TIA

4: Sacramento Street & Georgia Street

Cumulative Plus Project AM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	172	221	44	135
v/c Ratio	0.24	0.35	0.07	0.22
Control Delay	5.4	6.7	5.8	7.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.4	6.7	5.8	7.2
Queue Length 50th (ft)	10	15	2	10
Queue Length 95th (ft)	31	43	13	33
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1699	1493	1702	1577
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.10	0.15	0.03	0.09
Intersection Summary				

Queues
3: Santa Clara Street & Georgia Street

Elite Charter School TIA
Cumulative Plus Project PM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	175	176	173	143
v/c Ratio	0.17	0.18	0.29	0.25
Control Delay	6.1	5.1	6.7	7.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.1	5.1	6.7	7.0
Queue Length 50th (ft)	13	10	12	11
Queue Length 95th (ft)	33	28	31	29
Internal Link Dist (ft)	751	384	249	672
Turn Bay Length (ft)				
Base Capacity (vph)	1697	1632	1509	1455
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.10	0.11	0.11	0.10
Intersection Summary				

Queues

Elite Charter School TIA

4: Sacramento Street & Georgia Street

Cumulative Plus Project PM

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	215	189	132	146
v/c Ratio	0.30	0.28	0.21	0.23
Control Delay	6.4	6.1	6.0	6.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.4	6.1	6.0	6.7
Queue Length 50th (ft)	15	12	8	10
Queue Length 95th (ft)	41	35	27	31
Internal Link Dist (ft)	384	890	580	645
Turn Bay Length (ft)				
Base Capacity (vph)	1653	1515	1519	1516
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.13	0.12	0.09	0.10
Intersection Summary				

FEHR & PEERS

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Memo



455 Capitol Mall, Suite 300
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Date: February 21, 2024

To: Christina Ratcliffe, Planning Director, City of Vallejo

CC: Erwin Ordonez, Principal Planner, Interwest

From: Dimitri Antoniou, Pat Angell, Ascent

Subject: Air Quality Study - Elite Charter School Project in Vallejo, Class 32 Categorical Exemption

INTRODUCTION AND PURPOSE

A Class 32 exemption is a Categorical Exemption under the State California Environmental Quality Act (CEQA) Guidelines (Cal. Code Regs., title 14, Section 15000 et seq.) that is available for qualifying infill development located in an urban area. To qualify for a Class 32 Categorical Exemption, one criterion a project must meet is that approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality. The proposed project is located in the City of Vallejo on a 0.704-acre site, surrounded by commercial uses, and is characterized as an infill development project. The purpose of this Air Quality Study is to evaluate whether the proposed project could potentially result in any significant effects related to air quality for purposes of determining consistency with the requirements of a Class 32 Categorical Exemption under CEQA.

This study includes a brief explanation of the project, applicable standards of significance, analysis of air quality impacts, emission modeling results, and conclusions.

PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

The project site is located at 241-255 Georgia Street on Assessor's Parcel Number (APN) 0055-170-390 in the City of Vallejo, California in southwest Solano County. The 0.704-acre project site is bounded by an existing commercial development to the west, Georgia Street to the north, Sacramento Street to the east, and an existing parking lot and Vallejo Transit Center to the south. The project site includes approximately 30,666 square feet (sf) of parcel area and is presently developed with a partial two-story building with a combined total square footage of 34,819 square feet. The building is currently partially occupied by a medical clinic.

The proposed project would provide a new public charter high school that would accommodate a maximum of 400 students and 35 staff. The proposed project would be completed in two separate phases as the school continues to grow enrollment and additional funds for construction become available. The existing structure would not be demolished but internal improvements would be made to reconfigure the building layout.

The initial development phase proposes developing approximately 18,000 square feet of interior space suitable for 13 classrooms, four offices, bathroom facilities, a serving kitchen, a multi-purpose room, a library alcove, and a future gymnasium on the ground floor. The second development phase proposes to develop five additional classrooms,

storage areas, restrooms, a conference room, and four private offices on the second floor. The proposed project improvements would be Americans with Disabilities Act (ADA) accessible and would comply with State design and construction standards. Other project improvements include adding school signage, developing perimeter fencing for security purposes, constructing curbs, ramps, and gutters; trenching along Georgia Street for underground utilities; removing/reconfiguring existing curbs to accommodate new parking; minor removal of shrubs and trees; adding a new ADA accessible ramp that would connect Sacramento Street to the rear entrance of the building; reconfiguring 16 parking spaces into eight parallel parking spaces along Sacramento Street, as well as adding 36 bicycle parking spaces. New perimeter fencing for security purposes, school signage, and 36 bicycle parking spaces would be included.

The school would operate Monday through Friday from 8:00 a.m. to 3:30 p.m. with occasional after-school activities and weekend events (e.g., parent engagement meetings). During the initial development phase, the school would house a maximum of 249 students, ten teaching staff, and 25 administrative staff. At full enrollment, there would be a maximum of 400 students and approximately 35 staff members.

The project site is located in the City of Vallejo in Solano County which is within the San Francisco Bay Area Air Basin (SFBAAB). Air quality within the City of Vallejo is regulated by the US Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the Bay Area Air Quality Management District (BAAQMD). The SFBAAB is currently designated as a nonattainment area for State and national ozone standards and State particulate matter ambient air quality standards. The project site is surrounded by commercial land uses and the nearest sensitive receptors to the project site include the Vallejo John F. Kennedy Library, located approximately 0.08 miles northwest of the project site, north of Georgia Street and the multi-family residential dwellings along Maine Street, approximately 0.10 miles south of the project site.

APPLICABLE STANDARDS OF SIGNIFICANCE

BAAQMD develops regulations and emissions reduction programs to control emissions of criteria air pollutants, ozone precursors (oxides of nitrogen [NO_x] and reactive organic gases [ROG]), carbon monoxide (CO), toxic air contaminants (TACs), and odors within its jurisdiction. BAAQMD's 2022 CEQA Guidelines (BAAQMD 2022), provides guidance for the preparation of CEQA documents as it pertains to air quality and climate change, including recommended thresholds of significance for evaluation of air quality impacts of projects in the SFBAAB. BAAQMD's air quality thresholds of significance are tied to achieving or maintaining attainment designations, with the national and state air quality standards. The BAAQMD's project level thresholds, which are scientifically substantiated, are numerical concentrations of criteria air pollutants considered to be protective of human health. Projects that do not exceed BAAQMD thresholds would not contribute to the nonattainment of state and subsequently national standards or result in increases in health-related impacts to sensitive receptors associated with increases in criteria air pollutants or ozone precursors. Applicable thresholds for project construction and operation are shown in Table 1 below.

Table 1 BAAQMD Thresholds of Significance for Construction and Operational-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Operation		Construction Average Daily Emission (lbs/day)
	Average Daily Emission (lbs/day)	Maximum Annual Emissions (tons/year)	
ROG	54	10	54
NO _x	54	10	54
PM ₁₀ (exhaust)	82	15	82
PM _{2.5} (exhaust)	54	10	54

PM ₁₀ /PM _{2.5} (fugitive dust)	None	BMPs
---	------	------

Notes:

lbs/day = pounds per day

NO_x = oxides of nitrogen

PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers

PM₁₀ = fine particulate matter with an aerodynamic resistance diameter of 10 micrometers

ROG = reactive organic gases

BMP = Best Management Practices

Source: BAAQMD 2022

City of Vallejo General Plan

The policies and actions of the City of Vallejo 2040 General Plan Update which relate to air quality and are relevant to the project include (City of Vallejo 2017):

- ▶ **Policy CP-1.12 Clean Air.** Protect the community from harmful levels of air pollution.
 - **Action CP-1.12B.** Update City regulations to set BAAQMD-recommended limits for particulate emissions from construction, demolition, debris hauling, and utility maintenance.
 - **Action CP-1.12C.** Provide information regarding advances in air-quality protection measures to schools, homeowners, and operators of “sensitive receptors” such as senior and childcare facilities.
 - **Action CP-1.12E.** Periodically review the Building Code for consistency with the latest California Green Building Standards Code and assess the need for updates to require new construction and remodels to employ best practices and materials to reduce emissions, both during and after construction.

Basic Dust Control Measures

The project must comply with applicable city, regional, State, and federal regulations. General Plan Policy CP-1.12 notes that the city follows BAAQMD’s recommendations for particulate emissions from construction, demolition, debris hauling, and utility maintenance (City of Vallejo 2017). To comply with the best management practices (BMPs) required for all projects located within the BAAQMD, the following dust suppression BMPs would be implemented during project construction.

- ▶ All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- ▶ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- ▶ All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- ▶ All vehicle speeds on unpaved roads shall be limited to 15 mph.
- ▶ All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- ▶ All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- ▶ All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- ▶ Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- ▶ Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air

District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

ANALYSIS

Construction and Operational Criteria Air Pollutant Emissions

Project construction and operation would result in emissions of ROG, NO_x, respirable particulate matter with an aerodynamic diameter of 10 micrometers (PM₁₀), and fine particulate matter with an aerodynamic diameter of 2.5 micrometers (PM_{2.5}). Construction generated emissions would be temporary (i.e., Phase 1 construction is expected to start in March 2024 and end in November 2024) and would result from demolition activities, off-road equipment, material delivery, worker commute trips, and other activities (e.g., building construction, asphalt paving, application of architectural coatings). The air quality modeling assumed that phase two would be similar in duration and construction intensity as phase one and conservatively assumed that phase two would begin construction immediately after phase one is complete. This approach is conservative because construction equipment fleets become cleaner over time as older equipment is replaced with newer equipment.

Operational criteria air pollutant emissions would result from mobile and area-wide sources of emissions from vehicle trips, electricity consumption for lighting and building use, the use of landscaping equipment or other small equipment, and the periodic application of architectural coating. The project's mobile emissions were modeled using project specific trip rates identified in the traffic analysis conducted for this project (Fehr and Peers 2023). It should be noted that the air quality modeling assumed that the proposed development would result in new vehicular trips to the project site. However, currently, approximately 34,819 square feet of the existing two-story building is partially occupied by a medical clinic and once the project is complete, the total anticipated occupied space would be approximately 34,819 sf. Because the air emissions modeling did not adjust trips down for this anticipated decrease in medical clinic-associated trips from existing conditions, emissions estimates are conservative.

Construction and operation-generated emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.21 (CAPCOA 2022). Modeling was based on project-specific information (i.e., construction schedule and trip generation rates) and reasonable assumptions based on typical construction activities. Where project-specific details were unavailable, default values in CalEEMod were used based on the project's location and land use type. For detailed assumptions and modeling inputs, refer to Attachment A: Air Quality.

Table 2 below summarizes the daily average construction and operational-related emissions of criteria air pollutants in pounds per day, compared to BAAQMD-recommended thresholds of significance for the respective air pollutant emissions. As shown in Table 2, project construction and operation emissions would result in levels of ROG, NO_x, PM₁₀, and PM_{2.5} emissions that are below the respective BAAQMD-recommended thresholds of significance, indicating that project construction and operation would not result cumulatively considerable net increase of criteria air pollutant emissions.

Table 2 Estimated Criteria Air Pollutants and Precursors Emissions Associated with Project Construction and Operation

Emissions Source	Project Generated Emissions			
	ROG	NO _x	PM ₁₀ ^a	PM _{2.5} ^a
Phase 1 Project Construction (2024) Average Daily Emissions (lbs/day)	0.75	2.95	0.14	0.10
Phase 2 Project Construction (2025) Average Daily Emissions (lbs/day)	0.71	2.84	0.14	0.10
BAAQMD Construction Threshold of Significance	54	54	82	54
Exceed Significance Threshold?	No	No	No	No
Project Operation ^b Average Daily Emissions (lbs/day) / Annual (tons/year)	3.52 / 0.64	2.89 / 0.53	3.99 / 0.73	1.06 / 0.19

BAAQMD Operation Threshold of Significance Average Daily Emissions/Annual	54 / 10	54 / 10	82 / 15	54 / 10
Exceed Significance Threshold?	No	No	No	No

Notes:

lbs/day = pounds per day

NO_x = oxides of nitrogen

PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers

PM₁₀ = fine particulate matter with an aerodynamic resistance diameter of 10 micrometers

ROG = reactive organic gases

^a Construction PM emissions and thresholds are only reflective of PM exhaust emissions.

^b Operation emissions include mobile, energy, and area source criteria air pollutant emissions.

Source: modeled by Ascent 2023

As shown above in Table 2, project-generated construction and operational emissions would not exceed BAAQMD's adopted daily or annual thresholds. Therefore, the project would not result in a cumulatively considerable net increase of any criteria air pollutant for which the region is in nonattainment.

Potential to Result in Substantial Carbon Monoxide Concentrations

CO emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high localized concentrations of carbon monoxide. BAAQMD recommends comparing a project's attributes with the following screening criteria as a first step to evaluating whether the project would result in the generation of carbon monoxide concentrations that would substantially contribute to an exceedance of the Thresholds of Significance. The project would result in a less than significant impact to localized carbon monoxide concentrations if:

1. The project is consistent with an applicable congestion management program for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour
3. The project traffic would not increase traffic volumes at the affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage).

Based on the project's trip generation traffic data, there would be 276 peak trips per hour (Fehr and Peers 2023). The project's 276 peak trips would be well below the 44,000 vehicle per hour BAAQMD screening levels. Therefore, the project would not result in localized concentrations that could exceed the applicable thresholds or expose sensitive receptors to substantial concentrations of CO.

Potential to Result in Substantial Toxic Air Contaminant Concentrations

Project construction would result in diesel TAC emissions from off-road construction equipment; however, these emissions would be temporary and cease once construction is complete. As shown in Table 2, PM exhaust emissions are minimal and would not result in substantial concentrations of TAC. The use of diesel-powered equipment would also be limited as primary construction activities involve minor improvements to the inside of the building and some minor upgrades to the exterior (e.g., landscape improvement, parking improvements, paving improvements). Further, the duration of construction activities would be short-term (i.e., less than one year for each phase), thus, exposure duration from construction related TACs would not be substantial. The project would not include construction of any stationary permitted TAC sources. Increases in vehicular trips generated by the project would be minimal and would not result in substantial increases of traffic volumes on nearby roads, thus, would not result in substantial increases in TAC concentrations.

Potential to Result in Substantial Odor Emissions

Construction of the project would result in minor odors from the use of off-road equipment and the application of architectural coatings. These odors would be intermittent and temporary, as they would only occur during the construction phase. The BAAQMD identifies land uses typically associated with potential odor impacts, including coffee roasters, industrial uses, waste and compost facilities, wastewater treatment plants, among others. The project would include a new public charter school with associated on-site amenities, none of which would include long-term odor sources. Therefore, the project would not introduce new odor sources to the project area, and the use of off-road equipment and the application of architectural coatings during construction would be intermittent and short-term and would not result in substantial odors; thus, the project would not result in substantial odor impacts to both existing and future sensitive receptors.

CONCLUSION

Project generated construction and operational criteria air pollutant and precursor emissions would not exceed BAAQMD recommended thresholds of significance for project related construction or operational emissions and thus would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The project would generate minimal additional vehicle trips, would not result in substantial mobile or stationary sources of TACs, and would not result in sources of odors. Thus, approval of the project would not result in a significant effect related to air quality.

REFERENCES

- Bay Area Air Quality Management District. 2022. CEQA Guidelines. Available: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed December 18, 2023.
- California Air Pollution Control Officers Association. 2022. California Emissions Estimator Model Version 2022.1.1.21. Available: <https://www.caleemod.com/>. Accessed December 19, 2023.
- City of Vallejo. 2017. Propel Vallejo General Plan 2040. Available: <https://www.cityofvallejo.net/common/pages/DisplayFile.aspx?itemId=17961496>. Accessed December 18, 2023.
- Fehr and Peers. 2023. Trip Generation and Turning Movements.

Appendix A

Air Quality

Demolition Quantities Estimate

Using the site plans, all components to be removed (e.g., pavement, walls) were estimated and converted to tons of debris for purpose of estimating necessary haul trucks to evaluate emissions

	sheet 2	sheet 3		sheet 5		
PCC Pavement Area (sq ft)	2500	2300	66	101	241	257
AC Pavement Area (sq ft)	4000	2700	1109	928	399	363
Total pavement area to be demolished	Sq ft	6500	5000	1175	1029	640
						620
						14964 sq ft

Assumptions

Height of wall	12 ft
Weight of wall	2.2 lbs per sq ft
Weight of 1 ton	0.0005 lbs per ton

Phase 1

Wall	Length of wall (ft)	sqft of wall	lbs	tons
1	45	540	1188	0.594
2	45	540	1188	0.594
3	10	120	264	0.132
4	10	120	264	0.132
5	10	120	264	0.132
6	20	240	528	0.264
7	20	240	528	0.264
8	13	156	343.2	0.1716
9	7	84	184.8	0.0924
10	10	120	264	0.132
11	10	120	264	0.132
12	10	120	264	0.132
13	10	120	264	0.132
14	25	300	660	0.33
15	33	396	871.2	0.4356
16	14	168	369.6	0.1848
17	14	168	369.6	0.1848
18	14	168	369.6	0.1848
19	22	264	580.8	0.2904
20	25	300	660	0.33
21	22	264	580.8	0.2904
22	22	264	580.8	0.2904
23	12	144	316.8	0.1584
24	9	108	237.6	0.1188
25	9	108	237.6	0.1188
26	6	72	158.4	0.0792
27	14	168	369.6	0.1848
28	10	120	264	0.132
29	8	96	211.2	0.1056
30	8	96	211.2	0.1056
31	16	192	422.4	0.2112
32	8	96	211.2	0.1056
33	12	144	316.8	0.1584
34	12	144	316.8	0.1584
35	8	96	211.2	0.1056
36	8	96	211.2	0.1056
37	21	252	554.4	0.2772
38	9	108	237.6	0.1188
39	13	156	343.2	0.1716
40	8	96	211.2	0.1056
41	8	96	211.2	0.1056
42	13	156	343.2	0.1716
43	8	96	211.2	0.1056
44	11	132	290.4	0.1452
45	11	132	290.4	0.1452
46	11	132	290.4	0.1452
47	8	96	211.2	0.1056
48	16	192	422.4	0.2112
49	13	156	343.2	0.1716
50	9	108	237.6	0.1188
51	7	84	184.8	0.0924
52	9	108	237.6	0.1188
53	6	72	158.4	0.0792
54	8	96	211.2	0.1056
55	25	300	660	0.33
56	28	336	739.2	0.3696
57	28	336	739.2	0.3696
58	22	264	580.8	0.2904
59	28	336	739.2	0.3696

60	28	336	739.2	0.3696
61	28	336	739.2	0.3696
62	11	132	290.4	0.1452
63	11	132	290.4	0.1452
64	11	132	290.4	0.1452
65	15	180	396	0.198
66	15	180	396	0.198
67	13	156	343.2	0.1716
68	13	156	343.2	0.1716
69	13	156	343.2	0.1716
70	5	60	132	0.066
71	5	60	132	0.066
72	5	60	132	0.066
73	5	60	132	0.066
74	5	60	132	0.066
75	15	180	396	0.198
76	12	144	316.8	0.1584
77	14	168	369.6	0.1848
78	14	168	369.6	0.1848
79	8	96	211.2	0.1056
80	15	180	396	0.198
81	6	72	158.4	0.0792
82	10	120	264	0.132
83	15	180	396	0.198
84	10	120	264	0.132
85	15	180	396	0.198
86	42	504	1108.8	0.5544
87	108	1296	2851.2	1.4256
88	15	180	396	0.198
89	24	288	633.6	0.3168
90	15	180	396	0.198
91	24	288	633.6	0.3168
92	15	180	396	0.198
93	5	60	132	0.066
94	15	180	396	0.198
95	15	180	396	0.198
96	15	180	396	0.198
97	16	192	422.4	0.2112
98	14	168	369.6	0.1848
99	14	168	369.6	0.1848
100	14	168	369.6	0.1848
101	14	168	369.6	0.1848
102	12	144	316.8	0.1584
103	12	144	316.8	0.1584
104	12	144	316.8	0.1584
105	12	144	316.8	0.1584
106	14	168	369.6	0.1848
107	8	96	211.2	0.1056
108	10	120	264	0.132
109	10	120	264	0.132
110	10	120	264	0.132
111	10	120	264	0.132
112	6	72	158.4	0.0792
113	6	72	158.4	0.0792
114	6	72	158.4	0.0792
115	28	336	739.2	0.3696
116	28	336	739.2	0.3696
117	20	240	528	0.264
118	32	384	844.8	0.4224
119	38	456	1003.2	0.5016
120	22	264	580.8	0.2904
121	8	96	211.2	0.1056
122	29	348	765.6	0.3828
123	47	564	1240.8	0.6204
124	32	384	844.8	0.4224
125	14	168	369.6	0.1848
126	12	144	316.8	0.1584
127	24	288	633.6	0.3168
128	10	120	264	0.132
129	10	120	264	0.132
130	10	120	264	0.132
131	10	120	264	0.132
132	13	156	343.2	0.1716
133	10	120	264	0.132
134	13	156	343.2	0.1716

135	22	264	580.8	0.2904
136	16	192	422.4	0.2112
137	6	72	158.4	0.0792
138	6	72	158.4	0.0792
139	14	168	369.6	0.1848
140	18	216	475.2	0.2376
141	4	48	105.6	0.0528
142	4	48	105.6	0.0528
143	4	48	105.6	0.0528
144	4	48	105.6	0.0528
145	4	48	105.6	0.0528
146	4	48	105.6	0.0528
147	8	96	211.2	0.1056
148	4	48	105.6	0.0528
149	4	48	105.6	0.0528
150	5	60	132	0.066
151	12	144	316.8	0.1584
152	14	168	369.6	0.1848
153	5	60	132	0.066
154	5	60	132	0.066
2254 ft		27048 sq ft	59505.6 lbs	29.7528 tons

Phase 2

Wall	Length of wall (ft)	sqft of wall	lbs	tons
1	31	372	818.4	0.4092
2	18	216	475.2	0.2376
3	18	216	475.2	0.2376
4	27	324	712.8	0.3564
5	9	108	237.6	0.1188
6	14	168	369.6	0.1848
7	20	240	528	0.264
8	20	240	528	0.264
9	17	204	448.8	0.2244
10	24	288	633.6	0.3168
11	17	204	448.8	0.2244
12	34	408	897.6	0.4488
13	17	204	448.8	0.2244
14	25	300	660	0.33
15	22	264	580.8	0.2904
16	15	180	396	0.198
17	20	240	528	0.264
18	24	288	633.6	0.3168
19	10	120	264	0.132
20	10	120	264	0.132
21	25	300	660	0.33
22	36	432	950.4	0.4752
23	16	192	422.4	0.2112
24	16	192	422.4	0.2112
25	26	312	686.4	0.3432
26	8	96	211.2	0.1056
27	20	240	528	0.264
28	10	120	264	0.132
29	11	132	290.4	0.1452
30	19	228	501.6	0.2508
31	19	228	501.6	0.2508
32	15	180	396	0.198
33	18	216	475.2	0.2376
34	14	168	369.6	0.1848
35	12	144	316.8	0.1584
36	11	132	290.4	0.1452
37	8	96	211.2	0.1056
676 ft		8112 sq ft	17846.4 lbs	8.9232 tons

MUP 4.1

Wall	Length of wall (ft)	sqft of wall	lbs	tons
1	22	264	580.8	0.2904
2	22	264	580.8	0.2904
3	22	264	580.8	0.2904
4	11	132	290.4	0.1452
77 ft		924 sq ft	2032.8 lbs	1.0164 tons

Phase 1					Phase 2							
Phase 1 (MUP 5)		Prelim Demo (MUP 4.1)		Demo Items:	Phase 2 (MUP 8)		Sheet 5		Sheet 2		Sheet 3	
Quantity	weight (tons)	Quantity	weight (tons)		Quantity	weight (tons)	Quantity	weight (tons)	Quantity	weight (tons)	Quantity	weight (tons)
Walls	154	29.7528	4	1.0164	Walls	37	8.9232					
HVAC					HVAC	20	3.7					
Fans					Fans	3	0.18					
Curbs			8	0.5625	Curbs			4	0.1875			
Pavement					Pavement				129.9		243.75	187.5
Doors	73	3.65	5	0.25	Doors	34	1.7					
Hand Sink	10	0.15			Hand Sink	10	0.15					
Kitchen Sink	6	0.09			Kitchen Sink	3	0.045					
Wall Hung Urinal	2	0.06			Wall Hung Urinal	1	0.03					
Water Closet	14	0.84			Water Closet	12	0.72					
Total		34.5428		1.8289	Total		15.4482		130.0875			187.5
					Misc:							
					sidewalk			2				
					tree			2		2		
					shrub			1		4		
					retaining wall					2		
					fence					1		
					pipe					1		
					handrail					1		
Total Phase 1 Demo												
	36.3717	tons										
Total Phase 2 Demo												
	333.0357	tons										

Assumptions:

Weight of Door	100	lbs
Weight of Hand sink	30	lbs
Weight of Kitchen Sink	30	lbs
Weight of Urinal	60	lbs
Weight of Water Closet	120	lbs
Weight of 1 ton	0.0005	lbs
Curbs/pavement made of concrete		
Weight of 1 CF of Concrete	150	lbs
Height/width of curb	0.5	ft
Height of pavement	0.5	ft
Weight of HVAC	370	lbs
Weight of Fan	120	lbs

misc. demolition - 2 additional truck trips

Curbs	quantity	length (ft)	width (ft)	height (ft)	cubic feet (CF)	lbs	tons
	4	20	0.5	0.5	5	750	0.375
	4	10	0.5	0.5	2.5	375	0.1875
total tons of curb removed							0.5625
Pavement							
		sheet 2	sheet 3	sheet 5			
PCC Pavement Area (sq ft)		2500	2300	66	101	241	257
AC Pavement Area (sq ft)		4000	2700	1109	928	399	363
Total pavement area to be demolished							
		6500	5000	1175	1029	640	620
cubic feet of pavement		3250	2500		1732		14964
							7482
total tons of pavement		243.75	187.5		129.9		561.15
							sq ft
							cubic ft
							tons

Vallejo - Elite Charter School Project Class 32 Exemption Detailed Report

Operations (Phase 1 + 2, full project)

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Vallejo - Elite Charter School Project Class 32 Exemption
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	34.8
Location	255 Georgia St #241, Vallejo, CA 94590, USA
County	Solano-San Francisco
City	Vallejo
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	823
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

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	34.8	1000sqft	0.70	34,819	1,452	1,452	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.91	3.58	0.08	5.62	5.70	0.08	1.42	1.50	26.6	7,341	7,368	3.02	0.30	27.0	7,561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.44	4.12	0.08	5.62	5.70	0.08	1.42	1.50	26.6	6,939	6,966	3.06	0.33	0.83	7,143
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.52	2.89	0.07	3.92	3.99	0.07	0.99	1.06	26.6	5,165	5,192	2.95	0.23	8.42	5,343
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.53	0.01	0.72	0.73	0.01	0.18	0.19	4.41	855	860	0.49	0.04	1.39	885

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.80	3.17	0.05	5.62	5.67	0.05	1.42	1.47	—	6,759	6,759	0.29	0.30	26.9	6,881

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Area	1.09	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.23	6.23	< 0.005	< 0.005	—	6.25
Energy	0.02	0.40	0.03	—	0.03	0.03	—	0.03	—	571	571	0.06	< 0.005	—	574
Water	—	—	—	—	—	—	—	—	2.22	4.29	6.51	0.23	0.01	—	13.8
Waste	—	—	—	—	—	—	—	—	24.4	0.00	24.4	2.44	0.00	—	85.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	4.91	3.58	0.08	5.62	5.70	0.08	1.42	1.50	26.6	7,341	7,368	3.02	0.30	27.0	7,561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.58	3.72	0.05	5.62	5.67	0.05	1.42	1.47	—	6,363	6,363	0.34	0.33	0.70	6,470
Area	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.40	0.03	—	0.03	0.03	—	0.03	—	571	571	0.06	< 0.005	—	574
Water	—	—	—	—	—	—	—	—	2.22	4.29	6.51	0.23	0.01	—	13.8
Waste	—	—	—	—	—	—	—	—	24.4	0.00	24.4	2.44	0.00	—	85.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	4.44	4.12	0.08	5.62	5.70	0.08	1.42	1.50	26.6	6,939	6,966	3.06	0.33	0.83	7,143
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.53	2.48	0.04	3.92	3.96	0.03	0.99	1.03	—	4,587	4,587	0.23	0.22	8.29	4,667
Area	0.97	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.07	3.07	< 0.005	< 0.005	—	3.08
Energy	0.02	0.40	0.03	—	0.03	0.03	—	0.03	—	571	571	0.06	< 0.005	—	574
Water	—	—	—	—	—	—	—	—	2.22	4.29	6.51	0.23	0.01	—	13.8
Waste	—	—	—	—	—	—	—	—	24.4	0.00	24.4	2.44	0.00	—	85.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	3.52	2.89	0.07	3.92	3.99	0.07	0.99	1.06	26.6	5,165	5,192	2.95	0.23	8.42	5,343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.46	0.45	0.01	0.72	0.72	0.01	0.18	0.19	—	759	759	0.04	0.04	1.37	773
Area	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.51	0.51	< 0.005	< 0.005	—	0.51
Energy	< 0.005	0.07	0.01	—	0.01	0.01	—	0.01	—	94.6	94.6	0.01	< 0.005	—	95.0

Water	—	—	—	—	—	—	—	—	0.37	0.71	1.08	0.04	< 0.005	—	2.29
Waste	—	—	—	—	—	—	—	—	4.04	0.00	4.04	0.40	0.00	—	14.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	0.64	0.53	0.01	0.72	0.73	0.01	0.18	0.19	4.41	855	860	0.49	0.04	1.39	885

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	3.80	3.17	0.05	5.62	5.67	0.05	1.42	1.47	—	6,759	6,759	0.29	0.30	26.9	6,881
Total	3.80	3.17	0.05	5.62	5.67	0.05	1.42	1.47	—	6,759	6,759	0.29	0.30	26.9	6,881
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	3.58	3.72	0.05	5.62	5.67	0.05	1.42	1.47	—	6,363	6,363	0.34	0.33	0.70	6,470
Total	3.58	3.72	0.05	5.62	5.67	0.05	1.42	1.47	—	6,363	6,363	0.34	0.33	0.70	6,470
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.46	0.45	0.01	0.72	0.72	0.01	0.18	0.19	—	759	759	0.04	0.04	1.37	773
Total	0.46	0.45	0.01	0.72	0.72	0.01	0.18	0.19	—	759	759	0.04	0.04	1.37	773

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	89.2	89.2	0.01	< 0.005	—	90.1
Total	—	—	—	—	—	—	—	—	—	89.2	89.2	0.01	< 0.005	—	90.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	89.2	89.2	0.01	< 0.005	—	90.1
Total	—	—	—	—	—	—	—	—	—	89.2	89.2	0.01	< 0.005	—	90.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	14.8	14.8	< 0.005	< 0.005	—	14.9
Total	—	—	—	—	—	—	—	—	—	14.8	14.8	< 0.005	< 0.005	—	14.9

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.02	0.40	0.03	—	0.03	0.03	—	0.03	—	482	482	0.04	< 0.005	—	483
Total	0.02	0.40	0.03	—	0.03	0.03	—	0.03	—	482	482	0.04	< 0.005	—	483

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.02	0.40	0.03	—	0.03	0.03	—	0.03	—	482	482	0.04	< 0.005	—	483
Total	0.02	0.40	0.03	—	0.03	0.03	—	0.03	—	482	482	0.04	< 0.005	—	483
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	< 0.005	0.07	0.01	—	0.01	0.01	—	0.01	—	79.8	79.8	0.01	< 0.005	—	80.0
Total	< 0.005	0.07	0.01	—	0.01	0.01	—	0.01	—	79.8	79.8	0.01	< 0.005	—	80.0

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.25	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.23	6.23	< 0.005	< 0.005	—	6.25
Total	1.09	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.23	6.23	< 0.005	< 0.005	—	6.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectur Coatings	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectur al Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.51	0.51	< 0.005	< 0.005	—	0.51
Total	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.51	0.51	< 0.005	< 0.005	—	0.51

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	2.22	4.29	6.51	0.23	0.01	—	13.8
Total	—	—	—	—	—	—	—	—	2.22	4.29	6.51	0.23	0.01	—	13.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	2.22	4.29	6.51	0.23	0.01	—	13.8
Total	—	—	—	—	—	—	—	—	2.22	4.29	6.51	0.23	0.01	—	13.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

High School	—	—	—	—	—	—	—	—	0.37	0.71	1.08	0.04	< 0.005	—	2.29
Total	—	—	—	—	—	—	—	—	0.37	0.71	1.08	0.04	< 0.005	—	2.29

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	24.4	0.00	24.4	2.44	0.00	—	85.3
Total	—	—	—	—	—	—	—	—	24.4	0.00	24.4	2.44	0.00	—	85.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	24.4	0.00	24.4	2.44	0.00	—	85.3
Total	—	—	—	—	—	—	—	—	24.4	0.00	24.4	2.44	0.00	—	85.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	4.04	0.00	4.04	0.40	0.00	—	14.1
Total	—	—	—	—	—	—	—	—	4.04	0.00	4.04	0.40	0.00	—	14.1

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

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	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. 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)

Equipment Type	ROG	NOx	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)

Equipment Type	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

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

Land Use	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

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	838	0.00	0.00	218,412	7,983	0.00	0.00	2,081,259

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	52,229	17,410	—
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5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
High School	159,582	204	0.0330	0.0040	1,504,466

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
High School	1,156,152	39,456

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
High School	45.3	—

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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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	13.9	annual days of extreme heat
Extreme Precipitation	5.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth

Wildfire	10.1	annual hectares burned
----------	------	------------------------

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	13.6
AQ-PM	39.2
AQ-DPM	75.4
Drinking Water	24.0
Lead Risk Housing	78.3
Pesticides	32.3
Toxic Releases	63.4
Traffic	10.0

Effect Indicators	—
CleanUp Sites	64.4
Groundwater	93.0
Haz Waste Facilities/Generators	81.0
Impaired Water Bodies	51.2
Solid Waste	43.9
Sensitive Population	—
Asthma	99.8
Cardio-vascular	91.6
Low Birth Weights	99.2
Socioeconomic Factor Indicators	—
Education	72.5
Housing	95.2
Linguistic	49.1
Poverty	97.4
Unemployment	99.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	1.090722443
Employed	2.284101116
Median HI	0.128320287
Education	—
Bachelor's or higher	26.30565892
High school enrollment	100

Preschool enrollment	16.65597331
Transportation	—
Auto Access	0.397792891
Active commuting	89.25959194
Social	—
2-parent households	0.641601437
Voting	31.59245477
Neighborhood	—
Alcohol availability	23.58526883
Park access	81.35506224
Retail density	74.04080585
Supermarket access	16.64314128
Tree canopy	51.99538047
Housing	—
Homeownership	3.849608623
Housing habitability	6.377518286
Low-inc homeowner severe housing cost burden	3.336327473
Low-inc renter severe housing cost burden	17.56704735
Uncrowded housing	51.79006801
Health Outcomes	—
Insured adults	49.23649429
Arthritis	1.4
Asthma ER Admissions	0.2
High Blood Pressure	1.5
Cancer (excluding skin)	22.7
Asthma	3.8
Coronary Heart Disease	1.7

Chronic Obstructive Pulmonary Disease	1.1
Diagnosed Diabetes	0.9
Life Expectancy at Birth	30.6
Cognitively Disabled	3.1
Physically Disabled	47.8
Heart Attack ER Admissions	2.0
Mental Health Not Good	14.3
Chronic Kidney Disease	2.1
Obesity	8.0
Pedestrian Injuries	88.6
Physical Health Not Good	5.8
Stroke	0.9
Health Risk Behaviors	—
Binge Drinking	98.2
Current Smoker	11.7
No Leisure Time for Physical Activity	6.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	44.7
Children	4.0
Elderly	20.2
English Speaking	38.4
Foreign-born	38.0
Outdoor Workers	8.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	9.4
Traffic Density	6.4

Traffic Access	87.4
Other Indices	—
Hardship	95.4
Other Decision Support	—
2016 Voting	11.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	94.0
Healthy Places Index Score for Project Location (b)	0.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	lot size and acreage provided by project description.
Construction: Construction Phases	The existing structure would not be demolished.

Operations: Vehicle Data	Total daily trip = 868. No weekend trip rates since it is a school.
Characteristics: Project Details	Project location is downtown Vallejo.

Vallejo - Elite Charter School Project - Construction Detailed Report

Phase 1 Construction Only Output

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Vallejo - Elite Charter School Project - Construction
Construction Start Date	3/14/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	34.8
Location	255 Georgia St #241, Vallejo, CA 94590, USA
County	Solano-San Francisco
City	Vallejo
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	823
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

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	18.0	1000sqft	0.70	18,000	1,452	1,452	—	—

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.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.87	6.95	0.33	0.11	0.40	0.30	0.02	0.31	—	1,529	1,529	0.06	0.03	0.51	1,539
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.0	6.72	0.29	0.11	0.40	0.27	0.02	0.29	—	1,524	1,524	0.06	0.03	0.01	1,533
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	2.95	0.10	0.04	0.14	0.10	0.01	0.10	—	585	585	0.02	0.01	0.09	588
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.54	0.02	0.01	0.03	0.02	< 0.005	0.02	—	96.9	96.9	< 0.005	< 0.005	0.01	97.4

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.87	6.95	0.33	0.11	0.40	0.30	0.02	0.31	—	1,529	1,529	0.06	0.03	0.51	1,539

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	31.0	6.72	0.29	0.11	0.40	0.27	0.02	0.29	—	1,524	1,524	0.06	0.03	0.01	1,533
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.75	2.95	0.10	0.04	0.14	0.10	0.01	0.10	—	585	585	0.02	0.01	0.09	588
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.14	0.54	0.02	0.01	0.03	0.02	< 0.005	0.02	—	96.9	96.9	< 0.005	< 0.005	0.01	97.4

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	5.83	0.29	—	0.29	0.27	—	0.27	—	864	864	0.04	0.01	—	867
Demolition	—	—	—	0.02	0.02	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	5.83	0.29	—	0.29	0.27	—	0.27	—	864	864	0.04	0.01	—	867
Demolition	—	—	—	0.02	0.02	—	< 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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.48	0.02	—	0.02	0.02	—	0.02	—	71.0	71.0	< 0.005	< 0.005	—	71.3
Demolition	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	—	11.8
Demolition	—	—	—	< 0.005	< 0.005	—	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.00	0.08	0.08	0.00	0.02	0.02	—	91.3	91.3	< 0.005	< 0.005	0.40	92.8
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
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.9	23.9	< 0.005	< 0.005	0.05	25.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.00	0.08	0.08	0.00	0.02	0.02	—	84.4	84.4	< 0.005	< 0.005	0.01	85.5
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
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.9	23.9	< 0.005	< 0.005	< 0.005	25.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.02	7.02	< 0.005	< 0.005	0.01	7.12
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

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.06
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.18
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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34

3.3. Site Preparation (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	6.94	0.33	—	0.33	0.30	—	0.30	—	903	903	0.04	0.01	—	906
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.57	0.03	—	0.03	0.02	—	0.02	—	74.2	74.2	< 0.005	< 0.005	—	74.5
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.3
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	—	45.6	45.6	< 0.005	< 0.005	0.20	46.4
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	0.01	3.56
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.59
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
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

3.5. Building Construction (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	6.58	0.19	—	0.19	0.17	—	0.17	—	1,380	1,380	0.06	0.01	—	1,385
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	6.58	0.19	—	0.19	0.17	—	0.17	—	1,380	1,380	0.06	0.01	—	1,385
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.80	0.05	—	0.05	0.05	—	0.05	—	378	378	0.02	< 0.005	—	379
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.33	0.01	—	0.01	0.01	—	0.01	—	62.6	62.6	< 0.005	< 0.005	—	62.8
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.06	0.06	0.00	0.01	0.01	—	69.0	69.0	< 0.005	< 0.005	0.30	70.1
Vendor	< 0.005	0.11	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	80.1	80.1	< 0.005	0.01	0.21	83.9

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.06	0.06	0.00	0.01	0.01	—	63.8	63.8	< 0.005	< 0.005	0.01	64.6
Vendor	< 0.005	0.11	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	80.1	80.1	< 0.005	0.01	0.01	83.8
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.04	17.9
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	0.03	23.0
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.93	2.93	< 0.005	< 0.005	0.01	2.97
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.63	3.63	< 0.005	< 0.005	< 0.005	3.80
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

3.7. Paving (2024) - Unmitigated

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

Location	ROG	NOx	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	0.35	2.88	0.16	—	0.16	0.14	—	0.14	—	447	447	0.02	< 0.005	—	448
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.12	6.12	< 0.005	< 0.005	—	6.14
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.01	1.01	< 0.005	< 0.005	—	1.02
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.00	0.10	0.10	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.01	107
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.46	1.46	< 0.005	< 0.005	< 0.005	1.48
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25

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
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

3.9. Architectural Coating (2024) - Unmitigated

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

Location	ROG	NOx	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	0.14	0.91	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	30.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	0.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30

Architectur Coatings	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	< 0.005	12.9
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
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
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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

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

Land Use	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequester ed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequester ed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequester ed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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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	3/14/2024	4/24/2024	5.00	30.0	Material removal
Site Preparation	Site Preparation	4/25/2024	6/5/2024	5.00	30.0	Landscaping
Building Construction	Building Construction	6/6/2024	10/23/2024	5.00	100	Minor improvements
Paving	Paving	10/24/2024	10/30/2024	5.00	5.00	Paving for ramp
Architectural Coating	Architectural Coating	10/31/2024	11/6/2024	5.00	5.00	Parking stripes

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	Off-Highway Trucks	Diesel	Average	2.00	6.00	84.0	0.37
Demolition	Dumpers/Tenders	Diesel	Average	1.00	1.00	367	0.40
Demolition	Dumpers/Tenders	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Trenchers	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Off-Highway Trucks	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Generator Sets	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Pressure Washers	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Off-Highway Trucks	Diesel	Average	1.00	7.00	81.0	0.42

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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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	10.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	0.33	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	7.56	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	2.95	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—

Architectural Coating	Worker	1.51	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

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	27,000	0.00	6,300

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	36.4	—
Site Preparation	—	—	0.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
High School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
—	1.00	—	—
—	-4.00	—	—

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	13.9	annual days of extreme heat
Extreme Precipitation	5.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	0	0	0	N/A
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The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	13.6
AQ-PM	39.2
AQ-DPM	75.4
Drinking Water	24.0
Lead Risk Housing	78.3
Pesticides	32.3
Toxic Releases	63.4
Traffic	10.0
Effect Indicators	—
CleanUp Sites	64.4
Groundwater	93.0
Haz Waste Facilities/Generators	81.0
Impaired Water Bodies	51.2
Solid Waste	43.9
Sensitive Population	—
Asthma	99.8
Cardio-vascular	91.6
Low Birth Weights	99.2
Socioeconomic Factor Indicators	—
Education	72.5
Housing	95.2
Linguistic	49.1
Poverty	97.4
Unemployment	99.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	1.090722443
Employed	2.284101116
Median HI	0.128320287
Education	—
Bachelor's or higher	26.30565892
High school enrollment	100
Preschool enrollment	16.65597331
Transportation	—
Auto Access	0.397792891
Active commuting	89.25959194
Social	—
2-parent households	0.641601437
Voting	31.59245477
Neighborhood	—
Alcohol availability	23.58526883
Park access	81.35506224
Retail density	74.04080585
Supermarket access	16.64314128
Tree canopy	51.99538047
Housing	—
Homeownership	3.849608623
Housing habitability	6.377518286
Low-inc homeowner severe housing cost burden	3.336327473
Low-inc renter severe housing cost burden	17.56704735
Uncrowded housing	51.79006801

Health Outcomes	—
Insured adults	49.23649429
Arthritis	1.4
Asthma ER Admissions	0.2
High Blood Pressure	1.5
Cancer (excluding skin)	22.7
Asthma	3.8
Coronary Heart Disease	1.7
Chronic Obstructive Pulmonary Disease	1.1
Diagnosed Diabetes	0.9
Life Expectancy at Birth	30.6
Cognitively Disabled	3.1
Physically Disabled	47.8
Heart Attack ER Admissions	2.0
Mental Health Not Good	14.3
Chronic Kidney Disease	2.1
Obesity	8.0
Pedestrian Injuries	88.6
Physical Health Not Good	5.8
Stroke	0.9
Health Risk Behaviors	—
Binge Drinking	98.2
Current Smoker	11.7
No Leisure Time for Physical Activity	6.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	44.7

Children	4.0
Elderly	20.2
English Speaking	38.4
Foreign-born	38.0
Outdoor Workers	8.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	9.4
Traffic Density	6.4
Traffic Access	87.4
Other Indices	—
Hardship	95.4
Other Decision Support	—
2016 Voting	11.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	94.0
Healthy Places Index Score for Project Location (b)	0.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	project specific acreage provided.
Construction: Construction Phases	no grading.
Construction: Off-Road Equipment	The project is modifying existing structure and not constructing new facilities therefore defaults were revised based on scope of project construction.
Construction: Architectural Coatings	No exterior painting. The school would be required to provide 35 parking spaces (based on zoning code/table16.508-A for DMX district). Standard parking space = 180 sq.ft. (35 x 180 = 6,300 sq.ft.)

Vallejo - Elite Charter School Project - Phase 2 Construction Detailed Report

Phase 2 Construction Only

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Vallejo - Elite Charter School Project - Phase 2 Construction
Construction Start Date	3/14/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	34.8
Location	241 Georgia St, Vallejo, CA 94590, USA
County	Solano-San Francisco
City	Vallejo
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	823
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

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	16.8	1000sqft	0.70	16,819	1,452	1,452	—	—

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.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.84	6.79	0.31	0.29	0.55	0.28	0.06	0.29	—	1,518	1,518	0.06	0.04	0.81	1,528
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.4	6.41	0.25	0.29	0.55	0.23	0.06	0.29	—	1,514	1,514	0.06	0.04	0.02	1,522
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	2.84	0.09	0.05	0.14	0.09	0.01	0.10	—	596	596	0.02	0.01	0.09	600
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.52	0.02	0.01	0.03	0.02	< 0.005	0.02	—	98.7	98.7	< 0.005	< 0.005	0.02	99.3

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.84	6.79	0.31	0.29	0.55	0.28	0.06	0.29	—	1,518	1,518	0.06	0.04	0.81	1,528

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	29.4	6.41	0.25	0.29	0.55	0.23	0.06	0.29	—	1,514	1,514	0.06	0.04	0.02	1,522
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.71	2.84	0.09	0.05	0.14	0.09	0.01	0.10	—	596	596	0.02	0.01	0.09	600
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.13	0.52	0.02	0.01	0.03	0.02	< 0.005	0.02	—	98.7	98.7	< 0.005	< 0.005	0.02	99.3

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	5.48	0.25	—	0.25	0.23	—	0.23	—	865	865	0.04	0.01	—	868
Demolition	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	5.48	0.25	—	0.25	0.23	—	0.23	—	865	865	0.04	0.01	—	868
Demolition	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.45	0.02	—	0.02	0.02	—	0.02	—	71.1	71.1	< 0.005	< 0.005	—	71.3
Demolition	—	—	—	0.01	0.01	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.8	11.8	< 0.005	< 0.005	—	11.8
Demolition	—	—	—	< 0.005	< 0.005	—	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.00	0.08	0.08	0.00	0.02	0.02	—	89.5	89.5	< 0.005	< 0.005	0.37	91.0
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
Hauling	< 0.005	0.24	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	197	197	0.01	0.03	0.44	207
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.00	0.08	0.08	0.00	0.02	0.02	—	82.8	82.8	< 0.005	< 0.005	0.01	83.9
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
Hauling	< 0.005	0.26	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	197	197	0.01	0.03	0.01	207
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.99
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

Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	17.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.16
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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.68	2.68	< 0.005	< 0.005	< 0.005	2.82

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	6.77	0.31	—	0.31	0.28	—	0.28	—	904	904	0.04	0.01	—	907
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.56	0.03	—	0.03	0.02	—	0.02	—	74.3	74.3	< 0.005	< 0.005	—	74.5
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.3
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	—	44.8	44.8	< 0.005	< 0.005	0.18	45.5
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.44	3.44	< 0.005	< 0.005	0.01	3.49
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
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
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

3.5. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	6.29	0.16	—	0.16	0.15	—	0.15	—	1,381	1,381	0.06	0.01	—	1,386
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	6.29	0.16	—	0.16	0.15	—	0.15	—	1,381	1,381	0.06	0.01	—	1,386
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.72	0.04	—	0.04	0.04	—	0.04	—	378	378	0.02	< 0.005	—	380
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.31	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.06	0.06	0.00	0.01	0.01	—	63.2	63.2	< 0.005	< 0.005	0.26	64.3
Vendor	< 0.005	0.10	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.7	73.7	< 0.005	0.01	0.20	77.1

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.06	0.06	0.00	0.01	0.01	—	58.5	58.5	< 0.005	< 0.005	0.01	59.2
Vendor	< 0.005	0.10	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.7	73.7	< 0.005	0.01	0.01	77.0
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.03	16.5
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.2	20.2	< 0.005	< 0.005	0.02	21.1
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.68	2.68	< 0.005	< 0.005	0.01	2.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.34	3.34	< 0.005	< 0.005	< 0.005	3.49
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

3.7. Paving (2025) - Unmitigated

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

Location	ROG	NOx	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	0.31	2.54	0.12	—	0.12	0.11	—	0.11	—	423	423	0.02	< 0.005	—	425
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.80	5.80	< 0.005	< 0.005	—	5.82
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.96	0.96	< 0.005	< 0.005	—	0.96
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	105
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.46
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.24

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
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

3.9. Architectural Coating (2025) - Unmitigated

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

Location	ROG	NOx	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	0.13	0.88	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectur al Coatings	29.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectur al Coatings	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30

Architectur Coatings	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	< 0.005	11.8
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
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
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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

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

Land Use	ROG	NOx	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequester ed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequester ed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequester ed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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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	3/14/2025	4/24/2025	5.00	30.0	—
Site Preparation	Site Preparation	4/25/2025	6/5/2025	5.00	30.0	—
Building Construction	Building Construction	6/6/2025	10/23/2025	5.00	100	—
Paving	Paving	10/24/2025	10/30/2025	5.00	5.00	—
Architectural Coating	Architectural Coating	10/31/2025	11/6/2025	5.00	5.00	—

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	Off-Highway Trucks	Diesel	Average	2.00	6.00	84.0	0.37
Demolition	Dumpers/Tenders	Diesel	Average	1.00	1.00	367	0.40
Demolition	Dumpers/Tenders	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Trenchers	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Off-Highway Trucks	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Generator Sets	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Pressure Washers	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Off-Highway Trucks	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
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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	10.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	2.80	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	7.06	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	2.76	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—

Architectural Coating	Worker	1.41	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

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	25,229	0.00	6,300

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	333	—
Site Preparation	—	—	0.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
High School	0.00	0%

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	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	13.9	annual days of extreme heat
Extreme Precipitation	5.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	0	0	0	N/A
Sea Level Rise	0	0	0	N/A
Wildfire	0	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	0	0	0	N/A
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The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	13.6
AQ-PM	39.2
AQ-DPM	75.4
Drinking Water	24.0
Lead Risk Housing	78.3
Pesticides	32.3
Toxic Releases	63.4
Traffic	10.0
Effect Indicators	—
CleanUp Sites	64.4
Groundwater	93.0
Haz Waste Facilities/Generators	81.0
Impaired Water Bodies	51.2
Solid Waste	43.9
Sensitive Population	—
Asthma	99.8
Cardio-vascular	91.6
Low Birth Weights	99.2
Socioeconomic Factor Indicators	—
Education	72.5
Housing	95.2
Linguistic	49.1
Poverty	97.4
Unemployment	99.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	1.090722443
Employed	2.284101116
Median HI	0.128320287
Education	—
Bachelor's or higher	26.30565892
High school enrollment	100
Preschool enrollment	16.65597331
Transportation	—
Auto Access	0.397792891
Active commuting	89.25959194
Social	—
2-parent households	0.641601437
Voting	31.59245477
Neighborhood	—
Alcohol availability	23.58526883
Park access	81.35506224
Retail density	74.04080585
Supermarket access	16.64314128
Tree canopy	51.99538047
Housing	—
Homeownership	3.849608623
Housing habitability	6.377518286
Low-inc homeowner severe housing cost burden	3.336327473
Low-inc renter severe housing cost burden	17.56704735
Uncrowded housing	51.79006801

Health Outcomes	—
Insured adults	49.23649429
Arthritis	1.4
Asthma ER Admissions	0.2
High Blood Pressure	1.5
Cancer (excluding skin)	22.7
Asthma	3.8
Coronary Heart Disease	1.7
Chronic Obstructive Pulmonary Disease	1.1
Diagnosed Diabetes	0.9
Life Expectancy at Birth	30.6
Cognitively Disabled	3.1
Physically Disabled	47.8
Heart Attack ER Admissions	2.0
Mental Health Not Good	14.3
Chronic Kidney Disease	2.1
Obesity	8.0
Pedestrian Injuries	88.6
Physical Health Not Good	5.8
Stroke	0.9
Health Risk Behaviors	—
Binge Drinking	98.2
Current Smoker	11.7
No Leisure Time for Physical Activity	6.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	44.7

Children	4.0
Elderly	20.2
English Speaking	38.4
Foreign-born	38.0
Outdoor Workers	8.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	9.4
Traffic Density	6.4
Traffic Access	87.4
Other Indices	—
Hardship	95.4
Other Decision Support	—
2016 Voting	11.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	94.0
Healthy Places Index Score for Project Location (b)	0.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	Phase 2 construction to start in 2025
Land Use	project specific acreage provided.
Construction: Construction Phases	no grading.
Construction: Off-Road Equipment	The project is modifying existing structure and not constructing new facilities therefore defaults were revised based on scope of project construction.
Construction: Architectural Coatings	No exterior painting. The school would be required to provide 35 parking spaces (based on zoning code/table16.508-A for DMX district). Standard parking space = 180 sq.ft. (35 x 180 = 6,300 sq.ft.)

Memo



455 Capitol Mall, Suite 300
Sacramento, CA 95814
916.444.7301

Date: February 21, 2024

To: Christina Ratcliffe, Planning and Development Services Director, City of Vallejo

CC: Erwin Ordonez, Interwest

From: Dimitri Antoniou, Pat Angell, Ascent

Subject: Noise and Vibration Study- Elite Charter School Project in Vallejo, CA Class 32 Exemption

INTRODUCTION AND PURPOSE

Class 32 is a Categorical Exemption under the State California Environmental Quality Act (CEQA) Guidelines (Cal. Code Regs., Title 14, Section 15000 et seq.) that is available for qualifying infill development located in an urban area. To qualify for a Class 32 Exemption, one criterion a project must meet is that approval of the project would not result in any significant effects relating to noise. The proposed project is characterized as an infill development project and is located in the City of Vallejo on a 0.74-acre site, surrounded by commercial uses.

The purpose of this Noise Study is to evaluate whether the project would have a significant effect related to noise. This study includes a brief explanation of the project, applicable standards of significance, analysis of noise and vibration impacts, and conclusions. No airports or airstrips are located within a close proximity (i.e., within 2 miles) to the project site; thus, noise from airports is not discussed further.

PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

The project site is located at 241-255 Georgia Street on Assessor's Parcel Number (APN) 0055-170-390 in Vallejo, CA. The project site is bounded by an existing commercial development to the west, Georgia Street to the north, Sacramento Street to the east, and an existing parking lot and Vallejo Transit Center to the south. The project site includes approximately 30,666 square feet of parcel area and is currently occupied by a partial two-story building with a combined total square footage of 34,819 square feet. The building is currently partially occupied by a medical clinic.

The proposed project would provide a new public charter high school that would accommodate a maximum of 400 students and 35 staff. The proposed project would be completed in two separate phases as the school continues to grow enrollment and additional funds for construction become available. The existing structure would not be demolished but internal improvements would be made to reconfigure the building layout.

The initial development phase proposes developing approximately 18,000 square feet of interior space suitable for 13 classrooms, four offices, bathroom facilities, a serving kitchen, a multi-purpose room, a library alcove, and a future gymnasium on the ground floor. The second development phase proposes to develop five additional classrooms, storage areas, restrooms, a conference room, and four private offices on the second floor. The proposed project improvements would be Americans with Disabilities Act (ADA) accessible and would comply with State design and



construction standards. Other project improvements include adding school signage, developing perimeter fencing for security purposes, constructing curbs, ramps, and gutters; trenching along Georgia Street for underground utilities; removing/reconfiguring existing curbs to accommodate new parking; minor removal of shrubs and trees; adding a new ADA accessible ramp that would connect Sacramento Street to the rear entrance of the building; reconfiguring 16 parking spaces into eight parallel parking spaces along Sacramento Street, as well as adding 36 bicycle parking spaces. New perimeter fencing for security purposes, school signage, and 36 bicycle parking spaces would be included.

The school would operate Monday through Friday from 8:00 a.m. to 3:30 p.m. with occasional after-school activities and weekend events (e.g., parent engagement meetings). During the initial development phase, the school would house a maximum of 249 students, ten teaching staff, and 25 administrative staff. At full enrollment, there would be a maximum of 400 students and approximately 35 staff members.

NOISE FUNDAMENTALS

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determine the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this large range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB).

Because decibels are logarithmic units, SPLs cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than if only one of the sound sources were producing sound under the same conditions. For example, if one idling truck generates an SPL of 70 dB, two trucks idling simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear. Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000-8,000 Hz and perceive sounds within this range better than sounds of the same amplitude with frequencies outside of this range. To approximate the response of the human ear, sound levels of the individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of A-weighted decibels) can be computed based on this information. The A-weighting dB (dBA) scale approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds. Thus, noise levels are typically reported in terms of A weighted decibels. All sound levels discussed in this study are expressed in A-weighted decibels.

Common Noise Descriptors

Various time-averaging noise metrics are used in the field of acoustics, which can be chosen to better characterize the noise source in question and how people perceive it. The following definitions are applicable to the understanding of this analysis and the City of Vallejo's noise standards.

- ▶ **Equivalent Continuous Sound Level (L_{eq}):** L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period.
- ▶ **Maximum Noise Level (L_{max}):** the highest time-weighted sound level measured during a measurement period.
- ▶ **Minimum Noise Level (L_{min}):** The lowest time-weighted sound level measured during a measurement period.
- ▶ **Day-Night Noise Level (L_{dn}):** the average A-weighted sound level during a 24-hour period with a 10-dB penalty applied during the sensitive nighttime hours of 10:00 p.m. to 7:00 a.m.
- ▶ **Percentile-Exceeded Sound Level (L_x):** L_x represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10 percent of the time, and L_{90} is the sound level exceeded 90 percent of the time). The City of Vallejo Municipal Code uses an L_{50} metric, explained in "Applicable Noise Standards."

Existing Noise Sensitive Land Uses

Noise-sensitive land uses are generally considered to include uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose, such as schools, libraries, and residences. Residential uses are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because these land uses are places of rest and sleep for City residents. The project site is located along Georgia Street, just west of the intersection with Sacramento Street. The nearest sensitive receiver to the project site is the Vallejo John F. Kennedy Library, located approximately 0.08 miles northwest of the project site, north of Georgia Street. There are multi-family residential dwellings along Maine Street, approximately 0.10 miles south of the project site.

Existing Noise Sources and Ambient Levels

The sound levels in most communities fluctuate, depending on the activity of nearby and distant noise sources, time of the day, or season of the year, with major roads and highways typically the primary sources of ambient noise in a community. Local roads closest to the project site include Georgia Street and Sacramento Street. The nearest major roadway to the project site is State Route (SR) 29, located approximately 0.18 miles east of the project site. The area surrounding the project site can be characterized as urbanized and developed, and includes commercial uses such as restaurants, banks, and the Vallejo Transit Center. Primary noise sources include roadway traffic noise (e.g., engine noise, car radios) and noise associated with the Greyhound Bus Station / Vallejo Transit Center (e.g., busses idling, people talking) on the south side of the project site.

To establish existing noise levels, an ambient noise survey was conducted on January 4th and January 5th, 2024. One long-term (LT) (24-hour) and three short-term (ST) (15-minute) measurements were conducted using a Piccolo II integrating sound level meter. The meter was calibrated before use with a Hangzhou Aihua Class 2 acoustical calibrator to ensure measurement accuracy. The measurement equipment meets all pertinent specifications of the American National Standards Institute. Meteorological conditions during the measurement period were adequate for reliable noise measurements, with clear skies, temperatures ranging from 43 degrees Fahrenheit (°F) to 57°F, and maximum windspeed of 7 miles per hour (mph), and no precipitation.

In accordance with Section 16.502.09.E of the City Code, the noise meter was located 5 feet above the ground and in no case was it within 10 feet of nearby walls or other structures that could affect noise measurements. On-site measurements were conducted for the purpose of established existing ambient noise levels for use in the noise compatibility assessment below. Noise levels are summarized below in Table 1 with corresponding labels indicating

the locations of the measurements on Figure 1. A detailed summary of raw measurement data and photographs of meter location are included in Attachment A.

Table 1 Summary of Existing Ambient Noise Level Survey

Short-Term Measurements (15-minute)					
Noise Measurement Locations ¹	Date	Start/Stop Time	L _{eq} dBA	L _{max} dBA	L _{min} dBA
ST 1	1/4/2024	9:02 am/9:17 am	56.3	66.3	42.3
ST 2	1/4/2024	8:45 am/9:00 am	55.5	70.1	45.1
ST 3	1/4/2024	9:18 am/9:33 am	59.7	78.8	48.1
Long-Term Measurement (24-hour)					
	Date	Start/Stop Time.	CNEL dBA		
LT 1	1/4/2024-1/5-2024	10:00 a.m. / 10:00 a.m.	66.0		

Notes: ST = short-term; LT = long-term; L_{eq} = average hour noise level; L_{max} = maximum instantaneous noise level; L_{min} = minimum instantaneous noise level; dBA = A-weighted decibel; CNEL = community equivalent noise level.

Noise measurement locations correspond to labels on Figure 1.

Source: Field data collected by Ascent Environmental, Inc., 2024.

APPLICABLE NOISE STANDARDS

Federal

The Federal Transit Administration (FTA) developed the Transit Noise and Vibration Impact Assessment Manual, which provides guidance to engineers, planners, and consultants in assessing vibration from construction, operation, and maintenance of projects. To address the human response to ground vibration, the FTA has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines are presented below in Table 2. In addition, FTA has also established construction vibration damage criteria, shown below in Table 3. Where local agencies have not adopted vibration criteria, as is the case in Vallejo, these criteria apply.

Table 2 Ground-Borne Vibration Impact Criteria for General Assessment for Human Response

Land Use Category	Ground-Borne Vibration Impact Levels for Human Response	Ground-Borne Vibration Impact Levels for Human Response	Ground-Borne Vibration Impact Levels for Human Response
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where vibration would interfere with interior operations.	65 ⁴	65 ⁴	65 ⁴
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime uses.	75	78	83

Notes: VdB re 1 microinch/second = vibration decibels referenced to 1 microinch/second and based on the root mean square (RMS) velocity amplitude.

¹ "Frequent Events" is defined as more than 70 vibration events of the same source per day.

² "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

³ "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

- ⁴ This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels.

Source: FTA 2018: 123–126.



Sources: adapted by Ascent in 2023.

Figure 1 Noise Measurement Locations

Table 3 FTA Construction Damage Vibration Criteria

Land Use Category	PPV, in/sec
Reinforced-concrete, steel or timber (no plaster)	0.5
Engineered concrete and masonry (no plaster)	0.3
Non-engineered timber and masonry buildings	0.2
Buildings extremely susceptible to vibration damage	0.12

Source: FTA 2018.

Local

City of Vallejo General Plan

Table NBE-1 of the Vallejo General Plan (presented as Table 4 in this analysis) establishes guidelines for noise exposure to new development, based on the specific land use. New schools are subject to existing noise exposure levels of up to 70 dBA L_{dn} (City of Vallejo 2017: 4-37).

Table 4 California Land Use Compatibility for Community Noise Environments

Land Use Type	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Unacceptable ⁴
Residential – Low density Single-Family, Duplex, Mobile Homes	Less than 60 L_{dn}	55-70 L_{dn}	70-75 L_{dn}	75+ L_{dn}
Residential – Multiple Family	Less than 65 L_{dn}	60-70 L_{dn}	70-75 L_{dn}	75+ L_{dn}
Transient Lodging, Motels, Hotels	Less than 65 L_{dn}	60-70 L_{dn}	70-80 L_{dn}	80+ L_{dn}
Schools, Libraries, Churches, Hospitals, Nursing Homes	Less than 70 L_{dn}	60-70 L_{dn}	70-80 L_{dn}	80+ L_{dn}
Office Buildings, Businesses, Commercial, and Professional	Less than 75 L_{dn}	70-75 L_{dn}	75+ L_{dn}	N/A

Notes: L_{dn} = day-night level; dBA = A-weighted decibels

Source: Governor's Office of Planning and Research 2003 as cited in City of Vallejo 2017: Table NBE-1.

¹ Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

² New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

³ New construction or development should generally be discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

⁴ New construction or development generally should not be undertaken.

City of Vallejo Municipal Code

Section 16.502.03 Construction Management

The project site is in the City of Vallejo; therefore, the City's local policies pertaining to noise are applicable to the project. City Code Section 16.502.03.C requires that all construction and transport equipment be muffled in accordance with State and federal laws. Section 16.502.03(E) mandates that grading and pile driving operations within

¼ mile of residential units be limited to the hours between 8:00 a.m. and 5:00 p.m. on weekdays to ensure compliance with the requirements for construction activity.

Section 16.502.09 Noise

Section 16.502.09 of the City Code provides maximum allowable noise standards for various land uses, which are the basis for this noise assessment. Per Section 16.502.09.C.2, the requirements impose limits on regularly occurring noise for the specified time periods, averaged over an hour. Table 16.502-C of the City Code (presented as Table 5 in this study) establishes daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise standards applicable to various land uses, applicable on the subject property line, as well as noise limits at receiving residential zone boundaries. Maximum exterior noise levels are summarized below in Table 5.

Table 5 City of Vallejo Maximum Noise Levels by Noise Zone

Noise Zoning Districts	Maximum Noise Level in dBA (level not to be exceeded more than 30 minutes in any hour)	Maximum Noise Level in dBA (level not to be exceeded more than 30 minutes in any hour)	Maximum Noise Level in dBA (level not to be exceeded more than 50 minutes in any hour)
	Measured at property line or district boundary	Measured at any boundary of a residential zone	Between 10:00 p.m. and 7:00 a.m., measured at any boundary of a residential zone
Single-unit Residential	60	60	-
Multiple-unit Residential	65	65	-
Commercial and Mixed-Use, Medical, Office	70	60	50 or ambient noise level
Light Industrial	75	65	50 or ambient noise level
General Industrial	75	65	50 or ambient noise level
Public Facilities and Community Use	65	60	50 or ambient noise level
Open Space and Recreational Districts	65	60	50 or ambient noise level

Source: City of Vallejo 2023.

Section 16.502.09.C.3 establishes that the standard limits in Table 16.502-C (presented as Table 5 in this study) shall be adjusted by 5 decibels for any noise that contains a steady, pure tone such as a whine, screech or hum, or an impulsive sound such as hammering or riveting, or contains music or speech, as described in Table 16.502-D (presented as Table 6 in this study).

Table 6 Time and Adjustments to City Noise Standards

Time and Type of Noise	Adjustment (Decibels)
Any type other than construction and related activities between 7:00 a.m. and 10:00 p.m.	+5
Noise of unusual impulsive character (e.g., hammering or drilling)	-5
Noise of unusual periodic character (e.g., hammering or screeching)	-5

Source: City of Vallejo 2023.

Section 16.502.09.D.1 establishes specific hours and noise standards for construction in residential zoning districts and any mixed-use district. Specifically, construction, demolition, and related loading/unloading activities that may generate noise exceeding levels in Table 16.502.E (presented as Table 7 in this study) shall be limited to hours between 7:00 a.m. and 7:00 p.m. in residential zoning districts and in any mixed-use district.

Table 7 Maximum Noise Level for Temporary Construction Activity

	RR, RLD	RMD, RHD, NMX, NC	Commercial (including medical and office) and Industrial
Mobile construction equipment – non-scheduled, intermittent, and short-term for less than 15 days			
Weekdays 7:00 a.m. to 6:00 p.m.	75 dBA	80 dBA	85 dBA
Saturdays 9:00 a.m. to 6:00 p.m.	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None
Stationary construction equipment			
Weekdays 7:00 a.m. to 6:00 p.m.	60 dBA	65 dBA	70 dBA
Saturdays 9:00 a.m. to 6:00 p.m.	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None

Notes: RR = Rural Residential; RLD = Residential Low Density; RMD = Residential Medium Density; RHD = Residential High Density; NMX = Neighborhood Mixed Use; NC = Neighborhood Commercial

Source: City of Vallejo 2023.

THRESHOLDS OF SIGNIFICANCE

Based on the CEQA Appendix G Checklist and adopted City of Vallejo noise standards, the project would result in a significant impact to noise if it would result in:

- ▶ Short-term construction noise levels that exceed 65 dBA L_{eq} at Residential Medium Density, Residential High Density, Neighborhood Mixed Use, Neighborhood Commercial land uses during the daytime hours (i.e., 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. Saturdays);
- ▶ Short-term vibration levels that result in disturbance to sensitive uses or the potential to cause structural damage to structures;
- ▶ Operational stationary noise levels that exceed 65 dBA L_{eq} at residential uses; or
- ▶ Operational mobile noise sources that result in a substantial (i.e., 5 dBA) increase in noise.

ANALYSIS

Potential to Result in Substantial Temporary (Construction) Noise

Short-term construction noise levels would fluctuate depending on the type, number, and duration of usage of varying equipment. Additionally, the effects of construction noise largely depend on the type of construction activities being performed; noise levels generated by those activities; distances to noise-sensitive receptors; the relative locations of noise attenuating features such as topography and existing structures; and existing ambient noise levels. The proposed project would not require the demolition of the existing building. The project would include internal improvements to reconfigure the space for classrooms, administrative offices, and other education-related amenities.

Both phases of development would include various onsite improvements and upgrades to the existing buildings, including the installation of wrought iron fencing; removal of shrubs and trees; construction of curbs, ramps, and gutters; trenching for underground utilities; removal/reconfiguration of existing paved areas (e.g., curb and sidewalk portions) to accommodate reconfigured street parking; and construction of a new accessible ramp that would connect Sacramento Street to the rear entrance of the building. Construction equipment associated with these activities could include dump trucks, concrete mixers, pickup trucks, chainsaws, and concrete saws. Based on reference noise levels for typical construction equipment, the demolition/removal of existing concrete using concrete

saws would represent the loudest phases of construction. Thus, the noise assessment is based on this phase as all subsequent phases and associated noise levels would be lower than this activity.

As shown above in Table 7, the City of Vallejo identifies one set of standards for mobile construction equipment and one set of standards for stationary equipment. Both mobile (e.g., dump trucks and pickup trucks) and stationary equipment (e.g., concrete saws) could be used in project construction. The project site is located within a mixed-use zoning area, and thus, although downtown mixed-use is not specifically included in Table 7, the standards that apply for other mixed-use areas included in the table (i.e., neighborhood mixed use) are used in this analysis (i.e., 65 dBA) and are applied as hourly averages (i.e., L_{eq}).

Modeling identified that the operation of a concrete saw would result in noise levels of 83.0 dBA L_{eq} at 50 feet. See Attachment A for modeling inputs and results. Such activity would reduce to the City's construction noise standard of 65 dBA L_{eq} for mixed-use areas at 398 feet. There are no sensitive receptors located within this distance. The sensitive receptor nearest to Georgia Street, where this modeling scenario would occur, is the Vallejo John F. Kennedy Library located approximately 400 feet northwest of the project site. At this distance, noise levels would attenuate to 64.9 dBA L_{eq} , and therefore would not exceed applicable City standards. The nearest residential receptors are located approximately 494 feet south of the project site. At this distance, noise levels from the use of a concrete saw would attenuate to 63.1 dBA L_{eq} , and therefore would not exceed applicable City standards.

Based on the modeling conducted for the worst-case construction phase, project construction noise would not conflict with City standards. Further, construction activity and resulting noise would be temporary in nature, with an anticipated 8-month duration for each phase of the project and would end once construction is complete. During this time, construction activities would occur between 7:00 a.m. and 3:00 p.m., as no nighttime construction work is proposed. For these reasons, the noisiest construction equipment would not generate significant levels of noise that exceed adopted noise standards and would not substantially affect nearby receptors.

Potential Construction Vibration

Project construction would not involve the use of ground vibration-intensive activities, such as pile driving or blasting. The pieces of construction equipment that would be used during project construction, such as concrete saws and light trucks, generate little to no ground vibration and are not considered impact devices (FHWA 2006). Construction activity would be intermittent and temporary and is estimated to take approximately eight months for each phase. Specifically, construction activities associated with the project would occur during daytime hours (i.e., between 7:00 a.m. and 3:00 p.m.). Therefore, any vibration activity that would result from project construction would not occur during evening or nighttime hours, thereby reducing potential vibration impacts (i.e., annoyance) to nearby receptors during more sensitive hours of the day. Additionally, the project would not involve the development of any major sources of ground vibration such as commercial railways or passenger rail transit lines. Therefore, the project would not result in long-term operational activities associated with permanent or substantial levels of ground vibration. For these reasons, construction and operational generated vibration would not result in the potential for structural damage or human annoyance.

Operational Stationary Noise

Mechanical Equipment Noise

The project would include mechanical building equipment as part of the heating, ventilation, and air conditioning (HVAC) systems at the project site. HVAC equipment is a common noise source associated with land use development and is currently used on the project site. Specifically, there are currently 20 air conditioning units and three mechanical fans on the building rooftop. Therefore, noise associated with the mechanical equipment would not represent a new noise source in the area. Implementation of the project would result in the removal of 20 air conditioning units and three mechanical fans, as well as the installation of 14 new air conditioning units and five new mechanical fans. Therefore, the project would include fewer pieces of mechanical equipment than previously located

on the site. Further, as the school would generally operate during the daytime hours (i.e., between 9:00 a.m. and 3:00 p.m.), noise associated with building equipment would not result in substantial increases during sensitive times of the day. For these reasons, building equipment noise would not result in adverse effects to nearby sensitive receptors.

Outdoor Common Areas

The project would include the addition of outdoor common areas along Georgia Street that would be in use during daytime school hours. The addition of the outdoor patio could result in an increase in localized noise on the project site associated with people talking, congregating, and eating outdoors. Noise associated with people talking and eating would not be unique, dissimilar, or louder than existing ambient noise levels associated with urban environments (e.g., roadway traffic, people talking, landscape equipment). Additionally, the outdoor areas would be in use for short periods of time during daytime hours (i.e., weekdays between 9:00 a.m. and 3:00 p.m.) and would not be operational during nighttime hours and would not emit nighttime noise. For these reasons, noise from outdoor common areas would not result in adverse effects to nearby sensitive receptors.

Loading and Unloading

The operation of the new school would require daily delivery of food for students. Food delivery would take place Monday through Friday from 8:00 a.m. to 9:00 a.m. and from 11:00 a.m. to 1:00 p.m. As shown in the site plans, the deliveries would take place in the designated loading/unloading area along Sacramento Street, on the eastern frontage of the project site. Noise sources from truck activity associated with delivery areas are usually short-term and can include activities such as vehicle idling, engine revving, and the release of air brakes on heavy trucks. Based on a noise measurement conducted by Ascent on April 20, 2023, at the loading and unloading dock at an Anheuser Bush facility, noise from truck activity can be as loud as 59 dBA L_{eq} at 100 feet (Ascent 2023). The off-site residential receptor closest to the on-site delivery area are the multi-family residences located along Maine Street, approximately 494 feet south of the project site. Delivery truck-generated noise would be 45.1 dBA L_{eq} at 494 feet. Therefore, delivery truck noise would not exceed the City's daytime noise standards of 65 dBA L_{eq} .

Summary

Project operation would result in new stationary noise sources such as noise associated with HVAC equipment, outdoor common areas, and food delivery activity. Noise levels from new and existing noise sources would not exceed applicable daytime exterior noise standards established by the City. Further, as described in detail above, none of these sources would operate during the nighttime because the school would be closed by 3:00 p.m. daily, with limited after-school, evening, or weekend activities. Thus, project-generated noise would not result in any exceedance of nighttime noise standards.

Operational Mobile Source Noise

Vehicle trips associated with the project would include trips generated by employees and students. These trips would result in an increase in average daily traffic volumes and associated increase in traffic noise levels along roadway segments that would be used to travel to and from the project site. To analyze the impact of project-generated operational transportation noise sources, traffic noise levels under existing and existing-plus-project conditions were modeled for affected roadway segments. Refer to Attachment A for detailed noise modeling input parameters.

Due to the logarithmic properties of noise, a 3 dB increase in noise is characterized as barely perceptible, a 5 dB increase as distinctly perceptible, and a 10 dB increase as a doubling of the noise level. Further, it requires a doubling of the noise source to result in an audible (i.e., 3 dB) increase. Thus, a perceptible increase in noise (i.e., 5 dB), would be considered a substantial increase in noise. It should be noted that potential trip reductions from the student survey were not accounted for in this analysis, resulting in a conservative roadway analysis. Table 8 shows the existing and existing plus project noise levels of the roadway segments nearest to the project site.

Table 8 Existing and Existing Plus Project Traffic Noise Levels

Street Name	From	To	Existing Conditions	Existing + Project	Noise Increase
			dBA (L _{dn})		
Sonoma Boulevard	Florida Street	Georgia Street	55.8	56.3	0.6
Sonoma Boulevard	Georgia Street	Curtola Parkway	59.1	59.2	0.1
Georgia Street	Mare Island Way	Santa Clara Street	51.4	52.5	1.1
Georgia Street	Santa Clara Street	Sacramento Street	49.6	50.9	1.2
Georgia Street	Sacramento Street	Sonoma Boulevard	52.2	52.9	0.7
Curtola Parkway/Mare Island Way	Maine Street	Sonoma Boulevard	60.7	61.1	0.5
Sacramento Street	Georgia Street	Maine Street	50.2	53.7	3.4

Notes: dBA = A-weighted decibel; L_{dn} = day-night equivalent noise level.

Source: Modeled by Ascent 2023.

As shown in Table 8, implementation of the project would result in noise increases ranging from 0.1 dBA to 3.4 dBA L_{dn} on roadway segments within the project vicinity. The project would not result in a substantial noise increase (i.e., 5 dB or more) compared to existing conditions. All roadways currently experience noise levels below the "Normally Acceptable" levels applicable to the project area (i.e., 60 dBA L_{dn} for single-family residential, 65 dBA L_{dn} for residential multi-family and 75 dBA L_{dn} for nonresidential uses) and the project would not result in noise increases that exceed these levels along modeled roadway segments. Long-term operational noise from the project would not result in substantial increases in noise or levels that exceed applicable City standards.

Exposure to Existing Community Noise

As discussed above, the Vallejo General Plan establishes guidelines for noise exposure to new development based on the specific land use. Based on the land use categories established in Table NBE-1 (presented as Table 4 in this study) of the General Plan, new schools are subject to existing noise exposure levels of up to 70 dBA L_{dn}. As shown above in Table 1, an existing 24-hour noise measurement was conducted on January 4, 2024 and using the individual L_{eq} data for each hour of the 24-hour period, a 24-hour L_{dn} was calculated of 65.5 dBA, which is below the level identified by the City of Vallejo as normally acceptable for school uses (i.e., 70 dBA L_{dn}). The proposed school would not be exposed to noise levels exceeding City of Vallejo's adopted noise exposure levels.

CONCLUSION

Project-generated construction noise would be short-term and temporary and would comply with the City of Vallejo's construction noise standards and would not expose sensitive land uses to excessive noise. The project would not result in operational sources of substantial vibration. Project construction would not require the use of vibration-inducing equipment such as pile drivers and all construction would occur during the less sensitive daytime hours when people are awake thereby reducing the exposure of sensitive receptors to substantial vibration levels.

Operational stationary noise sources would not result in new substantial sources of noise to the project area or exceed applicable City standards. Operational increases in noise levels from vehicle trips would not result in a substantial increase in noise over existing conditions. Therefore, project related construction and operational noise and vibration would not be expected to exceed federal, state, or local standards or expose sensitive land uses to substantial increases in noise or vibration levels. Thus, approval of the project would not result in a significant effect related to noise.

REFERENCES

- City of Vallejo. 2023. City of Vallejo Municipal Code Chapter 16.502.09 Noise. Available https://library.municode.com/ca/vallejo/codes/municipal_code?nodeId=TIT16ZO_PTVSIDEDEST_CH16.502PEST_16.502.09NO. Accessed December 2023.
- City of Vallejo. 2017. Propel Vallejo General Plan 2040. Available: <https://www.cityofvallejo.net/common/pages/DisplayFile.aspx?itemId=17961496>. Accessed December 18, 2023.
- Federal Transportation Authority. 2018 (September). *Transit Noise and Vibration Impact Assessment Manual*. Washington, DC. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed December 2023.
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- Ascent 2023 (November). Noise Technical Study for the 5037 Patata Street Industrial Development Project. Prepared for the City of South Gate, South Gate, CA.

Attachment A

Noise Modeling and Measurements

Attenuation Calculations for Stationary Noise Sources

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
truck activity	59.0	@	100	hard	2	5	0.00	45.1	@	494

Notes:

Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 176 and 177 of FTA 2018.

Computation of the ground factor is based on the equation presented in Table 4-26 on pg. 86 of FTA 2018, where the distance of the reference noise level can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available:

<<http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report->

Sidewalk Improvements

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)	Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet ¹	Usage Factor ¹
Threshold	398	65.0	Concrete Saw	90	0.2
SR 1 - Library	400	64.9			
SR 2- Residences	494	63.1			

Ground Type hard
 Source Height 8
 Receiver Height 5
 Ground Factor² 0.00

Predicted Noise Level ³	L_{eq} dBA at 50 feet ³
Concrete Saw	83.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
83.0

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

² Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

³ Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$$L_{eq}(\text{equip}) = E.L. + 10 \log (U.F.) - 20 \log (D/50) - 10 \log (G/50)$$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Trenching (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L _{eq} dBA)	Equipment	Reference Emission Noise Levels (L _{max}) at 50 feet ¹	Usage Factor ¹
Threshold	264	65.0	Concrete Mixer Truck	85	0.2
SR 1 - Library	400	61.4	Pumps	77	0.5
SR 2- Residences	494	59.6			

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor ²	0.00

Predicted Noise Level ³	L _{eq} dBA at 50 feet ³
Concrete Mixer Truck	78.0
Pumps	74.0

Combined Predicted Noise Level (L _{eq} dBA at 50 feet)
79.5

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

² Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

³ Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$$L_{eq}(\text{equip}) = E.L. + 10 \log (U.F.) - 20 \log (D/50) - 10 \log (G/50)$$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Equipment Description	Acoustical Usage Factor (%)	Spec 721.560 Lmax @ 50ft (dBA slow)	Actual Measured Lmax @ 50ft (dBA slow)	No. of Actual Data Samples (count)	Spec 721.560 LmaxCalc	Spec 721.560 Leq	Distance	Actual Measured LmaxCalc	Actual Measured Leq
Auger Drill Rig	20	85	84	36	79.0	72.0	100	78.0	71.0
Backhoe	40	80	78	372	74.0	70.0	100	72.0	68.0
Bar Bender	20	80	na	0	74.0	67.0	100		
Blasting	na	94	na	0	88.0		100		
Boring Jack Power Unit	50	80	83	1	74.0	71.0	100	77.0	74.0
Chain Saw	20	85	84	46	79.0	72.0	100	78.0	71.0
Clam Shovel (dropping)	20	93	87	4	87.0	80.0	100	81.0	74.0
Compactor (ground)	20	80	83	57	74.0	67.0	100	77.0	70.0
Compressor (air)	40	80	78	18	74.0	70.0	100	72.0	68.0
Concrete Batch Plant	15	83	na	0	77.0	68.7	100		
Concrete Mixer Truck	40	85	79	40	79.0	75.0	100	73.0	69.0
Concrete Pump Truck	20	82	81	30	76.0	69.0	100	75.0	68.0
Concrete Saw	20	90	90	55	84.0	77.0	100	84.0	77.0
Crane	16	85	81	405	79.0	71.0	100	75.0	67.0
Dozer	40	85	82	55	79.0	75.0	100	76.0	72.0
Drill Rig Truck	20	84	79	22	78.0	71.0	100	73.0	66.0
Drum Mixer	50	80	80	1	74.0	71.0	100	74.0	71.0
Dump Truck	40	84	76	31	78.0	74.0	100	70.0	66.0
Excavator	40	85	81	170	79.0	75.0	100	75.0	71.0
Flat Bed Truck	40	84	74	4	78.0	74.0	100	68.0	64.0
Front End Loader	40	80	79	96	74.0	70.0	100	73.0	69.0
Generator	50	82	81	19	76.0	73.0	100	75.0	72.0
Generator (<25KVA, VMS signs)	50	70	73	74	64.0	61.0	100	67.0	64.0
Gradall	40	85	83	70	79.0	75.0	100	77.0	73.0
Grader	40	85	na	0	79.0	75.0	100		
Grapple (on Backhoe)	40	85	87	1	79.0	75.0	100	81.0	77.0
Horizontal Boring Hydr. Jack	25	80	82	6	74.0	68.0	100	76.0	70.0
Hydra Break Ram	10	90	na	0	84.0	74.0	100		
Impact Pile Driver	20	95	101	11	89.0	82.0	100	95.0	88.0
Jackhammer	20	85	89	133	79.0	72.0	100	83.0	76.0
Man Lift	20	85	75	23	79.0	72.0	100	69.0	62.0
Mounted Impact Hammer (hoe ram)	20	90	90	212	84.0	77.0	100	84.0	77.0
Pavement Scarafier	20	85	90	2	79.0	72.0	100	84.0	77.0
Paver	50	85	77	9	79.0	76.0	100	71.0	68.0
Pickup Truck	40	55	75	1	49.0	45.0	100	69.0	65.0
Pneumatic Tools	50	85	85	90	79.0	76.0	100	79.0	76.0
Pumps	50	77	81	17	71.0	68.0	100	75.0	72.0
Refrigerator Unit	100	82	73	3	76.0	76.0	100	67.0	67.0
Rivit Buster/chipping gun	20	85	79	19	79.0	72.0	100	73.0	66.0
Rock Drill	20	85	81	3	79.0	72.0	100	75.0	68.0
Roller	20	85	80	16	79.0	72.0	100	74.0	67.0
Sand Blasting (Single Nozzle)	20	85	96	9	79.0	72.0	100	90.0	83.0
Scraper	40	85	84	12	79.0	75.0	100	78.0	74.0
Shears (on backhoe)	40	85	96	5	79.0	75.0	100	90.0	86.0
Slurry Plant	100	78	78	1	72.0	72.0	100	72.0	72.0
Slurry Trenching Machine	50	82	80	75	76.0	73.0	100	74.0	71.0
Soil Mix Drill Rig	50	80	na	0	74.0	71.0	100		
Tractor	40	84	na	0	78.0	74.0	100		
Vacuum Excavator (Vac-truck)	40	85	85	149	79.0	75.0	100	79.0	75.0
Vacuum Street Sweeper	10	80	82	19	74.0	64.0	100	76.0	66.0
Ventilation Fan	100	85	79	13	79.0	79.0	100	73.0	73.0
Vibrating Hopper	50	85	87	1	79.0	76.0	100	81.0	78.0
Vibratory Concrete Mixer	20	80	80	1	74.0	67.0	100	74.0	67.0
Vibratory Pile Driver	20	95	101	44	89.0	82.0	100	95.0	88.0
Warning Horn	5	85	83	12	79.0	66.0	100	77.0	64.0
Welder / Torch	40	73	74	5	67.0	63.0	100	68.0	64.0
chipper		75							

Source:

FHWA Roadway Construction Noise Model, January 2006. Table 9.1

U.S. Department of Transportation

CA/T Construction Spec. 721.560

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

Measurement Site: 241 Georgia Street, Vallejo CA

Measurement Date: 1/4/2024

Project Name: Elite Charter School

Computation of CNEL

Hour of Day (military time)	Sound Level Leq (dBA)	Sound Power =10*Log(dBA /10)	Period of 24-Hour Day (1=included, 0=not)			Sound Power Breakdown by Period of Day		
			Day	Evening	Night	Day	Evening	Night
0:00	51.5	141,254	0	0	1	0	0	141,254
1:00	58.3	676,083	0	0	1	0	0	676,083
2:00	53.7	234,423	0	0	1	0	0	234,423
3:00	48.7	74,131	0	0	1	0	0	74,131
4:00	52.6	181,970	0	0	1	0	0	181,970
5:00	56.5	446,684	0	0	1	0	0	446,684
6:00	65.1	3,235,937	0	0	1	0	0	3,235,937
7:00	62.7	1,862,087	1	0	0	1,862,087	0	0
8:00	65.2	3,311,311	1	0	0	3,311,311	0	0
9:00	62.7	1,862,087	1	0	0	1,862,087	0	0
10:00	60.3	1,071,519	1	0	0	1,071,519	0	0
11:00	63.3	2,137,962	1	0	0	2,137,962	0	0
12:00	61.9	1,548,817	1	0	0	1,548,817	0	0
13:00	64.1	2,570,396	1	0	0	2,570,396	0	0
14:00	63.0	1,995,262	1	0	0	1,995,262	0	0
15:00	62.5	1,778,279	1	0	0	1,778,279	0	0
16:00	62.8	1,905,461	1	0	0	1,905,461	0	0
17:00	62.0	1,584,893	1	0	0	1,584,893	0	0
18:00	60.2	1,047,129	1	0	0	1,047,129	0	0
19:00	62.3	1,698,244	0	1	0	0	1,698,244	0
20:00	58.1	645,654	0	1	0	0	645,654	0
21:00	63.2	2,089,296	0	1	0	0	2,089,296	0
22:00	59.4	870,964	0	0	1	0	0	870,964
23:00	52.7	186,209	0	0	1	0	0	186,209

Sum of Sound Power during Period wo/penalty 22,675,203 4,433,194 6,047,653

Log Factor for CNEL Penalty (i.e., 10*log(x)) 1 3 10

Sound Power during Period with penalty 22,675,203 13,299,582 60,476,532

Total Daily Sound Power, with penalties 96,451,317

Hours per Day 24

Average Hourly Sound Power, with penalties 4,018,805

CNEL 66.0

Ldn computation on next page.

Computation of Ldn

Period of 24-Hour Day (1=included, 0=not)	Sound Power Breakdown by Period of Day	Day	Night
0	1	0	141,254
0	1	0	676,083
0	1	0	234,423
0	1	0	74,131
0	1	0	181,970
0	1	0	446,684
0	1	0	3,235,937
1	0	1,862,087	0
1	0	3,311,311	0
1	0	1,862,087	0
1	0	1,071,519	0
1	0	2,137,962	0
1	0	1,548,817	0
1	0	2,570,396	0
1	0	1,995,262	0
1	0	1,778,279	0
1	0	1,905,461	0
1	0	1,584,893	0
1	0	1,047,129	0
1	0	1,698,244	0
1	0	645,654	0
1	0	2,089,296	0
0	1	0	870,964
0	1	0	186,209

Sum of Sound Power during Period wo/penalty 27,108,397 6,047,653

Log Factor for Penalty (i.e., 10*log(x)) 1 10

Sound Power during Period with penalty 27,108,397 60,476,532

Total Daily Sound Power, with penalties 87,584,929

Hours per Day 24

Average Hourly Sound Power, with penalties 3,649,372

Ldn 65.6

Notes:

Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.

Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.

Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.

Source:

California Department of Transportation (Caltrans), Division of Environmental Analysis. 2009 (November). 2009 Technical Noise Supplement . Sacramento, CA. Available: <<http://www.dot.ca.gov/hq/env/noise/>>. Accessed September 24, 2010.

Short-Term Noise Measurements

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	SPL Time Weight	LN% Freq Weight
ST 2	1/4/24	8:45:46 AM	9:00:46 AM	0:15:00	Single	Low	Mic	Fast	dBA
ST 1	1/4/24	9:02:35 AM	9:17:35 AM	0:15:00	Single	Low	Mic	Fast	dBA
ST 3	1/4/24	9:18:51 AM	9:33:51 AM	0:15:00	Single	Low	Mic	Fast	dBA

Overload	UnderRange	Sensitivity	LAeq	LAFmax	LAFmin	LAF10%	LAF50%	LAF90%
No	No	23.49mV/Pa	55.5	70.1	45.1	58.9	51.8	48.4
No	No	23.49mV/Pa	56.3	66.3	42.3	60.2	52.9	45.7
No	No	23.49mV/Pa	59.4	78.8	48.1	63.1	53.6	50.9

Long-Term Noise Measurements

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	SPL Time Weight	LN% Freq Weight	Overload	UnderRange	Sensitivity	L _{Aeq}	L _A F _{max}	L _A F _{min}
1															
5	1/4/24	10:00:00 AM	11:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	60.3	85.7	43.1
6	1/4/24	11:00:00 AM	12:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	63.3	92.4	45.6
7	1/4/24	12:00:00 PM	1:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	61.9	85.6	44.8
8	1/4/24	1:00:00 PM	2:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	64.1	85.7	44.4
9	1/4/24	2:00:00 PM	3:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	63	87.2	44
10	1/4/24	3:00:00 PM	4:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	Yes	No	18.02mV/Pa	62.5	90.4	45.5
11	1/4/24	4:00:00 PM	5:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	Yes	No	18.02mV/Pa	62.8	91	45
12	1/4/24	5:00:00 PM	6:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	62	85.1	44.1
13	1/4/24	6:00:00 PM	7:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	60.2	84.7	44.7
14	1/4/24	7:00:00 PM	8:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	62.3	86.7	43.7
15	1/4/24	8:00:00 PM	9:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	58.1	80.6	40.7
16	1/4/24	9:00:00 PM	10:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	63.2	88.4	39.5
17	1/4/24	10:00:00 PM	11:00:00 PM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	59.4	87.5	38.5
18	1/4/24	11:00:00 PM	12:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	52.7	76.1	37.7
19	1/5/24	12:00:00 AM	1:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	51.5	72.4	35.4
20	1/5/24	1:00:00 AM	2:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	Yes	No	18.02mV/Pa	58.3	97	34.3
21	1/5/24	2:00:00 AM	3:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	53.7	82.4	35.5
22	1/5/24	3:00:00 AM	4:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	48.7	70.6	35.6
23	1/5/24	4:00:00 AM	5:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	52.6	71.8	36.9
24	1/5/24	5:00:00 AM	6:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	56.5	74.6	40.5
25	1/5/24	6:00:00 AM	7:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	65.1	95.2	45.7
26	1/5/24	7:00:00 AM	8:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	Yes	No	18.02mV/Pa	62.7	90.6	46.5
27	1/5/24	8:00:00 AM	9:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	Yes	No	18.02mV/Pa	65.2	96.5	46.7
28	1/5/24	9:00:00 AM	10:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	62.7	91.4	46.6
29	1/5/24	10:00:00 AM	11:00:00 AM	1:00:00	Auto	Low	Mic	Fast	dB	No	No	18.02mV/Pa	62.7	89.4	46.2

Traffic Noise Spreadsheet Calculator

ASCENT

Project:[illegible]

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

ASCENT

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

			EXISTING CONDITIONS				EXISTING + PROJECT			
Roadway	From	To	<u>Peak Hour Segment Total</u>		<u>ADT¹</u>		<u>Peak Hour Segment Total</u>		<u>ADT¹</u>	
			AM	PM	AM-Derived	PM-Derived	AM	PM	AM-Derived	PM-Derived
Sonoma Boulevard	Florida Street	Georgia Street	669	1216	6,690	12,160	760	1274	7,600	12,740
Sonoma Boulevard	Georgia Street	Curtola Parkway	576	982	5,760	9,820	628	1004	6,280	10,040
Georgia Street	Mare Island Way	Santa Clara Street	115	183	1,150	1,830	147	199	1,470	1,990
Georgia Street	Santa Clara Street	Sacramento Street	162	233	1,620	2,330	216	264	2,160	2,640
Georgia Street	Sacramento Street	Sonoma Boulevard	226	291	2,260	2,910	265	345	2,650	3,450
Curtola Parkway	Maine Street	Sonoma Boulevard	964	1174	9,640	11,740	1078	1119	10,780	11,190
Sacramento Street	Georgia Street	Maine Street	87	109	870	1,090	192	153	1,920	1,530

K-Factor

K-Factor 10

1. K-Factor represents proportion of peak-hour volumes to ADT volumes

Existing Balanced			AM Peak												PM Peak											
Study Int #	N/S St	E/W ST	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Sonoma Boulevard	Florida Street	29	339	12	36	275	39	43	49	25	8	57	25	14	666	9	51	505	69	97	49	25	14	57	52
2	Mare Island Way	Georgia Street	16	587	9	39	429	3	12	4	5	14	11	36	32	579	14	51	425	5	31	20	15	20	16	111
3	Santa Clara Street	Georgia Street	8	33	12	21	30	3	4	37	12	25	52	15	27	46	22	30	37	15	13	77	10	10	56	38
4	Sacramento Street	Georgia Street		25	3	25	48	8	9	54	7	8	84	19	12	47	14	22	59	14	19	105	5	15	78	23
5	Sonoma Boulevard	Georgia Street	13	282	11	39	234	32	10	65	12	35	99	69	25	565	41	89	367	38	33	122	17	18	87	74
6	Mare Island Way	Maine Street	2	606	36	68	371					34		24	2	515	28	60	457					42	47	
7	Maine Street	Sacramento Street				32		6	11	33				13				40		13	9	69			49	21
8	Sonoma Boulevard	Curtola Parkway	211	144	7	147	73	10		338	101		434	151	253	380	29	215	148	16		406	128		337	200
Project Trips Balanced			AM Peak												PM Peak											
Study Int #	N/S St	E/W ST	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Sonoma Boulevard	Florida Street		29	5		51					6	2			34	5		20					2	1	
2	Mare Island Way	Georgia Street		4	14	14	1							4		3	6	5								5
3	Santa Clara Street	Georgia Street	4	6	20	8	1			26	2				3	4	13	5				11			2	
4	Sacramento Street	Georgia Street					22		4	28	22	58		1	2	5	9		8		2	18	9	27		
5	Sonoma Boulevard	Georgia Street	9	23	13		20	27	11	9	8	9	35		5	21	8		7	11	15	15	4	6	11	
6	Mare Island Way	Maine Street		14	1	1								4		6								1		3
7	Maine Street	Sacramento Street						15	2					1					9						13	
8	Sonoma Boulevard	Curtola Parkway	7	9		11	11							6	3	2		7	8			2	1		3	3
Existing Plus Project			AM Peak												PM Peak											
Study Int #	N/S St	E/W ST	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Sonoma Boulevard	Florida Street	29	368	17	36	326	39	43	49	25	14	59	25	14	700	14	51	525	69	97	49	25	16	58	52
2	Mare Island Way	Georgia Street	16	591	23	53	430	3	12	4	5	14	11	40	32	582	20	56	425	5	31	20	15	20	16	116
3	Santa Clara Street	Georgia Street	12	39	32	29	31	3	4	63	14	25	52	15	30	50	35	35	37	15	13	88	10	10	58	38
4	Sacramento Street	Georgia Street	0	25	3	25	70	8	13	82	29	66	84	20	14	52	23	22	67	14	21	123	14	42	78	23
5	Sonoma Boulevard	Georgia Street	22	305	24	39	254	59	21	74	20	44	134	69	30	586	49	89	374	49	48	137	21	24	98	74
6	Mare Island Way	Maine Street	2	620	37	69	371	0	0	0	0	34	0	28	2	521	28	60	457	0	0	0	0	43	0	50
7	Maine Street	Sacramento Street	0	0	0	32	0	21	13	33	0	0	57	14	0	0	0	40	0	22	9	69	0	0	62	21
8	Sonoma Boulevard	Curtola Parkway	218	153	7	158	84	10	0	338	101	0	445	157	256	382	29	222	156	16	0	408	129	0	340	203
Opening Year			AM Peak												PM Peak											
Study Int #	N/S St	E/W ST	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Sonoma Boulevard	Florida Street	30	340	20	40	280	40	50	50	30	10	60	30	20	670	10	60	510	70	100	50	30	20	60	60
2	Mare Island Way	Georgia Street	20	590	10	40	430	10	20	10	10	20	20	40	40	580	20	60	430	10	40	20	20	20	20	120
3	Santa Clara Street	Georgia Street	10	40	20	30	30	10	10	40	20	30	60	20	30	50	30	30	40	20	20	80	10	10	70	40
4	Sacramento Street	Georgia Street		30	10	30	50	10	10	70	10	10	90	20	20	50	20	30	60	20	20	110	10	20	80	30
5	Sonoma Boulevard	Georgia Street	20	290	20	40	240	40	10	70	20	40	100	70	30	570	50	90	370	40	40	130	20	20	90	80
6	Mare Island Way	Maine Street	10	610	40	70	380					40		30	10	520	30	60	460					50		50
7	Maine Street	Sacramento Street				40		10	20	40			40	20				40		20	10	70			50	30
8	Sonoma Boulevard	Curtola Parkway	220	150	10	150	80	10		340	110		440	160	260	380	30	220	150	20		410	130		340	200
Opening Year + Project			AM Peak												PM Peak											
Study Int #	N/S St	E/W ST	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Sonoma Boulevard	Florida Street	30	369	25	40	331	40	50	50	30	16	62	30	20	704	15	60	530	70	100	50	30	22	61	60
2	Mare Island Way	Georgia Street	20	594	24	54	431	10	20	10	10	20	20	44	40	583	26	65	430	10	40	20	20	20	20	125
3	Santa Clara Street	Georgia Street	14	46	40	38	31	10	10	66	22	30	60	20	33	54	43	35	40	20	20	91	10	10	72	40
4	Sacramento Street	Georgia Street	0	30	10	30	72	10	14	98	32	68	90	21	22	55	29	30	68	20	22	128	19	47	80	30
5	Sonoma Boulevard	Georgia Street	29	313	33	40	260	67	21	79	28	49	135	70	35	591	58	90	377	51	55	145	24	26	101	80
6	Mare Island Way	Maine Street	10	624	41	71	380	0	0	0	0	40	0	34	10	526	30	60	460	0	0	0	0	51	0	53
7	Maine Street	Sacramento Street	0	0	0	40	0	25	22	40	0	0	59	21	0	0	0	40	0	29	10	70	0	0	63	30
8	Sonoma Boulevard	Curtola Parkway	227	159	10	161	91	10	0	340	110	0	451	166	263	382	30	227	158	20	0	412	131	0	343	203
Cumulative			AM Peak												PM Peak											
Study Int #	N/S St	E/W ST	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Sonoma Boulevard	Florida Street	40	380	20	40	310	50	50	60	30	10	70	30	20	740	10	60	560	80	110	60	30	20	70	60
2	Mare Island Way	Georgia Street	20	740	20	50	540	10	20	10	10	20	20	40	40	730	20	70	540	10	40	30	20	30	20	130
3	Santa Clara Street	Georgia Street	10	40	20	30	40	10	10	50	20	30	60	20	30	60	30	40	50	20	20	90	20	20	70	50
4	Sacramento Street	Georgia Street		30	10	30	60	10	10	80	10	10	100	30	20	60	20	30	70	20	30	120	10	20	90	30
5	Sonoma Boulevard	Georgia Street	20	310	20	50	260	40	20	80	20	40	110	80	30	630	50	100	410	50	40	140	20	20	100	90
6	Mare Island Way	Maine Street	10	760	50	90	470	0	0	0	0	40	0	30	10	650	40	80	580	0	0	0	0	50	0	60
7	Maine Street	Sacramento Street	0	0	0	40	0	10	20	40	0	0	50	20	0	0	0	50	0	20	10	80	0	0	60	30
8	Sonoma Boulevard	Curtola Parkway	240	160	10	170	90	20	0	380	120	0	480	170	280	420	40	240	170	20		450	150		370	220
Cumulative + Project			AM Peak												PM Peak											
Study Int #	N/S St	E/W ST	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Sonoma Boulevard	Florida Street	40	409	25	40	361	50	50	60	30	16	72	30	20	774	15	60	580	80	110	60	30	22	71	60
2	Mare Island Way	Georgia Street	20	744	34	64	541	10	20	10	10	20	20	44	40	733	26	75	540	10	40	30	20	30	20	135
3	Santa Clara Street	Georgia Street	14	46	40	38	41	10	10	76	22	30	60	20	33	64	43	45	50	20	20	101	20	20	72	50
4	Sacramento Street	Georgia Street	0	30	10	30	82	10	14	108	32	68	100	31	22	65	29	30	78	20	32	138	19	47	90	30
5	Sonoma Boulevard	Georgia Street	29	333	33	50	280	67	31	89	28	49	145	80	35	651	58	100	417	61	55	155	24	26	111	9

Citation # Citations

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Source: Ascent 2024.

Long-Term Noise Measurement.



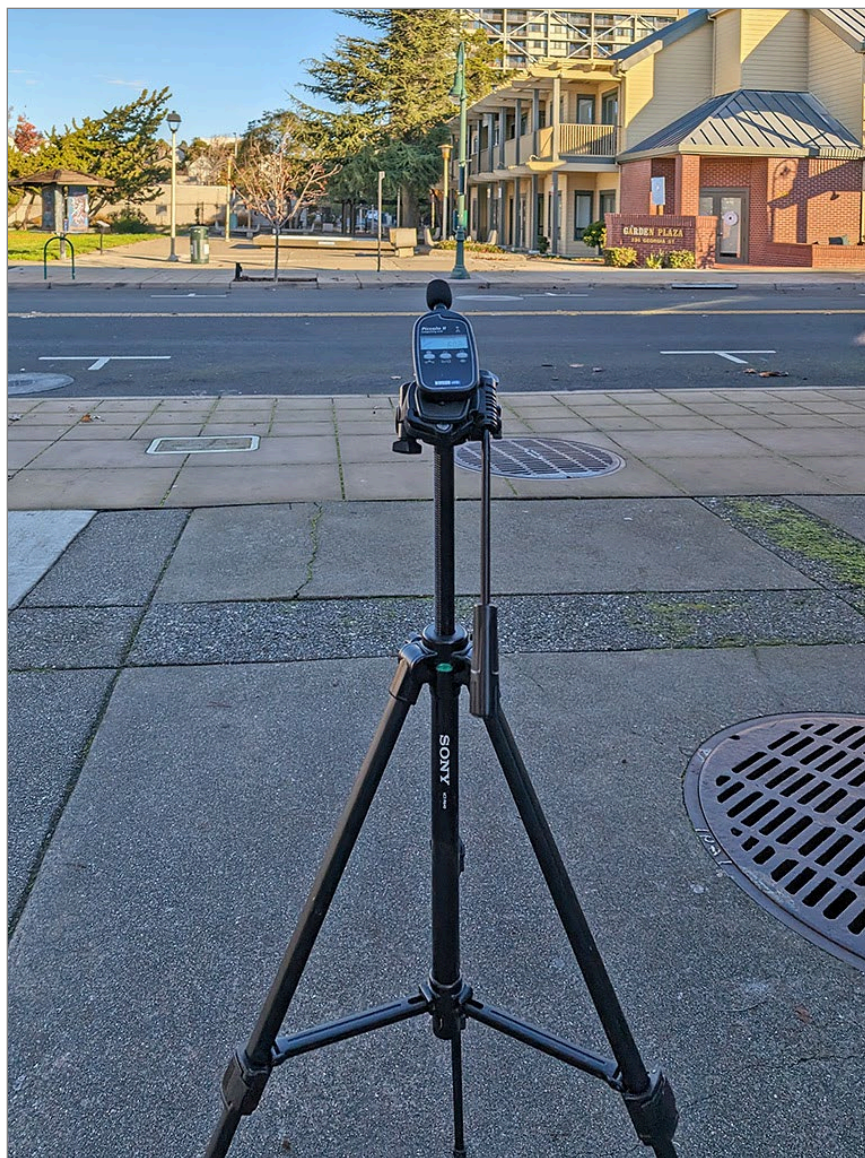
Source: Ascent 2024.

Short-Term Noise Measurement #1.



Source: Ascent 2024.

Short-Term Noise Measurement #2.



Source: Ascent 2024.

Short-Term Noise Measurement #3.

Memo



455 Capitol Mall, Suite 300
Sacramento, CA 95814
916.444.7301

Date: February 21, 2024

To: Christina Ratcliffe, Planning and Development Services Director, City of Vallejo

CC: Erwin Ordonez, Interwest

From: Alta Cunningham, M.A. Historic Preservation, Dimitri Antoniou, Ascent Environmental

Subject: Historical Resources Study - 241-255 Georgia Street in Vallejo, CA Class 32 Exemption

INTRODUCTION AND PURPOSE

Ascent Environmental has been retained to prepare technical memos in support of a California Environmental Quality Act (CEQA) Class 32 Categorical Exemption for the Elite Charter School Project, (project), located in the City of Vallejo, California. Section 15332 of the State CEQA Guidelines allows for the use of a categorical exemption for infill development, provided the contemplated development meets certain criteria, and that none of the exceptions to the exemptions apply (CEQA Guidelines Section 15300.2). This includes not causing a substantial adverse change in the significance of a historical resource; this includes both built environment features and archaeological sites. This memo addresses the project's potential to affect historical resources.

PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

The project site is located at 241-255 Georgia Street on Assessor's Parcel Number (APN) 0055-170-390 in Vallejo, California. The project site is bounded by an existing commercial development to the west, Georgia Street to the north, Sacramento Street to the east, and an existing parking lot and Vallejo Transit Center to the south. The project site is currently occupied by a two-story building.

The proposed project would provide a new public charter high school that would accommodate a maximum of 400 students and 35 staff. The proposed project would be completed in phases as the school continues to grow enrollment and additional funds for construction become available. The existing structure would not be demolished but internal improvements would be made to reconfigure the building layout. The initial development phase proposes to develop approximately 18,000 square feet of interior space suitable for 13 classrooms, four offices, bathroom facilities, a serving kitchen, a multi-purpose room, a library alcove, and a future gymnasium on the ground floor. The second development phase proposes to develop five additional classrooms, storage areas, restrooms, a conference room, and four private offices on the second floor. The proposed project would also include development of perimeter fencing for security purposes, school signage, the reconfiguration of 16 parking spaces into eight parking spaces along Sacramento Street, as well as the addition of 36 bicycle parking spaces. The proposed project improvements would be ADA accessible and comply with State design and construction standards.

REGULATIONS PERTAINING TO HISTORICAL RESOURCES

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on “historical resources.” Pursuant to Public Resources Code (PRC) Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” “Historical resource” is a term with a defined statutory meaning (PRC Section 21084.1; State CEQA Guidelines Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR (PRC Section 5024.1).
- 2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1).
- 4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or identified in a historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

California Register of Historical Resources

The CRHR is a listing of State of California resources that are significant in the context of California’s history. Resources listed in the National Register of Historic Places (NRHP) is automatically listed in the CRHR. A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA.

The CRHR uses four evaluation criteria:

- Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- Criterion 2. Is associated with the lives of persons important to local, California, or national history.
- Criterion 3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.
- Criterion 4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

A historical resource must meet one of the above criteria and retain integrity to be listed in the CRHR. For a property to retain and convey historic integrity it must possess most of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Location is the place where the historic property was constructed or the place where a historic event occurred. Integrity of location refers to whether the property has been moved since

its construction. Design is the combination of elements that create the form, plan, space, structure, and style of a property. Setting is the physical environment of a historic property that illustrates the character of the place. Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. This is an intangible quality evoked by physical features that reflect a sense of a past time and place. Association is the direct link between the important historic event or person and a historic property. Continuation of historic use and occupation help maintain integrity of association.

City of Vallejo Municipal Code

Chapter 2.48 of the City of Vallejo Municipal Code establishes the Architectural Heritage and Landmarks Commission, a seven-member group appointed by the City Council. The Commission is charged with:

- ▶ Conducting design review and holding public hearings for restoration, remodeling, demolition, and development projects, which take place within the city's designated historic districts, or which affect city landmarks, using the standards of the Secretary of Interior's Standards for the Treatment of Historic Properties or City policy as criteria for determining the historic and aesthetic appropriateness of proposed improvements.
- ▶ Surveying the older buildings and neighborhoods to identify those structures which have historic and/or architectural significance, and designating buildings, sites and objects of particular historic or architectural significance as City landmarks.
- ▶ Making policy recommendations to the City Council on matters which relate to historic preservation and the restoration of the designed districts.

Chapter 16.38 of the Municipal Code codifies the City's goals and policies regarding historic preservation. The purpose of the Architectural Heritage and Historic Preservation Ordinance is to:

- ▶ Designate, preserve, protect, enhance and perpetuate those historic buildings, structures, landscaping, districts and neighborhoods which contribute to the cultural and aesthetic heritage of Vallejo.
- ▶ Foster civic pride in the beauty and accomplishments of the past.
- ▶ Stabilize and improve the economic values of certain historic buildings, structures, landscaping, districts and neighborhoods.
- ▶ Protect and enhance the city's cultural and aesthetic heritage.
- ▶ Recognize the uniqueness of historic resources on Mare Island that have contributed to the history of Vallejo, California and the United States and that have significant value to the economic development and land use goals for the island and the community.
- ▶ Promote and encourage continued private ownership, where appropriate, and utilization of such buildings and other structures now so owned and used, to the extent that the objectives listed above can be obtained under such policy.

Structures, objects, and areas in Vallejo having special historical, cultural, architectural or aesthetic interest or value may be classified as one of the following (16.38.160):

- ▶ **City Landmark.** City landmarks shall include those structures found to have unique historical, architectural or aesthetic interest or value and which are eligible for or listed on the National Register of Historic Places.
- ▶ **Historic Structure.** Historic structures shall include those structures found to have outstanding historical, architectural or aesthetic interest or value.

- ▶ **Structure of Merit.** Structures of merit shall include those structures found to have significant historical, architectural or aesthetic interest or value.
- ▶ **Contributing Structure.** Contributing structures shall include those structures found to warrant special historical, architectural or aesthetic interest or value.

Designation of a resource as a City landmark, historic structure, structure of merit, or contributing structure is based on the following criteria (16.38.150):

- ▶ **Architectural Merit:**
 - Property that is the first, last, only, or most significant architectural property of its type in the city or region.
 - Property that is the prototype of, or outstanding example of, periods, styles, architectural movements, engineering or construction techniques, or an example of the more notable work, or of the best surviving work in the city or region of an architect, designer or master builder.
 - Architectural examples worth preserving for the values they add when integrated into the total fabric of the city's neighborhoods.
- ▶ **Cultural Value:** Structures, objects, sites and areas associated with the movement or evolution or religious, cultural, governmental, social and economic developments of the city;
- ▶ **Educational Value:** Structures worth preserving for their educational value;
- ▶ **Historical Value:**
 - Preservation and enhancement of structures, objects, sites and areas that embody and express the history of Vallejo, Solano County, California, or the United States.
 - History may be social, cultural, economic, political, religious or military;
 - Any property which is listed in the National Register of Historic Places and as described in Section 470a of Title 16 of the United States Code and/or is a registered state landmark.

EXEMPTIONS UNDER CEQA

Section 15332 of the CEQA Guidelines allows for the use of a Class 32 Categorical Exemption, provided the contemplated development meets certain criteria:

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
- (c) The project site has no value as habitat for endangered, rare or threatened species.
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- (e) The site can be adequately served by all required utilities and public services.

A lead agency must also consider whether a project may fall under a list of exceptions to all classes of exemptions, as detailed under Section 15300.2 of the CEQA Guidelines:

- (a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to 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 in 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.
- (b) Cumulative Impact. 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.
- (c) Significant Effect. 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.
- (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. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.
- (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 Section 65962.5 of the Government Code.
- (f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

ANALYSIS

On January 18, 2024, a records search of the project site and a 0.25-mile buffer was conducted at the Northwest Information Center (NWIC), at Sonoma State University (NWIC File No.: 23-0811; Attachment A). The following information was reviewed as part of the records search:

- ▶ NRHP and CRHR,
- ▶ Historic Property Data File for Marin County,
- ▶ Archaeological Determinations of Eligibility,
- ▶ California Inventory of Historic Resources,
- ▶ California State Historic Landmarks,
- ▶ California Points of Historical Interest, and
- ▶ Historical GLO land plat maps.

The results of the records search review revealed that two previous studies of cultural resources have been conducted within the project site and that an additional five cultural resources studies have been completed for lands within a 0.25-mile radius. The two studies that cover the project site were conducted between 2000 and 2010; both address archaeological and built-environment topics and included subsurface testing. The reports conclude that there is potential to encounter subsurface historic-era archaeological deposits (e.g., bottles, refuse, building foundations), however, the potential for pre-contact archaeological deposits (e.g., lithics, stone tools, shells, beads) was low due to the location of the project site being in an upland area away from fresh water sources and exposed to the wind (Beard 2008; Chattan 2004).

The NWIC records search also revealed that no built environment features or archaeological sites have been previously recorded within the project site. One archaeological site and two built environment features were identified within the 0.25-mile radius.

Additionally, the project site is located south of the NRHP-listed Saint Vincent's Hill Historic District and west of the NRHP-listed Architectural Heritage District. The building is not listed as a City of Vallejo Landmark (City of Vallejo 2016: 4.4-8 through 4.4-14). Although the building has not been evaluated for CRHR-eligibility, it is possible that it could be recommended eligible later. As described above, eligibility rests on twin factors of significance and integrity. The project does not have the potential to result in adverse changes to the integrity of the building, such as would render it ineligible for listing. The project does not include demolishing the existing structure or altering external features of the building. ADA improvements, changes to the parking layout, perimeter fencing, and internal design changes would not affect integrity of location, design, setting, materials, workmanship, feeling, or association, as described above.

CONCLUSION

The building at 241-255 Georgia Street is not listed on the CRHR or as a City of Vallejo Landmark. The project does not have the potential to cause a substantial adverse change in the significance of a historical resource if the building was ever recommended eligible for listing as either a landmark or CRHR.

There are no known archeological or tribal cultural resources on the site that qualify as historical resources, according to readily available material. Given that the property has been previously disturbed, the likelihood of finding such resources intact and within their relevant historic context is relatively low. Although not required to support an infill exemption or an SB 330 application, the project would comply with Public Resources Code and Health and Safety Code requirements that protect unanticipated cultural discoveries.

Public Resources Code section 21083.2 requires that if a unique archaeological resource is discovered, reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of appropriate treatment, in no order of preference, may include, but are not limited to, the following:

- ▶ Planning construction to avoid archaeological sites.
- ▶ Deeding archaeological sites into permanent conservation easements.
- ▶ Capping or covering archaeological sites with a layer of soil before building on the sites.
- ▶ Planning parks, greenspace, or other open space to incorporate archaeological sites.

To the extent that unique archaeological resources are discovered and preservation in place is not feasible, an archeologist would determine an appropriate treatment plan, which could include excavation.

Health & Safety Code section 7050.5 states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the

remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Public Resources Code section 5097.98 sets for the requirements for the NAHC when it receives notice from the coroner of the discovery of Native American human remains. It also includes requirements for the landowner, which include:

Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section, with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

The above existing laws, which the project applicant must follow in accordance with standard conditions of approval, would prevent significant impacts from project construction on unique archeological resources and human remains. Therefore, the project would not result in any impacts to historical resources, and this exception to the exemption in Section 15332 does not apply.

REFERENCES

City of Vallejo. 2016 (July) Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan Draft EIR.

Prepared by Placeworks. Available: https://cdnsm5-hosted.civiclive.com/Userfiles/DBFiles/server_16925367/202108/17961506.pdf

Beard, Vicki R. 2008 (September). Historic Property Survey Report: Downtown Vallejo Streetscape Project, Solano County, California. **CONFIDENTIAL** Report S-035474 on file at the Northwest Information Center at Sonoma State University.

Chattan, Cassandra. 2004 (July). Downtown Vallejo Specific Plan Historic Resources Assessment. **CONFIDENTIAL** Report S-028998 on file at the Northwest Information Center at Sonoma State University.

PERSONNEL QUALIFICATIONS

Alta Cunningham has over 23 years of experience in the environmental consulting field. Her experience as an architectural historian includes archival research, historic building and structure surveys and evaluations, evaluating projects for consistency with the Secretary of the Interior's Standards, and cultural resources documentation for National Environmental Policy Act and CEQA projects ranging from single building evaluations to district-wide surveys for CEQA, PRC Section 5024, and Section 106 compliance documents. Alta received her Bachelor of Science in History from the University of California, Davis, and a Master of Arts in Historic Preservation from the Savannah College of Art and Design. She meets the Secretary of the Interior's Professional Qualification Standards for architectural history and history. Alta also meets the Office of Historic Preservation's professional qualifications as an Archaeological Technician.

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Attachment A

NWIC Results Letter

CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE

HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO

SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://nwic.sonoma.edu

1/18/2024

NWIC File No.: 23-0811

Alta Cunningham
Ascent Environmental, Inc.
455 Capitol Mall, Suite 300
Sacramento, CA 95814

Re: 20230194.01

The Northwest Information Center received your record search request for the project area referenced above, located on the Mare Island USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a ¼ mi. radius:

Resources within project area:	None listed
Resources within ¼ mi. radius:	P-48-000090, P-48-001061, P-48-001854, P-48-001857
Reports within project area:	S-28998, 35474
Reports within ¼ mi. radius:	S-15900, 42482, 46990, 46540, 50626

Resource Database Printout (list):

☒ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details):

☒ enclosed ☐ not requested ☐ nothing listed

Resource Digital Database Records:

☐ enclosed ☒ not requested ☐ nothing listed

Report Database Printout (list):

☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details):

☒ enclosed ☐ not requested ☐ nothing listed

Report Digital Database Records:

☐ enclosed ☒ not requested ☐ nothing listed

Resource Record Copies:

☒ enclosed ☐ not requested ☐ nothing listed

Report Copies:

[within]

☒ enclosed ☐ not requested ☐ nothing listed

OHP Built Environment Resources Directory:

☒ enclosed ☐ not requested ☐ nothing listed

Archaeological Determinations of Eligibility:

☒ enclosed ☐ not requested ☐ nothing listed

CA Inventory of Historic Resources (1976):

☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps:

☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps:

☐ enclosed ☒ not requested ☐ nothing listed

Local Inventories:

☒ enclosed ☐ not requested ☐ nothing listed

Caltrans Bridge Survey:

☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information:

☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature:

☐ enclosed ☒ not requested ☐ nothing listed

Shipwreck Inventory:

☐ enclosed ☒ not requested ☐ nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Annette Neal

Researcher