City College of San Francisco

Updated Facilities Master Plan
Draft Environmental Impact Report
SCH# 20200090261

Volume II: Appendices

Prepared by:

IMPACT SCIENCES

505 14th Street, Suite 200
Oakland, CA 94612

Prepared for:

City College of San Francisco
50 Frida Kahlo Way
San Francisco, California 94112

January 2021

APPENDIX A

Scoping Process

CITY COLLEGE OF SAN FRANCISCO

PUBLIC NOTICE
AVAILABILITY OF NOTICE OF PREPARATION OF ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETING

Date: September 14, 2020

Project: Updated Facilities Master Plan of the City College of San Francisco

Lead agency name and address:
City College of San Francisco
50 Frida Kahlo Way
San Francisco, CA 94112

Contact person and phone number:
Alberto Vasquez
Interim Associate Vice Chancellor of Construction/Capital Planning
Facilities@ccsf.edu
(415) 239-3055

Project location:
CCSF Main Campus and Various location throughout the City and County of San Francisco

CCSF Main Campus
50 Frida Kahlo Way
San Francisco, CA 94112

A notice of preparation (NOP) of an environmental impact report (EIR) has been prepared by the City College of San Francisco District. The notice is available for public review and comment on the College's web page (https://archive.ccsf.edu/en/about-city-college/administration/vcfa/facilities_planning/Facilities.html).

A public scoping meeting will be held to receive oral comments concerning the scope of the EIR.

Public Scoping Meeting Date: Wednesday, October 7, 2020 at 4:00 PM

Public Scoping Meeting Location:
via Zoom Meeting
https://cccconfer.zoom.us/j/93347424499
or Telephone number (669) 900-6833
Meeting ID: 933 4742 4499

Requests to make public comment must be submitted in advance, no later than 30 minutes before the start of the meeting, via email to: Facilities@ccsf.edu or via phone to: (415) 239-3055. Please provide your name and, if participating by phone, please also include your phone number. During the time for public comment, individual speakers will be unmuted. The scoping meeting will be recorded.

Written comments will also be accepted until:
5:00 PM on Friday, October 16, 2020
Written comments should be sent to:
Facilities Construction and Planning
City College of San Francisco
50 Frida Kahlo Way, Bungalow 606
San Francisco, CA 94112

or via email to: Facilities@ccsf.edu

PROJECT SUMMARY

The City College of San Francisco (CCSF or "College") Updated Facilities Master Plan (FMP) provides a framework for future developments to support the goals and strategies of the College's Education Master Plan. The Updated FMP (proposed project) is a long-range plan, designed to guide future development through the year 2030. The Updated FMP would support enhanced student experience on campus and sets the framework for improvements to indoor and outdoor student gathering and learning spaces, campus infrastructure, accessibility, and paths of travel. The Updated FMP would also support sustainability and resilience measures of the campus.

The Updated FMP is prepared in compliance with CCSF Board Policy 7.02 which calls for maintaining a current Facilities Master Plan.

The San Francisco Community College District (District) determined that an Environmental Impact Report (EIR) must be prepared for the proposed project prior to any final decision whether to approve the project. The purpose of the EIR is to provide information about potential significant physical environmental effects of the proposed project, to identify possible ways to minimize the significant effects, and to describe and analyze possible alternatives to the proposed project.

The EIR analysis will evaluate, at a program level, the Updated FMP strategy that provides a districtwide framework of the CCSF facilities over the next 10 years. The analysis will also include a program-level evaluation of the Updated FMP strategy specific to the CCSF Main Campus located at 50 Frida Kahlo Way. The Updated FMP framework for the Main Campus prioritizes, among other improvements, efficient and optimization of the use of existing facilities, ease of access to critical campus resources; improvement of campus connectivity; and increased use of transit, bicycles, pedestrian, and shared-car programs, and infrastructure.

The EIR analysis will also evaluate at a project-level proposed individual demolition, decommission, renovation, and construction projects within the Main Campus.

The District will hold a **PUBLIC SCOPING MEETING** on **Wednesday, October 7, 2020, at 4:00 PM via Zoom Meeting** (see information above). The purpose of this meeting is to receive oral comments to assist the District in determining the scope and content of the environmental impact analysis. Written comments will also be accepted until **5:00 PM on Friday, October 16, 2020**. Written comments should be sent to Facilities Construction and Planning, City College of San Francisco, 50 Frida Kahlo Way, Bungalow 606, San Francisco, CA 94112 or emailed to Facilities@ccsf.edu.

RESPONSIBLE AGENCIES

The NOP (provided in the link above) provides a description of the project and solicits comments from responsible agencies, trustee agencies, federal, state and local agencies, and other interested parties on the scope and content of the environmental document to be prepared to analyze the environmental impacts of the project. Section 15082(b) of the State CEQA Guidelines requires that each responsible agency provide the Lead Agency with specific detail about the scope and content of the environmental information related to the responsible agency's area of statutory responsibility to be included in the draft EIR. Specific concerns related to the proposed project are sought in order to provide a document that best informs decision-makers and the general public.

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
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www.dot.ca.gov

Making Conservation a California Way of Life.

October 15, 2020

SCH # 2020090261
GTS # 04-SF-2020-00318
GTS ID: 20492
Co/Rt/Pm: SF/280/1.85

Alberto Vasquez, Interim Associate Vice Chancellor of Construction/Capital Planning
City College of San Francisco
50 Frida Kahlo Way
San Francisco, CA 94121

Updated Facilities Master Plan for the City College of San Francisco – Notice of Preparation (NOP) of an Environmental Impact report (EIR)

Dear Alberto Vasquez:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Updated Facilities Master Plan (FMP) project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the September 2020 NOP.

Project Understanding

The Updated FMP, as a long-range plan, provides a framework for future developments to support the goals and strategies of the College's Education Master Plan. The Updated FMP would support enhanced student experience on campus and sets the framework for improvements to indoor and outdoor student gathering and learning spaces, campus infrastructure, accessibility and paths of travel. It would also support sustainability and resilience measures of the campus. The EIR analysis will evaluate the Updated FMP strategy at a program level. The proposed individual demolition, decommission, renovation, and construction projects within the Main Campus will also be evaluated at a project-level in the Draft EIR.

The CCSF Main Campus is located at 50 Frida Kahlo Way in San Francisco. To the east, the campus is bordered by Interstate (I)-280. It is located within a Priority Development Area identified in the Plan Bay Area 2040 and within the Transit Priority Areas defined in the California Public Resources Code, Section 21099.

Travel Demand Analysis

With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide. The detailed Vehicle Miles Traveled (VMT) analysis should include the following:

- Projects that result in automobile VMT per capita above the threshold of significance for existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact. If necessary, mitigation for increasing VMT should be identified. Mitigation should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.

- A schematic illustration of walking, biking and auto conditions at the project site and study area roadways. Potential safety issues for all road users should be identified and fully mitigated.

- The project's primary and secondary effects on pedestrians, bicycles, travelers with disabilities and transit performance should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access to pedestrians, bicycle, and transit facilities must be maintained.

- Clarification of the intensity of events/receptions to be held at the location and how the associated travel demand and VMT will be mitigated.

Hydraulics

Any increase in storm water needs to be treated and contained on the project site to have no impact on State drainage systems. Please ensure that any runoff to State facilities be metered to pre-construction levels.

Construction-Related Impacts
Potential impacts to the State Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified in the Draft EIR. Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit that is issued by Caltrans. To apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits.

Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to I-280.

Lead Agency
As the Lead Agency, the City College of San Francisco is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Yunsheng Luo at Yunsheng.Luo@dot.ca.gov. Additionally, for future notifications and requests for review of new projects, please contact LDIGR-D4@dot.ca.gov.

Sincerely,

Mark Leong

Mark Leong
District Branch Chief
Local Development - Intergovernmental Review

cc: State Clearinghouse

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

October 15, 2020

Mr. Alberto Vasquez
City College of San Francisco
50 Frida Kahlo Way
San Francisco, CA 94112
Facilities@ccsf.edu

Subject: Updated Facilities Master Plan for City College of San Francisco, Notice of Preparation of an Environmental Impact Report, SCH No. 2020090261, City and County of San Francisco

Dear Mr. Vasquez:

The California Department of Fish and Wildlife (CDFW) received the Notice of Preparation (NOP) of a draft Environmental Impact Report from the City of San Francisco (City) for the Updated Facilities Master Plan for City College of San Francisco (Project).

CDFW ROLE

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA) §15386 for commenting on projects that could impact fish, plant and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. Pursuant to our jurisdiction, CDFW has the following concerns, comments, and recommendations regarding the Project.

PROJECT DESCRIPTION SUMMARY

Proponent: City College of San Francisco

Location and Description: Project activities will occur at the main campus address 50 Frida Kahlo Way, City College of San Francisco, San Francisco, CA 94112, Accessor Parcel Number (APN): 3179-010 and 3180-191.

The Updated Facilities Master Plan (FMP) is a long-range development plan for the City College. It provides a strategy for facilities improvements, renovations, replacements, and new construction through 2030. The Addendum to the 2004 Facilities Master Plan EIR addresses the new construction of three Campus facilities originally planned in the 2004 FMP:

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1. Diego Rivera Theater: would replace part of a surface parking lot located on the west side of Frida Kahlo Way to the north of the Multi-Use Building. The Theater would be approximately 75,000 square feet and 55 feet high with three stories and a partial basement.

2. Sciences, Technology, Engineering, Arts, and Math (STEAM) building: would be constructed on the west side of Frida Kahlo Way north of the future Diego Rivera Theater. The STEAM Building would be approximately 150,000 square feet and 4 to 5 stories tall. The construction of the Diego Riviera Theater and the STEAM building will remove a total of 569 spaces in the Upper Balboa Reservoir surface parking lot.

3. New Child Care Center: would be built at Judson Avenue and Frida Kahlo Way. This Center would include a one-story building, a courtyard, a playground, and a surface parking for a total of approximately 9,800 square feet.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources, including nesting birds.

Comment 1: Nesting Birds

Issue: On page 55 of the NOP, the Biological Resources section states that "the biological resources analysis will evaluate the potential or development under the Updated FMP to affect biological resources or habitats, such as trees or native resident or migratory bird species". If ground-disturbing or vegetation-disturbing activities occur during the bird breeding season (February through early-September), the Project could cause impacts to nesting birds.

Recommendation: To evaluate and avoid for potential impacts to nesting bird species, CDFW recommends incorporating the following mitigation measures into the Project's draft EIR, and that these measures be made conditions of approval for the Project:

CDFW recommends that the following protective measures be included in the draft EIR:

1. Nesting Bird Surveys: If Project-related work is scheduled during the nesting season (typically February 15 to August 30 for small bird species such as passerines; January 15 to September 15 for owls; and February 15 to September 15 for other raptors), CDFW recommends that a qualified biologist conduct two surveys for active nests of such birds within 14 days prior to the beginning of Project construction, with a final survey conducted within 48 hours prior to construction. Appropriate minimum survey radii surrounding the work

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area are typically the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; and iii) 1,000 feet for larger raptors such as buteos. Surveys should be conducted at the appropriate times of day and during appropriate nesting times.

2. Active Nest Buffers: If the qualified biologist documents active nests within the Project area or in nearby surrounding areas, an appropriate buffer between the nest and active construction should be established. The buffer should be clearly marked and maintained until the young have fledged and are foraging independently. Prior to construction, the qualified biologist should conduct baseline monitoring of the nest to characterize "normal" bird behavior and establish a buffer distance which allows the birds to exhibit normal behavior. The qualified biologist should monitor the nesting birds daily during construction activities and increase the buffer if the birds show signs of unusual or distressed behavior (e.g. defensive flights and vocalizations, standing up from a brooding position, and/or flying away from the nest). If buffer establishment is not possible, the qualified biologist should have the authority to cease all construction work in the area until the young have fledged and the nest is no longer active.

Comment 2: Tree Removal

Issue: It is unclear whether trees will be removed from the Project site and if so, what size and species will be removed. Both native and non-native trees provide nesting habitat for birds, and habitat value for other wildlife. Removal of heritage and mature trees on-site without adequate mitigation should be considered a substantial adverse change in the physical conditions within the area affected by the Project.

Recommendation: CDFW recommends that the draft EIR include a clear analysis of potential impacts to trees located within or adjacent to the Project area, and appropriate and effective avoidance, minimization and mitigation measures be developed and implemented to offset any significant Project impacts to trees. The Project should avoid tree removal to the greatest extent feasible. On-site tree planting should be considered as a potential impact minimization measure but not sufficient to completely off-set temporal impacts from loss of heritage or potentially other trees. CDFW recommends Project mitigation from loss of heritage and potentially other trees should include off-site preservation of heritage and/or other trees in perpetuity.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA

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documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code section 2080.

Lake and Streambed Alteration Program

Notification is required, pursuant to CDFW's LSA Program (Fish and Game Code section 1600 et. seq.) for any Project-related activities that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute the final LSA Agreement until it has complied with CEQA (Public Resources Code section 21000 et seq.) as the responsible agency.

Nesting Birds

CDFW has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Fully protected species may not be taken or possessed at any time (Fish and Game Code Section 3511). Migratory raptors are also protected under the federal Migratory Bird Treaty Act.

ENVIRONMENTAL DATA

CEQA requires that information developed in draft environmental impact reports be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form, online field survey form, and contact information for CNDDB staff can

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be found at the following link: https://wildlife.ca.gov/data/CNDDB/submitting-data. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Mia Bianchi, Environmental Scientist, at (707) 210-4531 or by email at Mia.Bianchi@wildlife.ca.gov; or Mr. Wes Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or by email at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Gregg Erickson
BE74D4C93C604EA...

Gregg Erickson
Regional Manager
Bay Delta Region

cc: State Clearinghouse No. 2020090261

COMMENT ON THE 2019 CCSF FACILITIES MASTER PLAN

OCEAN-HAVELOCK PARKING & HAVELOCK GATEWAY

1 Contents / Preface

2 Summary of Issues

3 Ocean-Havelock Parking / Existing Conditions

4 Ocean-Havelock Parking / FMP Recommendations

5 Havelock Gateway / Existing Conditions

6 Havelock Gateway / FMP Recommendations

7 Havelock Gateway / Neighborhood Impact

8 Havelock Gateway / Neighborhood Requests

9 Portable Village / Temporary Campus

Preface

Purpose

The purpose of this document to summarize items in the **2019 CCSF Facilities Master Plan (FMP)** that may affect neighbors east of the CCSF Ocean Campus: Marston Avenue, Edna Street, Havelock Street, and Circular Avenue; identify potential issues; and serve as a starting point for discussion between City College and neighbors.

Focus

The main impacts on our corner of the neighborhood are:

- **Future Surface Parking Lot.** The FMP will remove the 600 and 700 bungalows (which currently border the backyards of homes on Marston Avenue), and replace them with parking. The expanded parking lot is referred to as "Future Surface Parking" in the FMP, and as the "Havelock Lots" in this document.
- **Havelock / Sunnyside Gateway.** The FMP is unclear on its plans for vehicle access to the parking lots through Havelock Street.
- **Portable Village / Temporary Campus.** A plan to temporarily convert the parking lot on Havelock to temporary campus.

Format

- Left side of page (in blue) attempts to summarize information from the FMP and supporting documents. Omissions, misinterpretations and errors are unintentional.
- Right side of document (in red) comments on the plans, provides neighborhood insight, and raises questions.

Next Steps

- I am interested in your thoughts. Please feel free to send feedback and ask questions. If you'd like to get involved please let me know.
- Thanks to our neighbors in Mission Terrace, the **CCSF Facilities Committee** added this issue to the agenda of their next meeting on November 18, 2019, 1:00 PM to 3:00 PM, in the CCSF Multi-Use Building, Room 140. I will submit this document to the committee at that time. You are welcome to attend that meeting, provide your own comments, submit comments to facilities@ccsf.edu, or email me comments for me to forward or wrap into this document
- If you would are willing to sign your name in support of this document, please let me know by November 17.

Christine Weibel / havelockstreetbridge@gmail.com

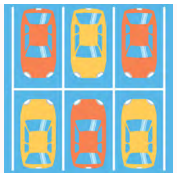
2 / SUMMARY OF ISSUES

Questions & Requests for the CCSF Facilities Committee

In March of 2019, City College of San Francisco published their **Facilities Master Plan (FMP),** a document that described the state of existing campus facilities and a plan for extensive upgrades.

Review of the FMP and its supporting documents from the revealed some questions and concerns related to the Future Surface Parking Lots on the east side of campus, and the entrance to those parking lots from Havelock Street.

These issues are summarized below, followed by requests for clarification or other action from the City College Facilities Committee.

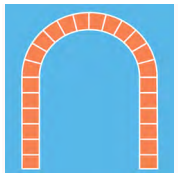


Provide Parking Lot Specifics

Provide clarity on number of parking spaces that will be added to the Ocean-Havelock Lots.

Currently, we do not know how many parking spaces the new lots will provide, so cannot understand the impact of the parking lot reconfiguration.

PAGE 3-4



Clarify Gateway Plans

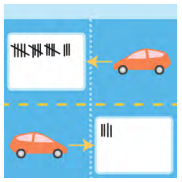
Provide clarity on the plans for vehicle access through the Havelock Gateway.

The FMP is unclear on vehicle traffic through the Havelock Gateway: will it be open to regular vehicle traffic or not?

Illustrations in the FMP indicate that the Havelock Gateway will not be used for regular vehicle traffic.

However, the text only says that traffic will "not be encouraged" and that reducing traffic "will be explored."

PAGE 5-6



Study Havelock Traffic

We would like SFMTA and/or CCSF to do a traffic study of Havelock Street.

CCSF generates traffic on Havelock that creates unsafe pedestrian conditions. The FMP does not seem aware of the impact the Havelock Gateway has on our neighborhood.

Traffic data will:

· Inform CCSF / SFMTA of the impact that CCSF's traffic has on the neighborhood, and its danger to pedestrians.

· Inform CCSF / SFMTA of the impact that closing the Havelock Entrance could have on Ocean Avenue.

· Provide a basis in data for planning decisions.

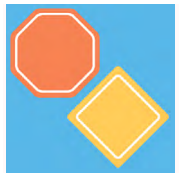
PAGE 7

Perform Outreach

Provide a process and timeline for the neighborhood to provide input on the design of the Surface Parking at the end of Havelock Street and the design of the Havelock Gateway.

We would like an opportunity to help City College achieve its goal for a safe, welcoming pedestrian and cycling route that connects the campus to neighborhoods.

PAGE 8



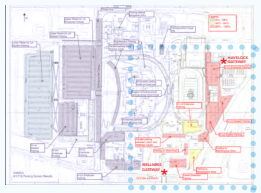
Mitigate impacts

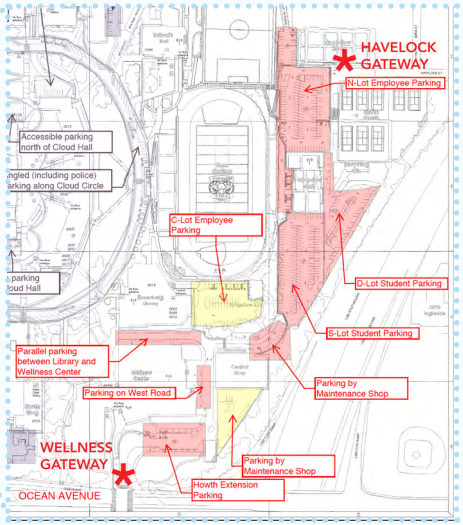
Mitigate traffic and quality-of-life impacts on neighbors near the Havelock Gateway and Future Surface Parking at the end of Havelock Street.

PAGE 8

3 / OCEAN-HAVELOCK PARKING / EXISTING CONDITIONS

Maps & Data from the FMP





Ocean-Havelock Parking Lots

Parking lots on the east edge of City College's Ocean Campus are connected by a road that winds from the Wellness Gateway on Ocean Avenue to Havelock Street.

		parking Lot name	no. of parking spaces	percent of spaces used at peak times
Ocean-Havelock Lots	Havelock Lots	N Lot	146	85-100%
445 spaces	374 spaces	S Lot	164	85-100%
		D Lot	64	85-100%
		Howth Extension	17	85-100%
	Other Ocean-Havelock Lots	Maintenance Shop	21	50-84%
		West Road	9	85-100%
	71 spaces	Between Library & Wellness Center	8	85-100%
		C Lot	16	50-84%

Table 1. Ocean-Havelock Parking Lot Spaces and Usage. Data Source: "City of San Francisco Parking Occupancy Counts at CCSF Wednesday, 8-17-2016. Appendix A." Included in the City College 2019 Facility Master Plan, Chapter 5: Appendix, pages 58-59.

Neighborhood-focused Interpretation

The 2019 CCSF Ocean Campus Transportation Demand Management Plan and Parking Analysis (TDM) grouped all parking lots east of Frida Kahlo Way with the seemingly sensible label, "East of Frida Kahlo Way." However, this label is too broad -- it mixes subgroups of parking lots that have very different entry gateways, vehicle circulation routes, future plans, and impacts on surrounding neighborhoods.

The interpretation below is from the point of view of neighbors who live near the parking lots on Havelock Street.

Ocean-Havelock Lots

This document refers to the chain of parking lots on the east side of campus as the **Ocean-Havelock Lots** and treats them as a unit. They share the following characteristics:

- They are primarily accessed by the Wellness Gateway (Ocean Avenue at Howth) or the Sunnyside / Havelock Gateway (at the end of Havelock Street in Sunnyside).
- They are all linked by a road that winds between the Wellness and Havelock Gateways.
- They generate traffic that has a direct impact on Ocean Avenue.
- They generate traffic that has a direct impact on Sunnyside streets east of campus: Marston, Edna, Havelock and Circular.

The Ocean-Havelock Lots contain 445 parking spaces, 15% of the 2964 spaces on the Ocean Campus.[1] Most of the lots are 85-100% full during peak hours.[2]

Havelock Lots

This document uses the term **Havelock Lots** to refer to the large **N**, **D**, and **S** lots, a subset of the Ocean-Havelock Lots.

These are the lots closest to the Havelock Gateway that will be expanded as part of the Facilities Master Plan, which refers to these lots as "**East Surface Parking.**" We prefer the term Havelock Lots, which locates them and emphasizes their impact on the surrounding neighborhood.

Currently, they contain a combined 374 parking spaces, which constitute 84% of the Ocean-Havelock parking and 13% of all parking at the Ocean Campus. These lots are heavily used, and are 85%-100% full during the peak time of 11am - 12pm.[3]

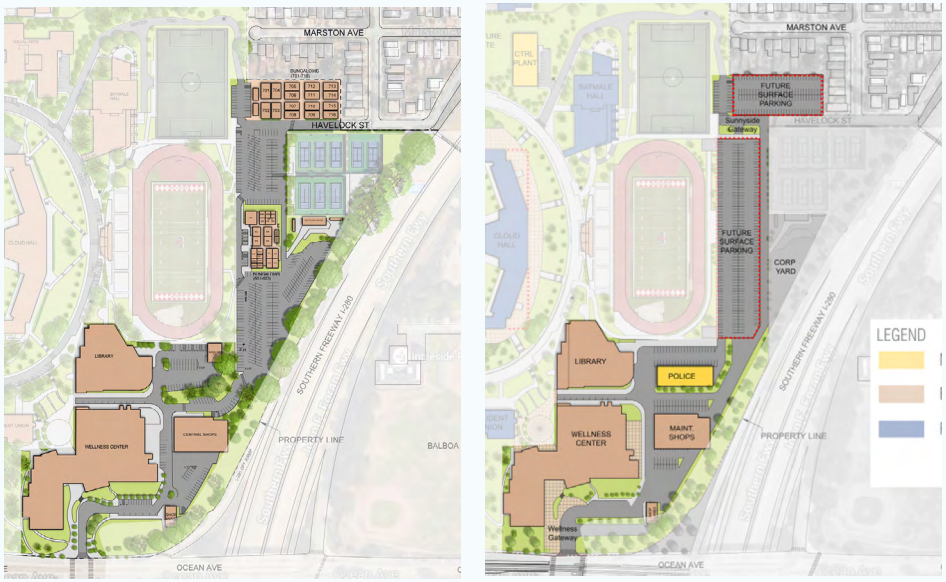
1 "City of San Francisco Parking Occupancy Counts at CCSF, Appendix A", Dated Wednesday, 8-17-2016. Included in the City College Facility Master Plan, Chapter 5: Appendix, page 58-59.

2 "City College of San Francisco – Existing Parking Lot Usage Percentages Exhibit." Included in the City College Facility Master Plan, Chapter 2: Existing Conditions, page 54.

3 "City College of San Francisco Summary of Findings of Preliminary Parking Analysis." Sandis, September 2016. Included in the FMP 5 Appendix, page 56.

4 / OCEAN-HAVELOCK PARKING / FMP RECOMMENDATIONS

Quotes & Figures from the FMP



Left, Existing Campus. Right, Recommended Facilities Master Plan. Images cropped to highlight Ocean-Havelock Parking Lots. FMP, 4 Recommendations, pages 205-206.

On the East Surface Parking (Havelock Lots)

Develop parking on the east side of the east campus, reside to the east of the football / track and field stadium where the N-Lot, S-Lot, and the 600 and 700 Bungalows (#35, 45, 46, 47, 48, 49, 50, 51) are currently located.

- Provide access to and from Ocean Avenue.
- **Develop the Sunnyside Gateway for pedestrian, service and emergency access.**
- Discourage access from the service route East Parking Lot to Marston Road.
- There is potential to provide parking and charging stations for electric cars.
- There is potential to provide parking for alternative transportation such as carpool and carshare vehicles, bicycles, and shared bicycles.
- Coordinate parking with SFMTA to ensure minimal impacts on MUNI Metro KLine on Ocean Avenue

Circulation

- Provide convenient access/egress to parking from Ocean Avenue.

FMP, 4 Recommendations, page 202

Questions & Comments on the FMP

Parking Lot Expansion

The CCSF Facilities Master Plan (FMP) will **expand the Havelock Lots** by removing the 600 and 700 bungalows. Other Ocean-Havelock lots will be reconfigured as well. The timeline is 6-10 years.

The overall effect will be more parking that is concentrated near the Havelock Gateway.

The number of parking spaces in the newly configured lots is not documented in the FMP. Changes to these lots are not included in the 2019 Transportation Demand Management (TDM) and Parking Plan analysis.

Given the absence of data in the FMP, a rough guesstimate based on the parking lot area, provided solely for the purpose of visualizing the scale of the expansion: the new lot appears about 120% the size of current Havelock Lots; 1.2 x the existing 374 spaces would mean 449 spaces, or 75 additional spaces.

Havelock Gateway

The plans for the gateway at Havelock Street say it will be developed for "pedestrian, service, and emergency access." However, it does not explicitly state the plan for regular vehicle access to the parking lot through the gateway, or any plans to minimize traffic impacts to the neighborhood.

Impact on Neighbors

The FMP diagram shows the new parking lot will abut backyards of neighbors on Marston Avenue and Edna Streets. Please let us know the process and timeline for community engagement on the parking lot design.

QUESTIONS

How many spaces are planned for the new parking lots?

What is the process and timeline for community engagement on the parking lot design?

5 / HAVELOCK GATEWAY / EXISTING CONDITIONS

Quotes & Figures from the FMP

On Havelock Street

"The street leads through a residential neighborhood and dead-ends into a service entry at the 'back' of the Ocean Campus. **While the College does not encourage traffic in the neighborhood, this is an essential gateway for emergency vehicles."**

"Infrastructure Condition Assessment City College of San Francisco (CCSF) – Part I Existing Conditions." Sandis. August, 2017. Included in FMP, 5 Appendix, page 79.

On Existing Parking Distribution

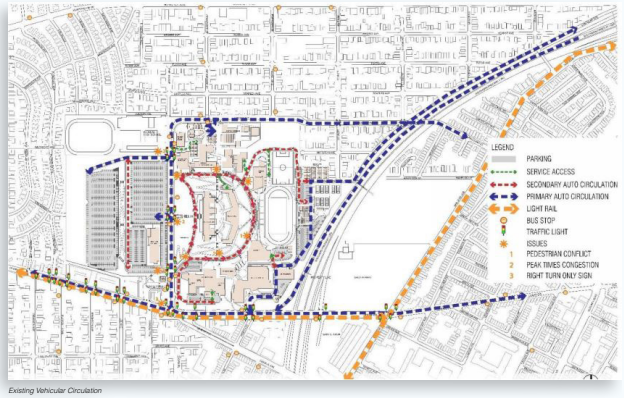
"Student parking also exists east of the soccer field at Parking Lot D and Parking Lot S. **The only direct access to the parking lots on the east side of campus is from Havelock Street; however, the majority of vehicles enter this parking area from Ocean Avenue and drive past the Wellness Center."**

CCSF 2019 Facilities Master Plan (FMP), 2 Existing Conditions, page 52.

On Current Vehicle Access via Havelock Street

"The street leads through a residential neighborhood and straight into the Ocean campus. There is no indication that the public street ends and there is no direct outlet. **While the College does not encourage traffic in the neighborhood, this is an essential gateway for emergency vehicles.** There are no site features or signage to denote the entrance. It is a missed opportunity to create a positive impression of the College."

FMP, 2 Existing Conditions, page 47.



Existing Vehicular Circulation

Ocean-Havelock Lots: Current Vehicle Circulation.

Existing Vehicle Circulation diagram includes Circular Avenue and Havelock Street as part of the Primary Auto Circulation route.

FMP, 2 Existing Conditions, page 51.

2-30 | CITY COLLEGE OF SAN FRANCISCO

Comments on Existing CCSF Policy

CCSF "Does Not Encourage" Traffic on Havelock

This page provides some context for the language used in the FMP regarding traffic on Havelock Street.

The FMP uses variations of the phrase "**does not encourage traffic**" through the Havelock Gateway. (See quotes, left.) The FMP acknowledges that Havelock Street is the "only direct access to the parking lots", but asserts that "the majority of vehicles" enter through the Wellness Gateway. Neither the FMP or Traffic Demand Management plan provide data on Havelock Street traffic.

In Reality: The Havelock Gateway is Well-Used

The above statements downplay the usage of the Havelock Gateway, and seem to not understand the impact of CCSF's traffic on the surrounding neighborhood. Even without CCSF's encouragement, the Havelock Gateway is well-used by vehicles.

The FMP's Existing Vehicle Circulation diagram acknowledges that **Havelock Street is on the Primary Auto Circulation Route** (image, left). The site circulation analysis acknowledges that vehicular access from Havelock street causes congestion in the surrounding residential areas.

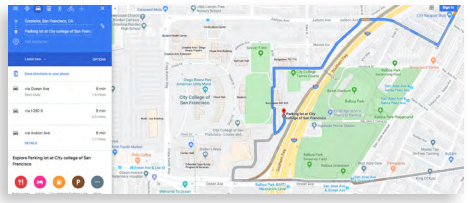
Havelock Street is a busy road in the mornings, with almost all its traffic headed to CCSF's parking lots. Cars speed around the corner at Circular and down Havelock Street on their way to the parking lot, and are a danger to those using the Havelock Street Pedestrian Bridge.

"Do Not Encourage" Does Not Work

Additionally, drivers do not need CCSF's encouragement to find the lot: A Google Map search for "Parking at City College of San Francisco" returns the Ocean-Havelock Lots (rather than the larger reservoir lots.) For some starting points, the Havelock Street entrance appears as one of the recommended vehicle routes.

Simply not encouraging traffic is not enough. CCSF must actively discourage traffic and/or work with neighbors and SFMTA to calm traffic and provide for pedestrian safety.

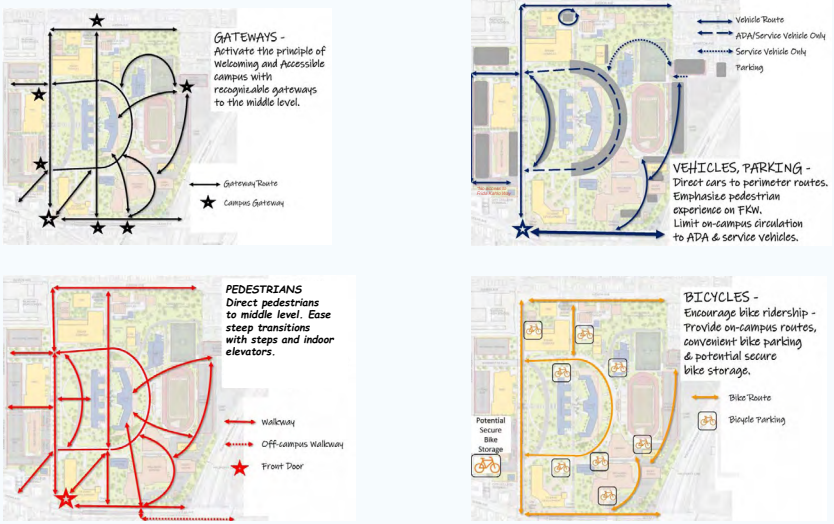
See page 7 for Neighborhood Impact.



A Google Map search for "Parking lot at City College of San Francisco" directs vehicles to the Havelock Lots via Havelock Street.

6 / HAVELOCK GATEWAY / FMP RECOMMENDATIONS

Quotes & Figures from the FMP



Recommended Gateway and Circulation Plans. FMP, 4 Recommendations, pages 174, 175, 179, 181.

On the Purpose of the Site Circulation Analysis

"The main site circulation concept is to encourage and enhance pedestrian access by limiting vehicular circulation on campus. This includes improving public roadway access to Campus, changing the Cloud Circle vehicular corridor to a pedestrian friendly route known as Cloud Walk and adding parking structure(s). **The concept of reducing vehicular access from Havelock Street to relieve congestion on surrounding residential areas will also be explored.** The City of San Francisco has plans for Ocean Avenue Improvements, which includes widening the roadway by adding landscape medians, a bicycle lane and a wider public sidewalk. The Ocean Avenue Corridor Improvement project proposes to move the city curb location into the CCSF campus property and transforming sections of Ocean Avenue into a Complete Street."

Infrastructure Condition Assessment City College of San Francisco (CCSF) - Part 2 Recommendations (in progress). Sandis. August, 2017. FMP 5 Appendix, page 42

On Developing an Appropriate Havelock Gateway

- Develop the Havelock gateway as a safe and convenient entrance for emergency vehicles, as required by code.

- Create a landscape plan for an attractive gateway that identifies the campus, welcomes pedestrians coming from the Balboa Park Bridge, and **does not encourage regular vehicle traffic.**

FMP, 4 Recommendations, page 186

On East Surface Parking

"Develop the Sunnyside Gateway for pedestrian, service and emergency access."

FMP, 4 Recommendations, page 202

Questions & Comments on the FMP

Sunnyside / Havelock Gateway

The FMP mentions plans for a campus gateway at Havelock Street. It is referred to as both the "Sunnyside Gateway" and "Havelock Gateway" in the FMP. This document uses Havelock Gateway, which is more specific.

Pedestrian / Cyclist Gateway?

Graphics indicate that the Havelock Gateway will be used by pedestrians, cyclists, and service vehicles. The vehicle circulation concept shows an arrow indicating "Service Vehicle Only" at the Havelock Gateway. I believe most neighbors are in support of this plan.

Or Open to Regular Vehicle Traffic (status quo)?

However, the text of the FMP does not state that the Havelock Gateway will be open to service vehicles only, as indicated by the concept drawings.

The text states that the Havelock Gateway design should "**not encourage regular vehicle traffic"** and that reducing traffic through the Havelock Gateway "**will also be explored**." The plans for East Surface Parking say that the Sunnyside Gateway should be developed for "pedestrian, service and emergency access," but makes no explicit mention of its plans for regular traffic.

We are confused by this seemingly contradictory information and ask for clarification on CCSF's plans for traffic through the Havelock Gateway.

Concern over "Do Not Encourage" Policy

Please note that the FMP indicates that current CCSF policy towards the Havelock Gateway is "do not encourage" its use. In spite of that policy, the Havelock Gateway is well-used by City College drivers.

CCSF's plan for the expanding the Havelock Lots will increase and concentrate parking at the end of Havelock Street. If the Havelock Gateway remains open, it's reasonable to expect traffic to the parking lot will increase as well. CCSF's "do not encourage" policy is not sufficient now, and will not be sufficient in the future.

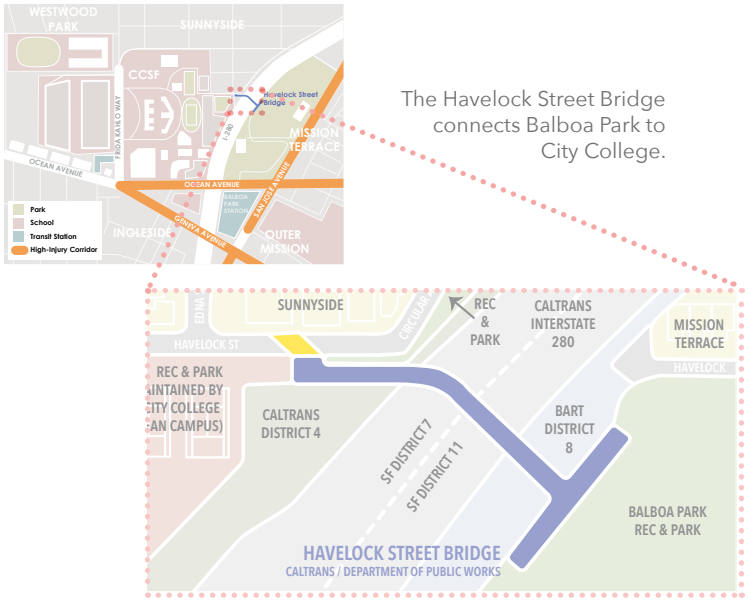
See page 5 for further discussion on CCSF's current policy, and page 7 for discussion on how CCSF's parking lot traffic impacts the neighborhood.

QUESTIONS

Will regular vehicle traffic be allowed through the Havelock Gateway?

What is the community engagement process for gateway design?

7 / HAVELOCK GATEWAY / NEIGHBORHOOD IMPACT



Havelock Street Bridge. CCSF's hedge at the foot of the west landing forces bridge users into the street, where cars headed to and from the CCSF parking lots are not expecting them.

Havelock Street Bridge: Location & Significance

The Havelock Street Bridge is a pedestrian bridge over I-280 that connects Balboa Park to City College. It is directly adjacent to City College -- the west entrance directly borders the tennis court area.

The bridge is used by the City College community; by Sunnyside families headed to schools, Balboa Station, and Balboa Park; and by Mission Terrace residents headed to City College and businesses on Ocean Avenue and Monterey Boulevard.

CCSF impacts the safety of bridge users. The two main issues are outlined below.

City College Hedge

The west landing of the bridge borders an area maintained by CCSF. A hedgerow lining the road forces bridge users to cross the street in the middle of the block to get to a sidewalk. Cars rounding the corner at Circular are not expecting people in the street. CCSF's hedge combined with its traffic creates a situation that is dangerous and scary for pedestrians.

We have requested that City College remove the hedge, and build a landscaped path on the south side of Havelock that directly connects the bridge to the College. This would support the FMP's goal for a safe, attractive route between the bridge and the Havelock Gateway. See page 8 for a current list of requests for the Havelock Gateway.

CCSF Traffic Headed to Ocean-Havelock Parking Lots

In January of 2019, we initiated a preliminary screen line count near the corner of Havelock Street and Circular Avenue. The purpose was to understand Havelock Street Bridge usage. A secondary goal was to quantify car traffic on Havelock Street, in order to better understand the risk cars pose to bridge users. These surveys were conducted in the mornings before the peak use times of 11-12pm. While the data is extremely limited, they do support the general neighborhood feeling that the City College parking lot generates a lot of traffic.

Traffic entered the parking lot at the rate of about 50 cars per half-hour block. On one survey block, 226 cars entered between 8:30 and 10:30am, which is just **over 50% of the 445 spaces in the Ocean-Havelock lots entering through the Havelock Gateway**.

The FMP says that the Havelock Gateway does not serve a "majority of vehicles" to the parking lot, but does not provide any data to support that statement.

Also noted: many cars did not stop or even slow at the stop sign on Circular Avenue at Havelock, right around the corner from the Havelock Street Bridge entrance. **Traffic generated by CCSF parking lots is a danger to pedestrians using the Havelock Street Bridge.**

If the Havelock Gateway remains open, more parking will mean more cars on Havelock Street, and even more danger for bridge users.

We would like for CCSF and SFMTA to perform an official traffic study of Havelock Street traffic, use that data to guide planning, and implement appropriate traffic calming and pedestrian safety measures.

8 / HAVELOCK GATEWAY / NEIGHBORHOOD REQUESTS

Quotes from the Facilities Master Plan

Phasing Years 1-5

1. Construct the Performing Arts Education Center
2. Renovate Horticulture Complex Lath House
3. Construct West Campus Parking Structure
4. Reconfigure Multi-Use Building for swing space for Student Services
5. Demolish existing Orfalea Child and Family Center
6. **Place Swing Space Bungalows**
7. Complete Infrastructure Replacement and construct Central Utility Plant
8. Renovate Cloud Hall
9. Demolish Creative Arts, Creative Art Extension, and Diego Rivera Theater Wing
10. Remove Bungalows 201-208 and Bungalow 214, 219-223 on north side
11. Demolish Visual Arts Building
12. Demolish Conlan Hall, Smith Hall and Statler Wing
13. Construct STEAM Complex
14. Re-purpose existing Multi-Use Building for instruction

FMP, 4 Recommendations, page 207

Phasing Years 6-10

- Construct Student Development Center
- Renovate existing Science Hall
- **Remove Bungalows 600-700s, construct surface parking**
- Renovate Batmale Hall
- Renovate Bookstore Annex
- Construct New Child Care Center
- Reconfigure Bungalows 212-213 for Campus Police Facility

FMP, 4 Recommendations, page 207

On East Surface Parking

"Develop the Sunnyside Gateway for pedestrian, service and emergency access."

FMP, 4 Recommendations, page 202

On Developing an Appropriate Havelock Gateway

- Develop the Havelock gateway as a safe and convenient entrance for emergency vehicles, as required by code.

- Create a landscape plan for an attractive gateway that identifies the campus, welcomes pedestrians coming from the Balboa Park Bridge, and **does not encourage regular vehicle traffic.**

FMP, 4 Recommendations, page 186

On vehicles and parking at the perimeter

Drop-Offs and Short-Term Parking

- A general drop-off will be developed at the Wellness Gateway.

- A drop-off and short-term parking for the Childcare Center will be located at the STEAM Gateway on Judson Avenue

FMP, 4 Recommendations, page 182

On Sustainability

Light Pollution Reduction

Upgrade site lighting to provide safety and limit the impact of development on nocturnal environments.

Relocate instruction and support activities away from the east side of the east campus.

Develop the east parking structure to limit the intrusion of light onto nearby areas.

FMP, 4 Recommendations, page 209

Summary of Requests

On the Havelock Gateway

- Remove Hedge on Havelock
- Install accessible path connecting the Havelock Street Bridge to Campus
- Landscaping / Lighting along Sidewalk
- Opportunity to comment and provide input on the Havelock Gateway design

On the East Surface Lots

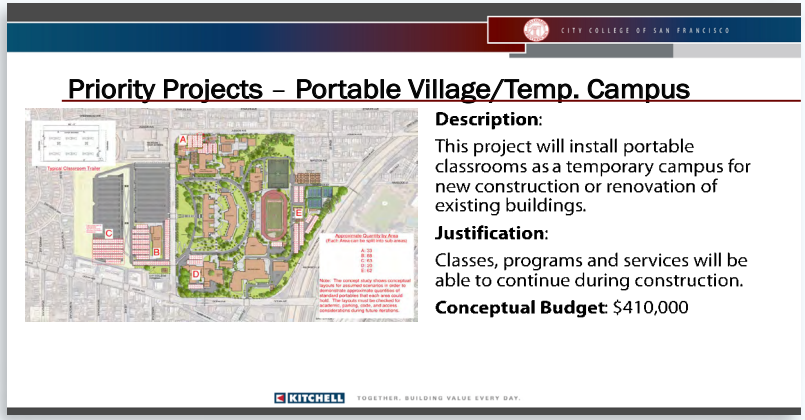
- Clarify number of parking spaces in expanded Surface Parking Lot
- Clarify whether Havelock Gateway will be open to vehicle traffic
- Fix Retaining Wall between 700 Bungalows and neighbors on Marston Ave
- Light / Noise buffer between parking lot and neighbors on Marston Ave
- Opportunity to provide input on the design of the Parking Lot

Improve Pedestrian Safety on Havelock Street

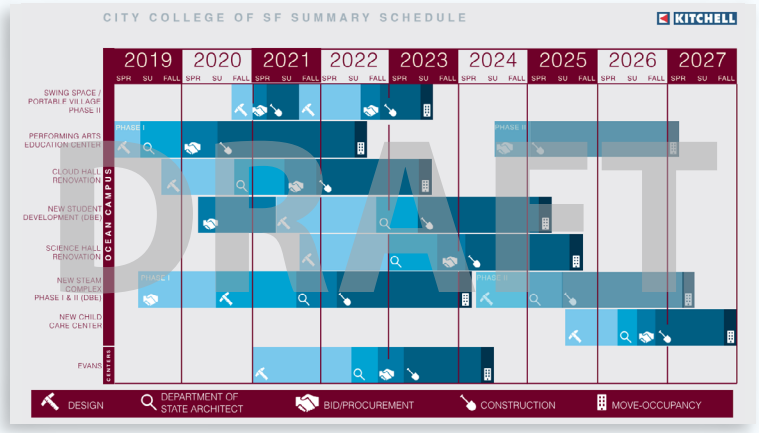
- Traffic study of Havelock Street
- If the Havelock Gateway remains open, we may need additional safety measures on Havelock Street and Circular Avenue.
- Havelock Gateway is currently used as a drop-off point, but a drop-off point at this location is not included in the FMP. Please consider including a drop-off at the Havelock Gateway so that vehicles can turn around without impacting traffic or pedestrian / cyclist safety.
- CCSF Police enforcement of traffic laws in the surrounding neighborhood, particularly the stop sign on Circular Avenue at Havelock Street.
- CCSF Police enforcement of parking regulations in the surrounding neighborhood, particularly the areas near the Havelock Street entrance (Marston, Circular, Edna, Havelock), especially when the parking lot is closed and converted to a Portable Village / Temporary Campus
- When the parking lot is closed and converted to a Portable Village / Temporary Campus, please install a drop-off point and vehicle turn around at the Havelock Gateway.

9 / PORTABLE VILLAGE / TEMPORARY CAMPUS

Slides from 2019-04-22 FMP Update



Facilities Master Plan – Facilities Committee Update Dated April 22, 2019, page 15



Facilities Master Plan – Facilities Committee Update Dated April 22, 2019, page 7

Questions & Comments

The **2019-04-22 FMP Update** shows a plan to temporarily remove all parking in the Havelock Lots, and fill the site with temporary buildings.

Potential traffic impact on neighborhood streets:

- Cars expecting to find parking at the Havelock Lots will be roaming the neighborhood looking for street parking.
- Cars will need a way to turn around at the end of Havelock in safe way.

Mission Terrace notes that in years past, when City College had a greater enrollment, many students would park here and walk across the freeway. They are concerned about how the parking shortage will affect their neighborhood as well.

QUESTIONS

When will the portable classrooms be installed?

How long will they be in place?

What is the vehicle circulation plan?

What is the plan for a safe way for cars to do a U-turn at the end of Havelock?

Is there a plan for notifying drivers of the parking lot closure?

Is there a plan for detour signage? (Judson @ Circular)

Joyce Oishi

From: Facilities
Sent: Wednesday, October 7, 2020 1:06 PM
To: Joyce Oishi; Vigor Lam
Subject: Fw: comments for NOP of an Environmental Impact Report

Comment received from Harry Bernstein.

From: Harry Bernstein <riquerique@yahoo.com>
Sent: Wednesday, October 7, 2020 11:46 AM
To: Facilities <facilities@ccsf.edu>
Subject: comments for NOP of an Environmental Impact Report

Hello

I have given my name and e-mail address at the end of these comments. If other information from those submitting comments is needed, please notify me. Thank you.
==========

The timeframe for the description of existing conditions is not clear, so I am providing my own observations from an initial reading of the Notice of Preparation of an Environmental Impact Report. A more detailed review on my part is in order.

p. 3 – current conditions/description

The Lower Balboa Reservoir, located to the west of the campus, is owned by the San Francisco Public Utilities Commission (SFPUC) and is currently leased to the District for use as a parking lot. Single-family residences are located to the west of the reservoir in the Westwood Park neighborhood.

The Student Success Center (SSC) is one of the top priorities on the five-year construction projects being submitted to the State prior to the first sale of bonds from the facilities bond measure of March 3, 2020—Proposition A (discussions taking place in September-October, 2020). The Center is indicated in the text on p. 30 and in the Updated Facilities Master Plan Site Plan on p. 31, and in Table 8 on pp. 43-44-- Total Building Space upon Buildout of the Updated FMP. Construction of the SSC is discussed on p. 50.

An omission here—and most likely it will appear further on in the report—is that the SFPUC sold the Lower Balboa Reservoir to Reservoir Community Partners, LLC—a partnership with for-profit developer AvalonBay and several non-profit developers. There are still some aspects of the deal that have to be finalized, but the sale of the property was approved by the San Francisco Board of Supervisors on August 11, 2020. It is hard to ignore this fact, even if the College is still being allowed to use the site for parking before the start of the construction phase. However, I understand that lining up some of the financing of this massive project is still a work in progress.

According to p. 7,

In addition, the Balboa Reservoir (currently in use by the District as the Lower Reservoir parking lot) is owned by the SFPUC. At the time of the preparation of this document, the San Francisco Planning Department has completed a Subsequent Environmental Impact Report (SEIR) that analyzes the proposed development of the 17.6-acre SFPUC Balboa Reservoir property with a mixed-income housing, open space, childcare facility / community room, retail space, parking, and new streets and other infrastructure.2 The Balboa Reservoir Project Final SEIR was certified on May 28, 2020.

Update--A legal challenge to the final SEIR was resolved at the San Francisco Board of Supervisors meeting on August 11, 2020.

On p. 18 there is an acknowledgement of the proposed development on the Lower Reservoir site:

> …The construction of the Diego Riviera Theater and the STEAM building will remove a total of 569 spaces in the Upper Balboa Reservoir surface parking lot. With the construction of the Child Care Center, 27 parking spaces will be added. Therefore, under baseline conditions, the Main Campus will have a total of approximately 1,430 vehicle parking spaces. Through a shared agreement between SFPUC, the project sponsor, and the College, the Balboa Reservoir housing development would continue to allocate 220 parking spaces for College use.

According to the agreement with the developer, 220 spaces is cited—though incorrectly according to some public testimony—as the number of replacement parking spaces that the College would require due to displacement by the development on the Lower Balboa Reservoir, 450 spaces is given as the maximum number of spaces that will ever be approved by the developer.

Other centers—

p. 20
3.1.7 Civic Center

> The Civic Center (also known as the Alemany Center), originally constructed in 1911 as a school, is nominally located at 750 Eddy Street in a four-story building of approximately 26,000 GSF. The permanent facility is currently vacant pending upcoming seismic retrofit of the structure. The program is temporarily housed in a leased space of approximately 37,000 GSF at 1170 Market Street. Civic Center offers non-credit instruction with a focus on the English as a Second Language program.

This passage neglects to say that the lease for the temporary site at 1170 Market Street is expected to be terminated in February, 2021 without having the 750 Eddy Street ready for use. It is anticipated that some of the program need will be absorbed by other College facilities, such as Downtown, Mission and even Chinatown. It was pointed out by ESL faculty at public hearings that it would be desirable to retain a facility that serves the nearby residents of the Tenderloin.

pp. 20-21
3.1.8 Downtown Center

> The Downtown Center, constructed in 1978, is located at 88 Fourth Street in an approximately 86,000-GSF building that comprises eight stories and a basement. The Downtown Center offers a program of credit and non-credit instruction in Architecture, Arts, Business Administration, Computer Applications, Culinary and Hospitality Studies, English, English as a Second Language (ESL), Fashion, Foreign Languages, Green CCSF Facilities Master Plan Notice of Preparation 20 September 2020 Business, History, International Business, Marketing, Management, Older Adults, Paralegal Studies, Psychology, Real Estate, and Small Business.

==========

Update--According to a decision by the administration, up to 350 sections were suddenly removed from online registration on November 19, 2019. This resulted in the devastation of the Older Adults program, with 52 of the 58 classes that were being offered at that time being cancelled as of Spring, 2020 (i.e., approximately 90%). There has been no indication that the residual stub of that Department will be expanded beyond that number—same allocation for Fall, 2020. While there have historically been Older Adults offerings at the site in question, there have not been any since 2019.

On p. 26 there is a table showing gradually growing enrollment from 2020-2030. At this time (October, 2020), the budget discussions project a flat enrollment for the next five years along with a cut of an additional 25-40% of the part-time faculty in FY 2020-2021. Sadly, this does not agree with the positive growth offered in the above-mentioned table:

Table 7
Districtwide Projected Students (2021-2030)

==========

On p. 45 it says,

> Theater within the Creative Arts Building The existing theater was constructed as part of the Creative Arts Building in 1961…

||||||||||

With a seating capacity of 286, this was known as the Little Theater, though in the absence of other suitable facilities on campus, it has become de facto the Theater.

submitted by Harry Bernstein
riquerique@yahoo.com

Rima Ghannam

From: Joyce Oishi <ce_joishi@ccsf.edu>
Sent: Thursday, October 8, 2020 10:47 AM
To: Rima Ghannam (rghannam@sertior.com); John Anderson
Cc: Marian Lam; Vigor Lam
Subject: NOP comments on facilities master plan

Thank you -

From: Facilities <facilities@ccsf.edu>
Sent: Thursday, October 8, 2020 10:45 AM
To: Joyce Oishi <ce_joishi@ccsf.edu>; Vigor Lam <ce_vlam@ccsf.edu>
Subject: Fw: comments on facilities master plan

Comment submitted by Andrew Sherman.

_____

From: Andrew Sherman <andrew.sherman@gmail.com<mailto:andrew.sherman@gmail.com>>
Sent: Wednesday, October 7, 2020 6:07 PM
To: Facilities <facilities@ccsf.edu<mailto:facilities@ccsf.edu>>
Subject: comments on facilities master plan

Figure 7 (Existing Pedestrian Circulation on the Main Campus) is incorrect as it shows pedestrian access from Ocean avenue going through the Wellness Center. This is of course impossible when the Wellness Center is closed. Many people crossing or entering the campus from BART enter campus along the path through the bushes to the east of the main entrance, and walk to the east of the Wellness Center. It was accepted by CCSF at the community review of the earlier iteration of the current master plan that pedestrian access from BART was to be treated as important.

APPENDIX B

Initial Study

City College of San Francisco
Updated Facilities Master Plan

Initial Study

SCH# 20200090261

January 2021

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9	Districtwide Projected Students (2021-2030)	100

ATTACHMENTS

Attachment A – Shadow Analysis
Attachment B – Air Quality and Greenhouse Gas Technical Analysis
Attachment C – Biological Resources
Attachment D – Noise Analysis

1. PROJECT DESCRIPTION

The project description for the Updated FMP program and individual projects at the Main Campus is included in **Chapter 3.0, Project Description**, in the Draft Environmental Impact Report (EIR) to which this Initial Study is appended.

2. BASELINE CONDITIONS

The project conditions including existing site characteristics and individual projects at the Main Campus are included in Chapter 3.0, Project Description, in the Draft EIR to which this Initial Study is appended.

3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

For each checklist question under each of the topics listed above, the Initial Study evaluation considered the impacts of the Updated FMP program and the individual projects at the Main Campus on a project-specific and cumulative level. Cumulative development includes approved construction projects within the campus such as the Diego Riviera Theater, the Sciences, Technology, Engineering, Arts, and Math (STEAM) building, the Child Care Center, and the upgrade to the campus infrastructure system. Other cumulative projects in the vicinity of the Main Campus include the Balboa Reservoir Project that would develop the lower Balboa Reservoir area to the west of the project site with housing, retail, and other associated amenities.

Effects Found to Be Significant

The Updated FMP and individual projects at the Main Campus have been evaluated in this Initial Study to determine whether any of the project's components could result in significant environmental impacts. The analysis presented below concluded that the proposed project would result in significant effect on historical

resources. Therefore, the historical resources topic is further analyzed and included in the EIR to determine if such impact would be significant and identify mitigation measures (MMs) that may avoid or reduce the potential impact.

Effects Found Not to Be Significant

As presented in the analysis below, none of the components associated with the Updated FMP and individual projects at the Main Campus would result in significant adverse effect on the environment related to the historical resources and transportation. Impacts related to aesthetics, air quality, archaeological resources and human remains, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and tribal cultural resources were determined to be less than significant with mitigation measures incorporated. These mitigation measures are included in the Initial Study and in **Table 1.0-1, Summary of Impacts and Mitigation Measures,** of the Executive Summary. Topics determined not to be significant or less than significant with mitigation incorporated are discussed below in the Initial Study and not analyzed further in the EIR.

3.1 Aesthetics and Shadow

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐
e) Create a source of shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces?	☐	☐	☒	☐

Environmental Setting

The Main Campus is characterized by a variation in topography with elevations ranging from 125 feet above mean sea level (amsl) from the eastern side to 350 feet amsl at the College Hill. As described in Section 3.1.1, Current Site Conditions, the Middle Level located around Cloud Circle has an elevation of approximately 295 feet amsl. The campus buildings are one to four stories tall. However, buildings such as Cloud Hall and the Science Building appear more prominent due to the variation in topography.

General types of vegetation include trees, shrubs, lawn areas, and naturalized (unmaintained) areas. The campus Upper Level is characterized by large pine and cypress trees and wide lawn spaces. The Middle Level has small areas of groundcover with stands of pine and cypress trees. The naturalized area is located to the north side of the Lower Level. The campus area west of Frida Kahlo Way is mostly paved with no vegetation.

The Main Campus is visible from nearby residential areas to the northeast, north, west, southwest, and south. Sources of light at the Main Campus include inside and outside lighting of existing buildings, lighting of paths between buildings, and campus roadways and parking lighting.

Existing Shadow. With the exception of the two triangular parcels to the east and southeast corner of the campus, none of the public spaces or open spaces within the Main Campus is under the jurisdiction of the San Francisco Recreation and Parks Department. Both of the triangular parcels are maintained by the College.

There are several publicly accessible open spaces in proximity to the Main Campus including Unity Plaza to the west of campus and Balboa Park to the east. There are also future planned open spaces associated with the Balboa Reservoir project.

Approach to Analysis

The Updated FMP program focuses on optimizing the use of indoor space to meet the needs of the forecasted growth with the Updated FMP timeframe and calls for the compliance with the College Sustainability Plan. The Updated FMP does not include individual projects at any of the College centers that would include new structures or additional floors to existing buildings. Future improvement projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design standards but would not require additional CEQA analysis. Aesthetic impacts would be analyzed at a project-specific CEQA analysis for future projects that would include new construction or exterior modifications to existing CCSF facilities under the Updated FMP.

Shadow Analysis. CEQA analysis for development projects within the City and County of San Francisco examines shadow impacts to public open spaces and recreational facilities. Therefore, for informational purposes, this analysis evaluates shadow impacts associated with the Updated FMP. Public open spaces and recreational facilities near the Main Campus include the Unity Plaza to the west of campus and Balboa Park to the east. There are also future planned open spaces associated with the Balboa Reservoir project. The only new development proposed under the Updated FMP is the SSC building. Therefore, shadow analysis in this document is focused on this building for which a shadow analysis impact has been prepared and is included in **Attachment A** of this Initial Study. If during the Updated FMP timeline the District identify any new building construction at the Main Campus or any CCSF center, further environmental review would be required and would include an evaluation of shadow impacts.

Impact AES-1: The Updated FMP program would not result in substantial adverse impact on a scenic vista, damage scenic resources, degrade the existing visual character, or create a new source of substantial light or glare. (*Less than significant*)

The Updated FMP program would direct the development of the City College in the Main Campus and centers located throughout the City and County of San Francisco. The program would provide a strategy for facilities improvement, renovation, replacement, and new construction over the next 10 years. The program's framework requires improvements to indoor and outdoor student gathering and learning spaces by extending the useful life of existing facilities where possible and modernizing and maximizing space utilization in an integrated urban design. The program also calls for upgrading site lighting to provide safety and limit the impact of development on nocturnal environments.

The Updated FMP program would not result in new structures or substantial visual alterations to any of the District's centers. Aesthetic impacts associated with the Updated FMP program for the Main Campus

are discussed under **Impact AES-2**, below. Improvements to meet the Updated FMP program framework would include renovations, which would generally entail reconfiguration and maximization of interior spaces and other modifications to the exteriors of existing buildings, such as new lighting or security cameras. Interior renovations (i.e., reconfigured spaces, upgraded building systems, etc.) would not be noticeable to viewers at public locations outside the District centers, and as such, would not substantially degrade the existing visual character of the surrounding areas. Therefore, proposed interior renovations of buildings and facilities would not substantially degrade the existing visual quality and character of the District centers and impacts would be less than significant. Therefore, the Updated FMP program would have less-than-significant impacts related to scenic vista, scenic resource, visual character, or light and glare. This topic is not discussed further in the EIR.

Impact AES-2: **The Updated FMP framework for the Main Campus would not result in substantial adverse impact on a scenic vista, damage scenic resources, degrade the existing visual character, or create a new source of substantial light or glare. (*Less than significant*)**

The Updated FMP framework for the Main Campus would provide a planning strategy that develop a park-like atmosphere at the campus with plazas offering views within the campus and vistas showing the surrounding cityscape. The plan calls for highlighting and enhancing views to and from the campus. Along Frida Kahlo Way, the Updated FMP open space framework would create an immersive CCSF panorama. The landscape plan along this roadway would be designed to enhance pedestrian activity and promote a pedestrian promenade on both sides of the street. The gateway at Unity Plaza would be improved under the plan to create a landmark viewing plaza and enhance the view of the mural of Pan American Unity. In addition to the campus' plazas, the plans for the design of sidewalks, buildings, and site features to be aimed at creating an inviting campus main entrance at the intersection of Ocean Avenue and Frida Kahlo Way. Although the character of the Main Campus would change under the plan, it would not cause negative visual effect because proposed framework would enhance and improve the campus area creating more vibrancy and activities in particular along streets frontage. Under the Updated FMP framework for the Main Campus, the dominant visual character of the area would remain generally consistent with existing conditions with an integrated campus activity with the public streets through streetscape improvements and functional and attractive access to the campus facilities. Proposed bicycle and pedestrian circulation enhancements would improve safety conditions, facilitate transaction with nearby transit facilities, and encourage socializing, continuous sidewalks, and better wayfinding. These improvements would be noticeable to students and faculty on-campus. The proposed improvements would facilitate campus connection with the neighborhood and engage off-campus pedestrians to experience the campus' landmark buildings, artworks, and landscapes. Therefore, the Updated FMP

framework for the Main Campus would not have substantial adverse effect on a scenic vista, natural or scenic resources, or visual character. These impacts would be less than significant. This topic is not discussed further in the EIR.

The Updated FMP framework for the Main Campus calls for compliance with the District's sustainability measures. New lighting would meet the energy conservation requirements of the Green Building Code require energy conservation. Also, compliance with sustainable design guidelines would require the use downward-directed, shielded outdoor lighting. Therefore, implementation of the Updated FMP framework at the Main Campus would result in light and glare conditions similar to or slightly better than those under existing conditions. New lighting would use improved designs and technology, such as LED technology, which allows individual lights to be directed downward at ground level, resulting in less spillage into surrounding buildings. Therefore, impacts associated with obtrusive light or glare would be less than significant. This topic is not discussed further in the EIR.

Impact AES-3: **The individual projects at the Main Campus would not substantially impact a scenic vista, damage a scenic resource, or degrade the existing visual character or quality of the site and its surrounding. (*Potentially Significant; Less than Significant with Mitigation)***

The Updated FMP and associated individual projects at the Main Campus would result in one new building (SSC building), which would replace Conlan Hall. The new two-story building would be similar in scale to the existing buildings. Therefore, it would not alter scenic views. The proposed decommission activities of the Creative Arts and Visual Arts buildings would not alter the exterior appearance of buildings or the surrounding area. In addition, demolition of the bungalows 700s, 600s, and EOPS and the theater within the Creative Arts building would not be visible from outside the campus. Therefore, proposed demolition of the bungalows and the theater and decommission of the Creative Arts and Visual Arts buildings would not result in any noticeable visual effect and would not alter the visual quality of the Main Campus.

The proposed demolition of Conlan Hall and Smith/Statler building and the construction of SSC would alter the visual character at the southwestern corner of the campus. Therefore, visual changes to the southwestern corner of the campus associated with the demolition of Conlan Hall and Smith/Statler building would not substantially degrade existing visual quality and character and impacts would be less than significant.

Renovation activities would include the Cloud Hall, Science Hall, Student Union, Batmale Hall, Arts and Extension building, and the Horticulture buildings. As described in **Chapter 3.0, Project Description**,

renovation would be mostly for the purpose of extending the buildings' life span and maximizing the efficiency of space use. Renovations could include new energy-efficient lighting; ceilings; paint; flooring; casework; elevators; Americans with Disabilities Act (ADA) access; ADA-compliant restrooms; stairwells; and HVAC systems; and in some cases, removal/modification of interior walls. While proposed renovations would generally entail reconfiguration and maximization of interior spaces, installation of ADA-compliant access and other modifications to the exteriors of existing buildings are also proposed, such the installation of elevator towers to the east side of Cloud Hall. Interior renovations would not be visible to off-campus viewers, and as such, would not substantially degrade the existing visual character of the campus. Proposed renovations would not be visually prominent and are not anticipated to be overly noticeable from off-campus locations.

Although off-campus views to the Main Campus buildings where exterior renovations are proposed tend to be obscured by existing landscaping and buildings, exterior renovations may entail alterations to the character-defining features of campus buildings. However, proposed renovations to campus buildings, such as the renovating Cloud Hall by adding an exterior elevator, may result in impacts to historic resources and/or to the historic districts within the campus, if not thoughtfully designed and constructed. As such, **MM-HIST-3b** described in Section 4.1 of the EIR would be implemented and would reduce perceptible visual impact associated with the proposed renovations. Therefore, implementation of **MM-HIST-3b** would minimize the potential for visual contrast between proposed renovations and existing campus buildings and would also foster the successful integration of the proposed renovations into the campus visual environment. As such, and with implementation of **MM-HIST-3b**, existing visual character and quality impacts associated with exterior building renovations would be less than significant. This topic is not discussed further in the EIR.

Impact AES-4: The individual projects at the Main Campus would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. (*Potentially Significant; Less than significant with Mitigation)*

Demolition, Decommission, Renovation, and Construction. The proposed demolition, decommission, renovation, and construction of facilities under the Updated FMP at the Main Campus would occur over a 7-year period. Various individual projects would occur simultaneously, including demolition and renovation activities. As stated in Chapter 3.0, Project Description, construction activities would be conducted Monday through Friday from 7:00 a.m. to 8:00 p.m. and Saturday from 9:00 a.m. to 8:00 p.m. Although nighttime lighting would not generally be needed for construction activities, lighting may be needed during winter months when the hours of daylight are shorter than in other seasons of the year. When in use, nighttime lighting would be focused in locations on campus under active construction. Construction lighting would be shielded and directed downward and would be of the minimum required

intensity to provide for safe construction activity. Therefore, lighting necessary for the demolition, decommission, renovation, and construction of the individual Updated FMP projects at the Main Campus is not anticipated to result in substantial lighting that could affect nighttime views in the area. This impact would be less than significant. This topic is not discussed further in the EIR.

Operation. Similar to existing campus buildings, renovated and new buildings at the Main Campus would include interior lighting for illumination of classrooms, instruction space, walkways, restrooms, and other areas, and exterior lighting for safety and security purposes. Planned demolition and decommission projects would result in the elimination of existing sources of light and glare from these buildings while maintaining the needed outdoor lighting for safety and nighttime circulation. Renovation projects may entail the replacing existing lighting with energy efficient interior and/or exterior lighting systems. As such, the replacement of existing lighting systems with new lighting systems would not result in substantial lighting that would substantially affect nighttime views in the area. Exterior lighting in public spaces would promote an increased sense of safety and security for students and faculty. Therefore, lighting and glare impacts resulting from the renovation of buildings and facilities would be less than significant.

While the specific lighting plan and intensity of new lighting sources to illuminate the proposed SSC and associated outdoor areas has not yet been developed, new light and glare of the SSC during operation may adversely affect day- or nighttime views in the surrounding area. As such, lighting and glare associated with the new building would be potentially significant. **MM-AES-1** and **MM-AES-2**, set forth below, are identified to reduce this impact to a less-than-significant level. This topic is not discussed further in the EIR.

The following mitigation measures would reduce potential impacts to existing visual character and quality and new sources of substantial light and glare to a less-than-significant level.

MM AES-1 New sources of exterior lighting shall be shielded and directed downward to avoid light spillover onto adjacent properties. Lighting shall also be of the minimum required intensity to provide for safety and security purposes. Nighttime operation of new sources of lighting shall be consistent with that of existing lighting sources on campus and shall consider potential effects to nighttime views of nearby residents and circulation. Interior lighting shall be turned off when not in operation or operated in the lowest possible setting.

MM AES-2 The use of reflective building materials shall be minimized to the extent practicable. Building materials shall be consistent with the visual character of existing and planned campus facilities and with the overall character of the Main Campus.

Impact AES-5: The SSC building at the Main Campus would not create a new source of shadow on public open spaces and recreational facilities. (*Less than significant)*

A 3D computer model was developed simulate the shadow effects of the proposed changes SSC building with respect to the baseline conditions. The model also included the Balboa Reservoir project as a cumulative condition consideration. **Figure 1** shows the results of a shadow fan analysis of the SSC building, which indicates all areas that would receive net new shadow year-round from between one hour after sunrise through one hour before sunset. This shadow fan analysis factors out areas of existing shadow that would be cast under baseline scenarios due to existing buildings (both those that would remain as well as those that would be demolished). **Attachment A** of this Initial Study includes exhibits depicting the progression of shadow that would be cast on the approximate Summer Solstice (June 21), Fall/Spring Equinoxes (September 20 and March 22, considered equivalent from the perspective of shadow), and the Winter Solstice (December 20). Diagrams reflect shadow conditions at hourly intervals between one hour after sunrise through one hour before sunset and graphically differentiate between existing shadow, net new shadow that would result from the SSC building, and net new sunlight that would occur due to the demolition of existing buildings.

As described under Existing Settings above, there are several publicly accessible open spaces in proximity to the Main Campus that include Unity Plaza to the west of campus and Balboa Park to the east. There are also future planned open spaces associated with the Balboa Reservoir project. None of these open spaces would receive any net new shadow as a result of the SSC building.

The SSC building would be two-story high and of similar scale to buildings in the same general area. The net new shadow would be limited to the area immediately surrounding the SSC building. Net new shadow would reach westward across Frida Kahlo Way but short of Unity Plaza (see **Figure 1**).

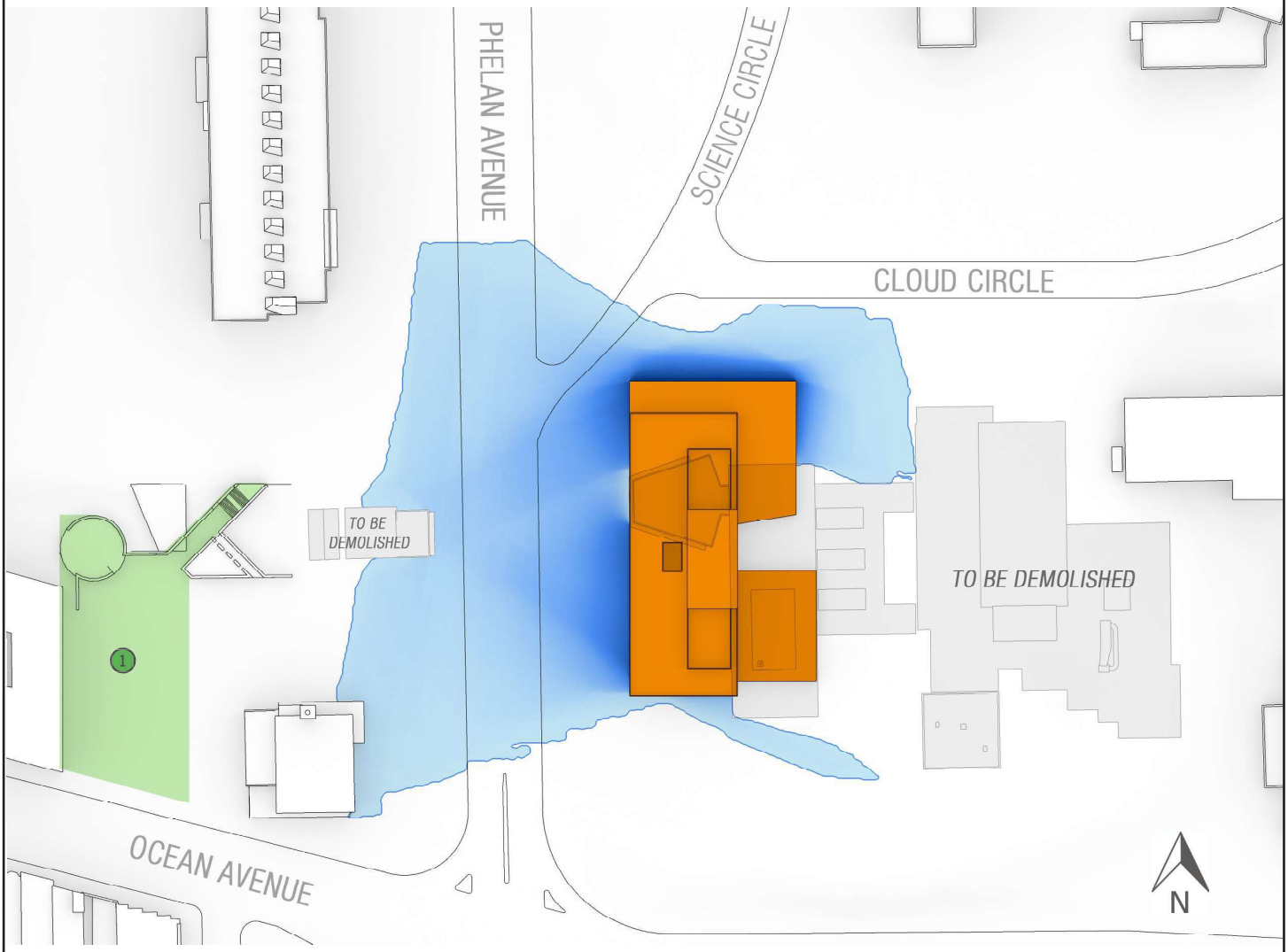
Demolition of the theater portion of the Creative Arts Building and the Bungalows 600s and 700s in the east side of the campus would generate areas of net new sunlight with no additional shadow (see Exhibits B, C, and D in **Attachment A** of this Initial Study). Therefore, shadow impact of the SCC building would be less than significant. This topic is not discussed further in the EIR.

PREVISION DESIGN

A1.1

CCSF FACILITIES MASTER PLAN: STUDENT SUCCESS CENTER

Full year net new shadow fan diagram factoring in the presence of existing shadows



SHADOW FAN DIAGRAM: ALL AREAS AFFECTED BY NET NEW SHADOW BETWEEN ONE HOUR AFTER SUNRISE TO ONE HOUR BEFORE SUNSET

FULL YEAR

Student Success Center

Net New Shadow Fan of Proposed Project

occasional shadow — frequent shadow

Publicly Accessible Open Spaces

1 Unity Plaza

SOURCE: Prevision Design, 2020

FIGURE 1

IMPACT SCIENCES

Shadow Forecast

1330.004•01/21

3.2 Agricultural and Forestry Resources

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

The District's Main Campus and centers are located within an urbanized area of San Francisco. No land in San Francisco County has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) as agricultural land. Therefore, the Updated FMP would not convert any prime farmland, or Farmland of Statewide Importance to non-agricultural use, and it would not conflict with existing zoning for agricultural use or a Williamson Act contract, nor would it involve any

changes to the environment that could result in the conversion of farmland. Therefore, topics (a), (b), and (e) are not applicable to the project.

Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits".[1] Timberland is defined as "privately owned land, or land acquired for state forest purposes, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre".[2] The District's Main Campus and centers do not contain forest land or timberland and are not zoned for such uses.[3] The Updated FMP would not convert any forest land or timberland to non-forest use, and would not conflict with existing zoning for forest land or timberland use, nor would it involve any changes to the environment that could result in the conversion of forest land or timberland. Therefore, topics (c) and (d) are not applicable to the project. These topics are not discussed further in the EIR.

3.3 Air Quality

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐

1 Public Resources Code section 12220(g).

2 Government Code section 51104.

3 California Department of Conservation. 2014. Farmland Mapping and Monitoring Program. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/mer14_no.pdf.

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Setting

The project area is subject to air quality planning programs developed in response to both the Federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). The CCSF Main Campus and centers are in the San Francisco Bay Area Air Basin which is regulated by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the Bay Area Air Quality Management District (BAAQMD).

The BAAQMD is the regional air quality agency for the San Francisco Bay Area Air Basin (SFBAAB or Air Basin), which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions.

Air quality in the Air Basin is monitored by the BAAQMD and CARB. Based on pollutant concentrations measured at monitoring stations within the Air Basin, the SFBAAB is classified as being either in attainment or non-attainment of federal and state air quality standards. The Air Basin is designated nonattainment for the federal and state ozone 8-hour standard, the state ozone 1-hour standard, the state Particulate Matter 10 microns or less (PM10) standard, and the state and federal Particulate Matter 2.5 microns (PM2.5) standards. For all other pollutants, the Air Basin is in attainment or unclassified.

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases. Sensitive receptors in the vicinity of the Main Campus include the following:

- Residences adjacent to the project site along Marston Ave, Ocean, Plymouth Ave, and Judson Ave.
- Archbishop Riordan High School adjacent to the north boundary of the project site.
- Lick Wilmerding High School approximately 200 feet south of the project site.

- Seventh Day Adventist Elementary School approximately 500 feet south of the project site.
- Sunnyside Elementary School approximately 620 feet to the north of the project site.
- Balboa Park approximately 400 feet to the east of the project site.

The *BAAQMD CEQA Air Quality Guidelines* ("BAAQMD Guidelines") set forth methodologies and quantitative significance thresholds that a lead agency may use to estimate and evaluate the significance of a project's air emissions. The BAAQMD Guidelines present thresholds for evaluating the significance of a project's construction-phase and operational emissions and include numeric thresholds for criteria pollutants and health-based evaluation criteria for toxic air contaminants (TAC). The BAAQMD Guidelines do not recommend quantification of fugitive dust emissions but note that the impact from a project's fugitive dust emissions during construction would be significant unless dust control measures and other best management practices are implemented. **Table 1, Bay Area Air Quality Management District Regional Significance Thresholds**, presents the BAAQMD's average daily thresholds for construction and operation.

To determine significance for plan-level documents, the BAAQMD has not set a threshold for construction emissions. However, the guidelines state that operation emissions would be less than significant if the proposed plan is consistent with the current Air Quality Plan and the projected vehicle miles traveled (VMT) or vehicle trip increase is less than or equal to the projected population increase.

Table 1
Bay Area Air Quality Management District Regional Significance Thresholds

Pollutant	Construction-Related Average Daily Emissions (lbs/day)	Operational-Related Average Daily Emissions (lbs/day)	Operational-Related Maximum Annual Emissions (tpy)
ROG	54	54	10
NOx	54	54	10
PM10	82 (exhaust)	82	15
PM2.5	54 (exhaust)	54	10

Source: BAAQMD. CEQA Guidelines. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

Approach to Analysis

The analysis below evaluates the air quality emissions associated with the construction and operation of the Updated FMP and associated individual projects on the Main Campus. Construction under the Updated FMP at a program level is speculative at this time. Furthermore, the BAAQMD does not have

significance thresholds at the Plan level. However, construction under the Updated FMP would only result in remodeling of existing buildings and would not change the overall square footage of the College centers per the existing buildings at the Main Campus that are not analyzed at a project level in this document. Therefore, construction under the Updated FMP is expected to be less intensive than construction of the individual projects on the Main Campus. If construction under the Updated FMP would result in any new building construction or demolition, additional analysis may be required.

The individual projects on the Main Campus were evaluated with the California Emissions Estimator Model version 2016.3.2 (CalEEMod) for project construction and compared to BAAQMD regional significance thresholds as described below. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects.

To evaluate the operational air pollutant emissions, mobile source emissions were quantified within the modeling at the Plan level, operational emissions source were qualitatively assessed to determine Plan-level significance. To evaluate operational emissions associated with the individual projects, CalEEMod models were prepared for the Main Campus under existing, baseline, and proposed conditions. The CalEEMod modeling for the proposed conditions on the Main Campus evaluates the total expected increase in vehicle trips from all student and staff increases expected under the Updated FMP. Net operational emissions on the Main Campus were compared against BAAQMD regional significance thresholds to determine project significance.

A Heath Risk analyses (HRA) was performed to determine the risk posed to sensitive receptors near the Main Campus during construction of individual projects. At the plan level, construction under the Updated FMP include indoor remodeling and reconfiguration of existing buildings. Therefore, construction and the resulting risk posed to sensitive receptors is expected to be less intensive than the risk posed to nearby receptors during construction of the individual projects on the Main Campus. If construction under the Updated FMP would result in any new building construction or demolition activities, or if construction of future plazas and circulation improvement facilities would require grading and soil movement, additional analysis to determine the health risk may be required. Finally, the health risk posed during operation of the Updated FMP and individual projects on the Main Campus were evaluated together as buildout of both would result in similar land uses.

Impact AQ-1: **The Updated FMP program and associated individual projects at the Main Campus could generate construction and operational criteria pollutant and**

precursor emissions that could conflict with or obstruct implementation of the applicable air quality plan. (*Less than Significant).*

The most recent clean air plan for the project area is the Bay Area 2017 Clean Air Plan that was adopted by BAAQMD in April 2017. The Plan includes control measures that are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. Projects that are consistent with the development of a regional or local air quality plan are considered not to conflict with the attainment of air quality standards identified in the plan.

Consistency with the air quality plan can be determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations or contribute to a new violation of the national ambient air quality standards. The BAAQMD Guidelines include thresholds of significance that are applied to evaluate regional impacts of project-specific emissions of air pollutants and their impact on BAAQMD's ability to reach attainment. Emissions that are above these thresholds have not been accommodated in the air quality plans and would not be consistent with the air quality plans. As demonstrated under Impact AQ-3 below, the proposed project would not conflict with the latest Clean Air planning efforts since emissions would not exceed BAAQMD construction or operational thresholds (see **Table 2** and **Table 3**). Furthermore, as described under Impact AQ-2, the Updated FMP calls for the modernization and reconfiguration of certain existing buildings at the College centers, and would not involve substantial operation of off-road construction equipment. As such, reconfiguration and modernization activities at the plan level would not contribute substantially to generation of construction emissions. It is reasonable to assume that the magnitude of these activities would be similar or less than the proposed renovation activities under the proposed individual projects. Therefore, the Updated FMP is not expected to exceed BAAQMD thresholds (see Impact AQ-2). The Updated FMP and the associated individual projects would be required to adhere to the College Sustainability Plan which includes goals to increase the life cycle of buildings and calls for water-efficient plumbing and energy-efficient systems in renovated and new buildings. Adherence to the Sustainability Plan would further decrease the Updated FMP's criteria air pollutant emissions during both construction and operation.

The Updated FMP including the individual projects would not conflict with or obstruct implementation of the applicable air quality plan and no mitigation is necessary. This topic is not discussed further in the EIR.

Impact AQ-2: **The Updated FMP program could generate criteria pollutant and precursor emissions that could violate an air quality standard or contribute substantially**

to an existing or projected air quality violation. (*Potentially Significant; Less than Significant with Mitigation*)

Construction and operation of the Updated FMP would generate criteria air pollutant and ozone precursor emissions. The Updated FMP planning framework focuses on providing an equitable and consistent level of quality and space assignment at all College locations. At the Main Campus, the Updated FMP planning concept focuses on shifting activity from the campus Lower Level to the Middle Level to facilitate and connect the campus facilities using the natural loop route in the Middle Level and provide users a level pathway. Implementing this planning framework would require reconfiguring College functions based on activity zones that would include indoor and outdoor spaces for student gathering and collaboration. In addition to the individual projects at the Main Campus discussed under Impact AQ-3 below, other improvements would include design of open spaces and development of plazas. In addition, the Updated FMP program at the Main Campus would support improvements to pedestrian and bicycle paths.

The Updated FMP program at the College centers calls for the maximization of space use. Overall square footage of the centers' buildings would remain the same. To increase efficiency and maximize learning space at the College's centers the Updated FMP program would include indoor reconfiguration and renovation of existing buildings.

Specific details regarding the reconfiguration and modernization activities described above for the Updated FMP program and the College's Main Campus and centers are not currently available. BAAQMD guidelines do not provide a specific methodology for quantitatively assessing construction-related impacts at the Plan level. Therefore, a qualitative analysis is provided for the assessment of construction-related impacts of the Updated FMP program that considers the result of the quantitative assessment of the impacts associated with the individual projects at the Main Campus (see Impact AQ-3 below). As described above, modernization and reconfiguration of certain existing buildings at the College centers would be predominantly indoor, and would not involve substantial operation of off-road construction equipment. As such, reconfiguration and modernization activities would not contribute substantially to generation of construction emissions. In addition, it is reasonable to assume that the magnitude of these activities would be similar or less than the proposed renovation activities under the proposed individual projects (see Table 3). As a result, renovation under the Updated FMP would not exceed BAAQMD thresholds. However, if any future new building construction or demolition activity is identified, additional analysis may be required.

Any reconfiguration or modernization activities undertaken under the Updated FMP would be constructed to meet the College's Sustainability Plan. The City College Sustainability Plan includes goals to increase the life cycle of buildings and calls for water-efficient plumbing and energy-efficient systems in renovated and

new buildings. In addition, construction activities under the Updated FMP program would be required to adhere to the BAAQMD's Basic Construction Control measures during construction. BAAQMD considers construction-related fugitive dust impacts of projects to be less than significant if the recommended dust-control measures outlined in **MM-AQ-1** are implemented. Therefore, implementation of BAAQMD-measures listed under **MM-AQ-1**, would reduce construction-related fugitive dust impacts of the Updated FMP program to a less than significant level. This topic is not discussed further in the EIR.

MM AQ-1 BAAQMD Basic Construction Mitigation Measures

For all projects, BAAQMD recommends the implementation of all Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable Thresholds of Significance.

- 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 track-out 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.
- Idling times shall be minimized either by shutting equipment off when not in use of reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action with 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Impact AQ-3: **Construction activities associated with the individual projects at the Main Campus could generate criteria pollutant and precursor emissions that could violate an air quality standard or contribute substantially to an existing or projected air quality violation. (Potentially Significant; *Less than Significant with Mitigation*)**

Construction of the individual projects at the Main Campus would result in the emissions of criteria air pollutants from mobile, area, and/or stationary sources, which may cause exceedances of federal and state ambient air quality standards or contribute to existing nonattainment of ambient air quality standards. Air quality impacts were evaluated in accordance with the methodologies recommended by CARB and the BAAQMD. Where criteria air pollutant quantification was required, emissions were modeled using CalEEMod. The following discussion identifies potential short-term impacts that would result from implementation of the individual projects.

Demolition, decommission, renovation, and construction of the individual projects would result in a temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and ROG off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Emissions generated from these activities would be for short-term duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the BAAQMD's thresholds of significance.

Construction emissions result from demolition, site grading, and excavation, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

The individual projects would include demolition, decommission, renovation, and new building construction over an approximately six-year period from 2021 to 2027. Demolition of Conlan Hall and Bungalow EOPS would occur in 2021 and would last for 6 months. The Creative Arts Building (theater) would be demolished in 2024 and demolition would last for 6 months. Demolition of the Smith/Statler building and bungalows 600s and 700s would occur in 2026 and would require 6 months. The 600s and 700s Bungalows would be replaced with a surface parking lot with approximately 205 spaces. Construction of the proposed lot is assumed to occur over the last month of bungalows' demolition. Renovation of Cloud Hall and the Creative Arts Extension Building would begin in late 2023 and end in the middle of 2025 and late 2025, respectively. Renovation of the Science Building would start in late 2024 and would be completed approximately in early 2026. Batmale Hall renovation would begin in the middle of 2026, after the

completion of Cloud Hall renovation, and end early 2027. Construction of SSC would begin early 2022 and end in the middle of 2023. Student Union would be renovated after the construction of SSC starting middle of 2026 for approximately 12 months.

In order to account for the construction schedule, separate modeling was prepared for each of the buildings except when the demolition or renovation of buildings directly overlapped or immediately followed one another. For example, the demolition of Smith/Statler and Bungalows 600s and 700s were modeled together as the demolition of Bungalows 600s and 700s will immediately follow the demolition of Smith/Statler. **Table 2, Construction Modeling Assumptions**, presents the anticipated construction schedule and land use sizes used to estimate the proposed project's construction emissions.

Table 2
Construction Modeling Assumptions

CalEEMod Model	Construction Type	Building	Square Footage	Construction Duration	Approximate Construction Schedule	
					Start	End
1	Demolition	Conlan Hall	37,410	6 months	7/1/2021	12/31/2021
		EOPS Bungalow	3,600			
2	Demolition	Bungalows 600s*	11,040	6 months	1/1/2026	6/30/2026
		Bungalows 700s*	12,960			
		Smith/Statler	56,056	6 months	6/1/2026	12/1/2026
3	Demolition	Creative Arts Building (theater)	13,623	6 months	12/1/2024	5/30/2025
		Demolition total	***134,689***			
4	Renovation	Creative Arts Extension Building	30,697	approx. 14 months**	12/1/2023	2/1/2025
		Cloud Hall	127,436			
5	Renovation	Science Hall	151,856	approx. 13 months**	12/1/2024	12/31/2025
6	Renovation	Student Union	17,998	12 months	7/1/2026	7/13/2027
7	Renovation	Batmale Hall	103,888	6 months	7/1/2026	1/1/2027
		Renovation Total	***431,875***			
8	Construction	SSC	80,000	approx. 18 months	1/1/2022	6/2/2023
		Construction Total	***80,000***			

Notes:
**Demolition of Bungalows 600s and 700s would also include the construction of a parking lot with approximately 205 spaces, assumed to occur over the last month of demolition (6/1/2026 to 6/30/2026)*
***Renovation of the Creative Arts Extension Building is expected to last until late 2025.Creative Arts Extension was modeled to be renovated at the same time as Cloud Hall. Shortening the schedule to match Cloud Hall results in a more conservative estimate of construction emissions.*

As stated above, CalEEMod modeling was prepared to estimate the emissions resulting from the construction, demolition, and renovation of the individual projects. **Table 3, Project Construction Emissions**, shows the average daily construction emissions of ROG, NOx, PM10, and PM2.5 that would result from the construction of the proposed project.

Table 3
Project Construction Emissions

Scenario	Estimated Emissions			
	ROG	**NOx**	**PM10 (Exhaust)**	**PM2.5 (Exhaust)**
Conlan Hall & EOPS Bungalow Demolition				
Average Yearly Emission (tons/year)				
2021	0.0552	0.5101	0.027	0.0258
SSC Construction				
Average Yearly Emission (tons/year)				
2022	0.2275	2.0716	0.0774	0.0743
2023	0.4715	0.4368	0.0187	0.0179
Creative Arts Building (theater) Demolition				
Average Yearly Emission (tons/year)				
2024	0.0071	0.0615	0.00276	0.00264
2025	0.0324	0.2814	0.0114	0.0109
Smith/Statler and Bungalows 600s and 700s Demolition				
Average Yearly Emission (tons/year)				
2026	0.1886	1.7807	0.074	0.0803
Creative Arts Extension Building and Cloud Hall Renovation				
Average Yearly Emission (tons/year)				
2023	0.0284	0.2893	0.0133	0.0122
2024	0.6251	1.574	0.0618	0.0584
2025	0.3742	0.0134	0.0006	0.00091
Science Hall Renovation				
Average Yearly Emission (tons/year)				
2024	0.1855	1.717	0.0687	0.0646
2025	0.9758	1.713	0.064	0.0602
Student Union Renovation				
Average Yearly Emission (tons/year)				
2026	0.0278	0.2776	0.0115	0.0106
2027	0.1154	0.1963	0.00836	0.00782
Batmale Hall Renovation				
Average Yearly Emission (tons/year)				
2026	0.5947	0.5606	0.0188	0.0182
2027	0.0182	0.00058	0.00003	0.00005
Total Tons	3.93	11.48	0.46	0.44

Scenario	Estimated Emissions			
	ROG	NOx	PM10 (Exhaust)	PM2.5 (Exhaust)
Average Daily Emissions (lbs/day)*	3.62	10.57	0.43	0.41
BAAQMD Thresholds	54	54	82	54
Exceed Thresholds?	No	No	No	No

*BAAQMD Guidelines Source: Impact Sciences, CalEEMod, 2020 (see **Attachment B** of this Initial Study).*
** While construction of the proposed project will take place from 2021 to 2030, based on the CalEEMod modeling, in order to calculate the average daily emissions, it was assumed that project construction would only take place over 2,172 days. This construction duration only accounts for the time that construction, renovation, or demolition will be occurring on campus and accounts for any anticipated overlap between project construction.*

As indicated in **Table 3**, estimated average daily project construction emissions for each of the buildings would not exceed the BAAQMD thresholds for ROG, NOx, PM10, and PM2.5. BAAQMD basic construction mitigation measures outlined under **Mitigation Measure AQ-1** above would be implemented during the construction activities of the individual projects, which would further reduce daily project construction emissions. Therefore, construction activities of the individual projects would result in a less than significant impact. This topic is not discussed further in the EIR.

Impact AQ-4: **Operations of the Updated FMP program and associated individual projects at the Main Campus could generate criteria pollutant and precursor emissions that could violate an air quality standard or contribute substantially to an existing or projected air quality violation. (*Less than Significant*).**

Operation of the Updated FMP and individual projects at the Main Campus would result in the emissions of criteria air pollutants from mobile sources, area sources, and/or stationary sources, which may cause exceedances of federal and state ambient air quality standards or contribute to existing nonattainment of ambient air quality standards. Air quality impacts for the individual projects on the Main Campus were evaluated in accordance with the methodologies recommended by CARB and the BAAQMD.

Operation of the proposed project would produce VOC, NOx, PM10, and PM2.5 emissions from area sources, energy sources, and mobile sources. Area sources include the use of consumer products, architectural coatings, and landscaping equipment. Energy sources include emissions associated with natural gas consumption. Mobile sources include emissions associated with motor vehicle trips to project land uses.

Emissions associated with baseline and project-generated daily traffic were modeled using weekday additional daily vehicle trips to and from the Main Campus and District centers under the Updated FMP. CalEEMod default data for temperature, variable start information, and emission factors were conservatively used for the model inputs. Project-related traffic was assumed to consist of a mixture of

vehicles in accordance with the model output for traffic. Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. The anticipated buildout of the Main Campus and Updated FMP is 2030, therefore, vehicle emission factors for the year 2030 were used to estimate the project mobile-source emissions.

CalEEMod was used to estimate emissions from the project area sources, which include landscape maintenance equipment, consumer products, and architectural coatings for building maintenance. The estimation of proposed operational emissions was based on proposed land use defaults and square footage of buildings and facilities that would be in operation in 2030.

Table 4, Average Daily Operational Emissions (pounds per day), presents the average daily emissions for existing conditions, baseline conditions and the proposed project in 2030 upon full Updated FMP buildout. The estimated baseline emissions in 2020 were subtracted from the proposed project emissions, and the net change in emissions is compared with BAAQMD significance thresholds.

Table 4
Average Daily Operational Emissions (pounds per day)

Emission Source	ROG	NOx	PM10	PM2.5
Existing Conditions				
Area	5.10	0.0003	0.0001	0.0001
Energy	0.21	1.89	0.14	0.14
Mobile	0.00	0.00	0.00	0.00
Total Existing Emissions	**5.31**	**1.89**	**0.14**	**0.14**
Baseline Conditions				
Area	6.04	0.0002	0.0001	0.0001
Energy	0.25	2.27	0.17	0.17
Mobile	0.00	0.00	0.00	0.00
Total Baseline Emissions	**6.29**	**2.27**	**0.17**	**0.17**
Proposed Project				
Area	5.43	0.0002	0.0001	0.0001
Energy	0.22	2.04	0.15	0.15
Mobile	1.50	6.48	8.59	2.35
Total Proposed Project's Emissions	**7.16**	**8.52**	**8.74**	**2.51**
Net Change in Emissions (Proposed – Baseline) (tons/year)	**0.87**	**6.25**	**8.57**	**2.34**
BAAQMD Annual Thresholds (tons/year)	10	10	15	10
Exceed Thresholds?	**No**	**No**	**No**	**No**
Net Change in Emissions (Proposed – Baseline) (tons/year)	**4.77**	**34.25**	**46.96**	**12.82**
BAAQMD Daily Thresholds (lbs/day)	54	54	82	54

Emission Source	ROG	NOx	PM10	PM2.5
Exceed Thresholds?	**No**	**No**	**No**	**No**

*Source: Impact Sciences, CalEEMod, 2020 (**Attachment B of this Initial Study**).*

As shown in **Table 4,** daily and annual emissions of ROG, NOx, PM10, and PM2.5 associated with operation of the proposed project would be below the BAAQMD's significance thresholds at full buildout.

As stated under Impact AQ-2, the Updated FMP program focuses on increasing efficiency and maximizing learning space of the College's facilities. Specific details regarding the reconfiguration and modernization activities for the College facilities besides those analyzed at a project level are not available. However, the Updated FMP would not change the overall square footage of the centers' buildings and the remaining Main Campus buildings that are not evaluated at a project level in this document. As a result, modernization activities and compliance with the City College Sustainability Plan is expected to reduce area and energy operational air quality emissions as compared to baseline conditions.

As stated above, the BAAQMD has set thresholds for the operational emissions of a plan-level analysis, including: (1) consistency with the current Air Quality Plan; and (2) the projected VMT or vehicle trip increase; operation emissions would not be considered significant if the project's VMT or vehicle trips increase would be less than or equal to projected population increase. As demonstrated under Impact AQ-1, the Updated FMP including the individual projects would not conflict with or obstruct implementation of the 2017 Clean Air Plan.

The BAAQMD has determined that a proposed plan must demonstrate that the projected VMT or vehicle trips (either measure may be used) is less than or equal to the projected population increase to be considered to have a less than significant impact on criteria air pollutants. According to the traffic impact analysis of the proposed project (**Section 4.2, Transportation** of the EIR), the total number of vehicle trips to and from CCSF facilities is projected to increase by approximately 8,994 trips per day. By 2030, CCSF is expected to increase student and staff population by 21,878 persons. As a result, the total increase in vehicle trips is significantly lower than the projected increases in student and staff populations. Therefore, the Updated Plan will have a less than significant impact. Furthermore, **Table 4** presents the project-level operational emissions. As discussed above, the project-level modeling accounts for the mobile source emissions generated from vehicle trips to the Main Campus as well as the other District Centers under the Updated FMP. Therefore, the modeling calculates the projected mobile-source emissions from the district-level increase of 8,994 trips per day. As shown in **Table 4,** these mobile-source emissions are not expected to result in an exceedance of BAAQMD regional significance thresholds. Therefore, operational air quality

impacts from the Updated FMP would result in a less than significant impact. This topic is not discussed further in the EIR.

Impact AQ-5: The Updated FMP program would not generate significant emissions that would expose sensitive receptors to substantial pollutant concentrations during construction. (*Less than Significant*)

As discussed under Impact AQ-2 above, the Updated FMP program would require reconfiguring locations of College functions at the Main Campus based on activity zones that would include indoor and outdoor spaces for student gathering and collaboration. In addition to the individual projects at the Main Campus, other improvements would include design of open spaces and development of plazas. In addition, the Updated FMP program at the Main Campus would support improvements to pedestrian and bicycle paths. The Updated FMP program at the College centers calls for the maximization of space use, which would entail indoor reconfiguration and renovation of existing buildings. As demonstrated below, the health risk posed to residential and school receptors near the Main Campus as a result of the demolition, decommission, renovation, and construction of the individual projects would be less than significant. Therefore, it is reasonable to assume that planned activities under the Updated FMP program at the Main Campus and the College's centers would be similar or less intense than those needed for the construction of the individual projects. As a result, the health risk posed during construction under the Updated FMP program would be less than significant. This topic is not discussed further in the EIR.

Impact AQ-6: The individual projects at the Main Campus would not generate emissions that would expose sensitive receptors to substantial pollutant concentrations during construction. *(Less than Significant)*

The Main Campus is located in an area with nearby sensitive receptors, including residential and school uses. The BAAQMD recommends evaluating the health risk posed to sensitive receptors from DPM within 1,000-foot radius of a project site. As stated above, the closest sensitive receptors within 1,000 feet of the Main Campus include residences along Ocean Avenue, Judson Avenue, Plymouth Avenue and Marston Avenue as well as Archbishop Riordan High School, Lick Wilmerding High School, Seventh Day Adventist Elementary School, and Sunnyside Elementary School.

Construction. During construction of the individual projects, construction-related TAC and PM2.5 emissions could expose nearby sensitive receptors to substantial pollutant concentrations. Total annual PM2.5 exhaust emissions (assumed to be DPM) from off-road construction equipment used during project construction and exhaust emissions from on-road vehicles (haul trucks, vendor trucks, and worker vehicles) were calculated using CalEEMod model. The HRA was conducted following methods in the

Office of Environmental Health Hazard Assessment's (OEHHA) Guidance Manual for Preparation of Health Risk Assessments and BAAQMD's CEQA Guidance. The cancer and non-cancer risks were compared to BAAQMD's thresholds, which include:

- Increased cancer risk of >10.0 in one million;
- Increased non-cancer risk of >1.0 Hazard Index; and
- Ambient PM2.5 increase: >0.3 μg/m3.

The US EPA AERMOD dispersion model was used to predict concentrations of DPM and PM2.5 at the sensitive receptors identified above, as recommended by the BAAQMD. The California Air Resources Board (CARB) recommends the Hotspots Analysis and Reporting Program 2 (HARP 2) to calculate the excess cancer risk. HARP 2's Risk Assessment Standalone Tools (RAST) incorporates the Office of Environmental Health Hazard Assessment (OEHHA) 2015 guidance in order to calculate the risk posed to receptors from facility operations.

Residential Receptor. The maximum DPM concentration from construction activities would occur at the nearby residential receptors located northeast of the Main Campus along Marston Avenue. Exposure over the first six year of the resident's life (third trimester, infant, and child) were conservatively assumed to occur at these residences through the entire construction period of the campus (See **Table 2**). Results of this assessment indicate that the maximum excess residential cancer risk posed to the residential receptors over the approximately six years of construction would be less than the BAAQMD's thresholds, see **Table 5, Maximum Health Risks from Project Construction Activities**. In addition, PM2.5 emissions from construction of the individual projects and the non-cancer risk would be less than the hazard index (HI).

Table 5
Maximum Health Risks from Project Construction Activities

Receptor	Lifetime Excess Cancer Risk (per million)	Annual PM2.5 (ug/m3)	Hazard Index
Residence			
Significance Threshold	10	0.3	1
Exceed Threshold?	No	No	No

Source: Impact Sciences, 2020.

School Child Receptor. As stated above, there are several schools near the project site. Exposure was assumed to occur over four years from ninth to twelfth grade ages for the students at Archbishop Riordan High School and Lick Wilmerding High School. For the students at Sunnyside Elementary School and

Seventh Day Adventist Elementary School, exposure was assumed to occur over six years from Kindergarten to fifth grade ages. The risks posed to students at these schools would be less than 10 in a million and, therefore, would be below the significance threshold, see **Table 6, Maximum Health Risk Posed to Student Receptors.**

Therefore, construction emissions associated with the individual projects would have a less-than-significant health risk impact on sensitive receptors near the Main Campus. This topic is not discussed further in the EIR.

Table 6
Maximum Health Risk Posed to Student Receptors

Receptor	Cancer Risk (in a million)	Threshold	Exceed Threshold?
Archbishop Riordan High School	0.58	10	*No*
Lick Wilmerding High School	0.43	10	*No*
Sunnyside Elementary School	0.61	10	*No*
Seventh Day Adventist Elementary School	0.65	10	*No*

Source: Impact Sciences, 2020.

Impact AQ-7: **The Updated FMP program and associated individual projects at the Main Campus would not generate emissions that would expose sensitive receptors to substantial pollutant concentrations during operation.** ***(Less than Significant)***

The Updated FMP including the individual projects are not expected to introduce new sensitive receptors to the Main campus or College centers. While, student enrollment and employment numbers are projected to increase, these are not considered sensitive receptors that would be adversely impacted by nearby stationary sources. Furthermore, buildout of the Updated FMP and the individual projects would not generate diesel truck trips typically associated with cancer risks and would not introduce any new stationary sources. Should the Updated FMP result in any stationary sources that emit toxic air pollutants (TACs), the stationary sources would be required to comply with all permitting and reporting requirements, as is required under BAAQMD's Rules and Regulations including New Source Review Rule, Regulation 2, Rule 2. Therefore, the health risk posed to students, faculty, and staff related to off-site pollutants would be less than significant. This topic is not discussed further in the EIR.

Impact AQ-8: **The Updated FMP program and associated individual projects would not generate emissions that create objectionable odors affecting a substantial number of people. (*Less than Significant*)**

Typical odor sources of concern include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, rendering plants, and coffee roasting facilities. The proposed project includes the demolition, and decommission, and renovation of existing buildings on the Main Campus of CCSF as well as the construction of the SSC. Any construction related to the Updated FMP program at other centers would also be related to educational facilities. During construction, diesel exhaust from construction equipment would generate odor. However, construction-related odors would be temporary and would not persist upon project completion. Operation under the Updated FMP would be similar to existing educational activities. Therefore, project's operations would not create significant sources of new odors.

Therefore, odor impacts related to the construction and operation of the proposed project would be less than significant. This topic is not discussed further in the EIR.

Impact C-AQ-1: **The Updated FMP program and associated individual projects, in combination with past, present, and reasonably foreseeable future projects, could contribute to cumulative air quality impacts. (*Less than Significant*)**

Implementation of the proposed project would generate short-term air pollutant emissions during construction and long-term operational emissions associated with simultaneous projects are speculative. BAAQMD thresholds of significance for both construction and operation consider project emission that would be cumulatively considerable. As demonstrated in the analysis above, with implementation of **Mitigation Measure AQ-1**, construction emissions of the proposed project would not exceed emission thresholds for the criteria pollutants.

Therefore, the proposed project's contribution to air quality impacts during construction would not be considered cumulatively considerable.

With regard to operational cumulative impacts associated with nonattainment pollutants, in general, if a project is consistent with the with the community and general plans, it has been accounted for in the attainment demonstration contained within the state implementation plan and would therefore not cause a cumulatively considerable impact on the ambient air quality. Construction and operational emissions are below BAAQMD significance thresholds. As demonstrated under Impact AQ-1, the proposed project would be consistent with the BAAQMD's 2017 Clean Air Plan. Accordingly, the project's operations would

not result in a cumulative considerable contribution to the nonattainment pollutants SFBAAB. As a result, cumulative impact of the project's operations would not be cumulatively considerable. This topic is not discussed further in the EIR.

3.4 Biological Resources

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The Updated FMP program focuses on optimizing the use of indoor space to meet the needs of the forecasted growth with the Updated FMP timeframe and calls for the compliance with the College Sustainability Plan. The Updated FMP does not include individual projects at any of the centers that would require construction or excavation. Therefore, the analysis below, including the description of environmental settings, focuses on the Updated FMP and associated individual projects at the Main Campus site. Future improvement projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR would not require additional CEQA analysis. If a future project that requires construction or excavation is identified at any of the College centers during the 10-year time frame of the Updated FMP, an environmental review would be required to analyze the project-specific impacts related to Biological Resources.

Environmental Setting

The Main Campus is located in an urban area and approximately 70 percent is covered by impervious surfaces. The remaining 30 percent of the campus consists of landscaped open space areas including grass lawns, landscaped plazas, mulch, horticultural gardens, and inaccessible planted areas. Areas of tree cover include the south and east borders of the campus. The inaccessible planted area is east of the horticulture gardens. Dominant tree species include Monterey Pine, Monterey Cypress, and Eucalyptus. Although these areas of vegetation support some common wildlife species, there are no natural vegetation communities on the campus, and the existing landscaping does not provide suitable habitat for special-status species.

The project site does not contain any wetlands, riparian habitat, or other sensitive natural communities as defined by the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS). The nearest mapped water bodies are the McLaren Upper Reservoir approximately 1.35 miles to

the east and Lake Merced approximately 1.85 miles to the west of the Main Campus. Therefore, implementation of the proposed project would not affect any wetlands, riparian habitat, or sensitive communities protected by federal or state laws or regulations. There is no adopted habitat conservation plan, natural community conservation plan, or other approved local, state, or regional habitat conservation plans in the project area. Thus, criteria (b), (c), and (f) are not applicable to the proposed project.

Impact BIO-1: **Implementation of the Updated FMP program including the individual projects at the Main Campus would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; and the proposed project would interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.** ***(Potentially Significant; Less than Significant with Mitigation)***

The project site, as the CCSF Main Campus, has been subject to routine vehicular and pedestrian activity. The surrounding neighborhood includes residential, commercial, and public uses. Although there is open space with trees, plants, and lawns on the project site the surrounding areas have been developed with buildings, roadways, and parking lots. In addition, there are no intermittent or permanent streams on the project site or in the immediate vicinity, and the project site has no connectivity to wildlife habitats. The nearest undeveloped area with potential wildlife habitat is the Golden Gate Park, located 2.8 miles to the northwest. The project site does not serve as a nursery site or corridor for native resident or migratory fish or wildlife, except potentially for birds.

Implementation of the proposed project would result in the demolition of Conlan Hall, Smith/Statler building, the theater within the Creative Arts building, Bungalow EOPs, and Bungalows 600s and 700s. The proposed project would also decommission the Creative Arts and Visual Arts buildings. Demolition of Conlan Hall and Smith/Statler building would result in the removal of onsite trees and vegetation.

Wildlife species are protected under the Federal Endangered Species Act, the Migratory Bird Treaty Act, the California Endangered Species Act, and regulations concerning California Species of Special Concern. Queries utilizing the U.S. Fish and Wildlife Service (USFWS) IPaC System and the California Natural

Diversity Database (CNDDB) and California Native Plant Society (CNPS)[4] were used to determine potential species to consider for this analysis (See **Attachment C** of this Initial Study). Tables 8 and 9 in **Attachment C** list the special status wildlife and plant species, respectively, known from the general project vicinity with notes on their potential occurrence on the project site. Based on a review of the site history, records from the IPaC, CNDDB and CNPS records, and current site conditions, the project site does not contain suitable habitat for any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFW or USFWS and there is a very low likelihood of any candidate, sensitive, or special-status species on the project site. Therefore, the impact of the proposed project on candidate, sensitive, or special-status species would be less than significant with the possible exception of impacts on migratory birds, which are discussed below. This topic will not be discussed further in the EIR.

Landscaped areas within the Main Campus may provide suitable habitat for resident and migratory birds covered under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. Migratory birds that may potentially inhabit the project location include Allen's hummingbird (*Selasphorus sasin*), black swift (*Cypseloides niger*), and Nuttall's woodpecker (*Picoides nuttallii*), among others.[5] Therefore, the proposed project would result in the temporary loss of nesting and foraging habitat through the removal of onsite trees and vegetation during construction of the SSC; however, other landscaped areas and open spaces would provide suitable nesting and foraging habitat for potentially displaced birds. In addition, the proposed project would replace the nine trees removed near the proposed SSC and within the plazas proposed as part of the Updated FMP throughout the campus.

Construction activities may result in the displacement of migratory birds and/or the abandonment of active nests should construction and vegetation removal occur during the vegetation removal occur during the typical nesting season (January 15 through August 15). Implementation of **MM-BIO-1: Preconstruction Nesting Birds Surveys and Buffer Areas**, would reduce this potentially significant impact on nesting birds covered under the MBTA and California Fish and Game Code to a less-than-significant level by ensuring project activities do not result in the take of an active nest. This topic will not be discussed further in the EIR.

MM BIO-1: Preconstruction Nesting Bird Surveys and Buffer Areas

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4 California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website: http://www.rareplants.cnps.org [accessed 14 September 2020].

5 Information for Planning and Consultation (IPaC). 2020. United States Fish and Wildlife Service Environmental Conservation Online System. Website: https://ecos.fws.gov/ipac/location/index. Accessed November 23, 2020.

Nesting birds and their nests shall be protected during construction by implementation of the following measures for each construction phase:

a. To the extent feasible, conduct initial activities including, but not limited to, vegetation removal, tree trimming or removal, ground disturbance, building demolition, site grading, and other construction activities which may compromise breeding birds or the success of their nests outside of the nesting season (January 15 through August 15).

b. If construction during the bird nesting season cannot be fully avoided, a qualified wildlife biologist shall conduct pre-construction nesting surveys within 14 days prior to the start of construction or demolition at areas that have not been previously disturbed by project activities or after any construction breaks of 14 days or more. Surveys shall be performed for suitable habitat within 250 feet of the project site in order to locate any active nests of common bird species and within 500 feet of the project site to locate any active raptor (birds of prey) nests.

c. If active nests are located during the preconstruction nesting bird surveys, a qualified biologist shall evaluate if the schedule of construction activities could affect the active nests and if so, the following measures would apply:

    i. If construction is not likely to affect the active nest, construction may proceed without restriction; however, a qualified biologist shall regularly monitor the nest at a frequency determined appropriate for the surrounding construction activity to confirm there is no adverse effect. Spot-check monitoring frequency would be determined on a nest-by-nest basis considering the particular construction activity, duration, proximity to the nest, and physical barriers which may screen activity from the nest. The qualified biologist may revise his/her determination at any time during the nesting season in coordination with the District.

    ii. If it is determined that construction may affect the active nest, the qualified biologist shall establish a no-disturbance buffer around the nest(s) and all project work shall halt within the buffer until a qualified biologist determines the nest is no longer in use. Typically, these buffer distances are 250 feet for passerines and 500 feet for raptors; however, the buffers may be adjusted if an obstruction, such as a building, is within line-of-sight between the nest and construction.

iii. Modifying nest buffer distances, allowing certain construction activities within the buffer, and/or modifying construction methods in proximity to active nests shall be done at the discretion of the qualified biologist and in coordination with the District, who would notify CDFW. Necessary actions to remove or relocate an active nest(s) shall be coordinated with the District and approved by CDFW.

iv. Any work that must occur within established no-disturbance buffers around active nests shall be monitored by a qualified biologist. If adverse effects in response to project work within the buffer are observed and could compromise the nest, work within the no-disturbance buffer(s) shall halt until the nest occupants have fledged.

v. Any birds that begin nesting within the project area and survey buffers amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels, so exclusion zones around nests may be reduced or eliminated in these cases as determined by the qualified biologist in coordination with the District, who would notify CDFW. Work may proceed around these active nests as long as the nests and their occupants are not directly impacted.

d. In the event inactive nests are observed within or adjacent to the project site at any time throughout the year, any removal or relocation of the inactive nests shall be at the discretion of the qualified biologist in coordination with the District, who would notify and seek approval from the CDFW, as appropriate. Work may proceed around these inactive nests

Impact BIO-2: **The Updated FMP program including the individual projects at the Main Campus would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.** ***(Less than Significant)***

Trees in the City and County of San Francisco are protected under article 16 section 801 et seq., of the San Francisco Public Works Code (the Urban Forestry Ordinance). The Urban Forestry Ordinance provides for

the protection of landmark trees,[6] significant trees,[7] and street trees located on any street or other public right-of-way anywhere within the territorial limits of the City and County of San Francisco.

If the proposed project would result in tree removal subject to the Urban Forestry Ordinance (such as a street tree), a permit from the City's Public Works Department would be warranted. The ordinance states that the Public Works Department shall require that replacement trees be planted (at a one-to-one ratio) or that an in-lieu fee be paid (section 806(b) of the Public Works code).

Numerous mature Monterey cypress (*Cupressus macrocarpa*) and Monterey pine (*Pinus radiata*). Based on the arborist report (**Attachment C – Biological Resources**), a total of nine trees is recommended for removal near Conlan Hall due to existing structural defects of these trees.[8] These trees are eight Monterey cypress trees and one Monterey pine tree. All trees to be removed are located on the west side of Conlan Hall. None of the trees to be removed or other trees on campus are designated as a landmark tree.[9] In addition, the trees to be removed are not considered significant trees under the Urban Forestry Ordinance since they would not be on property under the jurisdiction of the San Francisco Department of Public Works and would be further than 10 feet away from the public right-of-way.

If necessary, to remove street trees or trees considered significant, during any future individual projects under the Updated FMP program, in compliance with Public Works requirements, the District would submit a tree removal permit application and would replace any street trees that would be removed in compliance or exceeding the one-to-one replacement requirements. Therefore, the proposed project would comply with ordinance requirements.

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6 The City's Urban Forestry Ordinance Section 810(f)(4)(A)-(E), sets forth criteria for the designation of landmark trees, which include consideration of the age, size, shape, species, location, historical association, visual quality, and other contribution to the City's character. Landmark trees are designated by the Board of Supervisors upon the recommendation of the Urban Forestry Council, which uses established criteria (section 810 of the public works code) to determine whether a nominated tree meets the qualifications for designation.

7 As defined by the City Urban Forestry Ordinance, a significant tree shall be a tree: (1) on property under the jurisdiction of the San Francisco Department of Public Works or (2) on privately owned-property with any portion of its trunk within 10 feet of the public right-of-way, and (3) that satisfies at least one of the following criteria: (a) a diameter at breast height (DBH) in excess of twelve (12) inches, (b) a height in excess of twenty (20) feet, or (c) a canopy in excess of fifteen (15) feet.

8 Howard, Stephen. 2019. Arborist Report. Tree Condition Assessment. CCSF. September. (**Appendix B – Biological Resources**).

9 San Francisco Public Works. 2021. List of Designated Landmark Trees. https://sfpublicworks.org/services/significant-and-landmark-trees. Accessed on January 14, 2021.

No other policies or ordinances protecting biological resources apply to the proposed project. Therefore, the proposed project would have a less-than-significant impact regarding conflicts with local policies or ordinances protecting biological resources. This topic will not be discussed further in the EIR.

Impact BIO-3: **The Updated FMP program including the individual projects at the Main Campus, in combination with past, present, and reasonably foreseeable future projects, would result in a cumulatively considerable contribution to cumulative impacts related to biological resources.** ***(Potentially Significant; Less than Significant with Mitigation)***

The past, present, and reasonably foreseeable future projects within the vicinity of the project site are identified in **Section 4.0.4, Approach to Cumulative Impacts**. Similar to the proposed project, cumulative development within the vicinity of the project site would occur within an urban environment that lacks suitable habitat for candidate, sensitive, or special-status species. As with the proposed project such development could have an impact on nesting and migratory birds that would be reduced to less-than-significant levels with implementation of mitigation measures associated with meeting the requirements of the MBTA and California Fish and Game Code. The removal of any protected trees at nearby cumulative development or other future projects would not conflict with the Urban Forestry Ordinance because Public Works permit requirements and tree protection plans would be required. In summary, nearby cumulative projects would be subject to the same local, state, and federal plans, policies, and regulations, and would implement mitigation if required. The proposed project would implement **MM-BIO-1**, and therefore, would not contribute considerably to any potentially significant cumulative impacts on biological resources in combination with past, present, and reasonably foreseeable projects. This topic will not be discussed further in the EIR.

3.5 Cultural Resources

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

The Updated FMP and associated individual projects would have the potential to result in significant impacts to historical resources. Accordingly, criteria (a) under this topic is further analyzed and included in the EIR.

The Updated FMP program focuses on optimizing the use of indoor space to meet the needs of the forecasted growth with the Updated FMP timeframe and calls for the compliance with the College Sustainability Plan. The Updated FMP does not include individual projects at any of the centers that would require construction or excavation. Therefore, the analysis below, including the description of environmental settings, focuses on the Main Campus site. Future improvement projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR but would not require additional CEQA analysis. If a future project that require construction or excavation is identified at any of the College centers during the 10-year time frame of the Updated FMP, an environmental review would be required to analyze the project-specific impacts related to unique archaeological resources, historical resources, or resources eligible for the California Register of Historical Resources.

Record Research

An archival and records search and sensitivity study was conducted for the CCSF Updated FMP for Native American and historic period archaeological sites. The purpose of the archival and records search was to obtain documentation relating to prior studies and known Native American and historic period cultural resources within and proximate to the Ocean View Campus. Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include prehistoric resources, historic-era resources, unique archaeological resources (as defined by Public Resources Code [PRC] Section 21083.2[g]), and "tribal cultural resources" (as defined by Assembly Bill [AB] 52, Statutes of 2014, in PRC Section 21074).

Archaeological resources are locations where human activity has altered the earth or left deposits of prehistoric or historic-era physical remains (e.g., stone tools, bottles, former roads, foundations). Historical

(or architectural) resources include standing buildings (e.g., houses, barns, outbuildings, cabins), intact structures (e.g., dams, bridges, roads, districts), and landscapes. A cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. Tribal cultural resources include site features, places, cultural landscapes, sacred places, or objects that are of cultural value to a tribe and that meet the criteria described in PRC Section 21074.

The search included prior studies and known cultural resources within the Updated FMP study area and a surrounding one-block (328-foot) radius. The locations and unique identifiers for these studies and resources were obtained from a review conducted by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University. In addition to the NWIC review, the Balboa Park Station Area Plan Final EIR (2008); Draft Subsequent Environmental Impact Report, Balboa Reservoir Project (2019); Appendix B of the Draft Subsequent Environmental Impact Report, Balboa Reservoir Project (2019); and records and maps on file with the Pacific Legacy Berkeley Office were examined.

The archival and records search included a review of relevant U.S. Geological Survey (USGS) 7.5-minute topographic maps. Reports for prior studies conducted within the archival and records search area were obtained in full if they contained information pertinent to cultural resources in the search area, otherwise a bibliographic listing containing report details was obtained. Cultural resource records for archaeological sites and historic-period built environment resources also were collected from the NWIC for a one-block area around the project API. The spatial extents and basic attributes of each previously recorded cultural resource and prior study were acquired from the NWIC in the form of ArcGIS shapefiles. These data were "clipped" to the extents of the archival and records search area and portrayed on USGS topographic maps.

The archival and records search revealed two previously recorded resources within the one-block archival and records search buffer. No Native American or historic period archaeological resources were noted in the project API. The two resources comprise historic-period built environment resources, neither of which overlaps the project API. The recorded resources are P-38-004672 and P-38-004932. P-38-004672 is the San Francisco Fire Department's Auxiliary Water Supply System, which was recommended for listing on the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) as a discontinuous historic district. The district consists of five elements: The Twin Peaks Reservoir, Ashbury Tank, Jones Street Tank, Pump Station No. 1, and Pump Station No. 2. The report, prepared by Julia Mates (2009) of Tetra Tech, evaluated components of the Auxiliary Water System that had not been previously evaluated for NRHP/CRHP eligibility. Both Pump Station No. 1 and Pump Station No. 2 had been previously determined eligible for the NRHP/CRHR, and Pump Station No. 2 was listed on the NRHP in 1975 (Mates 2009). The evaluation also included 135 miles of pipeline, a portion of which is along Ocean

Avenue located southeast of the Main Campus. P-38-004932 is the Ocean Fire House. In their 2012 report, Crawford and Bonner (2012) recommended the building not eligible for listing in the NRHP and/or CRHR. The building is located adjacent to the southwest edge of the Ocean View Campus.

Summary of Studies. The archival and records search covered the Main Campus and a surrounding one-block radius. No prior cultural resource studies were conducted within the Project Area, though eight prior cultural resource studies were conducted within a one-block radius of the Main Campus. These studies represent several types of cultural resource evaluation efforts encompassing archaeological and architectural literature searches, field studies, and monitoring reports. None of the reports were positive for Native American or historic-period cultural resources.

Four of the reports concern the historic-period built environment, mainly along Ocean Avenue on the south side of the Ocean View Campus. Two of the reports summarize archaeological monitoring efforts at several locations along Ocean Avenue for pipeline replacements by the Department of Public Works. The reports were negative. One prior study reported on archaeological monitoring for Unity Plaza construction at the northwest corner of Ocean Avenue and Frida Kahlo Avenue. Monitoring was completed as a requirement of the 2008 Balboa Park Station Area Plan Final EIR. Historic period artifacts were encountered, but no discrete historic period features were noted. Another prior study reported on monitoring for the Lick-Wilmerding High School, located at 755 Ocean Avenue. No Native American or historic period archaeological resources were discovered at this location.

Reviews of the Balboa Park Station Area Plan Final EIR (2008); Draft Subsequent Environmental Impact Report, Balboa Reservoir Project (2019); Appendix B of the Draft Subsequent Environmental Impact Report, Balboa Reservoir Project (2019); and the CCSF Master Plan EIR (2004) did not result in the identification of any Native American, historic period, or unique archaeological resources within the Main Campus.

The archival and records search did not result in the identification of any Native American, historic period, or unique archaeological resources in the project API or a surrounding one-block (100-meter) radius. No systematic archaeological survey of the Main Campus has been undertaken, and no cultural resource studies apart from overviews for environmental documents have been conducted. The Main Campus lies within the Islais Creek drainage and historically has been used for institutional purposes since at least 1865. The campus has been considered moderately sensitive for the presence of prehistoric and historic period archaeological resources.

Prehistoric Archaeological Resources

Site Sensitivity

The archival and records search did not result in the identification of any Native American archaeological resources in the study area or a surrounding one-block (328-foot or 100-meter) radius. No systematic archaeological survey of the Main Campus has been undertaken, and no cultural resource studies apart from overviews for environmental documents have been conducted. The campus lies within the Islais Creek drainage and is considered moderately sensitive for Native American resources.

Historical Archaeological Resources

Site Sensitivity

The archival and records search did not result in the identification of any historic period archaeological resources in the Project API or a surrounding one-block (328-foot or 100-meter) radius. No systematic archaeological survey of the Main Campus has been undertaken, and no cultural resource studies specifically related to historic archaeological resources, apart from overviews for environmental documents, have been conducted. The campus site has historically been used for institutional purposes since at least 1865. The Main Campus has been considered moderately sensitive for the presence of historic period archaeological resources although these may be obscured by construction and landscaping of the campus.

Impact CR-1: **Construction activities of the Updated FMP program and associated individual projects at the Main Campus could cause a substantial adverse change in the significance of an archaeological resource. (*Potentially Significant; Less than Significant with Mitigation*)**

Updated FMP. While the Updated FMP focuses primarily on the Main Campus, it provides a comprehensive strategy that covers all CCSF locations and describes improvement potential at the CCSF centers. Proposed improvements at the CCSF centers under the Updated FMP include renovation and modernization of the existing buildings' interior in order to increase efficiency and maximize learning space. These proposed improvements would not include grading, excavation, or earth moving-activities. Therefore, implementation of the Updated FMP at the College's centers would have no impact to archaeological resources as defined by Section 15064.5.

In the event that any unforeseen improvements under the Updated FMP timeframe at the College's centers would require grading, excavation or any earth-moving activities, the potential to inadvertently damage

significant historic-period archaeological resources would represent a significant impact and would require further environmental review.

As noted above, no previously documented unique archaeological resources, historical resources, or resources eligible for the CRHR have been documented on the Main Campus. Therefore, the proposed project is not anticipated to affect archaeological resources pursuant to CEQA Guidelines section 15064.5. However, during construction activities such as grading, excavation, or earth moving unknown unique archaeological resources, historical resources, or resources eligible for the CRHR could be potentially encountered and inadvertently damaged. If any previously unrecorded archaeological resources are identified during project ground-disturbing activities and were found to qualify as an historical resource per CEQA Guidelines section 15064.5 or a unique archaeological resource as defined in Public Resources Code section 21083.2(g), any impacts to the resource resulting from the project could be potentially significant. Implementation of **Mitigation Measure CR-1**, Accidental Discovery of Archaeological Resources, during construction would address impacts on any previously unrecorded and buried (or otherwise obscured) archaeological deposits, which requires adherence to the relevant procedures and protocols to identify and appropriately treat archaeological resources discovered during construction activities. This impact would be reduced to a less-than-significant level with implementation of **Mitigation Measure CR-1**.

Proposed Individual Projects at the Main Campus. At a project level, impacts associated with proposed individual demolition, decommission, renovation, and construction projects within the Main Campus would be similar to those identified at the program level above. As stated above, no previously documented Native American or historic archaeological resources have been documented at the identified project locations. However, it is possible that unique archaeological resources, historical resources, or resources eligible for the CRHR would be encountered during ground disturbing activities associated with the proposed individual projects. Inadvertent damage to unique archaeological resources, historical resources, or resources eligible for the CRHR during construction activities of the proposed individual projects would be a significant impact. Implementation of **Mitigation Measure CR-1**, Accidental Discovery of Archaeological Resources, during construction would address impacts on any previously unrecorded and buried (or otherwise obscured) archaeological deposits, which requires adherence to the appropriate procedures and protocols to identify and appropriately treat archaeological resources discovered during construction activities. This impact would be reduced to a less-than-significant level with implementation **Mitigation Measure CR-1.** This topic is not discussed further in the EIR.

MM CR-1: Accidental Discovery of Archaeological Resources

Prior to the start of a project that require grading, excavation, or earth movement, the project prime contractor, any project subcontractor, and utilities firm involved in soils-disturbing activities within the project site shall attend a mandatory training provided by CCSF's consulting archaeologist. The training shall describe the archaeological resources that could be encountered and the procedures that should be followed by the construction team in the event of an accidental discovery of archaeological resources.

Should any indication of an archaeological resource be encountered during any soils-disturbing activity of the project, the project engineer, foreman and or other responsible person shall suspend any soil-disturbing activities with 100 feet of the discovery and notify CCSF of the find.

If CCSF's consulting archaeologist determines that an archaeological resource as defined in Section 15064.5 may be present within the project area, an archaeological resource mitigation plan shall be prepared and implemented pursuant to PRC Section 21083.2(b). in compliance with Section 21083.2(b), preservation in place shall be the preferred mitigation. This shall be accomplished through:

- Protection of the resource through capping and covering;
- Modification to the construction plan to avoid the resource; or
- Incorporation of the resource within open space.

If preservation in place is not feasible, the CCSF's consulting archaeologist shall prepare and implement a detailed treatment plan. The treatment plan shall define a data recovery program to preserve the significant information the archaeological resource is expected to contain. The intent of the treatment plan is to save as much of the archaeological resource as possible, including moving the resource if feasible. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project.

For prehistoric resources, CCSF shall consult with the Native American representative(s) on the approach and the preparation of the treatment plan. As appropriate, the prehistoric resource shall be analyzed in a regional context and the treatment plan shall be provided to local and state repositories, libraries, and interested professionals.

Impact CR-2: **Construction activities of the Updated FMP program and associated individual projects at the Main Campus could disturb human remains if such remains are present within the project site. (*Potentially Significant; Less than Significant with Mitigation*)**

Updated FMP. Proposed improvements at the CCSF centers under the Updated FMP include renovation and modernization of the existing buildings' interior in order to increase efficiency and maximize learning space. These proposed improvements would not include grading, excavation, or earth moving-activities. Therefore, implementation of the Updated FMP at the College's centers would not include activities that could result in disturbance of human remains if such remain are present at these locations. As such, implementation of the Updated FMP at the CCSF centers would have no impact to human remains.

In the event that any unforeseen improvements under the Updated FMP timeframe at the College's centers would require grading, excavation or any earth-moving activities, the potential to inadvertently human remains would represent a significant impact and would require further environmental review.

No previously documented Native American or historic period human remains were identified at the Main Campus during the literature review for the Updated FMP. Ground disturbing activities related to the Updated FMP at the Main Campus could unearth previously undiscovered or unrecorded human remains if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097 would make this impact less than significant for the overall Updated FMP as well as the identified projects. Impacts could be reduced to less than insignificant with implementation of **Mitigation Measure CR-2**.

Proposed Individual Projects at the Main Campus. No previously documented Native American or historic period human remains were identified during the literature review for the Updated FMP. Ground disturbing activities related to ground disturbing activities could unearth previously undiscovered or unrecorded human remains if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097 would make this impact less than significant for the identified projects. Impacts could be reduced to less than significant with implementation of **Mitigation Measure CR-2**. This topic is not discussed further in the EIR.

MM CR-2: **Treatment of Human Remains**

The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with all applicable state and federal laws. This shall include halting construction activities within 100-foot radius and immediate notification of the CCSF consulting archaeologist and the San Francisco Office

of the Chief Medical Examiner. In the event the San Francisco Office of the Chief Medical Examiner determines that the human remains are Native American remains, per protocol, the San Francisco Office of the Chief Medical Examiner shall notify the Native American Heritage Commission (NAHC) to appoint a Most Likely Descendant (MLD). The CCSF shall request from the appointed MLD to complete his or her inspection and make recommendations or preferences for treatment and disposition within 48 hours of being granted access to the site (Public Resources Code section 5097.98).

CCSF shall make all reasonable efforts to develop a Burial Agreement ("Agreement") with the MLD, as expeditiously as possible for the treatment and disposition, with appropriate dignity, of the human remains and associated or unassociated funerary objects (as detailed in CEQA Guidelines section 15064.5(d)). The Agreement shall take into consideration the appropriate excavation, removal, recordation, scientific analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. If the MLD agrees to scientific analyses of the remains and/or associated or unassociated funerary objects, the CCSF consulting archeologist shall retain possession of the remains and associated or unassociated funerary objects until completion of any such analyses, after which the remains and associated or unassociated funerary objects shall be reinterred or curated as specified in the Agreement.

Nothing in existing state regulations or in this mitigation measure compels CCSF to accept recommendations of an MLD. However, if CCSF and MLD are unable to reach an agreement on scientific treatment of the remains and associated or unassociated funerary objects, the CCSF, shall ensure that the remains and associated or unassociated funerary objects are stored securely and respectfully until they can be reinterred on the property, with appropriate dignity, in a location not subject to further or future subsurface disturbance (Public Resources Code section 5097.98).

Treatment of historic-period human remains and of associated or unassociated funerary objects discovered during soil-disturbing will be determined by CCSF in consultation with the consulting archaeologist and descendant communities if identified.

Impact C-CUL-1: Implementation of the Updated FMP program and associated individual projects would not result in cumulatively considerable impacts on archaeological resources, in combination with past, present and reasonably

foreseeable future projects in the vicinity of the Main Campus site (*Less than Significant*)

As discussed above, the proposed project would not result in an impact to archaeological resources that meet CEQA's definitions of a unique archaeological resources, historical resources, or resource eligible for the CRHR. Therefore, the proposed project would not contribute to cumulative impacts on these resources associated with the cumulative projects located on and in proximity to the Main Campus. This impact would be less than significant. This topic is not discussed further in the EIR.

3.6 Energy

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

The San Francisco Bay Area is serviced by Pacific Gas & Electric (PG&E). PG&E provides natural gas and electric service to approximately 16 million people throughout a 70,000 square-mile service area in northern and central California. In 2018, PG&E sold 48,832 GWh of electricity and 881,279 million cubic feet of natural gas.[10] Electricity produced by PG&E was from nuclear generation (34%), hydroelectric facilities (13%), renewable resources (39%), and natural gas/other (15%). The power mix only accounts for the electricity produced by PG&E, PG&E also buys electricity from other sources.[11]

10 Pacific Gas and Electric. PG&E Overview. Available: https://www.pgecorp.com/corp_responsibility/reports/2019/bu01_pge_overview.html. Accessed: November 27, 2020.

11 Pacific Gas and Electric. Delivering low-emission energy. Available: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page?WT.mc_id=Vanity_cleanenergy. Accessed : November 27, 2020.

In 2019, San Francisco County consumed approximately 5,604 GWh of electricity, approximately 27% was consumed by residential sources and 73% was consumed by non-residential sources.[12]

Impact EN-1: **The Updated FMP program including the individual projects at the Main Campus would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. (*Less than Significant)***

Construction activities under the Updated FMP would consume diesel to power off-road construction equipment, hauling, and vendor trucks as well as gasoline from workers traveling in passenger vehicle cars to and from the construction site. Construction activities under the Updated FMP would comply with all applicable laws and regulations, including applicable state and federal laws. For example, construction activities would be required to comply with the California Air Resources Board's Airborne Toxic Control Measure (ATCM) to limit idling of diesel-fueled commercial motor vehicle to no longer than five minutes any location.

With respect to project operations, implementation of the Updated FMP would be required to adhere to the College Sustainability Plan, which includes goals to increase public transit use, increase the life cycle of buildings, and increase water and energy efficiency. Therefore, the Updated FMP would increase project efficiency and reduce the consumption of electricity and natural gas to light and heat the College facilities. However, student enrollment is expected to increase over plan implementation and, as a result, implementation of the Updated FMP may increase the use of fuel to travel to the site. Due to the College Sustainability Plan's focus on transit use and the proximity of CCSF Main Campus and centers to transit stops with the City of San Francisco, the per capita fuel use is expected to decrease. Therefore, the Updated FMP would not result in the wasteful, inefficient, or unnecessary consumption of energy sources and impacts would be less than significant. This topic is not discussed further in the EIR.

Impact EN-2: **The Updated FMP program including the individual projects at the Main Campus would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. *(Less than Significant)***

State plans adopted for the purpose of promoting energy efficiency include the California Renewable Portfolio Standard, the Clean Energy and Pollution Reduction Act of 2015 (CA Senate Bill 350), the California Energy Efficiency Standards for Nonresidential Building, and the California Green Building

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12 California Energy Commission. *Electricity Consumption by County*. Available online at: http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

Standards Code (CALGreen Code). Construction activities under the Updated FMP would be in accordance with all applicable laws and regulations, including applicable federal, state, and local laws that are intended to promote efficient utilization of resources and minimize environmental impacts. Therefore, the Updated FMP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and this impact would be less than significant. This topic is not discussed further in the EIR.

Impact C-EN-1: **The Updated FMP program including the individual projects at the Main Campus, in combination with past, present and future projects would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. (*Less than Significant)***

As stated above, the Updated FMP would comply with the College Sustainability Plan. New and renovated buildings would be designed to be more efficient. Compliance with the College Sustainability Plan during operation would focus on increasing transit use for students, staff, and faculty. Other projects that would be developed near the CCSF Main Campus and center would also be required to adhere to the California Renewable Portfolio Standard, Clean Energy and Pollution Act of 2015, California Energy Efficiency Standards, and CALGreen. As a result, cumulative energy consumption is not expected to be wasteful, inefficient, or unnecessary and impacts would be less than significant. This topic is not discussed further in the EIR.

3.7 Geology and Soils

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐

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

The Updated FMP program focuses on optimizing the use of indoor space to meet the needs of the forecasted growth with the Updated FMP timeframe and calls for the compliance with the College Sustainability Plan. The Updated FMP does not include individual projects at any of the centers that would require construction or excavation. In addition, with the exception of the SSC building, none of the individual projects proposed at the Main Campus under the Updated FMP would require major excavation for foundation construction. Therefore, the analysis including the description of environmental setting for geology and soils, focuses on the SSC area within the Main Campus site. If an individual project that requires construction or excavation is identified at the Main Campus or any of the College centers during the 10-year time frame of the Updated FMP, an environmental review would be required to analyze the project-specific impacts related to geology and soils.

Future improvement projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all relevant state laws and regulations but would not require additional CEQA analysis.

The new and renovated buildings associated with the Updated FMP project would be connected to the existing combined sewer system and would not use septic tanks or alternative wastewater disposal systems. Therefore, Criterion (e) is not applicable.

Environmental Setting

The Main Campus is underlain by Cretaceous sheared rocks (melange) of the Franciscan Complex. The melange consists of small to large fragments of hard rock in a matrix of generally coherent and firm to occasionally soft sheared rock that is derived mostly from shale and sandstone; some serpentine may be present. Bedrock crops out on-site, or is overlain by Quaternary Colma Formation, which is predominantly friable, well-sorted, yellowish orange to gray fine to medium sand with occasional beds of sandy silt, clay, and gravel. Slope debris and ravine fill (colluvium) were mapped on portions of the campus as well as artificial fill.[13] Its topography can be described as falling within three levels that range between 185 and 355 feet above mean sea level (msl). The SSC project site located at the southwestern corner of the Main Campus is within the campus Middle Level at an elevation of approximately 315 feet above mean sea level (msl).

Soils underlying the SSC project site consist of sandy clayey fill overlying Colma Formation sediments. The Colma Formation lies unconformably on Franciscan Complex melange. The depth to melange bedrock

13 Rutherford & Chekene. 2019. Geotechnical Investigation, Student Success Center, City College of San Francisco.

varies from 5 feet near the loading dock at the existing Conlan Hall to about 12 feet at the southeastern corner of the SSC project site, behind Statler Wing. Soil and bedrock under the SSC project site can be separated into three units based on the findings from the subsurface exploration performed for the current project and on previous investigations.[14] Generalized descriptions of the earth material units are as follows:

- Artificial Fill (Qaf): Fill beneath the site is comprised mostly of loose clayey sand and soft sandy clay with gravel and organics. Where observed, these fills are generally less than three feet thick. The age and condition of the various fills suggest that little if any of the fill was engineered.

- Colluvium (Qco): Colluvium (slope debris and ravine fill) generally occurs as a veneer over bedrock that is expected to be a few feet thick over most of the areas with a maximum thickness of 7 feet.

- Franciscan Complex Melange (KJu): The Melange consists of moderately to deeply weathered siltstone, claystone, and sandstone that occur as blocks of relatively competent rock in a clayey matrix of very weak, highly sheared claystone and mudstone. The blocks were typically intensely fractured. Unweathered and unfractured pockets of very hard bedrock are likely to be encountered within the matrix of moderately to deeply weathered bedrock.

Field explorations conducted for the SSC project did not encounter groundwater. However, groundwater has previously been encountered at an elevation of approximately 258 feet at the Health and Wellness site. Groundwater on the site is likely to consist of seepage through the fractures in the bedrock rather than an established phreatic surface. Groundwater also may be perched on the top of bedrock.[15]

Approach to Analysis

In the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's occupants, except where the project would significantly exacerbate an existing environmental condition. Accordingly, hazards resulting from a project that would place development in an existing or future seismic hazard area or an area with unstable soils are not considered impacts under CEQA unless the project would significantly exacerbate the seismic hazard or unstable soil conditions. Thus, the analysis below evaluates whether the Updated FMP would exacerbate existing or future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death.

14 Rutherford & Chekene. 2019. Geotechnical Investigation, Student Success Center, City College of San Francisco.

15 Rutherford & Chekene. 2019. Geotechnical Investigation, Student Success Center, City College of San Francisco.

Impact GEO-1: **The Updated FMP program and associated individual projects would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault and strong seismic ground shaking.** ***(Less than Significant)***

Fault Rupture. No active fault or Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, lies directly underneath the Main Campus site or other CCSF centers.[16] The northwest trending City College Fault is mapped crossing the center of the CCSF campus. This fault is defined as a pre-Quaternary fault (older than 1.6 million years) and, therefore, lacks seismicity and recognized Quaternary displacement or shows no evidence of displacement during Quaternary time. Furthermore, observations of historic ground failures in northern California triggered by major earthquakes from 1800 to 1970 have not shown any movement on the City College fault.[17] One major active fault—the San Andreas fault zone— is located approximately 3.9 miles southwest of the Main Campus. Other major active faults in the region include the San Gregorio, Hayward, Calaveras, and Rodgers Creek faults.

Based on the seismicity of the region, the Main Campus is susceptible to very strong shaking induced by a major earthquake. The potential sources of such a major earthquake include: 1) the San Andreas fault, located about 3.9 miles to the west; 2) the San Gregorio fault, located about 7.9 miles to the southwest; and 3) the Hayward fault, located about 13.6 miles to the northeast at their closest proximity to the site.[18] Since there are no active faults that exist in the immediate vicinity, the Main Campus area is unlikely to experience surface fault rupture and the individual projects would not exacerbate existing conditions that would increase the likelihood of surface fault rupture. Therefore, the impact related to fault rupture would be less than significant and this topic is not discussed further in the EIR.

Ground Shaking. Although the Main Campus could be subject to very strong ground shaking in the event of a major earthquake, individual projects under the Updated FMP and associated individual projects would not expose people or structures to substantial adverse effects related to ground shaking. Adverse effects would be minimized since design of the new building and renovations of existing buildings would comply with the Division of the State Architect requirements, the State of California Uniform Building Code (CBC), and other applicable regulations as controlled by the permitting process. All buildings in California are subject to the standards in the CBC, which requires engineers to develop seismic design criteria that reflect the nature and magnitude of maximum ground motions that can be reasonably

16 California Geologic Survey. Earthquake Zones of Required Investigation. Available online at: https://maps .conservation.ca.gov/cgs/EQZApp/app/.

17 Rutherford & Chekene. 2019. Geotechnical Investigation, Student Success Center, City College of San Francisco.

18 Rutherford & Chekene. 2019. Geotechnical Investigation, Student Success Center, City College of San Francisco.

expected. These seismic design criteria allow engineers to apply appropriate building codes and design structures to reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy.[19]

As required by Chapter 18 of the CBC, recommended measures and type of foundations identified through the geotechnical investigation conducted for the SSC building were incorporated into the building design. The SSC building foundations would be conventional spread footings in combination with concrete grade beams where lateral force resisting walls are located. Furthermore, at the hillside portion, permanent concrete retaining walls and their foundation would be designed to resist lateral earth pressure plus additional lateral pressure that may be caused by earthquakes, surcharge loads behind them, and water pressures.

The California Department of General Services (DGS), Division of State Architect (DSA), has jurisdiction over all aspects of the District construction, to ensure that plans, specifications, and construction activities comply with the CBC and the California Geological Survey (CGS) guidance as provided under the Seismic Hazards Mapping Act. The CGS serves as an advisor under contract with DSA to review engineering geology and seismology reports for compliance with state geologic hazard regulations. The District will be required to send all engineering, geotechnical, and soils reports required to comply with the CBC to CGS to ensure that such reports also comply with applicable geologic hazard regulations. DSA approval of SSC construction would require compliance with the CBC and applicable geologic hazards regulations. For this reason, the proposed project would be designed and built in a manner that would reduce public exposure to geologic risks to acceptable levels, and the potential impacts of the proposed SSC building would be less than significant. Impact of the Updated FMP and associated individual project related to ground shaking would not be further discussed in the EIR.

Liquefaction and Earthquake-Induced Settlement. Liquefaction is a phenomenon in which saturated granular sediments such as sand and silt temporarily lose their shear strength during periods of earthquake-induced strong ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude of earthquakes likely to affect the site. The Main Campus is not located in liquefaction hazard zones designated for the City and County of San Francisco.[20] Furthermore, design and construction of the SSC building under the Updated

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19 Title 14 of the California Code of Regulations (CCR), Section 3601(e), defines a structure for human occupancy as any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year.

20 California Geologic Survey. Earthquake Zones of Required Investigation. Available online at: https://maps.conservation.ca.gov/cgs/EQZApp/app/.

FMP would be in accordance with the building code. Construction documents specifying the structural design, including the type of foundation, would be reviewed by DSA and CGS during review of the building design. Soils that could liquefy, or experience earthquake-induced settlement, would be removed during construction and/or soil improvement techniques would be implemented in conjunction with development of the structural foundation design. Removal of potentially liquefiable materials and/or implementation of soil improvement techniques, along with appropriate foundation designs, would reduce the potential for settlement within building footprints. Therefore, impacts of the SSC construction related to exacerbation of liquefaction and earthquake-induced settlement would be less than significant. This topic is not be further analyzed in the EIR.

Earthquake-Induced Landslides. The Main Campus is not located within an area defined as being susceptible to seismically induced landslides.[21] Furthermore, no landslides were identified at the planned location of the SSC building and the potential for landslides was estimated to be low.[22] Therefore, impact related to earthquake-induced landslides would be less than significant. This topic is not be further analyzed in the EIR.

Impact GEO-2: The Updated FMP program and associated individual projects would not result in substantial soil erosion or the loss of topsoil. ***(Less than Significant)***

The Main Campus is primarily built out and covered with impervious surfaces, including buildings, campus roads, parking lots, and sidewalks. Approximately 70 percent of the site is covered by buildings or impermeable surfaces and 30 percent is landscaping or landscaped open space. During the construction phase of individual development projects at the Main Campus, there is the potential for construction activities to disturb or remove existing vegetation, thereby increasing the potential for erosion within certain parts of the campus. The College would be required to follow standard erosion control practices for new construction. Potential construction-period impacts from the project due to erosion would be avoided through preparation and implementation of an erosion and sediment control plan and a Stormwater Pollution Prevention Plan (SWPPP). Development and implementation of a Storm Water Pollution Prevention Plan is required to maintain project coverage under the National Pollution Discharge Elimination System (NPDES) General Permit for Construction Activities. The SWPPP details the site-specific Best Management Practices (BMPs) to control erosion and sedimentation and maintain water quality during project construction. Adherence to regulations and standard erosion control practices for new construction would reduce and/or prevent erosion during construction activities. Therefore, impact of

21 Ibid.

22 Rutherford & Chekene. 2019. Geotechnical Investigation, Student Success Center, City College of San Francisco.

the Updated FMP program and associated individual projects related to soil erosion would be less than significant. This topic is not discussed further in the EIR.

Impact GEO-3: **The Updated FMP program and associated individual projects would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.** ***(Less than Significant)***

As noted above, the Main Campus is not located in liquefaction or landslide hazard zones designated for the City and County of San Francisco.[23] Lateral spreading occurs when a layer liquefies at depth and causes horizontal movement or displacement of the overburden mass toward a free face such as a stream bank or excavation, or toward an open body of water. Based on the low liquefaction potential at the site, the potential for lateral spreading at the SSC project site would be less than significant. In addition, soils at the SSC building location are mostly clayey sands silty clays and clayey gravels, which are less susceptible to earthquake-induced densification. Therefore, the potential for compaction settlement or seismic densification[24] would be low. As discussed above, new campus facilities under the proposed project would be required to comply with the DSA and CBC requirements. Regulatory requirements would include measures that would prevent and abate effects of lateral spreading, subsidence, liquefaction, or collapse. Therefore, impact of the Updated FMP program and associated individual projects related to unstable soil conditions would be less than significant. This topic is not discussed further in the EIR.

Impact GEO-4: **The Updated FMP program and associated individual projects would not be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property. (*Less than Significant)***

Expansive soils are those that shrink or swell significantly with changes in moisture content. Clay content and porosity of the soil also influence the change in volume. The shrinking and swelling caused by expansive clay-rich soil often results in damage to overlying structures. The geotechnical report for the SSC concluded that the individual site soils are predominantly clayey, sandy and silty with low to moderate plasticity and the potential for expansive soils-related hazards on a large scale are low. Therefore, impact

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23 California Geologic Survey. Earthquake Zones of Required Investigation. Available online at: https://maps .conservation.ca.gov/cgs/EQZApp/app/.

24 Compaction settlement or seismic densification occurs when loose granular soils above the water table increase in density as a result of earthquake shaking.

of the Updated FMP and associated individual project related to expansive soils would be less than significant. This topic is not discussed further in the EIR.

Impact GEO-5: The Updated FMP and associated individual projects would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. ***(Potentially Significant; Less than Significant with Mitigation)***

A unique geologic or physical feature embodies distinctive characteristics of any regional or local geologic principles, provides a key piece of information important to geologic history, contains minerals not known to occur elsewhere in the county, and/or is used as a teaching tool. No unique geologic are known to exist at either the Main Campus or any other centers; therefore, no impacts on unique geological features would occur. Although portions of the Main Campus would be excavated during construction, the general topography of the site would remain the same. The Updated FMP and associated individual projects would have no impact on unique geologic features. This topic is not discussed further in the EIR.

Paleontological resources are lithologically dependent; that is, deposition and preservation of paleontological resources are related to the lithologic unit in which they occur. Particularly important are fossils found in situ (undisturbed) in primary context (e.g., fossils that have not been subjected to disturbance subsequent to their burial and fossilization). As such, they aid in stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphological evolution, paleoclimatology, the relationships between aquatic and terrestrial species, and evolution in general. Previous records searches have indicated that paleontological finds have been made in the geologic units that underlie the Main Campus (within or near the project area).[25] Ground-disturbing activities as a result of excavation activities, such as the construction of the SSC building, could expose and cause impacts on unknown paleontological resources, which would be a potentially significant impact. This impact would be reduced to a less-than-significant level with implementation of **MM-GEO-1, Inadvertent Discovery of Paleontological Resources**. This topic is not discussed further in the EIR.

MM GEO-1: Inadvertent Discovery of Paleontological Resources

Before the start of any drilling or excavation activities, the College's contractor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in on-site construction worker training. The qualified paleontologist shall complete an institutional record and literature search and train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding

25 Records search through the Museum of Paleontology, University of California-Berkeley, November 5, 2003.

the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, and proper notification procedures should fossils be encountered. If potential vertebrate fossils are discovered by construction crews, all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately and the monitor shall notify the District. The fossil should be protected by an "exclusion zone" (an area approximately five feet around the discovery that is marked with caution tape to prevent damage to the fossil). Work shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue or recommend salvage and recovery of the fossil. If treatment and salvage is required, recommendations shall be consistent with Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, and currently accepted scientific practice, and shall be subject to review and approval by the District. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection [e.g., the University of California Museum of Paleontology], and may also include preparation of a report for publication describing the finds. The District shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.

Impact C-GEO-1: **The Updated FMP program including the associated individual projects, in combination with past, present, and reasonably foreseeable future projects, would not result in significant cumulative impacts on geology and soils or paleontological resources.** ***(Less than Significant)***

Geology, soils, and paleontological resources impacts are generally site-specific and localized. Past, present, and reasonably foreseeable projects could require various levels of excavation and grading, which would affect local geologic conditions and may affect paleontological resources. However, the cumulative projects are also subject to the CBC requirements for geotechnical review and would be required to comply with the state and local building codes. In addition, sites-specific geotechnical review and assessment for paleontological resources would reduce each individual project's impacts associated with geology, seismic safety, and paleontological resources. In addition, based on site conditions, cumulative projects may require site-specific mitigation. Similar to the proposed project, all cumulative projects listed in **Section 4.0.4, Approach to Cumulative Impacts** of the EIR, would be subject to these mandatory seismic safety standards and design review procedures. Compliance with these standards and procedures would ensure

that the effects from nearby cumulative projects would be reduced to less-than-significant levels. Therefore, in combination with cumulative projects, the proposed project would result in a less-than-significant cumulative impact. This topic is not discussed further in the EIR.

3.8 Greenhouse Gas Emissions

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Approach to Analysis

Greenhouse gas (GHG) emissions and global climate change represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from past, present, and future projects have contributed and will continue to contribute to global climate change and its associated environmental impacts.

BAAQMD has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with *CEQA Guidelines* sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. *CEQA Guidelines* section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. *CEQA Guidelines* section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan.

As a state-funded institution, CCSF is required to comply with the State of California's long-term GHG reduction goals, outlined in SB 32 and AB 32. AB 32 was signed into law in 2006 and required California to reduce its GHG emissions to 1990 levels by 2020. SB 32 followed AB 32 and was signed into law in 2016, requiring California to reduce GHG emissions to 40% below 1990 levels by 2030.

San Francisco has prepared *Strategies to Address Greenhouse Gas Emissions*, which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified Greenhouse Gas Reduction Plan (GGRP) in compliance with the *CEQA Guidelines*. These GHG reduction actions have resulted in a 29 percent reduction in GHG emissions in 2016 compared to 1990 levels, exceeding the year 2020 reduction goals outlined in the air district's Bay Area 2017 Clean Air Plan, Executive Order S-3-05, and Assembly Bill 32 (also known as the Global Warming Solutions Act).

Given that the City has met the state and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under Executive Order S-3-05, Executive Order B-30-15, and Senate Bill 32, the city's GHG reduction goals are consistent with Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32, and the 2017 Clean Air Plan. CCSF is not subject to comply with the City of San Francisco's GGRP. However, the GGRP represents the most conservative and comprehensive strategy to reduce GHG emissions within the City of San Francisco beyond the state's required reduction goals. As a result, CCSF will adhere to the ordinances listed within the GGRP Checklist that are applicable to this project type. Therefore, the analysis below evaluates the Updated FMP's and individual projects' consistency with the City of San Francisco's GGRP to determine significance.

Impact GG-1: **The Updated FMP program and the associated individual projects would not generate GHG emissions, either directly or indirectly, at levels that would result in a significant impact on the environment.** ***(Less than Significant)***

Construction. Construction under the Updated FMP program is speculative at this time, however, since the focus remains on renovating and modernizing existing buildings instead of demolition and new construction, it can be assumed that any renovation required under the Updated FMP would be similar or less intense than the construction of the individual development projects.

The proposed individual projects on the Main Campus would result in the construction of an 80,000-square-foot SSC, demolition of approximately 134,689 square feet, decommission of 82,616 square feet, and renovation of 431,875 square feet of existing buildings. Construction and renovation may result in GHG emissions over the approximately six-year construction period; however, these emissions would be short-term and temporary. The BAAQMD does not provide a construction-related GHG generation threshold, but recommends that these emission types be quantified and disclosed. Using CalEEMod, project GHG emissions throughout the construction phases were calculated from off-road equipment usage, hauling vehicles, delivery, and worker vehicle trips to and from the site. The total GHG construction emissions during construction of the individual projects would be approximately 2,292 MT CO_2e. As GHG emissions impact from construction activities would occur over a relatively short time span, it would contribute a

relatively small portion of the lifetime GHG emission impact of the individual projects. The total construction GHG emissions were divided by 30 to determine an annual construction emission rate to be amortized over the project's first 30 years of operational life, consistent with guidelines from the California Air Resources Board. Amortized over a 30-year period, the proposed project is anticipated to emit approximately 76.40 MT CO_2e/year.

Operation. Direct operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water and wastewater; and emissions associated with waste removal, disposal, and landfill operations.

The proposed modernization of the District facilities under the Updated FMP focuses on renovation of the existing buildings to increase efficiency and maximize learning space. The renovated and new buildings under the Updated FMP would adhere to the City College Sustainability Plan, which includes goals to increase transit use, increase the life cycle of buildings, and include water-efficient plumbing and energy-efficient systems in renovated and new buildings. Therefore, the Updated FMP would reduce area and energy-source GHG emissions as compared to baseline conditions. Student enrollment is expected to increase over plan implementation. The total increase in mobile source emissions as a result of growth under the Updated FMP and the individual projects on the Main Campus are evaluated in **Table 7** below.

Operational GHG emissions of the proposed project under existing, baseline, and project conditions were estimated through CalEEMod modeling. GHG emissions would be generated from area, energy, and mobile-source emissions.

Under the proposed project, the new and renovated buildings would be required to adhere to the City College Sustainability Plan. The Sustainability Plan requires new and redeveloped buildings to implement strategies to reduce energy use, utilize renewable energy sources, and promote water efficiency through a variety of sustainability measures including reducing potable water consumption to 30 percent below CALGreen baselines and exceeding Title 24 energy savings by at least 25 percent for mixed-fuel buildings. As a conservative approach, these measures were not applied to the model used to quantify the operation impacts of the proposed project. As a result, during operation, the proposed project would likely emit less than is disclosed in the table below.

The estimated net annual emissions of the proposed project, including operational emissions and amortized construction are detailed in **Table 7, Proposed Project GHG Emissions**.

Table 7
Proposed Project GHG Emissions

Scenario	Estimated Emissions (MT CO2e/year)
Existing Conditions	
Area	0.08
Energy	3,659
Waste	738
Water	155
Total	**4,553**
Baseline Conditions	
Area	0.05
Energy	4,343
Waste	884
Water	186
Total	**5,414**
Proposed Project	
Amortized Construction	76.4
Area	0
Energy	3,906
Mobile	5,170
Waste	794
Water	167
Total	**10,114**
Net Change in Emissions (Proposed - Baseline)	**4,700**

Source: Impact Sciences, 2020

Project's emissions from area, energy, waste, and water sources are expected to decrease as compared to baseline conditions. However, GHG emissions associated with mobile sources are expected to increase. Estimated vehicle trips from the Updated FMP are expected to generate a net increase in GHG emissions of 4,700 MT CO_2e/year. This increase is due to the forecasted increase in student and staff population that is expected to occur by 2030 as compared to baseline conditions. As discussed above, project significance is determined based on consistency with the City of San Francisco's GGRP (Impact GG-2). While vehicle trips and the associated emissions would increase by project buildout, the Updated FMP would comply with the City's GGRP and, as a result, would result in a less than significant impact.

Impact GG-2: **The Updated FMP program and associated individual projects on the Main Campus would not conflict with an applicable plan, policy or regulation**

adopted for the purpose of reducing the emissions of greenhouse gas. *(Less than Significant)*

As stated above, CCSF is not subject to comply with the City of San Francisco's GGRP. However, the GGRP represents the most conservative and comprehensive strategy to reduce GHG emissions within the City of San Francisco beyond the state's required reduction goals. San Francisco's GGRP exceeds state reduction goals. The GGRP provides a Checklist of ordinances that apply to new development projects within San Francisco, see **Attachment B, Air Quality and Greenhouse Gas Technical Analysis,** of this Initial Study. According to the GGRP, "[m]andatory compliance with these regulations ensures that development projects do not impair the State's ability to meet statewide GHG reduction targets outlined in AB32, nor impact the City's ability to meet San Francisco's local GHG reduction targets."

CCSF would adhere to the ordinances listed within the GGRP Checklist that are applicable to the proposed project. Compliance with the applicable regulations would reduce the project's GHG emissions related to transportation, energy use, waste disposal, wood burning, and use of refrigerants. Specifically, the proposed project would comply with the City's Commuter Benefits Program, transportation management programs, energy efficiency requirements and/or renewable energy criteria of the City's Green Building Code, Stormwater Management Ordinance, water conservation and irrigation ordinances, and Energy Conservation Ordinance.

In regard to transportation management, the Updated FMP focuses on the following transportation strategies: accommodation of safe transitions from public transit/bikes to pedestrian circulation; convenient connections between transit stops and College Main Campus and other centers; safe routes for bike and pedestrian circulation and secure parking for bikes on the Main Campus and at other centers; and side and bike share programs, carpools, transit incentives. Standards required under CCSF's Sustainability Plan as well as the College's Main Campus and centers locations in proximity to the City's transit stops, would also reduce overall GHG emissions. As previously mentioned, CCSF is a state-funded institution that is not required to pay municipal fees. Since the GGRP is designed to reduce GHG emissions from city projects, not state projects, any ordinances requiring city fees would not be applicable. Specifically, CCSF would not be required to pay the Transportation Sustainability Fee, San Francisco Planning Code, section 411A.

Because the proposed project would be consistent with the City's GHG reduction strategy, it would be also consistent with the GHG reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32 and the Bay Area 2017 Clean Air Plan. Therefore, the proposed project would not exceed San Francisco's applicable GHG threshold of significance. As such, the proposed project would have a less-than-significant impact with respect to consistency with applicable GHG reduction plans, policies, and regulations. This topic is not further discussed in the EIR.

3.9 Hazards and Hazardous Materials

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

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

The Framework of the Updated FMP program at the CCSF Main Campus and centers would not immediately result in new buildings, with the exception to the new SSC building at the Main Campus. The Updated FMP program focuses on optimizing the use of indoor space to meet the needs of the forecasted growth with the Updated FMP timeframe and calls for the compliance with the College Sustainability Plan. The Updated FMP Program would entail improvements to the interior spaces of existing facilities and allocation of college functions in an efficient manner. Therefore, this section evaluates impacts associated with hazards and hazardous materials that could result from the implementation of the Updated FMP at the CCSF Main Campus and centers and focuses on the proposed individual projects at the Main Campus.

Future reconfiguration and renovation projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all relevant state laws and regulations but would not require additional CEQA analysis.

Existing Conditions

None of the CCSF campus or centers are located within an area covered by an airport land use plan, within 2 miles of a public airport or a public use airport, or in the vicinity of a private airstrip; nor is the project site located adjacent to wildlands. Therefore, CEQA Checklist topics (e) and (g) are not applicable to the proposed project.

Existing structures on the Main Campus and centers may contain hazardous materials, such as asbestos, lead, mercury, or other substances. In the past, asbestos, polychlorinated biphenyls (PCBs), and lead were commonly installed in insulation, floor tiles, roofing tar, electrical transformers, fluorescent light ballasts, and paint. Mercury is a common component in electrical switches and fluorescent light bulbs.

Hazardous materials are used and stored at various locations throughout the CCSF Main Campus and centers. The materials are primarily associated with academic department use or campus facilities and landscape maintenance. Academic departments use hazardous materials for instruction and include

chemicals commonly used in classroom laboratories such as acids, bases, volatile organic compounds (VOCs), alcohol, photo-chemicals, fixers and adhesives.

Hazardous materials are used for campus and centers maintenance, including the general upkeep of facilities such as buildings and greenhouses, and for landscaping. The hazardous materials used include fuels, herbicides and pesticides. Fuels were stored in 1.0- and 2.5-gallon plastic and metal storage containers. The Grounds Maintenance Building also stores fuel (gasoline and diesel) in 1.0- and 2.5-gallon containers, lubricants, degreasers, cleansers, and other shop supplies. The Main Campus is not listed by the Department of Toxic Substances Control (DTSC) as a hazardous materials site pursuant to Government Code Section 65962.5.[26] A former underground storage tank (UST) was present near the eastern edge of the Main Campus. The State Water Resources Control Board lists a closed case for the underground storage tank cleanup site (Geotracker ID TO607551313) on the eastern edge of the Main Campus.[27] According to the case closure summary, the UST was used to store 1,500 gallons of gasoline. Following the removal of the UST, analyses of soil samples detected the presence of hydrocarbons and therefore, additional excavation was conducted to remove the residual contaminants. No groundwater was encountered during removal of the UST. Clean imported fill was used to backfill the cavity.[28]

Impact HAZ-1: The Updated FMP program and associated individual projects would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. ***(Less than Significant)***

Construction. Implementation of the Updated FMP and demolition, decommission, renovation and construction activities associated with individual projects would involve the routine transport, use, and disposal of hazardous materials such as fuel, solvents, paints, oils, grease, and caulking. The solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during the construction phase; these materials are typically used in construction projects and transported according to manufacturer recommendations. Such transport, use, and disposal would be compliant with applicable regulations, such as the RCRA, U.S. Department of Transportation (DOT) hazardous materials regulations, and California Occupational Safety and Health Administration (Cal/OSHA) regulations.

With the exception of the bungalows to be demolished, buildings proposed for demolition, decommission, and renovation activities within the Main Campus were all built before regulatory requirements were

26 Department of Toxic Substances Control (DTSC). Envirostor. Available at: https://www.envirostor.dtsc.ca.gov/public/.

27 State Water Resources Control Board. GeoTracker. Available at: https://geotracker.waterboards.ca.gov/.

28 City and County of San Francisco Department of Public Health. 2005. Remedial Action Completion Certification. Available at: https://geotracker.waterboards.ca.gov/site_documents/4496640861/11614CCL.pdf.

enacted regarding lead-based paint (LBP) and PCBs (1978), asbestos-containing materials (ACMs) (1981), and mercury in fluorescent lighting (2004). Therefore, demolition, decommission, and renovation activities could expose workers and/or the general public to these hazardous materials. The proposed project would comply with California Code of Regulations (CCR), Title 8, 1532.1 and Section 1529 for the identification, removal, and disposal of LBP and ACMs, respectively. In compliance with these regulations, and prior to the start of any of demolition, decommission, renovation, or construction activities, a lead-based paint and asbestos survey would be completed by completed by a Cal/OSHA-certified asbestos assessor and a California Department of Public Health-certified lead-based paint assessor. If the survey identifies the presence of LBP and/or ACM , an abatement work plan must be prepared and submitted to the appropriate agency Bay Area Air Quality Management District for asbestos and Cal/OSHA for lead). The abatement plan would describe removal methods and specific instructions for providing protective clothing and equipment for abatement personnel. Once all abatement measures have been implemented, the contractor would conduct a clearance examination and provide written documentation to the District that testing and abatement have been completed in accordance with all federal and State laws and regulations.

For the detection and disposal of PCBs, the proposed project would comply with the US EPA Title 40 Chapter 1 Subchapter R Part 761 and CCR, Title 22, Section 66263.44. In compliance with these regulations, the contractor's specification documents would include testing electrical transformers and fluorescent light ballasts prior to demolition, decommission, or renovation activities. The contractor's document would require disposal of PCBs in a licensed facility permitted to accept PCBs and to submit to the District documentation that testing and abatement have been completed in compliance with applicable federal and state regulations.

The proposed project would comply with CCR, Title 22, Sections 67426.1 – 67428.1 and 66261.50 for the removal and disposal of mercury in fluorescent light tubes. Contractor's documents would require compliance with these regulations, and the submittal of written documentation to the District confirming the completion of testing and abatement activities in accordance with all federal, State, and local laws and regulations.

With compliance with applicable federal and state regulations, the potential for exposure to LBP, ACM, and other construction materials during demolition, decommission, and renovation activities under the Updated FMP would be less than significant.

See also CPHP Impact HAZ-2, below, for a discussion of construction best management practices (BMPs) that would be implemented as part of a Storm Water Pollution Prevention Plan, as required by the NPDES Construction General Permit which would also minimize the potential for an inadvertent release of hazardous materials during construction.

In addition, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented during project construction for projects disturbing more than 5,000 square feet of soil, in accordance with SWRCB requirements and as required by the National Pollutant Discharge Elimination System (NPDES) (See Impact HAZ-2 below). As discussed under HAZ-2, the SWPPP requires implementation of BMPs related to hazardous materials storage and soil stockpiles, inspections, maintenance, employee training, and the containment of releases to prevent runoff into existing stormwater collection systems or waterways.

Compliance with federal and state laws and regulations related to the transportation, management, and disposal of hazardous materials and wastes would reduce the potential risks of human exposure. Therefore, demolition, decommission, renovation, and construction associated with the Updated FMP and the proposed individual projects would result in a less-than-significant impact related to exposure of the public or the environment to hazardous materials or wastes through the routine transport, use, or disposal of hazardous materials. This topic is not discussed further in the EIR.

Operations. The proposed framework under the Updated FMP and the uses of associated individual projects would be for institutional purposes that would not require any major handling or use of hazardous materials. However, most of the new land uses under the Updated FMP Plan and the individual projects would involve handling common types of hazardous materials related to cleaning and building maintenance such as cleansers, disinfectants, and chemical agents for sanitation. These commercial products would be used in small amounts and are labeled to inform users of potential risks and appropriate handling procedures. Any release would be localized and cleaned up as it occurs. Moreover, these commercial products are typically consumed during use. Therefore, operations associated with the Updated FMP and associated individual projects would not result in the production of significant quantities of hazardous waste.

All hazardous materials generated and/or used on the CCSF Main Campus or centers would be managed in accordance with all relevant federal, state, and local laws, including the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Given compliance with these regulations, the transport, use, and disposal of hazardous materials would not pose a significant hazard to the public or the environment.

Compliance with the federal, state, and local requirements would minimize potential exposure of site personnel and the public to any accidental releases of hazardous materials or waste and protect against potential environmental contamination. In addition, the transport of hazardous materials would comply with the California Highway Patrol and the California Department of Transportation. Because compliance with existing regulations is mandatory, operational activities related to implementation of the Updated FMP and the associated individual projects would not create a significant hazard for the public or the

environment through the routine transport, use, or disposal of hazardous materials. This impact would be less than significant and would not be discussed further in the EIR.

Impact HAZ-2: **The Updated FMP program and associated individual projects would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.** ***(Potentially Significant; Less than Significant with Mitigation)***

Construction. A variety of hazardous materials, including fuels for equipment and vehicles, new and used motor oils, cleaning solvents, and paints, would be used during construction, renovation, and demolition activities. Improper handling and/or use of these materials during construction would represent a potential threat to the public and the environment. Accident prevention and containment are the responsibility of the construction contractors, and provisions for properly managing hazardous substances and wastes are typically included in construction specifications. All contractors are required to comply with applicable laws and regulations regarding hazardous materials and hazardous waste management and disposal. Construction activities that would disturb more than one acre would be required to comply with the NPDES Construction General Permit. This permit requires implementation of best management practices (BMPs) that would address the safe handling of hazardous materials, and would include spill response measures to contain any incidental release of hazardous materials. The use of construction BMPs implemented as part of a Storm Water Pollution Prevention Plan (as discussed further in Section 4.9, Hydrology and Water Quality) as required by the NPDES Construction General Permit would minimize the potential adverse effects from accidental release of hazardous materials or wastes.

Examples of hazardous materials management include preventing the disposal or release of hazardous materials onto the ground or into groundwater or surface water during construction and providing completely enclosed containment for all refuse generated in the planning area. In addition, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to a permitted waste facility for treatment, storage, and/or disposal. As a result, proper use and disposal of these materials would not pose a significant risk to the public and the environment. However, accidental spills or unauthorized releases during construction, renovation, or demolition activities could result in a potential soil contamination. In addition, soils in the project area may be contaminated due to past uses and spills at the project site. **Mitigation Measure HAZ-1** would require submitting a remediation plan to the appropriate agency in the event of accidental spills or if contaminated soil or groundwater is encountered during excavation. In addition, **Mitigation Measure HAZ-2** requires a preparation of a hazardous materials contingency plan to manage impacts from accidental spills or contaminated soils if discovered during construction or the

implementation of any other activity under the Updated FMP. With implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, the potential impact of the Updated FMP and associated individual projects related to accidental hazardous materials releases during demolition, decommission, renovation, and construction would have a less-than-significant impact on human health and/or the environment. This topic is not discussed further in the EIR.

Operations. Routine operation under the Updated FMP would include the use of chemical reagents, solvents, fuels, paints, and cleansers that are currently used as part of facilities and landscape maintenance. As discussed under Impact HAZ-1 above, all chemicals used on site would continue to be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR 4.5). Compliance with state regulations regarding handling and storage of hazardous materials during operation would reduce the potential hazards to the public and environment related to accidental release of hazardous materials to a less-than-significant level. This topic and is not discussed further in the EIR.

MM HAZ-1: Soil and Groundwater Contamination

If evidence of contaminated soil and/or groundwater, such as odors, oil sheen, or discolored soil, is encountered during excavation or grading activities, the construction contractors shall stop work and immediately inform the College. An environmental hazardous materials professional shall be contracted to conduct soil and groundwater analyses to determine if the encountered materials pose any risk to the public or construction workers. In the event that any potential risk is identified, the construction contractor shall prepare and submit a remediation plan to the appropriate agency and comply with all federal, state, and local regulations. The soil remediation plan could include excavation and on-site treatment, excavation and off-site treatment or disposal, and/or treatment without excavation. Remediation methods for cleanup of contaminated groundwater could include in situ treatment, extraction and on-site treatment, or extraction and off-site treatment and/or disposal. Construction plans shall be modified or postponed to ensuring construction will not inhibit remediation activities and will not expose the public or construction workers to hazardous conditions.

MM HAZ-2: Hazardous Materials Contingency Plan

A hazardous materials contingency plan shall be prepared prior to the start of any construction activity. The contingency plan shall be implemented during demolition,

decommission, renovation, and construction activities for the project. The hazardous materials contingency plan shall include, at a minimum, the following:

- Identification of known areas with hazardous waste and hazardous materials of concern
- Procedures for temporary cessation of construction activity and evaluation of the level of environmental concern
- Procedures for restricting access to the contaminated area except for properly trained personnel
- Procedures for notification and reporting, including internal College management and public agencies, as needed
- Health and safety measures for removal and excavation of contaminated soil
- Procedures for characterizing and managing excavated soils
- Procedures for certification of completion of remediation

Site workers shall be familiar with the hazardous materials contingency plan and shall be fully trained on how to identify suspected contaminated soil.

Impact HAZ-3: **The Updated FMP program and associated individual projects would not result in hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste, but would involve the usage of minor amounts of routine hazardous materials within one-quarter mile of an existing or proposed school.** ***(Potentially Significant; Less than Significant with Mitigation)***

Construction. Demolition, decommission, renovation, and construction activities under the Updated FMP and the proposed individual projects at the Main Campus could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Archbishop Riordan High school is adjacent to the northwest boundary of the Main Campus and Lick Wilmerding High School lies approximately 85 feet to the south across Ocean Avenue. As discussed under Impact HAZ-1 and HAZ-2, above, hazardous materials used during construction would be managed in accordance with applicable laws and regulations. **Mitigation Measure HAZ-2** would require preparation of a hazardous materials contingency plan to manage impacts from accidental spills or contaminated soils if discovered during construction or the implementation of any other activity under the Updated FMP. With adherence to relevant federal and state laws and regulations and implementation of **Mitigation Measure HAZ-2** potential impacts on nearby receptors during construction would be less than significant. This topic is not discussed further in the EIR.

Operation. The primary exposure pathway of concern for children at nearby schools is through the inhalation of air contaminants, such as particulate matter. Sources of hazardous emissions during project construction and operation include diesel particulate matter (DPM) from vehicle exhaust and emergency generators. The effects of DPM emissions, including construction emissions, are addressed in **Section XXX, Air Quality**. As discussed under Impact HAZ-1 and HAZ-2 above, operations under the Updated FMP including the proposed individual projects would continue to comply with existing regulatory requirements. Therefore, implementation of the Updated FMP would not result in any adverse exposure to hazardous emissions to existing or future schools within, or in the vicinity of, the campus site and the impacts would be considered less than significant. This topic is not discussed further in the EIR.

Impact HAZ-4: The Main Campus is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 but would not create a significant hazard to the public or the environment. ***(Less than Significant)***

As noted above, a former underground storage tank (UST) was present near the eastern edge of the Main Campus. The State Water Resources Control Board lists a closed case for the underground storage tank cleanup site (Geotracker ID TO607551313) on the eastern edge of the Main Campus.[29] According to the case closure summary, the UST was used to store 1,500 gallons of gasoline. Following the removal of the UST, analyses of soil samples detected the presences of hydrocarbons and therefore, additional over-excavation was conducted to remove the residual contaminants. No groundwater was encountered during removal of the UST. Clean imported fill was used to backfill the cavity.[30]

Therefore, although the project site is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5, the proposed project would not create a significant risk to the public or the environment from exposure to hazardous materials from historical site uses. The impact would be less than significant, and no mitigation measures are necessary. This topic is not discussed further in the EIR.

29 State Water Resources Control Board. GeoTracker. Available at: https://geotracker.waterboards.ca.gov/.

30 City and County of San Francisco Department of Public Health. 2005. Remedial Action Completion Certification. Available at: https://geotracker.waterboards.ca.gov/site_documents/4496640861/11614CCL.pdf

Impact HAZ-5: **The Updated FMP program and associated individual projects would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.** ***(Less than Significant)***

CCSF has emergency procedures regarding building evacuation, earthquakes, fire, hazardous materials release, and other lockdown protocols.[31] The Updated FMP would not make changes or interfere with these protocols.

The City has a published Emergency Response Plan, prepared by the San Francisco Department of Emergency Management as part of the City's Emergency Management Program, which also includes plans for hazard mitigation and disaster preparedness and recovery. The Updated FMP would not obstruct implementation of the City's Emergency Response Plan or interfere with emergency evacuation planning because none of the project components have any characteristics (e.g., permanent road closures) that would physically impair or otherwise interfere with emergency access, response, or evacuation.

Implementation of the Updated FMP including the proposed individual projects would not impair the implementation of an adopted emergency response or evacuation plan. This impact would be less than significant and is not discussed further in the EIR.

Impact C-HAZ-1: **The Updated FMP program and associated projects, in combination with other past, present, and reasonably foreseeable future development, would not make a considerable contribution to any cumulative impact related to hazards and hazardous materials.** ***(Less than Significant)***

Environmental impacts related to hazards and hazardous materials are generally site-specific. Nearby cumulative development projects would be subject to the same fire safety and hazardous materials handling and disposal regulations applicable to the Updated FMP and associated projects. Although implementation of the Updated FMP could result in potential impacts related to demolition, decommission, or renovation of structures that may contain hazardous building materials. In addition, the proposed project could result in a significant impact related to accidental release of hazardous materials. The proposed project would conform with applicable regulatory requirements. In addition, implementation of identified **Mitigation Measures HAZ-2** would reduce those impacts to a less-than-significant level. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable

31 City College of San Francisco. Emergency Procedures. Available at: https://www.ccsf.edu/campus-police/emergency-procedures.

future projects in the project vicinity to create a significant cumulative impact related to hazards and hazardous materials. This topic will not be discussed in the EIR.

3.10 Hydrology and Water Quality

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

The Framework of the Updated FMP Program at the CCSF Main Campus and centers would not immediately result in new buildings, with the exception to the new SSC building at the Main Campus. The Updated FMP program focuses on optimizing the use of indoor space to meet the needs of the forecasted growth with the Updated FMP timeframe and calls for the compliance with the College Sustainability Plan. The Updated FMP Program would entail improvements to the interior spaces of existing facilities and allocation of college functions in an efficient manner. Therefore, this section evaluates hydrology and water quality impacts that could result from development proposed individual projects at the Main Campus.

Future improvement projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all relevant state laws and regulations but would not require additional CEQA analysis.

The CCSF Main Campus and centers are not located within a 100-year flood hazard area designated on the SFPUC flood map nor in an area identified as subject to potential inundation in the event of a tsunami or a dam or levee failure. [32, 33] No mudflow hazards exist at the project site because the project site is not located in the immediate vicinity of any seismically induced landslide-prone areas. A seiche is an oscillation of a partially enclosed water body, such as a bay, which may cause local flooding. A seiche could occur in San Francisco Bay due to seismic or atmospheric activity. The Main Campus is located over 3 miles west of the San Francisco Bay in an area of the city that varies from approximately 240 feet above mean sea level (msl) to above 350 feet above msl. The centers are located throughout San Francisco with Evans Center being the

32 San Francisco Public Utilities Commission. 100-Year Storm Flood Risk Map. Available at: https://sfplanninggis.org/floodmap/.

33 California Department of Conservation. California Official Tsunami Inundation Maps. Available at: https://www.conservation.ca.gov/cgs/tsunami/maps.

closest to a body of water at approximately 1,800 feet south of the Islais Creek Channel, which drains into the San Francisco Bay. Therefore, release of pollutants from project inundation in flood hazard, tsunami, or seiche zones would not occur. Topic (d) is not applicable to any of the project components including the Updated FMP Program and the associated individual projects.

Surface Water and Hydrology

Groundwater Hydrology. The CCSF Main Campus lies on the dividing line for the Westside (ID 2-35) and Islais Valley (ID 2-33) Groundwater Basins. The CCSF centers are within either the Downtown San Francisco Groundwater Basin (Downtown Basin) (ID 2-40), Westside, or Islais Valley Groundwater Basins.[34] Groundwater recharge occurs from the infiltration of rainfall, landscape irrigation, or leakage from sewer pipes. Recharge due to leakage from municipal water and sewer pipes accounts for about half of the total recharge of groundwater in the San Francisco area. Groundwater in the Downtown Basin is not currently used for water supply, nor do plans exist for this basin to be used for future water supply. In April 2017, the SFPUC began pumping groundwater from the Westside Groundwater Basin aquifer that extends from approximately 300 to 600 feet below ground. The groundwater is treated and blended with regional drinking water supplies before it is delivered to customers.[35] At the Main Campus, groundwater was encountered at an elevation of approximately 258 feet at the Health and Wellness site. Groundwater on the site is likely to consist of seepage through the fractures in the bedrock rather than an established phreatic surface. Groundwater also may be perched on the top of bedrock.[36]

Water Quality. The quality of the stormwater runoff from the CCSF Main Campus and centers is affected primarily by discharges from point sources of pollutants such as outfalls. Other discharge sources generally result from diffuse sources, such as land runoff, precipitation, or seepage. Water quality in the vicinity of the CCSF Main Campus and centers is directly affected by stormwater runoff from streets and traffic pollutants, as well as from landscape fertilizers. Other diffuse discharge sources also include sediment with associated pollutants from soil erosion, trash, and other pollutants. The Regional Water Quality Control Board (RWQCB) has listed San Francisco Bay as an impaired water body for chlordane,

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34 California Regional Water Quality Control Board, San Francisco Bay Region. 2019. San Francisco Bay Basin (Region 2) Water Quality Control Plan. Available at: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/docs/ADA_compliant/BP_all_chapters.pdf.

35 San Francisco Public Utilities Commission. San Francisco Groundwater Supply Project. Available at: https://www.sfwater.org/index.aspx?page=1136.

36 Rutherfore and Chekene. 2019. Geotechnical Investigation: Student Success Center City College of San Francisco.

dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds, furan compounds, invasive species, mercury, polychlorinated biphenyls (PCBs) (including dioxin-like compounds), selenium, and trash.[37]

Groundwater Quality. Groundwater beneath the San Francisco Peninsula is a mixed cation bicarbonate type. The primary constituents of concern are high total dissolved solids, nitrate, boron, and organic compounds. Although there is no published groundwater quality information available for the Downtown Basin, limited water quality data for the surrounding basins are available and show that the general character of groundwater for all basins beneath the entire San Francisco Peninsula is similar. Groundwater beneath the San Francisco Peninsula has a high mineral content and is considered generally "hard." High concentrations of nitrates, iron, and manganese and elevated chloride, boron, and total dissolved solids concentrations are typically found in groundwater within the Downtown Basin. Elevated concentrations of nitrate and chloride are common, especially at shallower depths.[38]

Combined Sewer System and Overflows. The combined sewer system can be divided into the Bayside and Westside drainage basins which collect wastewater and stormwater from the east and west sides of the City, respectively. Within the Main Campus, the boundary between the two basins is marked roughly by Frida Kahlo Way. The Bayside drainage basin includes five urban watersheds that include North Shore, Channel, Islais, Sunnyvale and Yosemite. The Westside drainage basin include three urban watersheds that include Richmond, Sunset, and Lake Merced. Wastewater and stormwater flows from east of Frida Kahlo Way would drain to the Islais Creek urban watershed. Flows from west of Frida Kahlo Way would drain to the Lake Merced urban watershed.[39]

For the Bayside drainage area, wastewater flows are transported to the Southeast Treatment Plan. All dry and wet weather discharges from the combined sewer system, through either the outfalls or the combined sewer overflow (CSO) structures, are operated in compliance with the federal Clean Water Act and the State's Porter-Cologne Water Quality Control Act through National Pollutant Discharge Elimination System (NPDES) permit CA0037664 issued by the California Regional Water Quality Control Board, San

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37 California State Water Resources Control Board. Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report). Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml.

38 California Department of Water Resources. California's Groundwater Bulletin 118. Basin Descriptions: Islais Valley Groundwater Basin. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/2_033_IslaiValley.pdf.

39 San Francisco Planning Department. 2007. Balboa Park Station Area Plan. Available at: https://default.sfplanning.org/MEA/2004.1059E_Balboa_FEIR_Pt1.pdf.

Francisco Bay Region.[40] The North Point Wet-Weather Facility operates when the Southeast Treatment Plant approaches capacity (approximately 250 million gallons per day).

For the Westside drainage area, wastewater flows are transported to the Oceanside Water Pollution Control Plant (OWPCP). All dry and wet weather discharges from the combined sewer system to the ocean, through either the Southwest Ocean Outfall or the CSO structures, are operated in compliance with the federal Clean Water Act and the State's Porter-Cologne Water Quality Control Act through National Pollutant Discharge Elimination System (NPDES) permit CA0037681 issued by the CRWQCB and the U.S. EPA.[41]

Impact HYD-1: **The Updated FMP and associated individual projects would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.** ***(Potentially Significant; Less than Significant with Mitigation)***

Construction. Activities associated with the individual projects under the Updated FMP at the Main Campus would include demolition, decommission, renovation, and construction. Land-disturbing activities and the placement of stockpiles in proximity to storm drain inlets or nearby surface waters may result in a temporary increase in sediment loads in San Francisco Bay and the Pacific Ocean. Pollutants, such as nutrients, trace metals, and hydrocarbons attached to sediment, can be transported with sediment to downstream locations and degrade water quality. The delivery, handling, and storage of construction materials and wastes (e.g., concrete debris), as well as the use of heavy construction equipment, could also result in stormwater contamination, thereby affecting water quality. Construction activities may involve the use of chemicals and operation of heavy equipment, which could result in accidental spills of hazardous materials (e.g., fuel and oil) during construction activities. Such spills could enter the groundwater aquifer or nearby surface water bodies from runoff or storm drains. Constituents in fuel, oil, and grease can be acutely toxic to aquatic organisms and/or bioaccumulate in the environment.

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40 California Regional Water Quality Control Board, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037664, Order No. R2-2013-0029, for City and County of San Francisco Southeast Water Pollution Control Plant, North Point Wet Weather Facility, and Bayside Wet Weather Facilities. Adopted August 14, 2013. Available at: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2013/R2-2013-0029.pdf.

41 California Regional Water Quality Control Board, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037681, Order No. R2-2019-0028, for City and County of San Francisco Oceanside Water Pollution Control Plant, Wastewater Collection System, and Westside Recycled Water Project. Adopted September 11, 2019. Available at: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2019/R2-2019-0028.pdf.

All project construction activities resulting from implementation of the proposed individual projects at the Main Campus would be subject to existing regulatory requirements. Because implementation of the proposed project would collectively require construction activities resulting in a land disturbance of more than 1 acre, the District would be required to obtain Construction General Permit (CGP) under the modified 2017 NPDES for Storm Water Discharges from Construction Activities. Before the beginning of construction, the District would file a Notice of Intent with the State Water Regional Control Board (SWRCB) that would include a SWPPP. The SWPPP would incorporate BMPs, such as silt fences, stockpile containment, slope stabilization structures, tire washing, and street sweeping, in order to prevent, or reduce to the greatest feasible extent, adverse impacts to water quality from erosion and sedimentation. The SWPP would also identify BMPs for the storage and handling of the backfill and the disturbed soil. A copy of the applicable SWPPP would be kept at the construction site and be available for County/Division of the State Architect (DSA) review on request. Compliance with the NPDES CGP and implementation of BMPs would prevent construction-related contaminants from reaching impaired surface waters and contributing to urban impacts on water quality in the San Francisco Bay and Pacific Ocean. These regulatory requirements would ensure that water quality impacts resulting from construction-related activities and ground disturbance activities would be less than significant. This topic is not discussed further in the EIR.

Management of Demolition Activities and Debris. Section 3.9, Hazards and Hazardous Materials, discusses the potential hazardous materials issues related to demolition activities, such as the potential presence of lead-based paint or asbestos. Furthermore, **Section 3.9** addresses the possibility of spills, leaks, transport, and/or storage of hazardous materials and includes measures to ensure they are not released to the environment. Implementation of **MM-HAZ-1** and **HAZ-2** would ensure that transport, use, and/or storage of hazardous materials would not have adverse effects with regard to water quality.

Therefore, potential water quality impacts related to a violation of water quality standards, the degradation of water quality or stormwater runoff, or conflict with or obstruct implementation of a water quality control plan during construction of the proposed individual projects under the Updated FMP would be less than significant. This topic is not discussed further in the EIR.

Operations. The Updated FMP would involve operation and maintenance of educational and office spaces, open space, and landscaping. These operational activities could increase existing levels of pollutants at the campus, such as trash, sediments, pesticides, bacteria, nutrients, metals, oils, and other toxins. These pollutants could reach surface waters in the vicinity through storm drains and ultimately discharge into San Francisco Bay and the Pacific Ocean.

Operation and maintenance activities associated with the Updated FMP would generate pollutants from landscape maintenance, building maintenance, the storage of materials and substances, and vehicle use.

However, good housekeeping practices, such as regular trash collection and sweeping, would continue to be implemented onsite.

Runoff from impervious surfaces would be drained by new and existing pipes that would be connected to the existing combined sewer system that serves the Main Campus. In compliance with the NPDES Phase II MS4 permit, stormwater management measures would include low-impact development (LID) techniques, such as pervious pavement, to reduce pollutant discharges. Implementation of the LID techniques would minimize discharge of pollutants and eliminate prohibited non-stormwater discharges as part of the final drainage design. Furthermore, as applicable, any improvements under the Updated FMP that would be constructed outside the campus site boundary, such as the new access to the SSC, would be subject to post-construction stormwater controls in accordance with the City Public Works Code and in compliance with the City's Stormwater Management Ordinance. Therefore, with inclusion of post-development BMPs and NPDES drainage control requirements and compliance with the City's Stormwater Management Ordinance, the operational impacts of the Updated FMP and proposed individual projects related to water quality and waste discharge requirements would be less than significant. This topic is not discussed further in the EIR.

Impact HYD-2: **The Updated FMP program and associated individual projects would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.** ***(Less than Significant Impact)***

Construction. Groundwater beneath the location of the proposed SSC building was not encountered during field exploration. However, groundwater was encountered at an elevation of approximately 258 feet at the Health and Wellness Center. Excavation associated with the SCC construction would not extend to groundwater. However, in the event that groundwater is encountered during construction, dewatering would be conducted on a one-time or temporary basis during the construction phase but would not result in a loss of water that would substantially decrease groundwater supplies or conflict with or obstruct implementation of a sustainable groundwater management plan. The District would seek approval from the Department of Toxic Substances Control prior to excavation or other soil-disturbing activities to reduce impacts on groundwater sources. The water supply for construction (e.g., concrete mixing, material washing) would most likely come from nearby hydrants and/or be trucked to the site. The District would require the contractor to comply with the San Francisco Public Works Code article 21, which restricts the use of potable water for soil compaction and dust control activities undertaken in conjunction with any construction or demolition activity, unless permission is obtained from the San Francisco Public Utilities Commission. Recycled water provided at the SFPUC truck-fill station at the Southeast Water Pollution Control Plant would be used for soil compaction and dust control activities during project construction or

demolition. Use of recycled water during construction and demolition activities would comply with the Regulation Related to Recycled Water (Title 22) of the State Water Resources Control Board (SWRCB).

Other proposed individual projects under the Updated FMP, such as the renovation or decommission activities would not include construction of new structures that would extend below the groundwater table or increase impervious surfaces.

Implementation of the Updated FMP Program and the associated proposed individual projects would comply with the regulatory controls described above and therefore would not substantially decrease groundwater supplies, interfere substantially with groundwater recharge, or conflict with or obstruct implementation of a sustainable groundwater management plan. Potential groundwater impacts associated with construction activities and degradation of the groundwater supply would be less than significant. This topic is not discussed further in the EIR.

Operation. New impervious areas can reduce rainfall infiltration capacities that naturally recharge groundwater. However, implementation of the Updated FMP and the associated individual projects at the Main Campus would not interfere with groundwater recharge because, renovation and decommission activities would not change the existing impervious surface coverage. Demolition of Smith/Statler building and the theater within the Creative Arts building would result in the development of new landscaped areas, which may reduce existing impervious surfaces. Construction of the SSC building would replace the existing Conlan Hall and provide landscaped area around the new buildings. Therefore, the proposed developments would not increase impervious surface coverage or otherwise reduce infiltration or the size of groundwater recharge areas. New open space areas under the Updated FMP would comply with the District's Sustainability Plan and include stormwater BMPs to promote the infiltration of stormwater, such as decreasing the amount of existing impervious surfaces, which may increase recharge to the groundwater basin. Operation of the Main Campus and centers pursuant to the Updated FMP would not use groundwater supplies or increase groundwater demand; therefore, operations would not substantially decrease groundwater supplies or conflict with or obstruct implementation of a sustainable groundwater management plan. The impact of the Updated FMP and associated individual projects on groundwater supplies and recharge would be less than significant. This topic is not discussed further in the EIR.

Impact HYD-3: **The Updated FMP program and associated individual projects would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site, or substantially increase the rate or amount of surface**

runoff in a manner that would result in flooding on or off site. *(Less than Significant)*

Construction. Grading, excavation, trenching, and other construction activities necessary for new construction, renovation, decommission, and demolition activities could result in disturbance of soils at the Main Campus. Construction site runoff can contain soil particles and sediments from these activities. Dust from construction sites can also be transported to other nearby locations where the dust can enter runoff or water bodies. Under existing conditions, stormwater that is not infiltrated through landscaped areas moves as sheet flow towards street gutters, swales, and the inlets of underground storm drains, which direct runoff to the City combined sewer system. If rainfall is sufficiently intense and/or long lasting, and particularly if storm drain inlets have not been cleared of leaves and/or other debris, water may temporarily pond in low-lying areas. Under the Updated FMP and associated individual projects, stormwater runoff would generally behave in the same manner, and drainage plans would ensure hydrologic and water quality standards are met. The campus would continue to direct stormwater runoff to the City's combined sewer system.

As discussed in the setting, impervious surfaces currently make up approximately 70 percent of the campus area, with the rest consisting of lawns, landscaping, and natural areas. The proposed new construction of the SSC building would occur on previously paved surfaces and within the footprint of demolished facilities. Proposed renovations, decommission, and demolition would not substantially change the amount or distribution of impervious surfaces on campus. The demolition of the theater within the Creative Arts building could increase the amount of impervious surfaces relative to existing conditions.

As described above under **Impact HYD-1**, because implementation of the proposed project would collectively require construction activities resulting in a land disturbance of more than 1 acre, the District would be required to obtain the CGP under the modified 2017 NPDES. The NPDES CGP would require the preparation of a SWPPP that would include site-specific BMPs detailing the use, location, and placement of sediment and erosion control devices. The SWPPP would include erosion and sediment control BMPs to minimize the potential for erosion and sedimentation. BMPs would include, but would not necessarily be limited to, filtering runoff during construction and avoiding earthwork operations during the rainy season. Therefore, with implementation of erosion and sedimentation control BMPs as required by the NPDES CGP, the potential changes to drainage patterns during construction would have a less-than-significant impact. This topic is not discussed further in the EIR.

Operation. Because the proposed individual projects under the Updated FMP are in the initial planning stages (i.e., no detailed layout or designs are available), the increase or decrease in impervious surfaces that would occur as a result cannot be quantified at this time. However, the campus is already largely built-out

and surrounded by urban land uses. Therefore, the proposed individual projects are not anticipated to substantially modify existing topography, drainage shed boundaries, or runoff rates/patterns. The District's Sustainability Plan and Design Standards require contractors to incorporate design standards that would increase on-site infiltration, minimize storm-water runoff, and reduce contaminants during and after construction. As described under **Impact HYD-1** above, new SSC building proposed under the Updated FMP would be subject to the most current standards for drainage design and the Small Phase II MS4 permit, which generally requires the contractors to maintain pre-construction drainage patterns when designing the drainage plan for a site. In addition, as applicable, any improvements under the Updated FMP that would be constructed outside the campus site boundary (such as access to the SSC) would be subject to post-construction stormwater controls in accordance with the City Public Works Code and in compliance with the City's Stormwater Management Ordinance.

Compliance with applicable state regulations, the District's Sustainability Plan and Design Standards, and the City's Stormwater Management Ordinance would reduce impacts of the proposed individual projects on drainage patterns and long-term effects on water quality to a less than significant level. This topic is not discussed further in the EIR.

Impact HYD-4: **The Updated FMP and associated projects would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.** ***(Less than Significant)***

Similar to existing conditions, under buildout of the Updated FMP, stormwater runoff within developed areas of the Main Campus would continue to be collected by on-site stormwater collection facilities and routed off-site to the City's Combined Sewer System. Due to the relatively small change in impervious surfaces and the implementation of LID stormwater features, storm water flows from the campus site would not adversely affect stormwater drainage capacity Therefore, the potential impacts related to flooding on- or off-site, stormwater drainage capacity, or additional sources of polluted runoff would be less than significant. This topic is not discussed further in the EIR.

Impact HYD-5: **The Updated FMP would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (*Less than Significant*)**

The Updated FMP would be constructed in compliance with all applicable federal, state, and local regulations governing water quality and discharges into surface and underground bodies of water. Runoff from the College's Main Campus and centers would drain into the city's combined sewer system where it

is treated before being discharged to the San Francisco Bay or the Pacific Ocean. Therefore, the Updated FMP would not conflict with applicable water quality and groundwater management plans and this impact would be less than significant. This topic is not discussed further in the EIR.

Impact C-HYD-1: **Construction and operation of the Updated FMP and associated individual projects, in conjunction with other cumulative development within the City of San Francisco, would not cumulatively violate water quality standards or waste discharge requirements, or otherwise substantially degrade water quality or degrade the drainage pattern of the site or area.** ***(Less than Significant)***

Cumulative projects have the potential to discharge pollutants, including sediment, off-site during construction and operational activities, which could further degrade runoff directed into the City's Combined Sewer System. However, similar to the Updated FMP, cumulative projects would be required to comply with federal, state, and local regulations related to stormwater water quality. These regulations include, but are not limited to, the NPDES CGP and also the City's Stormwater Management Ordinance. All cumulative projects that disturb more than one acre would include preparation and implementation of a SWPPP that would include BMPs to reduce pollutants in stormwater and other non-point source runoff during construction. These regulatory requirements also include LID design measures which must be implemented into project designs and are created to minimize off-site discharges and reduce pollutant loading. Therefore, with adherence to these existing regulatory requirements the potential cumulative impact related to water quality standards, waste discharge requirements, and drainage patterns would be less than significant. This topic is not discussed further in the EIR.

3.11 Land Use Planning

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

The City and County of San Francisco, a relatively densely developed urban environment that consists of a number of neighborhoods with a mix of land uses. The existing Main Campus is a 68.1-acre project site, situated on the west and east of Frida Kahlo Way between Ocean Avenue and Judson Avenue.

The main campus and Balboa reservoir are in the P (Public Use) zoning district. The P district applies to "land that is owned by a governmental agency and in some form of public use, including open space," and allows "[p]ublic structures and uses of the City and County of San Francisco, and of other governmental agencies…"

As a state-funded entity, the District is not subject to local government planning documents or policies. However, this District is considering local land use policies in the review of the proposed project. In addition, as needed, the District consults with the City agencies and complies with applicable ordinances and permits on improvements encroaching on the City's right-of-way.

Future improvement projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR and comply with applicable regulations and policies but would not require additional CEQA analysis.

Impact LU-1: The Updated FMP program and associated individual projects would not physically divide an established community. *(Less than Significant)*

The Updated FMP and associated projects would not create a new barrier or obstruction that would physically divide the community. Rather, the Updated FMP would include accessibility improvements throughout and within the campus such as a circulation and connectivity framework based on directing all pathways to the Middle Level of the campus and facilitating pedestrian and bicycle access between the different campus functions. The plan calls for engaging the campus life with the surrounding community and facilitates pedestrian activity through the College. The plan supports improvements to pedestrian and bicycle paths along Frida Kahlo Way and Ocean Avenue and calls for designing new facilities along Frida Kahlo Way closer to the street to encourage pedestrian activities.

The Updated FMP aims to improve accessibility on campus and the surrounding area with a focus on alternative transportation with strategies that include safe transitions from transit/bikes to pedestrian access, ride and bike share programs, and transit incentives.

The Updated FMP would not result in development outside of the established college campus or centers. It would not include any activities that would result in the division of surrounding neighborhoods. Therefore, the proposed project would have a less than significant impact with respect to physically dividing the surrounding community.

Impact LU-2: **The Updated FMP program and associated individual projects would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.** ***(Less than Significant)***

As Discussed in **Chapter 3.0, Project Description** of the EIR, the Updated FMP is intended as a long-range plan that would direct the development of the City College through the year 2030 and support the goals and strategies of the City College's Education Master Plan by providing facilities improvement, renovation, and new construction over the next 10 years, building a 21st century community college, and modernizing and maximizing space utilization.

The Updated FMP is intended to support projected population at the College's Campus and centers. At the Main Campus, the Updated FMP would restructure the facilities based on function zones and would group similar operations in the same areas for efficient campus operations. The proposed land use framework would have the campus facilities located in the middle level to east and west of Frida Kahlo Way designated for instructional facilities. The campus Lower Level would include the facilities for physical education/athletics (Wellness Center, Rush Stadium, and athletic fields). Areas designated for core services in the Updated FMP would include the main entrance on Ocean Avenue and Frida Kahlo Way, the northwest corner of the campus (Friday Kahlo Way and Judson Avenue), and the Lower Level southwest of the stadium. Areas designated for campus support would be south of the stadium and another northeast of the Cloud Hall for these functions.

In compliance with the Memorandum of Agreement (MOU) between the District and the adjacent Sunnyside Neighborhood Association, the wooded area in the northeast corner of the campus would be maintained as a buffer between the Sunnyside houses and the Main Campus.

The proposed functional zone changes would remain consistent with the existing institutional uses of the campus facilities. In addition, the proposed changes would all be on the campus site and would not affect existing land uses outside of the campus site boundaries.

As noted above, as a state project, the College is not subject to municipal land use enactments, such as the San Francisco General Plan or Balboa Park Station Area Plan. However, the analysis is examining consistency with local planning policies for informational purposes. Conflicts with existing plans and policies do not, in themselves, indicate a significant environmental effect related to the topic of Land Use and Planning within the meaning of CEQA, unless the project substantially conflicts with a land use plan/policy that was adopted for the purpose of avoiding or mitigating an environmental effect, such that a substantial adverse physical change in the environment would result. The Main Campus is within the

boundaries of the Balboa Park Station Area Plan. The Balboa Park Station Area Plan designates the Main Campus for Public Facilities. The use of the campus as a community college is consistent with the City's zoning designation. The Balboa Park Station Area Plan aims to "integrate the college with the community, the neighborhood commercial district, and the transit station area." The planning framework of the Updated FMP would be consistent with the planning strategy of the Balboa Park Station Area Plan as it aims at strengthening the connection between the Main Campus and centers and surrounding neighborhoods. The proposed plan's open space and circulation framework aims at creating an inviting campus atmosphere to engage pedestrians from the neighborhood to experience the campus buildings, artworks, and landscapes. The District would adhere with local applicable ordinances and permits for the purpose of avoiding or mitigating an environmental effect such that a substantial adverse physical change in the environment related would result. Therefore, implementation of the Updated FMP would have a less-than-significant impact regarding conflict with land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect. This topic is not discussed further in the EIR.

Impact C-LU-1: **The Updated FMP program and associated individual projects, in combination past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative land use impacts. *(Less than Significant)***

The Updated FMP provides a long-range planning framework at the College's Main Campus and centers. Besides the proposed SSC building, the Updated FMP would not include any new construction with the planned timeframe of 10 years. Besides the individual projects analyzed in this document, no new construction opportunities are planned. Implementation of the Updated FMP would require renovation activities to maximize the use and modernize existing facilities and better serve the College's educational operations. Other planned improvements would include open spaces and plazas and pedestrian facilities. Conflicts with existing land use plans and policies are policy issues that do not, in themselves, give rise to a significant physical impact related to land use under CEQA. For these reasons, the conflicts with plans and policies, considered with those of past, present and foreseeable projects, could not combine to result in a significant cumulative impact related to land use.

As noted above, implementation of the Updated FMP would be within the boundaries of the College's Main Campus and centers. Furthermore, other development projects would be subject to the Balboa Park Station Area Plan. Designs would aim to enhance neighborhood connectivity, improve public spaces, and increase the safety of streets and intersections for all users. For these reasons, the Updated FMP, in combination with other past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable land use impact. Accordingly, cumulative effects of the Updated FMP including

the proposed individual projects related to land use would be less than significant. This topic is not discussed further in the EIR.

3.12 Mineral Resources

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

The project site is not designated as a mineral resource zone, and no known or potential mineral resources are located on the campus. Land in the City and County of San Francisco includes a number of different Mineral Resource Zone classifications as defined by the California Division of Mines and Geology (CDMG) under the Surface Mining and Reclamation Act of 1975. The area of the Main Campus west of Frida Kahlo Way is designated as MRZ-1, which is used for area "where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. The portion of campus east of Frida Kahlo Way is mostly designated as MRZ-4, which is an area with no known mineral occurrences or there is too little information to indicate either the presence or absence of significant mineral resources.[42] Therefore, the project would have no impact on the loss of availability of a known mineral resource or locally important mineral resource recovery site. This topic is not discussed further in the EIR.

[42] California Department of Conservation, Division of Mines and Geology. 1987. Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area: Classification of Aggregate Resource Areas: South San Francisco Bay Production-Consumption Region.

3.13 Noise

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

Methodology

On-Site Construction Activities. Noise levels associated with on-site construction activities were modeled pursuant to the ISO 9613-2 (1996) sound attenuation methodology using the SoundPLAN Essential model (version 5.1). Noise modeling analysis is included in **Attachment D, Noise**, of this Initial Study. This software package considers reference equipment noise levels, noise management techniques, distance to receptors, and any attenuating features to predict noise levels from sources like construction equipment. The distance from construction equipment noise sources (e.g., engines and tailpipes) assume that vehicles would not be capable of operating directly where the project's property line abuts adjacent structures. These vehicles would retain some setback to preserve maneuverability, in addition to operating at reduced power and intensity to maintain precision at these locations.

Since construction noise associated with Updated FMP individual projects would occur over a 6-year period and at various locations on campus, construction phasing was summarized into four phases. No

phase overlaps with another but often includes work at multiple locations on campus, as illustrated in **Table 8, Phasing of Construction Noise Impacts**.

Table 8
Phasing of Construction Noise Impacts

Phase	Construction Type	Building	Start	End
1	Demolition	Conlan Hall, EOPS bungalow	July 2021	December 2021
2	Construction	Student Success Center	January 2022	June 2023
3	Demolition	Creative Arts Building	December 2024	May 2025
	Renovation	Creative Arts Extension building, Cloud Hall, Science Hall	December 2023	December 2025
4	Demolition	Bungalows 600-700, Smith Statler	January 2026	December 2026
	Renovation	Student Union, Batmale Hall	July 2026	July 2027

Off-Site Construction Activities. The proposed project's off-site construction noise impact from haul trucks was analyzed by considering the project's estimated haul truck usage with existing traffic and roadway noise levels along the project's anticipated haul route. Because it takes a doubling of traffic volumes on a roadway to elevate ambient noise levels by 3 A-weighted decibels[43] (dBA),[44] the analysis focused on whether truck traffic would double traffic volumes on key roadways to be used for hauling soils to and/or from the Main Campus during construction activities. Because haul trucks generate more noise than traditional passenger vehicles, a 19.1 passenger car equivalency (PCE) was used to convert haul truck trips to a reference level conversion to an equivalent number of passenger vehicles.[45]

The City of San Francisco Noise Ordinance Section 2908 generally limits the generation of construction noise that exceeds the actual measured existing ambient noise level by 5 dB(A) at neighboring properties. Therefore, in compliance with the City's ordinance, this analysis considers increases in 5dB(A) above ambient noise levels to be significant, unless mitigated.

On-Site Operational Activities. During project operation, the project would include stationary noises from sources associated with building operations, such as heating, ventilation, and air conditioning (HVAC) systems. However, these uses are currently on campus and new HVAC equipment would not be expected

43 A-weighted decibels (dBA) is a weighted scale for judging loudness that corresponds to the hearing threshold of the human ear.

44 Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

45 Caltrans, Technical Noise Supplement Table 3-3, 2013.

to significantly impact ambient noise levels. Therefore, operational impacts are only anticipated to come from traffic noise, which is described below.

Off-Site Operational Activities. Traffic noise in the project area was estimated using average daily traffic volumes obtained from the traffic analysis prepared for the proposed project (**Section 4.2, Transportation** and **Appendix D** of the EIR). The analysis presented below analyzed off-site noise impact associated with project-related traffic on local roadways that serve the Main Campus. Because it takes a doubling of traffic volumes on a roadway to elevate ambient noise levels by 3 dBA, the analysis focused on whether auto trips generated by the proposed project would double traffic volumes on key roadways to be used to access the Main Campus.

Vibration Impacts. For analyzing vibration impacts, construction vibration damage criteria are assessed based on structural category (e.g. reinforced-concrete, steel, or timber). Guidelines of the Federal Transit Administration (FTA) consider 0.2 inch/second peak particle velocity (in/sec PPV) to be the significant impact level for non-engineered timber and masonry buildings. Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.5 in/sec PPV pursuant to FTA guidelines.[46] The FTA guidelines include a table showing the vibration damage criteria based on structural category and is presented below in **Table 9, Construction Vibration Damage Criteria.**

Table 9
Construction Vibration Damage Criteria

Building/Structural Category	PPV (in/sec)
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual. September 2018.
PPV: Peak Particle Velocity
In/sec: Inch per second

46 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual. September* 2018.

The project site is not located within an area covered by an airport land use plan, within two miles of a public airport or a public use airport, or in the vicinity of a private airstrip. Therefore, topic (c) is not applicable to the proposed project.

Environmental Setting

Noise-sensitive land uses are generally considered to include those 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. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as natural parks and recreation areas, historic sites, and cemeteries are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The Main Campus is set in a residential neighborhood with institutional and commercial uses along arterials like Ocean Avenue. Sensitive receptors within 500 feet of the Main Campus include, but are not limited to, the following representative sampling:

- Single-family residences, western side of Plymouth Avenue along the west edge of campus.
- Multi-family residences, along Ocean Avenue along the southern edge of campus.
- Archbishop Riordan High School, 175 Frida Kahlo Way; along the northern edge of campus
- Lick Wilmerding High School, 755 Ocean Avenue; 60 feet south of campus
- Seventh Day Adventist Elementary School, 66 Geneva Avenue; 305 feet south of campus.

The existing ambient noise environment in the project vicinity is typical of many areas in San Francisco, dominated by vehicular traffic. In November 2020, Impact Sciences took short-term noise measurements near the Main Campus to determine the ambient noise conditions of the neighborhood near sensitive receptors.[47] Measurements were taken at off-campus locations along the north, west, and south sides of campus that represent the noise environment for sensitive receptors near the campus. Because of

[47] Noise measurements were taken using a Quest Technologies Sound Examiner Sound Level Meter. The Sound Examiner meter complies with the American National Standards Institute (ANSI) and International Electrotechnical Commission (IEC) for general environmental measurement instrumentation. The meter was equipped with an omni-directional microphone, calibrated before the day's measurements, and set at approximately five feet above the ground.

circumstances associated with the COVID-19 pandemic, traffic levels were lower than usual and therefore the noise measurements reflect a much quieter environment. As such, these measurements are approximations of normal conditions. As shown in **Table 10, Ambient Sound-Level Readings,** the predicted noise levels along roadways near the Main Campus are generally consistent with traffic volumes on local roads. Transportation noise is the main source of noise in urban environments, largely from the operation of internal combustion engines and frictional contact between the vehicles and the ground and air.[48] While the I-280 flanks the eastern edge of campus, the influence of traffic noise from this freeway is minimal, as the right-of-way is depressed, with berms and structures attenuating noise from sensitive receptors west of the freeway.

Figure 2, Noise Monitoring Locations illustrates the noise measurement locations relative to the project site. The existing average daily noise levels for these locations are presented in **Table 10, Ambient Sound-Level Readings.**

Table 10
Ambient Sound-Level Readings

Noise Measurement Location #	dBA Leq
1. 1300 block of Plymouth Ave	46.0
2. Archbishop Riordan High School	49.8
3. 300 block of Judson Ave	49.6
4. 1100 block of Ocean Ave	60.9
5. 800 block of Ocean Ave	66.6

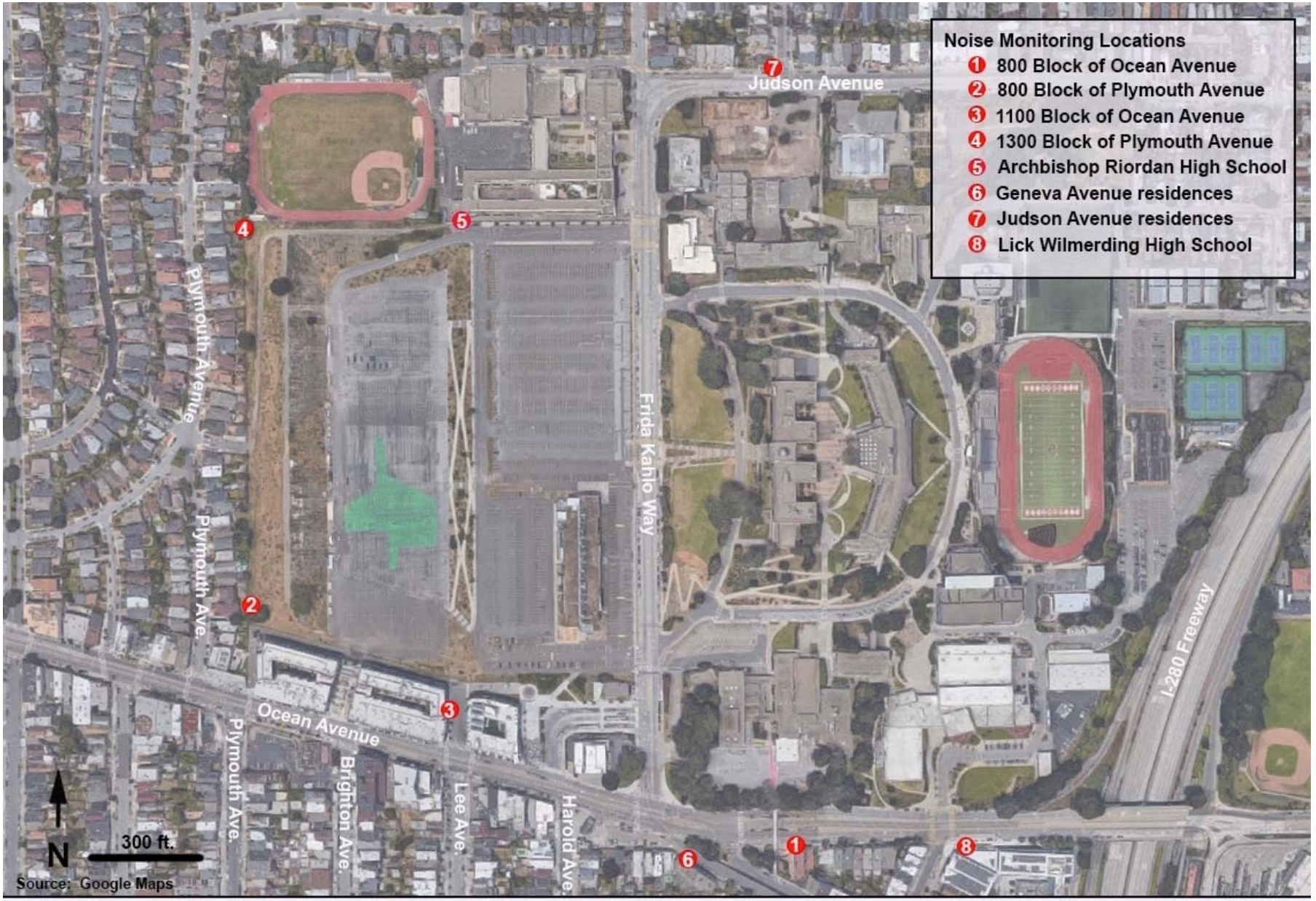
Groundborne Vibration

The only sources of groundborne vibration in the vicinity of the CCSF Main Campus and centers are heavy-duty vehicles (e.g., refuse trucks, delivery trucks, and school buses) traveling on local roadways. Vibration is often expressed in vibration decibels (VdB).Trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB, and these levels could reach 72 VdB where trucks and buses pass over bumps in the road.[49] In terms of peak particle velocity (PPV)[50] levels, a heavy-duty vehicle traveling at a distance of 50 feet can result in a vibration level of approximately 0.001 inch per second.

48 World Health Organization, https://www.who.int/docstore/peh/noise/Comnoise-2.pdf accessed November 18, 2020.

49 California Department of Transportation. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.

50 PPV refers to the movement within the ground (not surface) of molecular particles.



SOURCE: Impact Sciences, Inc., 2021

FIGURE **2**

IMPACT SCIENCES

Noise Monitoring Locations

1339.001•08/16

Impact NOI-1: **The updated FMP program and associated individual projects would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies. (*Less than Significant Impact*)**

Construction Impacts

Temporary On-Site Construction Activity Noise. Over the course of six years, demolition, renovation, and construction activities associated with the Updated FMP's individual projects would take place on campus. These activities would elevate noise levels at off-site sensitive receptors based on the location of construction activities on campus and the proximity to the sensitive receptors located to the north, south, or west of the campus.

Noise levels would generally peak during demolition, excavation, and grading phases, when diesel-fueled heavy-duty equipment like excavators and dozers are needed to move large amounts of debris or dirt. This equipment is mobile in nature and does not always operate in a steady-state mode full load, but rather powers up and down depending on the duty cycle needed to conduct work. As such, equipment is occasionally idle during which time it does not generate any noise. Construction equipment would often operate away from off-site receptors, as mobile equipment generally does not operate continuously in one place.

During other phases of construction (e.g., site preparation, paving, building construction), noise impacts are generally lesser than during demolition, excavation, and grading because they are less reliant on using heavy equipment with internal combustion engines. Smaller equipment such as forklifts, generators, and various powered hand tools and pneumatic equipment would generally be utilized during these other construction phases. Off-site secondary noises would be generated by construction worker vehicles, vendor deliveries, and haul trucks.

Table 11, Construction Noise Impacts at Off-Site Sensitive Receptors (without Mitigation), summarizes the construction noise impacts for each of the four construction phases and determines if any impacts to sensitive receptors would be significant unless mitigated. As presented in **Table XX**, there would be no increases above 5 dB(A) at sensitive receptors near the project area during any of the construction phases. Therefore, noise generated during construction activities under the Updated FMP at the Main Campus would be less than significant. This impact is not discussed further in the EIR.

Table 11
Construction Noise Impacts at Off-Site Sensitive Receptors (without Mitigation)

Receptor	Existing Ambient Noise Level (dBA L_{eq})	Maximum Construction Noise Level (dBA L_{eq})	New Ambient Noise Level (dBA L_{eq})	Increase (dBA L_{eq})	Potentially Significant?
Phase 1					
800 Block of Ocean Avenue	66.6	64.2	68.6	2.0	No
800 Block of Plymouth Avenue	46.0	44.7	48.4	2.4	No
1100 Block of Ocean Avenue	46.0	34.9	46.3	0.3	No
1300 Block of Plymouth Avenue	46.0	41.2	47.2	1.2	No
Archbishop Riordan High School	49.8	46.0	51.3	1.5	No
Geneva Avenue residences	66.6	63.0	68.2	1.6	No
Judson Avenue residences	49.6	39.2	50.0	0.4	No
Lick Wilmderding High School	66.6	52.9	66.8	0.2	No
Phase 2					
800 Block of Ocean Avenue	66.6	57.5	67.1	0.5	No
800 Block of Plymouth Avenue	46.0	40.3	47.0	1.0	No
1100 Block of Ocean Avenue	46.0	30.6	46.1	0.1	No
1300 Block of Plymouth Avenue	46.0	36.4	46.5	0.5	No
Archbishop Riordan High School	49.8	40.1	50.2	0.4	No
Geneva Avenue residences	66.6	59.7	67.4	0.8	No
Judson Avenue residences	49.6	33.1	49.7	0.1	No
Lick Wilmderding High School	66.6	46.0	66.6	0.0	No
Phase 3					
800 Block of Ocean Avenue	66.6	44.0	66.6	0.0	No
800 Block of Plymouth Avenue	46.0	39.6	46.9	0.9	No
1100 Block of Ocean Avenue	46.0	39.3	46.8	0.8	No
1300 Block of Plymouth Avenue	46.0	45.7	48.9	2.9	No
Archbishop Riordan High School	49.8	44.7	51.0	1.2	No
Geneva Avenue residences	66.6	42.2	66.6	0.0	No
Judson Avenue residences	49.6	51.4	53.6	4.0	No
Lick Wilmderding High School	66.6	44.9	66.6	0.0	No
Phase 4					
800 Block of Ocean Avenue	66.6	64.9	68.8	2.2	No
800 Block of Plymouth Avenue	46.0	38.9	46.8	0.8	No
1100 Block of Ocean Avenue	46.0	32.0	46.2	0.2	No
1300 Block of Plymouth Avenue	46.0	42.4	47.6	1.6	No
Archbishop Riordan High School	49.8	46.8	51.6	1.8	No
Geneva Avenue residences	66.6	55.5	66.9	0.3	No
Judson Avenue residences	49.6	39.7	50.0	0.4	No
Lick Wilmderding High School	66.6	59.5	67.4	0.8	No

Source: Impact Sciences, 2020.

Temporary Off-Site Construction Activity Noise. Construction haul trucks would generate noise off-site during demolition. This would include removal of construction debris from the Main Campus. While this vehicle activity would increase ambient noise levels along the haul routes in the vicinity of the Main Campus, ambient noise levels would not be expected to significantly increase ambient noise levels by 3 dB(A) or greater at any noise sensitive land use. Studies have shown that a 3 dB(A) increase in sound level pressure is barely detectable by the human ear. A 3 dB(A) increase in roadway noise levels requires an approximate doubling of roadway traffic volume, assuming that travel speeds and fleet mix remain constant.[51] As discussed in **Section 4.2, Transportation**, Havelock Avenue located to the northeast corner of the Main Campus has an existing baseline traffic volume of approximately 2,598 daily vehicle trips. Due to the relatively low number of existing traffic along Havelock Avenue, increase in ambient noise along this segment would most likely be noticeable. The demolition of the 600 and 700 bungalows is estimated to have a total of 109 hauling trips (including trips to and from the Main Campus over a 129-day period, averaging less than 1 trip per day. As a conservative approach, the analysis assumes that all these trips would use Havelock Avenue. Furthermore, because haul trucks generate more noise than traditional passenger vehicles, a 19.1 passenger car equivalency (PCE) was used to convert haul truck trips to a reference level conversion to an equivalent number of passenger vehicles.[52] The addition of approximately 16 PCE trips per day would account for an increase of about 0.6 percent of existing traffic volume. Since it would take a doubling of roadway traffic volume to increase noise levels by 3 dB(A), the addition of haul trucks from the construction activities at the Main Campus would not increase traffic to levels capable of producing 3 dB(A) ambient noise increases and there would be no perceptible increase in noise due to the addition of haul trucks. Therefore, temporary increase in ambient noise along hauling routes during construction activities of the Updated FMP's individual projects would be less than significant. This impact is not discussed further in the EIR.

Operation Impacts

Permanent Operational Traffic Noise. As discussed above, a 3 dB(A) increase in roadway noise levels requires an approximate doubling of roadway traffic volume, assuming that travel speeds and fleet mix remain constant. A 3 dB(A) noise level increase is the minimum noise level increase required for a human to perceive a change in ambient noise.

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51 California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Protocol*. September 2013.

52 Caltrans, Technical Noise Supplement Table 3-3, 2013.

As discussed in **Section 4.2, Transportation** of the EIR, Havelock Avenue located to the northeast corner of the Main Campus has an existing baseline traffic volume of approximately 2,598 daily vehicle trips. Due to the relatively low number of existing traffic along Havelock Avenue, increase in ambient noise along this segment would most likely be noticeable. For this segment, the proposed project would add approximately 1,487 new daily vehicle trips as discussed in **Section 4.2, Transportation**. The addition of 1,487 new daily vehicle trips would cause an increase of 57.4 percent to traffic volumes along this segment, the largest percent increase for any of the studied roadway segments near the Main Campus. However, since it would take a doubling of traffic, or 100 percent increase to increase noise levels by 3 dB(A), the increase in traffic volume as a result of the proposed project would not cause an audible noise increase. Therefore, long-term increase in ambient noise under the Updated FMP would be less than significant. This impact is not discussed further in the EIR.

Impact NOI-2: **The updated FMP program and associated individual projects would not result in the generation of excessive groundborne vibration or groundborne noise levels. (*Less than Significant Impact)***

Construction. Groundborne vibration generated by construction activities associated with the proposed project would affect both on- and off-site sensitive uses located in close proximity to the Main Campus. As shown in **Table 12, Vibration Source Levels for Construction Equipment**, vibration velocities could range from 0.003 to 0.089 inch/sec PPV at 25 feet from the source activity, with corresponding vibration levels (VdB) ranging from 58 VdB to 87 VdB at 25 feet from the source activity, depending on the type of construction equipment in use.

Table 12
Vibration Source Levels for Construction Equipment

	Approximate PPV (in/sec)					Approximate RMS (VdB)				
Equipment	**25 Feet**	**50 Feet**	**60 Feet**	**75 Feet**	**100 Feet**	**25 Feet**	**50 Feet**	**60 Feet**	**75 Feet**	**100 Feet**
Large Bulldozer	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Caisson Drilling	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Loaded Trucks	0.076	0.027	0.020	0.015	0.010	86	77	75	72	68
Jackhammer	0.035	0.012	0.009	0.007	0.004	79	70	68	65	61
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004	58	49	47	44	40

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

Table 13, Vibration Levels at Off-Site Sensitive Uses from Project Construction - Unmitigated, shows the vibration velocity and levels that would occur at nearby sensitive receptors and structures during

construction at the project site. It should be noted, distances presented in **Table 13** below, are between the sensitive uses and the edge of the campus site.

Table 13
Vibration Levels at Off-Site Sensitive Uses from Project Construction - Unmitigated

Sensitive Uses Off-Site	Distance to Project Site (ft.)	Receptor Significance Threshold PPV (in./sec)	Estimated PPV (in/sec) [a]
Plymouth Avenue residences (north)	1,000 ft	0.2	0.000
1150 Ocean Avenue residences	500 ft	0.2	0.001
Judson Avenue residences	75 ft	0.2	0.017
Archbishop Riordan High School	115 ft	0.2	0.002
Plymouth Avenue residences (central)	700 ft	0.2	0.000
Plymouth Avenue residences (south)	700 ft	0.2	0.000
800 block of Ocean Avenue residences	150 ft	0.2	0.006

Source: Impact Sciences, Inc. 2020

The vibration velocities predicted to occur at the nearest receptors located 15 feet from the nearest project site boundary would be 0.017 in/sec PPV. All receptors are considered to be a non-engineered timber or masonry building and would not experience a PPV groundborne vibration level that exceed the FTA threshold of 0.2 in/sec PPV. Therefore, vibration impacts associated with building damage due to construction activities under the Updated FMP and associated individual projects would result in a less than significant impact. No mitigation is required. This topic is not discussed further in the EIR.

Impact C-NOI-1: **The Updated FMP program and associated individual projects, in combination with past, present, and reasonably foreseeable future projects would not cause a substantial temporary or periodic increase in ambient noise levels or generation of excessive groundborne vibration impacts.** ***(Less than Significant)***

Noise impacts are generally site specific, as noise contributions from other construction projects would be greatly attenuated through both distance and intervening structures.

Cumulative construction noise would be limited to the various construction projects within the Main Campus that would potentially occur at the same time. These cumulative scenarios are already reflected in the analysis above (Impact NOI-1).

Vibration impacts are also generally site specific, although they could combine and impact nearby receptors. However, vibration impacts from the Updated FMP are considered to be minimal due to their distance from nearby receptors as show above in **Table 13, Vibration Levels at Off-Site Sensitive Uses from Project Construction – Unmitigated,** and would not be anticipated to combine with any nearby cumulative construction projects. Therefore, noise and vibration impacts, when combined with past, present and reasonably foreseeable future projects would also have a less than significant impact. This topic is not discussed further in the EIR.

3.14 Population and Housing

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

Population growth is considered in the context of local and regional plans and population, housing, and employment projections. Substantial population growth is an increase in population that is unplanned without consideration of or planning for infrastructure services and housing needs to support new residents, employees, and visitors. The Updated FMP would support enhanced student experience on campus and sets the framework for improvements to indoor and outdoor student gathering and learning spaces, campus infrastructure, accessibility, and paths of travel. Proposed improvements at the CCSF centers under the Updated FMP include renovation and modernization of the existing buildings' interior in order to increase efficiency and maximize learning space. At a project level, the Updated FMP would involve demolition, decommission, renovation, and construction of educational facilities on the CCSF Main Campus. The proposed project would not include the construction or development of housing facilities. The Updated FMP is intended to meet the needs of projected campus enrollment and associated employees increase through 2030. However, it would not, in itself, increase the enrollment at CCSF. The projected increase in student enrollment could result in an increase of students and employees living in the vicinity

of the CCSF Main Campus and centers. For this analysis, population growth is compared to projected growth planned under Plan Bay Area 2040[53] by the Association of Bay Area Governments.

Impact PH-1: **The Updated FMP program and associated individual projects would not directly or indirectly induce substantial unplanned population growth in the City and County of San Francisco that could create demand for housing. *(Less than Significant)***

Construction**.** Implementation of the Updated FMP program as well as the associated individual projects are projected to occur between the end of 2021 and 2030. It is anticipated that construction employees who are not already living in the City would commute from their residences elsewhere in the San Francisco Bay Area rather than permanently relocate to San Francisco from more distant locations; this is typical for employees in the various construction trades. Once the construction phases are complete, construction workers typically seek employment at other job sites in the region that require their particular skills. Therefore, construction of the proposed project would not generate a substantial population increase in the city or region. This topic is not discussed further in the EIR.

Operation. The Updated FMP would involve an increase in student enrollment, which could result in the increase of students and employees living in the vicinity of the campus. The districtwide student enrollment for 2019 was 38,256 students.[54] The Updated FMP would support the forecasted CCSF headcount enrollment for the next 10 years. **Table 14**, **Districtwide Projected Students (2021-2030)**, shows the forecasted student enrollment (as measured via headcount). Enrollment projections districtwide during the Updated FMP planning period are projected to increase by approximately 47 percent, with a projected increase of approximately 45 percent at the Main Campus and 41 percent at the College centers.[55, 56, 57]

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53 Association of Bay Area Governments, Plan Bay Area 2040 http://projections.planbayarea.org/ accessed October 29, 2020.

54 Alma Strategies. 2019. City College of San Francisco – Enrollment and Staff Projections. November.

55 Projected headcount for the year 2020 and the following years conservatively do not include the effect of the COVID-19 pandemic, which is anticipated to decrease the headcount during the early part of the Updated FMP implementation period.

56 Alma Strategies. 2019. City College of San Francisco – Enrollment and Staff Projections. November.

57 California Community College Chancelor's Office. Management Information System Data Mart; https://datamart.cccco.edu/Students/Student_Term_Annual_Count.aspx. Accessed November 5, 2020.

Table 14
Districtwide Projected Students (2021-2030)

Year	Student Headcount
2020	46,863
2021	48,566
2022	50,333
2023	52,163
2024	54,061
2025	54,980
2026	55,915
2027	56,415
2028	57,832
2029	58,815
2030	59,814

Between 2020 and 2030, the number of employees is expected to increase by approximately 13 percent with a projected employee number of 2,501 by 2030.[58]

According to the 2019 American Community Survey 1-Year Estimates, the City and County of San Francisco has a population of approximately 881,549 residents.[59] Plan Bay Area 2040 projects the City and County of San Francisco to have a 2030 population of 1,034,175.[60] This would be an increase in population of 17.3 percent from 2019 estimated population levels. The increase in student enrollment could cause an increase in students or employees living closer to the Main Campus. However, this increase would not be substantial because future students and employees likely already live within the San Francisco Bay Area and mostly within the City and County of San Francisco. The increase in student enrollment and number of employees on campus would be within the projected growth of the Plan Bay Area 2040 and would not induce substantial unplanned growth that would require additional housing. This impact would be less than significant and no further analysis is required in the EIR.

58 Alma Strategies. 2019. City College of San Francisco – Enrollment and Staff Projections. November.

59 U.S. Census Bureau, 2019 American Community Survey 1-Year Estimates. https://data.census.gov/cedsci/table?t=Populations%20and%20People&g=0500000US06075&tid=ACSST1Y2019.S0101&hidePreview=false.

60 Association of Bay Area Governments. 2020. Plan Bay Area Projections 2040. Available at: http://projections.planbayarea.org/data.

Impact PH-2: **The Updated FMP program and associated individual projects would not displace substantial numbers of existing housing units or people necessitating the construction of replacement housing.** ***(No Impact)***

The Updated FMP sets the framework for improvements to the College's educational facilities and outdoor space. The associated individual projects would involve demolition, decommission, renovation, and construction of educational facilities. CCSF does not provide any housing on the Main Campus or centers. Therefore, the proposed project would have no impact with regard to displacement of people or housing. This topic is not discussed further in the EIR.

Impact C-PH-1: **The Updated FMP program and associated individual projects, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to significant cumulative population and housing impacts.** ***(Less than Significant)***

As noted above, Plan Bay Area 2040, which is the current regional transportation plan and Sustainable Communities Strategy that was adopted by the Metropolitan Transportation Commission and the Association of Bay Area Governments in July 2017, contains housing and employment projections anticipated for San Francisco through 2040. Based on the Plan Bay Area 2040, growth in the San Francisco Bay Area growth would occur as infill development in areas with good transit access and where services necessary for daily living are provided in proximity to housing and jobs. With its abundant transit service and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth.

As discussed under Impact PH-1 and PH-2 above, the proposed project would not result in significant growth that would increase housing demand and would have no impact on housing. Therefore, the project's contribution to cumulative impacts related to population and housing would not be significantly considerable. This topic is not discussed further in the EIR.

3.15 Public Services

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

The proposed project's impacts to parks and open spaces are discussed under Section 3.16, Recreation. Impacts on other public services are discussed in this section below.

Impact PS-1: **The Updated FMP program and associated individual projects would result in an increased demand for fire protection services, but not to the extent that would require new or physically altered fire protection facilities, the construction of which would result in significant environmental impacts.** ***(Less than Significant)***

San Francisco Fire Department (SFFD) provides fire suppression and emergency medical services in the City and County of San Francisco, including CCSF's Main Campus and centers. San Francisco Fire Department Station 15 lies just southwest of the Main Campus. The fire department responds to medical emergencies (Code 2) as well as life-threatening fire and medical emergencies (Code 3). Response times are measured from the time a unit is dispatched to the time the unit arrives at the scene. According to San

Francisco's Emergency Medical Services Agency policy, the target response time for a life-threatening emergency medical incident should be within 10 minutes 90 percent of the time.[61]

SFFD consists of three divisions, which are subdivided into 10 battalions and 45 active stations throughout the city. As discussed in the **Chapter 3.0, Project Description**, the Updated FMP projects approximately 13 percent increase in student headcount between 2019 and 2030. The increased student population would increase demand for fire protection and emergency medical services. However, population increase associated with the Updated FMP would not be substantial in comparison to the population served by the existing fire stations near the Main Campus and College centers and existing demand and capacity for fire protection and emergency medical services. The anticipated population increase associated with implementation of the Updated FMP would not have a significant impact on SFFD service standards nor would it require the construction of new fire protection facilities to accommodate an increase in SFFD staff and/or equipment.

As described in **Chapter 3.0, Project Description**, renovation and new construction under the Updated FMP would comply with the applicable requirements of the California Fire Code, which includes requirements pertaining to fire protection systems, provision of state-mandated fire alarms, fire extinguishers, appropriate building access and egress, and emergency response notification systems. Construction of the SSC and renovation activities under the Updated FMP would be required to comply with all applicable building and fire codes. Therefore, implementation of the Updated FMP would enhance fire safety of the College facilities. Implementation of the Updated FMP would have a less than significant impact regarding the construction of new or physically altered fire protection facilities. This topic is not discussed further in the EIR.

Impact PS-2: **The Updated FMP program and associated individual projects would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities the construction of which could cause significant environmental impacts.** ***(Less than Significant)***

The Public Safety Department of the College provides law enforcement and security at CCSF District facilities. These services include providing both personal safety as well as the protection of district property. Currently, the Public Safety Department in a temporary structure of approximately **2,160** square feet. After the completion of the construction of the previously approved Child Care Center at the north side of the

61 City and County of San Francisco, Mayor's 2017-2018 and 2018-2019 Proposed Budget, Fire Department, Available online at: https://sfmayor.org/sites/default/files/CSF_Budget_Book_2017_Final_CMYK_LowRes.pdf. Accessed: November 24, 2020.

campus, the Public Safety Department would be housed in the current Child Development Center located at the east site of the campus. This facility is composed of two bungalows of approximately 2,817 square feet would accommodate additional law enforcement and security staff if required. The Public Safety Department evaluates twice a year its safety programs. One evaluation is due each year on October first. The purpose of this evaluation is to review security reports and make needed adjustments to the crime prevention strategy at the Main Campus and College centers. The second evaluation is conducted every year in June/July. This evaluation examines whether campus police services are staffed and trained at appropriate levels. As part of the routine evaluation processes, the Public Service Department would examine if adjustments are needed based on the incremental increase in College population. Therefore, implementation of the Updated FMP would result in less-than-significant impact on the College police services. This topic is not discussed further in the EIR.

Impact PS-3: **The Updated FMP program and associated individual projects would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts.** ***(Less than Significant)***

The proposed project would not build new housing and no residential uses are associated with the Updated FMP. Therefore, implementation of the Updated FMP would not result in direct impact on schools due to an increase in residential population. As discussed in Section 3.14, Population and Housing, future students and employees likely already live within the San Francisco Bay Area and mostly within the City and County of San Francisco. To the extent that new students or employee move to be closer to the Main Campus, their number would not be large and not add a substantial number of school age students to the nearby community. Therefore, implementation of the Updated FMP and associated individual projects would have a less than significant impact on schools. This topic is not discussed further in the EIR.

Impact PS-4: **The Updated FMP program and associated individual projects would not result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts.** ***(Less than Significant)***

The Updated FMP and associated individual projects would not include new residences. Therefore, proposed improvements of the Main Campus and College Centers would not result in direct impact on public libraries. The San Francisco Public Library operates 27 branches throughout San Francisco. The closest library to the Main Campus is the Ingleside Branch Library, located to the west at 1298 Ocean Avenue. Given the availability of libraries at the Main Campus and at the centers, it is unlikely that student, faculty, or staff would utilize off-campus public libraries. Therefore, the impact of the Updated FMP and

associated individual projects on libraries would be less than significant. This topic is not discussed further in the EIR.

Impact C-PS-1: **The Updated FMP program and associated individual projects, in combination with past, present, and reasonably foreseeable future projects, would not result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives. *(Less than Significant)***

Development under the Updated FMP and associated individual projects, when combined with foreseeable growth in the vicinity, would increase demand for fire services, police services, schools, and libraries. As discussed above, the forecasted increase in College students and staff associated with the implementation of the Updated FMP would not affect SFFD service nor would it require an increase in SFFD staff or the construction of new fire protection facilities. In addition, any increased demand on the CCSF law enforcement could be accommodated within the existing campus facilities designated for this purpose. As discussed above, the Updated FMP resulting increase in population would not be substantial with regards to school facilities for the San Francisco Unified School District. CCSF students would likely use the 12 libraries within CCSF and therefore would not have a significant contribution on the demand for citywide library services. Therefore, the contribution of the Updated FMP to impacts associated with the increase in demand to public services would not be cumulatively considerable and the impact would be less than significant. This topic is not discussed further in the EIR.

3.16 Recreation

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

San Francisco has approximately 5,890 acres of open space in a variety of forms: parks, walkways, landscaped areas, recreational facilities, playing fields, and unmaintained open areas. This open space system is under the jurisdiction of several local, state, and federal agencies as well as private owners, in the form of privately owned public open spaces.[62,63] The San Francisco Recreation and Park Department (parks department) owns and operates approximately 3,433 acres of permanently dedicated, public open space across more than 220 parks, playgrounds, and open spaces throughout the city. Parks department recreation facilities also include 25 recreation centers, 9 swimming pools, 5 golf courses, and more than 300 athletic fields, tennis courts, and basketball courts.[64]

Impact REC-1: **The Updated FMP program and associated individual projects would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the**

62 City and County of San Francisco. 2014. San Francisco General Plan: Recreation and Open Space Element, Map 1, p. 3. Available at: http://openspace.sfplanning.org/

63 Privately owned public open spaces in the city consist of publicly accessible spaces in the form of plazas, terraces, atriums, and small parks and landscaped areas (some with a few pedestrian amenities) that are provided and maintained by private developers.

64 San Francisco Recreation and Parks Department. 2004. Recreation Assessment Report, p. 21.

facilities would occur or be accelerated, or such that the construction of new facilities would be required. ***(Less than Significant)***

The nearest parks are Balboa Park and Apatos Park, located 0.3 and 1.2 miles from CCSF, respectively. Public parks near the College centers include Portsmouth Square, St. Mary's Square, Civic Center Plaza, Jefferson Square Park, Yerba Buena Gardens, Union Square, Youngblood-Coleman Recreation Center, The Panhandle, Mission Dolores Park, Palou and Phelps Mini Park, Mendell Plaza, and Joseph Lee Recreation Center. Although the College is projected to experience an increase in student enrollment over the Updated FMP planning period, outdoor gathering areas are available at the Main Campus and Centers. In addition, recreational facilities are available on the Main campus and at John Adams Center, Mission Center, and Southeast Center. Improvements under the Updated FMP program include planning strategy for the development of a park-like atmosphere at the Main Campus with plazas to provide spaces for student gathering and collaboration. At the College centers, improvements under the Updated FMP aim at building a sense of community that include providing informal gathering areas. Given the existing recreational facilities and outdoor areas within the Main Campus and College centers and the planned plazas and outdoor areas under the Updated FMP, the increase in College population under the Updated FMP would not result in an increase in the use of existing recreational facilities. Therefore, the proposed project would not cause substantial physical deterioration of existing park facilities to occur or be accelerated. Impacts to recreational facilities would be less than significant, and no further analysis is required in the EIR.

Impact REC-2: **Construction of open space as part of the Updated FMP or associated individual projects would not result in substantial adverse physical environmental impacts.** ***(Less than Significant)***

The Updated FMP planning strategy for open space is to develop a park-like atmosphere at the Main Campus with plazas providing for student gathering and collaboration. At the College centers, improvements under the Updated FMP aim at building a sense of community that include providing informal gathering areas. Construction and improvements to open spaces under the Updated FMP would not result in additional significant impacts not otherwise disclosed elsewhere in the related environmental topics in this document. Therefore, the physical environmental impacts as a result of construction of open spaces and outdoor gathering areas as part of the Updated FMP would be considered less than significant. This topic is not discussed further in the EIR.

Impact C-REC-1: **The Updated FMP and associated individual projects, in combination with past, present, and reasonably foreseeable future projects, would not increase the use of existing neighborhood and regional parks or other recreational facilities such**

that substantial physical deterioration of the facility would occur or be accelerated. ***(Less than Significant)***

Development under the Updated FMP, when combined with cumulative growth, could increase demands for recreation facilities. However, this increased demand would not cumulatively result in the substantial physical deterioration of such facilities. As discussed above, recreational activities and facilities are available on campus and at John Adams Center, Mission Center, and Southeast Center. Off-site recreational facilities would not experience substantial deterioration due to an increase in use**.** It is expected that continued long-range planning by City agencies, including, but not limited to the San Francisco Recreation and Parks, would ensure City-owned recreational facilities in the campus site vicinity and near the College centers would continue to be maintained and improved as needed to accommodate anticipated cumulative increases in the citywide population. Therefore, development under the Updated FMP, when combined with cumulative growth, would not result in significant cumulative impact to recreation. This topic is not discussed further in the EIR.

3.17 Transportation and Traffic

Would the project…	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐
b) Would the project 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?	☒	☐	☐	☐

The Updated FMP and associated individual projects would have the potential to result in significant impacts on transportation and circulation. Accordingly, this topic is further analyzed and included in the EIR.

3.18 Tribal Cultural Resources

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

The analysis presented below assesses impacts to Tribal Cultural Resources related to the implementation of the Updated FMP at the Main Campus. The Updated FMP provides a comprehensive strategy that covers all CCSF locations and describes improvement potential at the CCSF centers. Proposed improvements at the CCSF centers under the Updated FMP include renovation and modernization of the existing buildings' interior in order to increase efficiency and maximize learning space. These proposed improvements would not include grading, excavation, or earth moving-activities. Therefore, implementation of the Updated FMP at the College's centers would have no impact to tribal cultural resources as defined by PRC Section 21074 and is not discussed further in this analysis.

In the event that any unforeseen improvements under the Updated FMP timeframe at the College's centers would require grading, excavation or any earth-moving activities, the potential to inadvertently damage significant historic-period Native American archaeological resources would represent a significant impact and would require further environmental review.

Environmental Setting

PRC section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, on the national, state, or local register of historical resources.

On December 18, 2019, Pacific Legacy (archaeology consultant) submitted a request to the Native American Heritage Commission (NAHC) for a search of the Sacred Lands File. A response letter from Nancy Gonzalez-Lopez of the NAHC was received as an email attachment on December 19, 2019. Ms. Gonzalez-Lopez indicated that a search of the Sacred Lands File had failed to indicate the presence of cultural resources "on the Main Campus." The NAHC provided a list of five tribal groups or individuals who may have knowledge of cultural resources in the Main Campus area or may have an interest in the Updated FMP. The list includes Irenne Zwierlein of the Amah Mutsun Tribal Band of the Mission San Juan Bautista; Tony Cerda of the Costanoan Rumsen Carmel Tribe; Anne-Mari Sayers of the Indian Canyon Mustun Band of Costanoan; Monica Arellano of the Muwekma Ohlone Indian Tribe of the SF Bay Area; and Andrew Galvan of the Ohlone Indian Tribe. Certified letters were sent to each of these tribal representatives requesting any information they may have on Native cultural resources or sensitive areas within or near the Project API. No responses have been received to date. In addition, in compliance with PRC Sections 21080.3.1 and 21080.3.2, on September 14, 2020, requesting consultation regarding Tribal Cultural Resources, CCSF sent letters to the five Native American Tribes identified by NAHC. No Tribes have responded to date.

Impact TCR-1: **Construction activities of the Updated FMP and associated individual projects at the Main Campus could disturb tribal cultural resources if such resources are present within the project site. (*Potentially Significant; Less than Significant with Mitigation*)**

During the scoping period, the NAHC failed to identify any areas of concern and provided a list of tribes to contact, as previously mentioned. No replies were received for the initial request for information. Pursuant to Assembly Bill 52, on September 14, 2020, the District sent notification letters of CCSF's proposal to implement the Updated FMP to the representatives for the Irenne Zwierlein of the Amah Mutsun Tribal

Band of the Mission San Juan Bautista; Tony Cerda of the Costanoan Rumsen Carmel Tribe; Anne-Mari Sayers of the Indian Canyon Mustun Band of Costanoan; Monica Arellano of the Muwekma Ohlone Indian Tribe of the SF Bay Area; and Andrew Galvan of the Ohlone Indian Tribe via registered mail on September 14, 2020. In the notification letters, the District provided a description of the project and requested comments on the identification, presence, and significance of tribal cultural resources in the vicinity of the Main Campus. During the 60-day comment period, no Native American tribal representatives contacted CCSF to request consultation. No known Tribal resources were identified for the Main Campus. However, there remain the potential that ground disturbance could impact previously undiscovered or buried archaeological resources that could be tribal cultural resources. The impact to tribal cultural resources could be potentially significant. As discussed under Impact CR-2, **Mitigation Measure CR-2** would be applicable to the proposed project if tribal resources are discovered during construction. This would reduce potential adverse effects on tribal cultural resources by requiring either preservation-in-place of the tribal cultural resources, if determined effective and feasible. In addition to **Mitigation Measure TCR-1**, would require developing additional measures in consultation with affiliated Native American tribal representatives and the District. Implementation of **Mitigation Measures CR-2** and **TCR-1** would reduce potential impact of the Updated FMP to tribal cultural resources to a less-than-significant level. This topic is not discussed further in the EIR.

MM TCR-1: Tribal Resources

If CCSF, in consultation with their consulting archaeologist determines that ground-disturbing activities may cause a substantial adverse change to a tribal cultural resource, and measures to protect the resource are not otherwise identified in the consultation process, CCSF shall implement additional measures pursuant to PRC Section 21084.3(b). Provisions under PRC Section 21084.3(b) describe mitigation measures that may avoid or minimize the significant adverse impacts. Examples include: 1) Avoidance and preservation of the resources in place, including, but not limited to, designing the treatment to avoid the resources and protect the cultural and natural context; 2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following: protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

If CCSF determines that preservation-in-place of the tribal cultural resource is both feasible and effective, then CCSF consulting archeologist shall prepare an archeological resource preservation plan (ARPP), which shall be implemented when feasible. If CCSF, in consultation with the affiliated Native American tribal representatives, determines that

preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, then CCSF and the affiliated tribe shall consider alternatives to mitigate the impact which may include documentation or study of the resource, public education and or brochures, interpretive programs such as trails, exhibits, replanting, or other measures negotiated between CCSF and the affiliated Native American Tribal representatives.

3.19 Utilities and Service Systems

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

The Updated FMP program focuses on optimizing the use of indoor space to meet the needs of the forecasted growth with the Updated FMP timeframe and calls for the compliance with the College Sustainability Plan. The Updated FMP does not include individual projects at any of the centers that would include new structures or additional floors to existing buildings. Future improvement projects under the Updated FMP that would require modification to the interior space of existing buildings would still be required to implement applicable mitigation measures identified in this EIR and comply with applicable regulations and policies, but would not require additional CEQA analysis. Impacts to utilities and service systems would be analyzed at a project-specific CEQA analysis for future projects that would include new construction under the Updated FMP.

Environmental Setting

The College Main Campus and Centers are within an urban area that is served by water storage, treatment, and distribution facilities; combined wastewater and stormwater collection, storage, treatment and disposal facilities; and solid waste collection and disposal service systems.

Wastewater/Stormwater

San Francisco's combined sewer system collects, transports, and treats sanitary sewage and stormwater runoff in the same facilities to prior discharge to federal and state waters. Stormwater enters the combined sewer system through roof drains on buildings or the thousands of catch basins along the streets. Sanitary sewage flows from homes and businesses into sewer lateral pipes to sewer mains and through a network of over 1,000 pipes.[65]

Water Supply

The SFPUC provides regional water services to approximately 2.6 million people in San Francisco, Santa Clara, Alameda, San Mateo, and Tuolumne Counties, including all of the City and County of San Francisco. Approximately 97 percent of the water provided to San Francisco is supplied by the SFPUC Regional Water System (RWS), which originates from the Hetch Hetchy Reservoir and Bay Area reservoirs in the Alameda Creek and Peninsula watersheds. The remaining 3 percent is supplied by local water supplies, including

65 San Francisco Public Utilities Commission. Wastewater Collection System. Available at: https://sfwater.org/index.aspx?page=399. Accessed November 27, 2020.

recycled water, groundwater and non-potable water.[66] The 2015 Urban Water Management Plan (UWMP) projects sufficient water supplies through 2040 during normal, dry, and multiple dry years.[67]

Solid Waste

Recology provides solid waste collection, recycling, and disposal services for residential and commercial garbage, recycling, and composting in San Francisco. Solid waste in the City is collected and hauled to a transfer station near Candlestick Point and recycled as feasible. Recyclable materials are taken to Recology's Pier 96 facility, where they are separated into commodities (e.g., aluminum, glass, and paper) and transported to other users for reprocessing. Compostables (e.g., food waste, plant trimmings, and soiled paper) are transferred to a Recology composting facility in Solano County, where they are converted to soil amendment and compost. The remaining material that cannot otherwise be reprocessed ("trash") is transported to landfills.

In 2019, San Francisco sent approximately 713,010 tons of solid waste to landfills, with approximately 419,000 tons transported to Recology Hay Road Landfill, 92,000 tons to the Corinda Los Trancos Landfill, 87,000 tons to the Altamont Landfill, and 61,000 tons to the Potrero Hills Landfill. The remaining approximate 54,010 tons of solid waste were transported to 21 other landfills. Together, these top four landfills used by San Francisco in 2019 have a remaining capacity of approximately 131.9 million cubic yards.[68]

Electric and Natural Gas Facilities

As noted in Section 3.6, Energy, PG&E provides natural gas and electric service to approximately 16 million people throughout a 70,000 square-mile service area in northern and central California. In 2018, PG&E sold 48,832 GWh of electricity and 881,279 million cubic feet of natural gas. Electricity produced by PG&E was from nuclear generation (34%), hydroelectric facilities (13%), renewable resources (39%), and natural gas/other (15%). The power mix only accounts for the electricity produced by PG&E. PG&E also buys electricity from other sources.

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66 San Francisco Public Utilities Commission. 2016. 2015 Urban Water Management Plan. Available at: https://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839. Accessed November 27, 2020.

67 San Francisco Public Utilities Commission. 2016. 2015 Urban Water Management Plan for the City and County of San Francisco. Available at: https://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839. Accessed November 27, 2020.

68 California Department of Resources and Recycling (CalRecycle). 2020. Solid Waste Information System Facility/Site Search. Available at: https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility. Accessed on November 27, 2020.

In 2019, San Francisco County consumed approximately 5,604 GWh of electricity, approximately 27% was consumed by residential sources and 73% was consumed by non-residential sources.[69]

Telecommunications Facilities

Telecommunications systems for a campus setting typically include voice frequency, digital, fiber optic, wireless, Ethernet video over Internet Protocol, and voice over Internet Protocol. Infrastructure can be located underground in vaults and conduits and aboveground on overhead power lines with pole mounted cable and transformers.

Impact USS-1: **Implementation of the Updated FMP program and associated individual projects would not exceed the capacity of the wastewater treatment provider that would serve the project site; would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; and would not require the construction of new, or expansion of existing, wastewater treatment or stormwater drainage facilities.** ***(Less than Significant)***

As noted above in **Section 3.10, Hydrology & Water Quality**, wastewater flows from eight urban watersheds in the City that is treated at the Southeast Treatment Plant, Oceanside Treatment Plan, and North Point Wet-Weather Facility. The North Point Wet-Weather Facility is used to treat additional flow of the Southeast Treatment Plan when this later reaches capacity of approximately 250 million gallons per day.[70] San Francisco's combined sewer system collects, transports, and treats sanitary sewage and stormwater runoff in the same facilities prior to discharge to federal and state waters.

The Southeast Water Pollution Control Plant has a wet weather flow capacity of 250 million gallons per day. It has the capacity to provide primary and secondary treatment to up to 150 million gallons per day and is permitted to discharge up to an additional 100 million gallons per day of wastewater that receives primary treatment plus disinfection.[71] The Oceanside Treatment Plan has a wet weather flow capacity of

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69 California Energy Commission. Electricity Consumption by County. Available online at: http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

70 San Francisco Public Utilities Commission. 2020. Wastewater Treatment Facilities. https://sfwater.org/index.aspx?page=621. Accessed on November 25, 2020.

71 California Regional Water Quality Control Board, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037664, Order No. R2-2013-0029, for City and County of San Francisco Southeast Water Pollution Control Plant, North Point Wet Weather Facility, and Bayside Wet Weather Facilities. Adopted August 14, 2013. Available at: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2013/R2-2013-0029.pdf.

65 million gallons per day, up to 43 million gallons per day of wastewater that receives secondary treatment and 22 million gallons per day that are treated to a primary standard.[72]

The City's combined sewer system is sized to accommodate both daily wastewater flows and stormwater runoff. The current collection system design standard is to provide enough drainage capacity to contain a 5-year storm (a storm with a 20 percent chance of occurring in one year).[73]

Proposed improvements at the Main Campus under the Updated FMP that include demolition, decommission, renovation, and construction activities, as well as improvements to the open space and circulation system would result in a total reduction of 10 percent of the campus facilities square footage. Proposed improvements under the Updated FMP at the College Centers would maximize the space use. However, it would not result in additional square footage. As described in **Chapter 3.0, Project Description** of the EIR, all improvements and new construction would comply with the District's Sustainability Plan, which requires the installation of water-efficient plumbing, increasing on-site infiltration, and minimizing stormwater runoff. Therefore, implementation of the Updated FMP and associated individual projects would not result in additional sewage or stormwater flow to the City's combined sewer system. This impact would be less than significant and is not discussed further in the EIR.

Impact USS-2: **Development under the Updated FMP and associated individual projects would be served from existing water supply entitlements and resources and would not require new or expanded water supply resources or entitlements.** ***(Less than Significant)***

California Water Code Section 10912 requires a Water Supply Assessment (WSA) for projects that would demand an amount of water equivalent to, or greater than, a 500-dwelling unit residential development. Implementation of the Updated FMP would not include new residential uses. Therefore, a WSA is not required for the proposed project. As discussed under Impact USS-1, the Updated FMP and associated individual projects would not result in additional facilities square footage at the College centers and would reduce existing square footage at the Main Campus by 10 percent. In addition, implementation of the Updated FMP including renovations, new construction, and improvements to open spaces and plazas at

72 California Regional Water Quality Control Board, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037681, Order No. R2-2019-0028, for City and County of San Francisco Oceanside Water Pollution Control Plant, Wastewater Collection System, and Westside Recycled Water Project. Adopted September 11, 2019. Available at: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions /adopted_orders/2019/R2-2019-0028.pdf.

73 San Francisco Public Utilities Commission. 2010. San Francisco Sewer system Master Plan, Summary Report, Final Draft. Available at: http://docs.ppsmixeduse.com/ppp/DEIR_References/2010_1210_sfpuc _509combinedsewer.PDF.

the Main Campus would be implemented in compliance with the District's Sustainability Plan, which requires the installation of water-efficient plumbing and implementation of water conservation practices. Therefore, implementation of the Updated FMP and associated individual projects would not increase water demand and would not require additional water supply resources. This impact would be less than significant, and no further analysis is required in the EIR.

Impact USS-3: Construction and operation under the Updated FMP including the associated individual projects would not generate solid waste in excess of the capacity of local solid waste collection and treatment facilities and would comply with applicable statutes and regulations related to solid waste. ***(Less than Significant)***

Construction. During the implementation timeline of the Updated FMP and associated individual projects, demolition, decommission, renovation, and construction activities would generate construction debris. As described under Environmental Settings above, the top four landfills used by San Francisco have a remaining capacity of approximately 131.9 million cubic yards. The proposed individual projects would generate approximately 11,000 tons (7,860 cubic yards)of solid waste.[74] In compliance with the San Francisco's Construction and Demolition Debris Recovery Ordinance, construction debris would be transported by a registered transporter and taken to a registered facility that must recover for reuse or recycling and divert from landfill at least 65 percent of all received construction and demolition debris. Given the available capacity at the Recology landfills and the reduction in landfill waste, solid waste generated during construction activities of the Updated FMP and associated individual projects would not result in the landfills exceeding capacity or in non-compliance with federal, state, and local statutes and regulations related to solid waste. Therefore, this impact would be less than significant. This impact is not discussed further in the EIR.

Operation. College operations under the Updated FMP are estimated to generate additional solid waste associated with the forecasted growth of 13 percent of the College students. The College would continue to implement the recycling and composting programs as required by the District's Sustainability Plan. The College has recently increased its landfill diversion rate by approximately XXX percent. At present the College diverts XXX percent of the generated solid waste at the College Main Campus and the centers. By maintaining the current diversion rate and considering the existing landfills capacities, operations under the Updated FMP would not exceed the permitted capacity of the landfills that serve the College Main Campus and centers, or result in non-compliance with federal, state and local statutes and regulations

[74] EPA. 2003. Estimated 2003. Building-Related. Construction and Demolition Materials Amounts.

related to solid waste. Therefore, this impact would be less than significant. This topic is not discussed further in the EIR.

Impact C-USS-1: The Updated FMP program and associated individual projects, in combination with past, present, and reasonably foreseeable future projects, would not substantially contribute to cumulative impacts related to utilities and services systems. ***(Less than Significant)***

Water Supply

The analysis conducted in Impact USS-2 is a cumulative analysis of the Updated FMP's water demand within the overall context of the overall cumulative water demand based on current water supply planning. As noted above, the 2015 Urban Water Management Plan projects sufficient water supplies through 2040 during normal, dry, and multiple dry years. The Updated FMP and associated individual projects would not include residential uses and therefore would not make a considerable contribution to cumulative impacts on water supply, and the impact would be less than significant. This topic is not discussed further in the EIR.

Wastewater Treatment

Net new development under the Updated FMP, when combined with foreseeable growth, would also increase the demand for the wastewater treatment facilities. As noted above, runoff from the College Main Campus and centers and their surrounding areas would drain into the city's combined sewer system, ensuring that such runoff is properly treated to meet the applicable NPDES Permit and the U.S. Environmental Protection Agency's Combined Sewer Overflow Control Policy. The combined collection and treatment system is sized to accommodate both daily wastewater flows and stormwater runoff. The current collection system design standard is to provide enough drainage capacity to contain a 5-year storm (a storm with a 20 percent chance of occurring in one year).[75] Therefore, cumulative impacts with regard to wastewater treatment capacity would be less than significant. This topic is not discussed further in the EIR.

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75 San Francisco Public Utilities Commission. 2010. San Francisco Sewer system Master Plan, Summary Report, Final Draft. Available at: http://docs.ppsmixeduse.com/ppp/DEIR_References/2010_1210_sfpuc_509combinedsewer.PDF.

Solid Waste

Development under the Updated FMP, when combined with foreseeable growth, would increase demand for solid waste disposal facilities. As stated above under Impact USS-3, the proposed project would be served by landfills with sufficient permitted capacity to accommodate its solid waste needs. The top four landfills used by San Francisco have a remaining capacity of approximately 131.9 million cubic yards.[76] Therefore, cumulative impacts with regard to solid waste would be less than significant. This topic is not discussed further in the EIR.

76 California Department of Resources and Recycling (CalRecycle). 2020. Solid Waste Information System Facility/Site Search. Available at: https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility.

3.20 Wildfire

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

The College Main Campus and center are located in an urbanized environment with little natural vegetation. There are no wildlands located in San Francisco. The City does not have any state responsibility areas for fire prevention or lands that have been classified as very high fire hazard severity zones.[77] Therefore, this topic is not applicable and is not discussed further.

77 California Department of Forestry and Fire Protection. Draft Fire Hazard Severity Zone Viewer. Available at: https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414.

ATTACHMENT A

Shadow Analysis

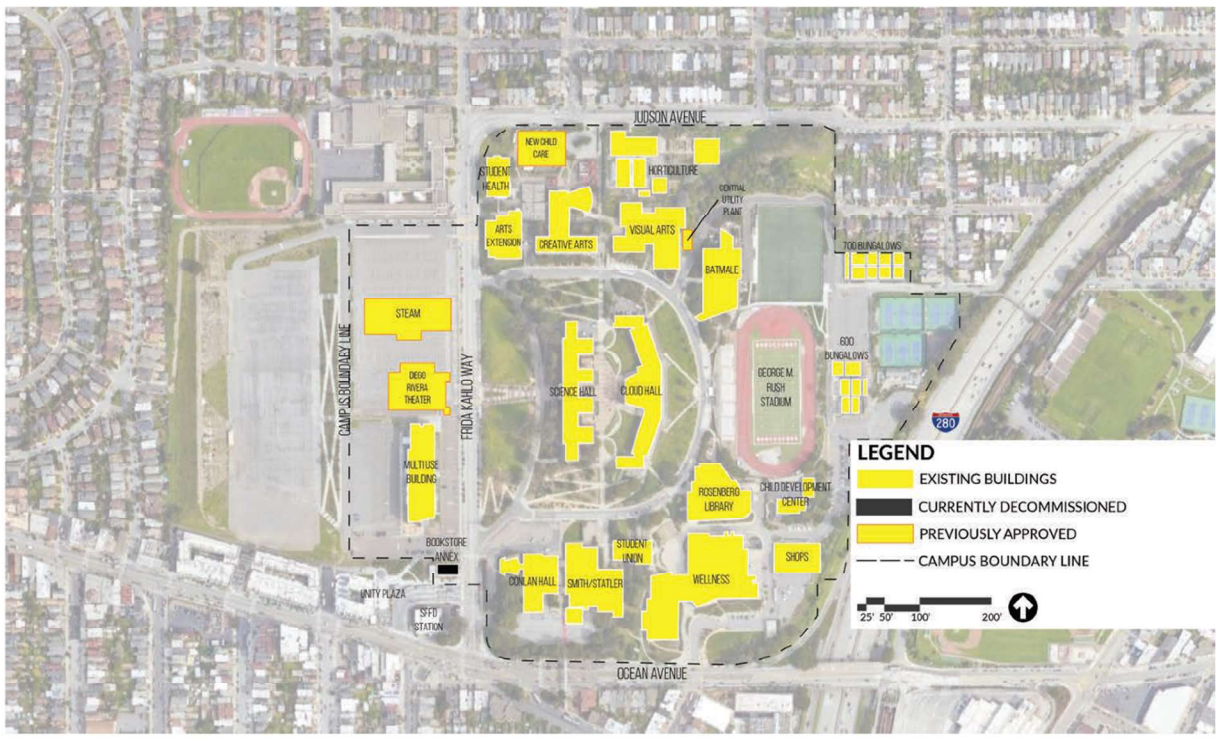
PREVISION DESIGN

CITY COLLEGE OF SAN FRANCISCO FACILITIES MASTER PLAN SHADOW ANALYSIS FINDINGS

October 6, 2020

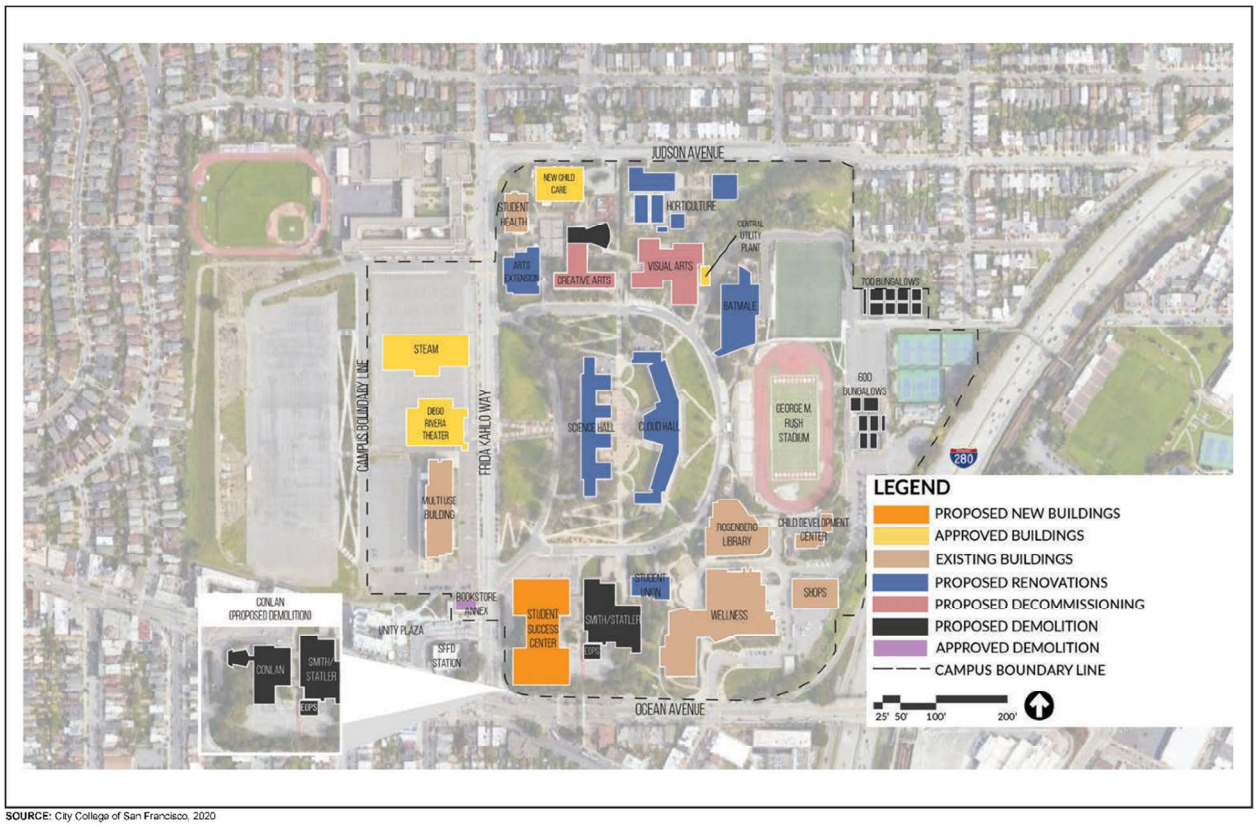
Introduction

Prevision Design has conducted an analysis of the shadow effects of proposed new and demolished buildings at the City College of San Francisco Ocean Avenue Campus, pursuant to their Facilities Master Plan. This analysis compares the net new change in shadow conditions from a future baseline scenario (Figure 1) which includes both existing as well as previously approved (but not yet completed) buildings with proposed future conditions which include the addition of one new building (Student Success Center), along the with partial or complete demolition of several other structures across campus (Figure 2). The purpose of this analysis is to evaluate whether the project would generate shadow effects on publicly accessible open spaces in the vicinity of the campus.



SOURCE: City College of San Francisco, 2020

FIGURE 1 - CCSF Site Plan: Baseline Conditions



SOURCE: City College of San Francisco, 2020

FIGURE 2 - CCSF Site Plan: Proposed Conditions

Approach to Analysis & Deliverables

The analysis was conducted using a 3D computer model of the existing and proposed campus buildings, surrounding neighborhood, streets, and topography. This model was used to simulate the shadow effects of the baseline vs. proposed changes throughout the year.

Exhibit A shows the results of a shadowfan analysis of the Student Success Center, which indicates all areas that would receive net new shadow year-round from between one hour after sunrise through one hour before sunset due to the addition of the Student Success Center. This shadowfan analysis factors out areas of existing shadow that would be cast under baseline scenarios due to existing buildings (both those that would remain as well as those that would be demolished).

Exhibits B-D depict the progression of shadow that would be cast on the approximate Summer Solstice (6/21), Fall/Spring Equinoxes (9/20 and 3/22, considered equivalent from the perspective of shadow), and the Winter Solstice (12/20). Diagrams reflect shadow conditions at hourly intervals between one hour after sunrise through one hour before sunset and graphically differentiate between existing shadow, net new shadow due to the Student Success Center, and net new sunlight that would occur due to the demolition of existing buildings. Additionally, the proposed Balboa reservoir project has been included as a cumulative condition consideration, with shadows that would be cast due to that future project included for reference.

PREVISION DESIGN

Shadow Analysis Findings

There are several publicly accessible open spaces in proximity to the CCSF Ocean Street Campus including Unity Plaza to the west of campus and Balboa Park to the east. There are also future planned open spaces associated with the Balboa Reservoir project. None of these open spaces would receive any net new shadow as a result of the proposed project, while a small portion of Unity Plaza would receive a very small amount net new sunlight due to the demolition of the Bookstore Annex in late spring and early summer.

Due to the two-story height of the proposed Student Success Center as well as the fact that it would be replacing existing buildings of similar scale in the same general area, the net new shadow cast by the would be limited to the area immediately surrounding the building. Net new shadow would reaching westward across Phelan Avenue but short of Unity Plaza (ref Exhibit A1.1).

Elsewhere across campus, the removal of buildings would generate areas of net new sunlight, and no additional shadow (ref. Exhibits B-D).

Accordingly, the impact of shadow would be considered less than significant.

PREVISION DESIGN

EXHIBIT A

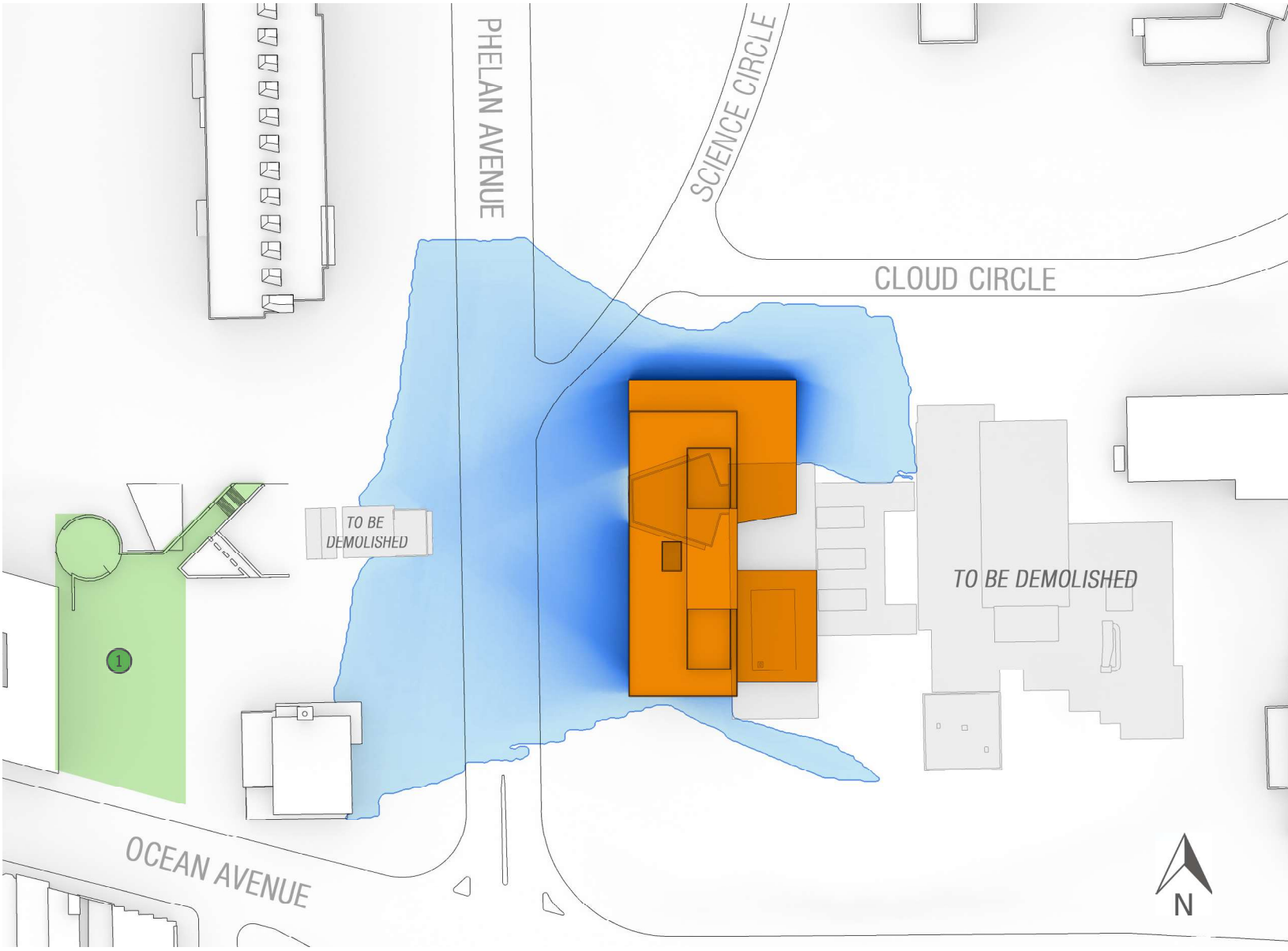
Student Success Center Shadow Fan Diagram

PREVISION DESIGN

A1.1

CCSF FACILITIES MASTER PLAN: STUDENT SUCCESS CENTER

Full year net new shadow fan diagram factoring in the presence of existing shadows



SHADOW FAN DIAGRAM: ALL AREAS AFFECTED BY NET NEW SHADOW BETWEEN ONE HOUR AFTER SUNRISE TO ONE HOUR BEFORE SUNSET

FULL YEAR

Student Success Center

Net New Shadow Fan of Proposed Project

occasional shadow — frequent shadow

Publicly Accessible Open Spaces

1 Unity Plaza

PREVISION DESIGN

EXHIBITS B-D

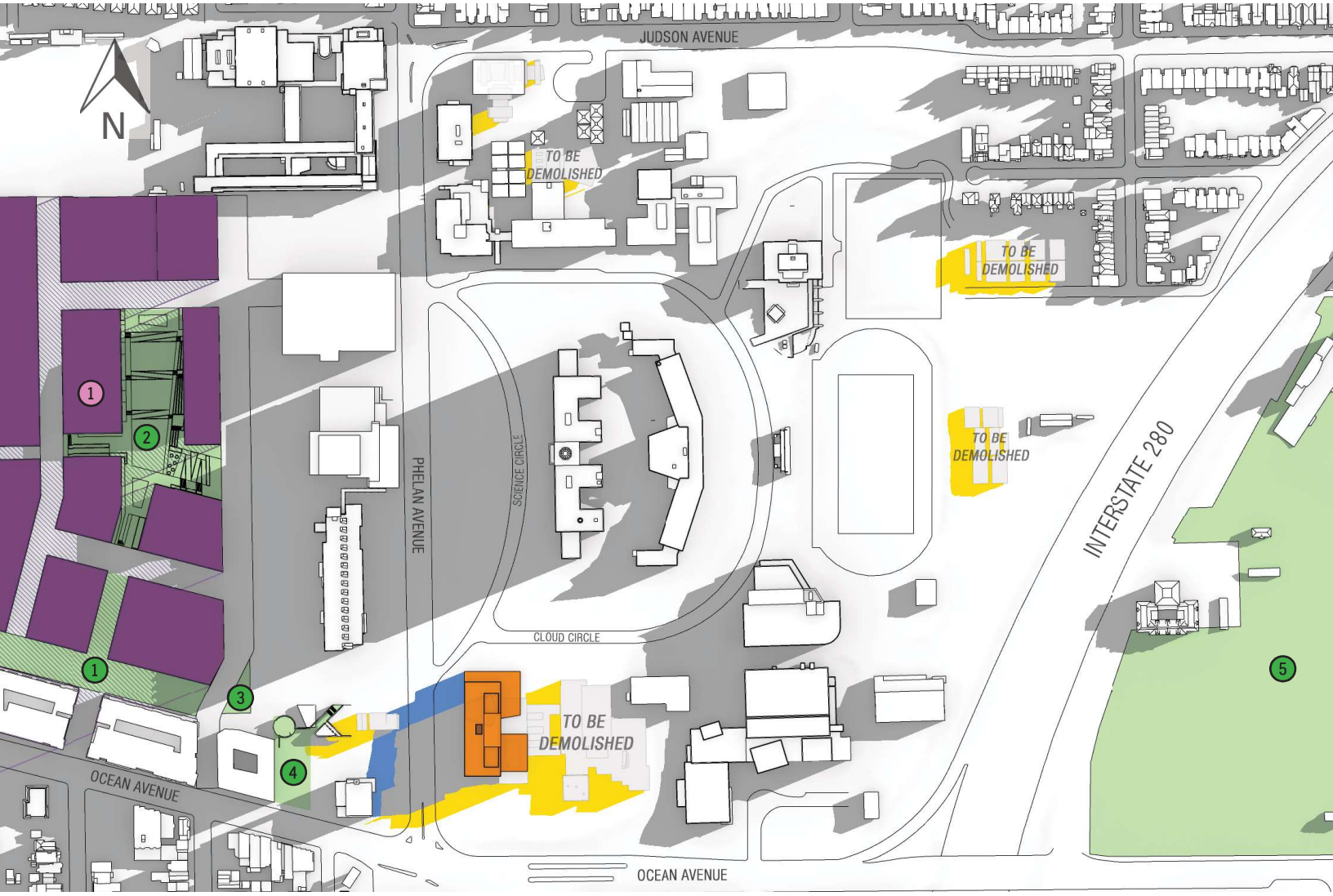
Campus Shadow Diagrams

Summer Solstice | Exhibit B
Fall/Spring Equinoxes | Exhibit C
Winter Solstice | Exhibit D

PREVISION DESIGN

B1.1 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE JUNE 21

6:46 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

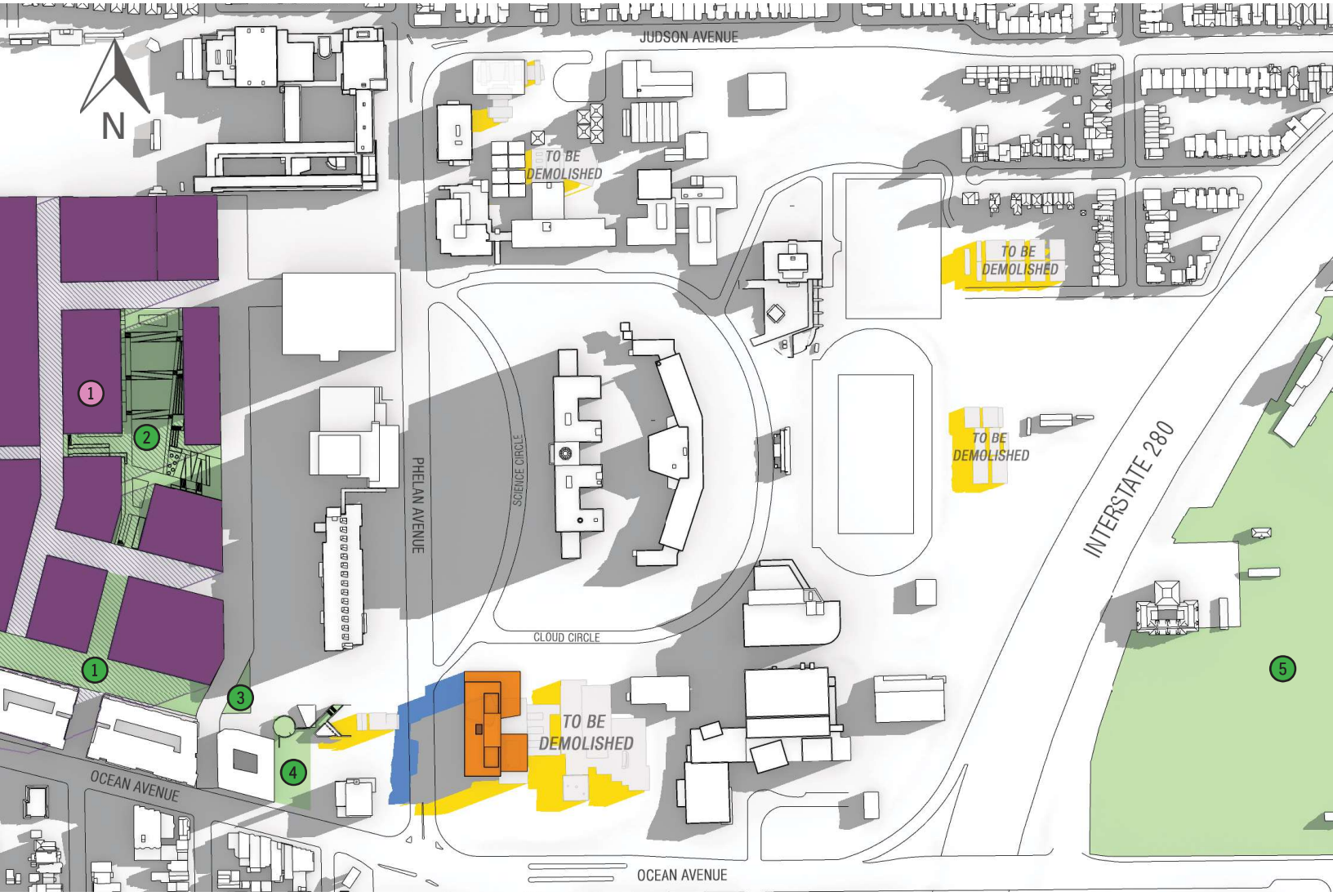
1. Balboa Resevoir Project

PREVISION DESIGN

B1.2

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

7:00 AM

- Proposed New Projects
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Parks and Open Spaces
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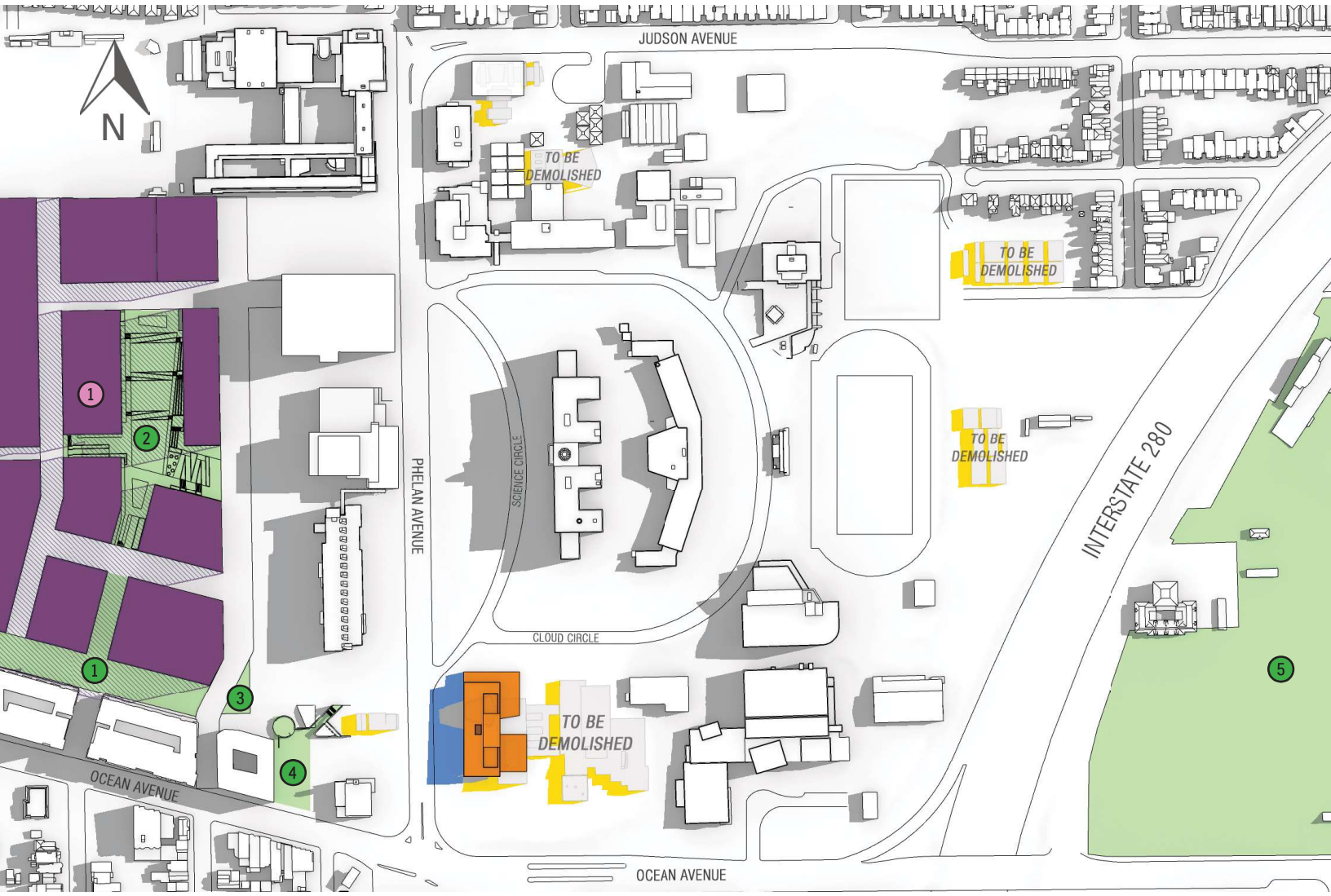
Cumulative Projects
1. Balboa Resevoir Project

PREVISION DESIGN

B1.3

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

8:00 AM

- Proposed New Projects
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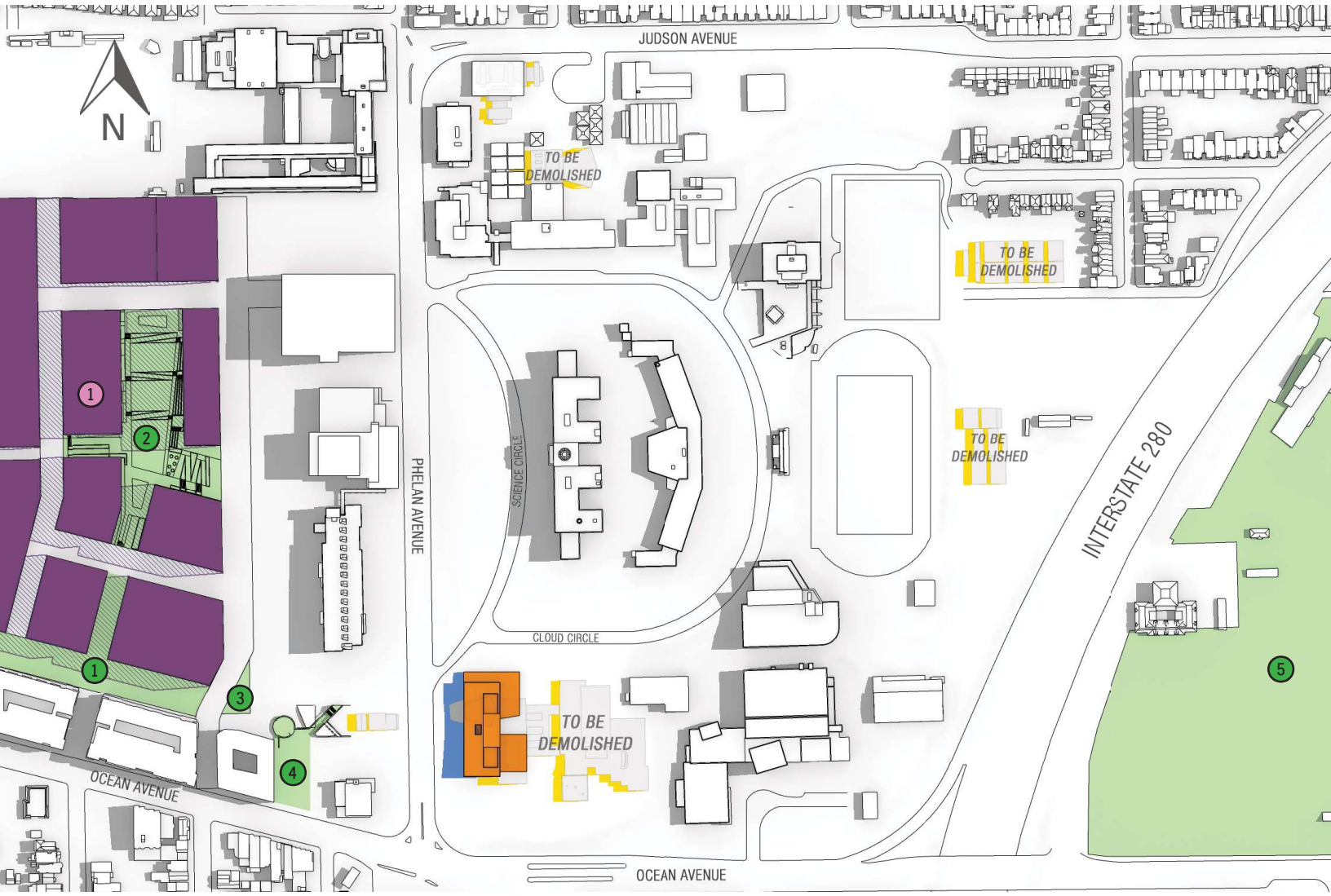
Cumulative Projects
1. Balboa Resevoir Project

PREVISION DESIGN

B1.4

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

9:00 AM

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Cumulative Projects

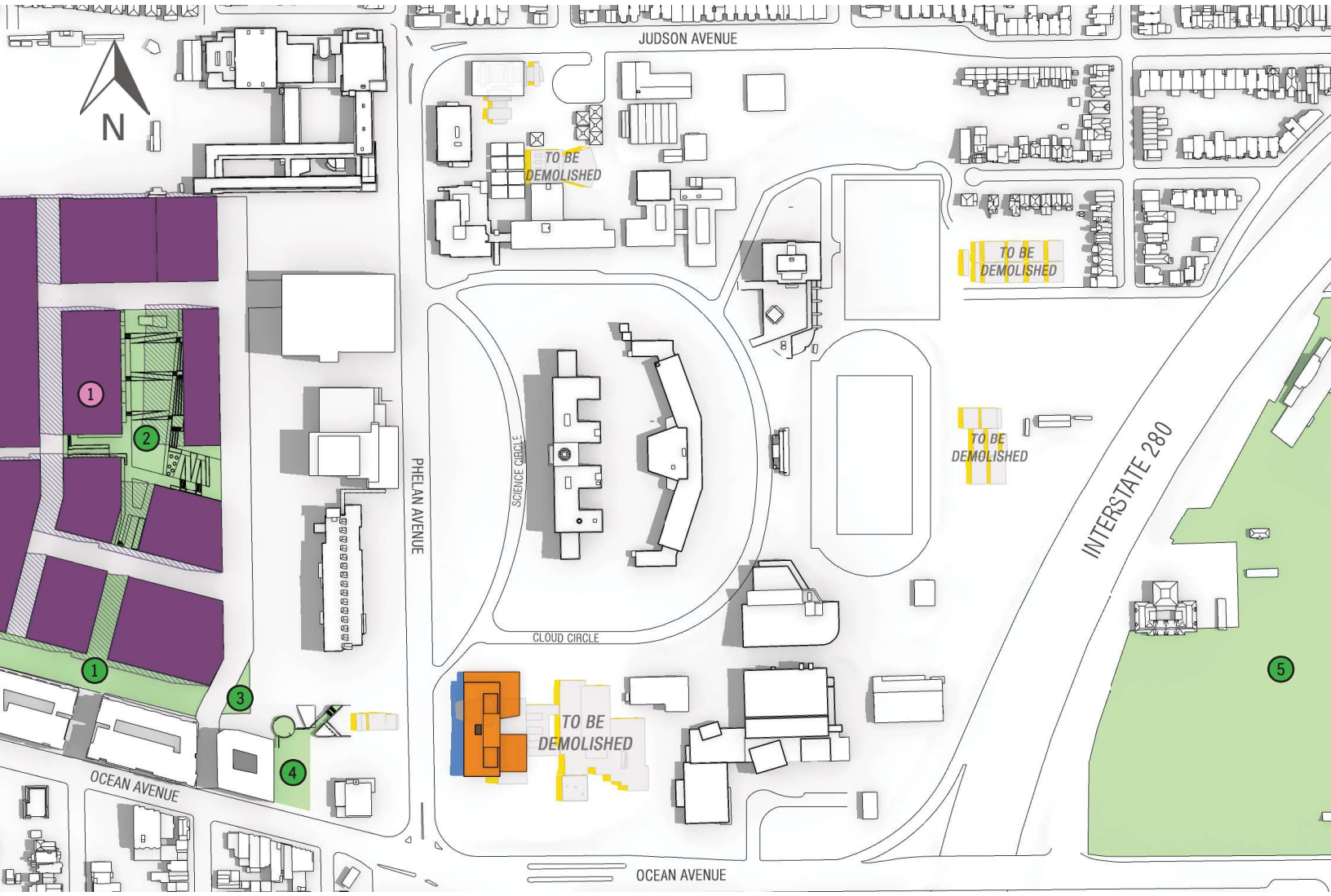
1. Balboa Resevoir Project

PREVISION DESIGN

B1.5

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

10:00 AM

- Proposed New Projects
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Cumulative Projects

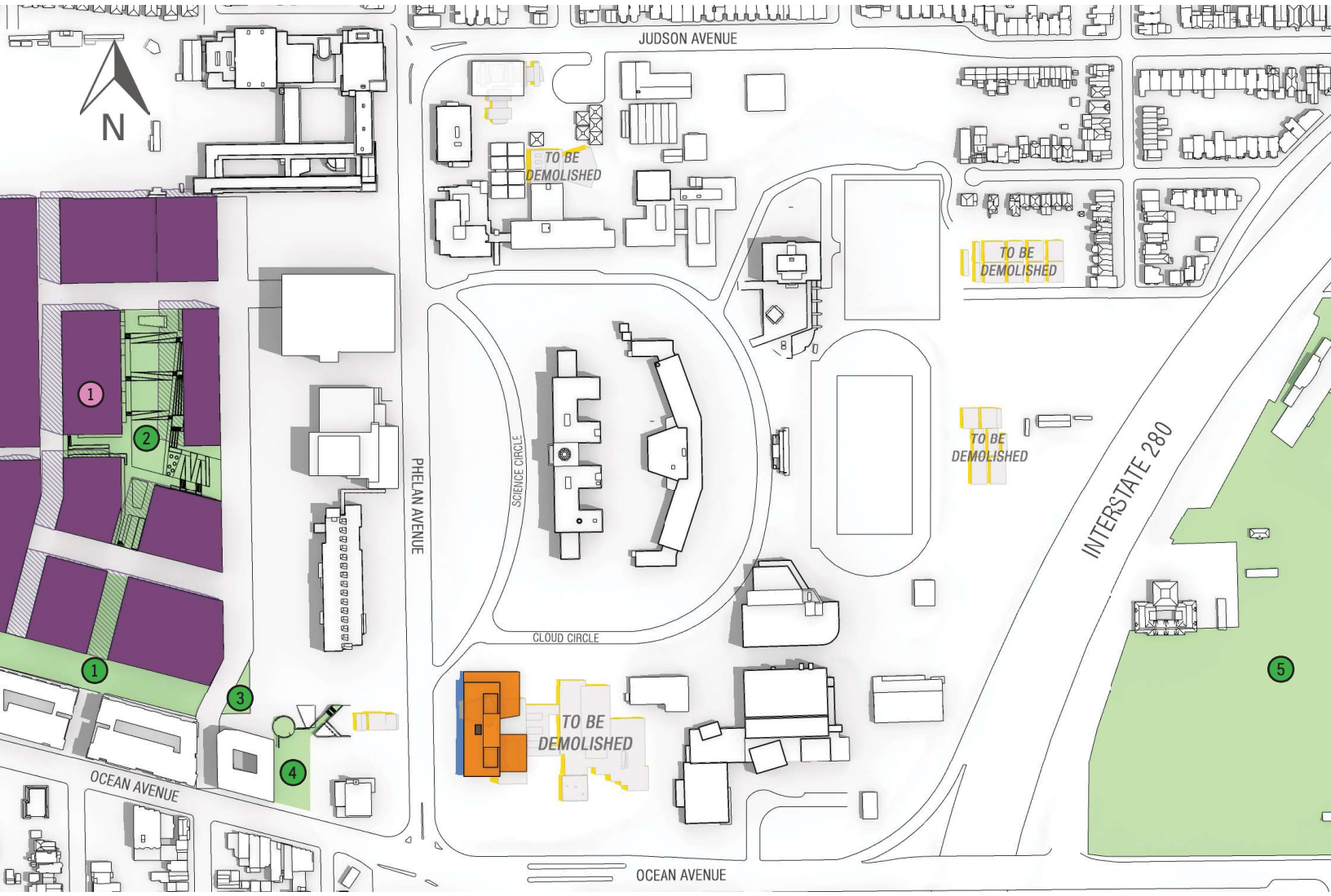
1. Balboa Resevoir Project

PREVISION DESIGN

B1.6

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

11:00 AM

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Cumulative Projects

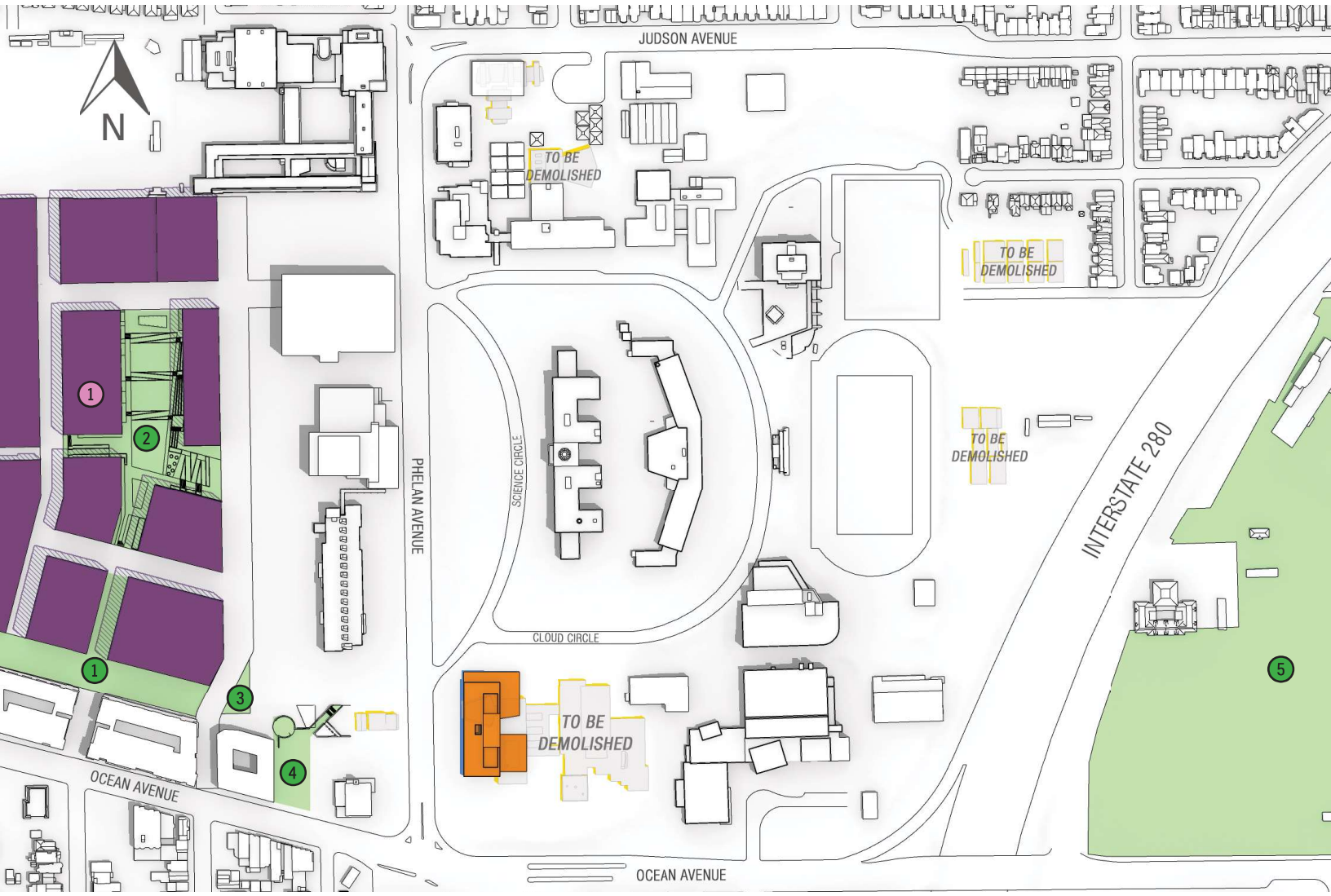
1. Balboa Resevoir Project

PREVISION DESIGN

B1.7

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

12:00 PM

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Cumulative Projects

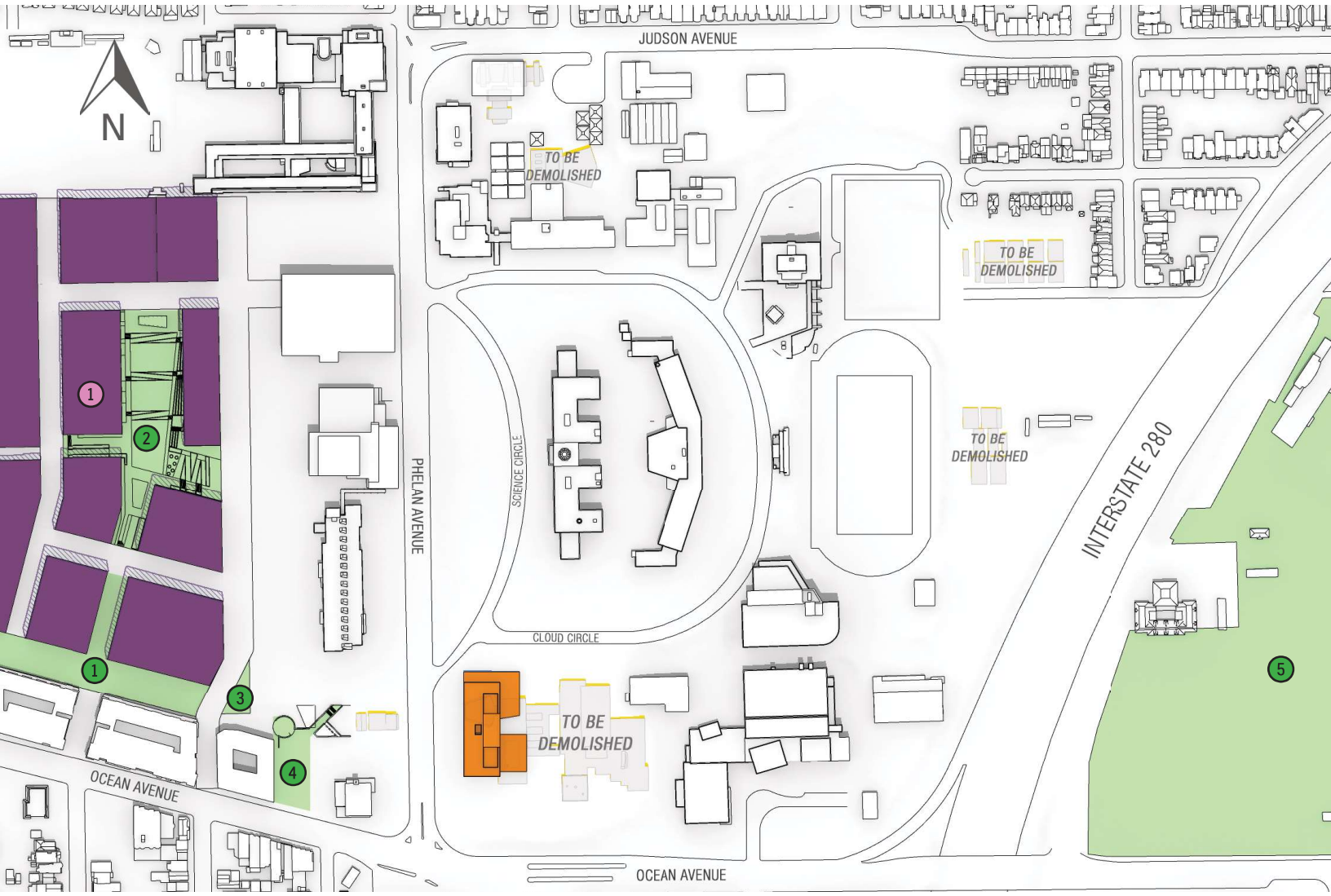
1. Balboa Resevoir Project

PREVISION DESIGN

B1.8

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

1:00 PM

- Proposed New Projects
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- New Shading from Cumulative Projects

Parks and Open Spaces
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5. Balboa Park (RPD)

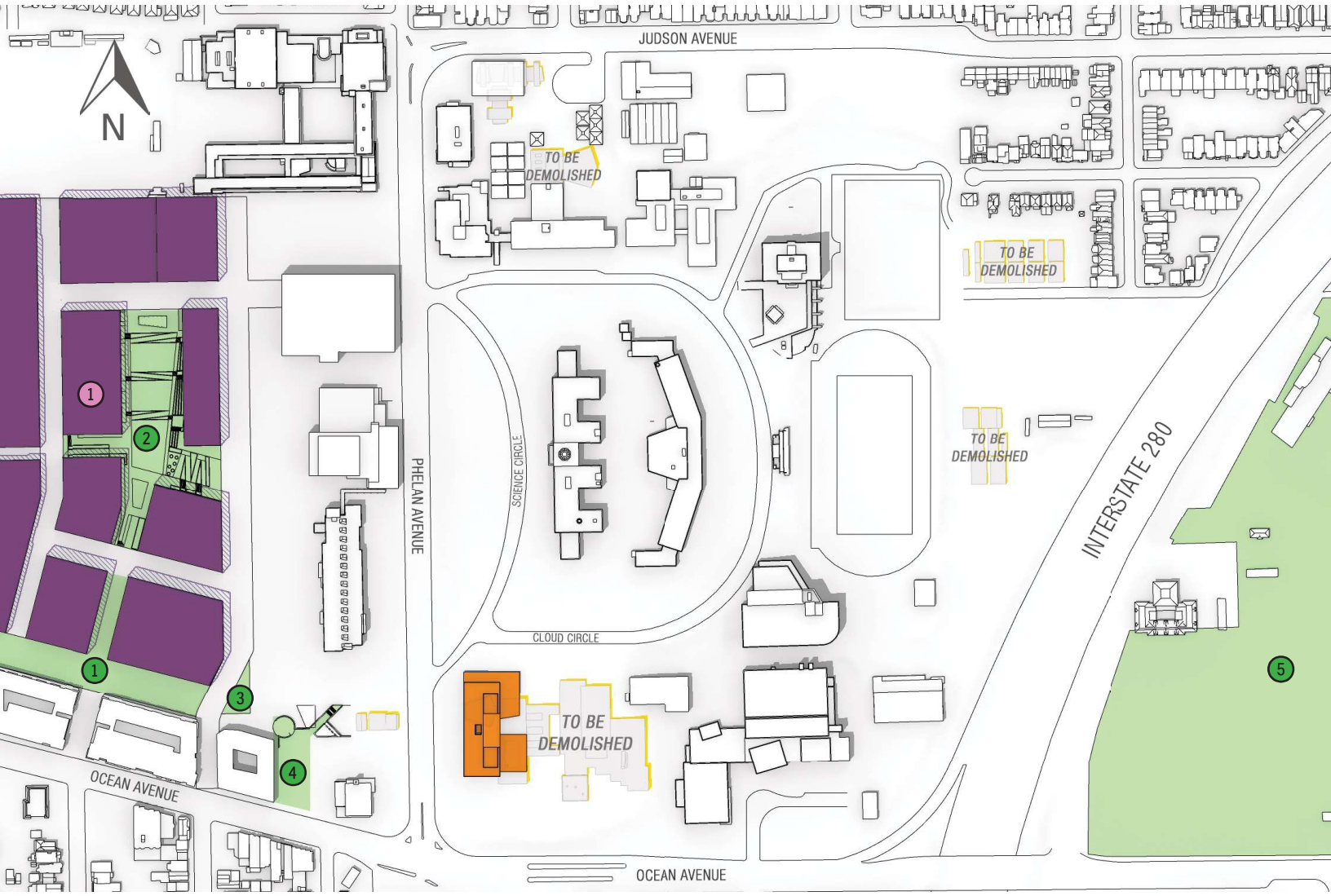
Cumulative Projects
1. Balboa Resevoir Project

PREVISION DESIGN

B1.9

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE
JUNE 21

2:00 PM

- Proposed New Projects
- Existing (current) Shadows
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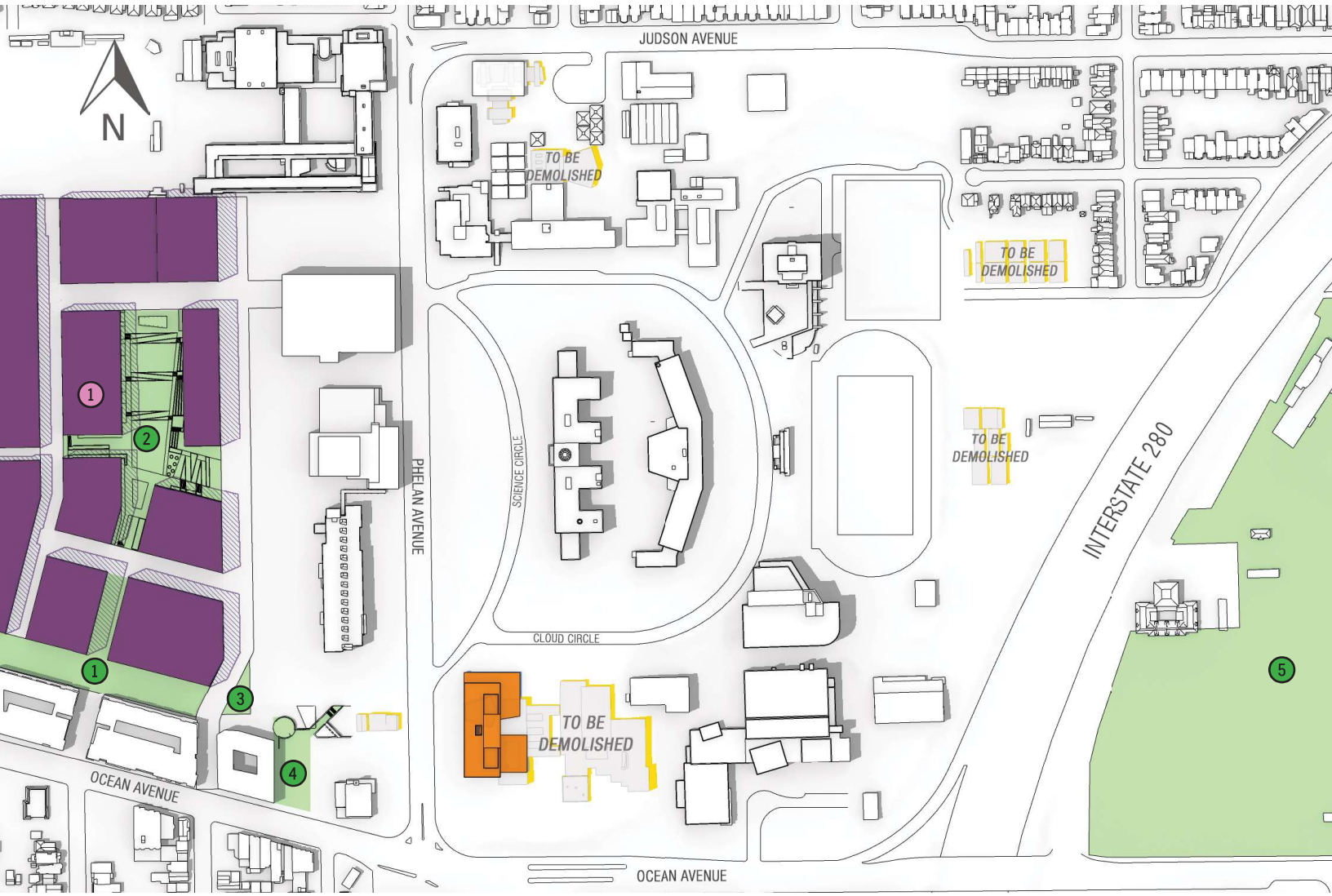
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

B1.10 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE JUNE 21

3:00 PM

- Proposed New Projects
- Existing (current) Shadows
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Parks and Open Spaces

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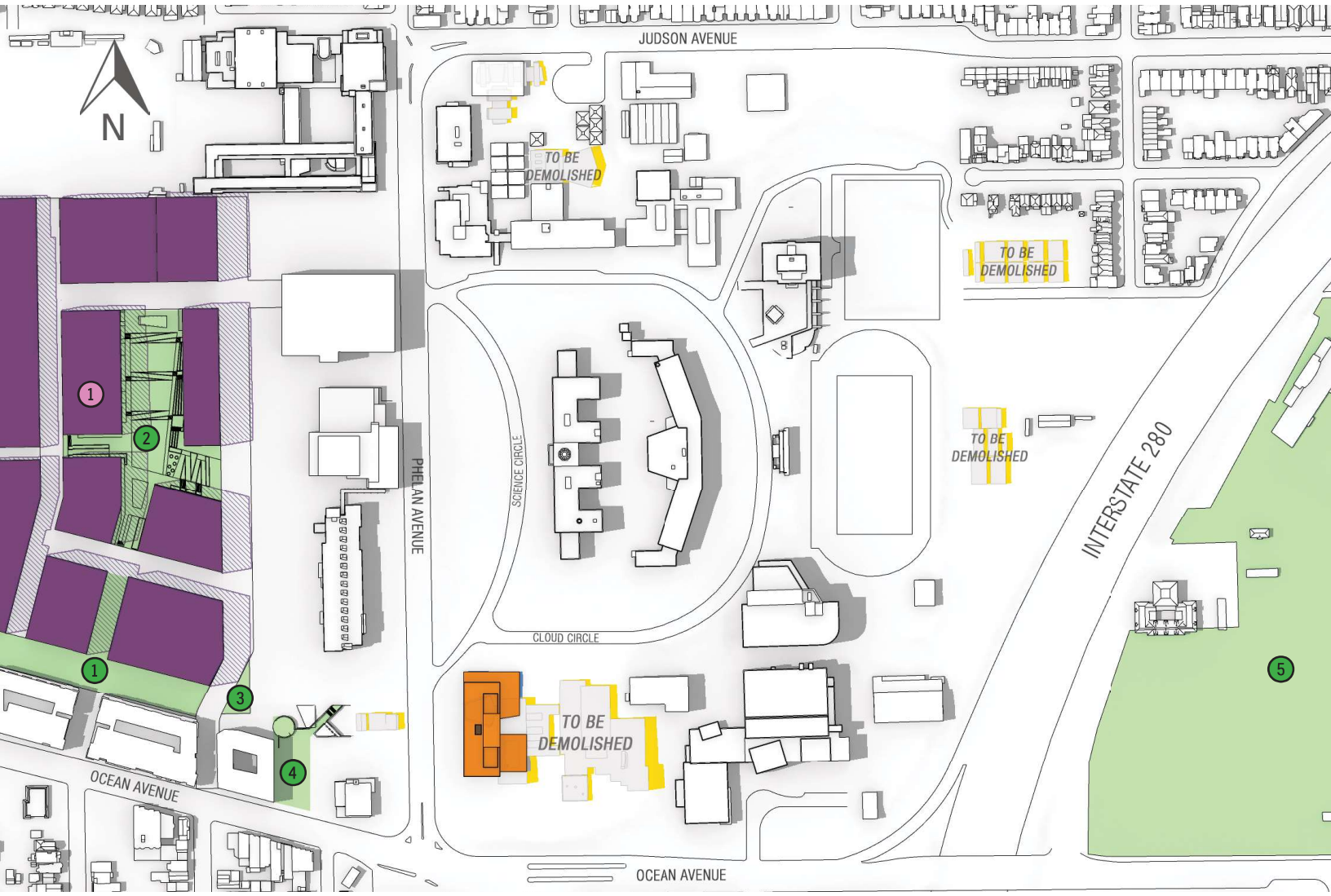
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

B1.11 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE JUNE 21

4:00 PM

- Proposed New Projects
- Existing (current) Shadows
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Parks and Open Spaces

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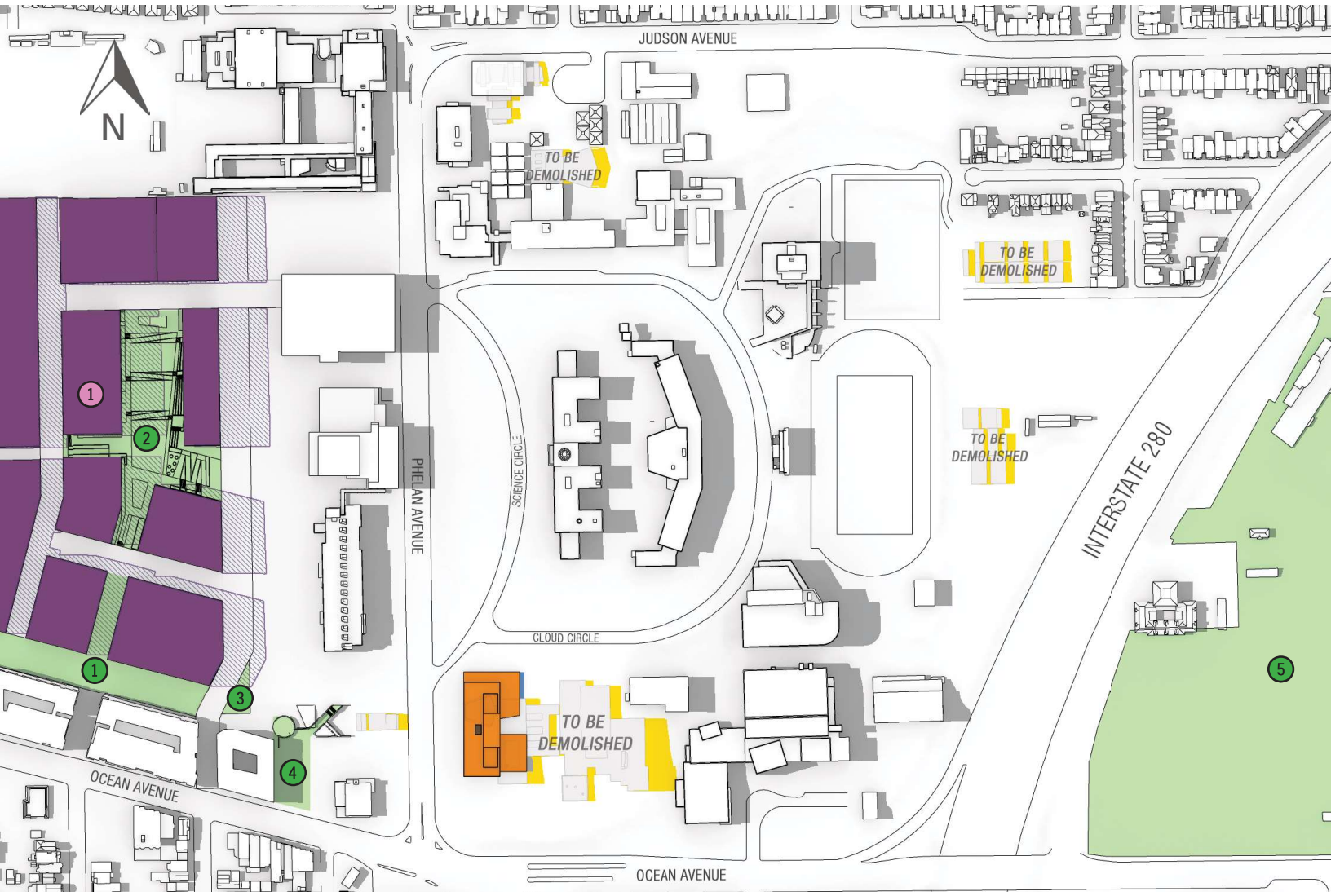
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

B1.12 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE JUNE 21

5:00 PM

- Proposed New Projects
- Existing (current) Shadows
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- New Sunlight due to Demolition
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Parks and Open Spaces

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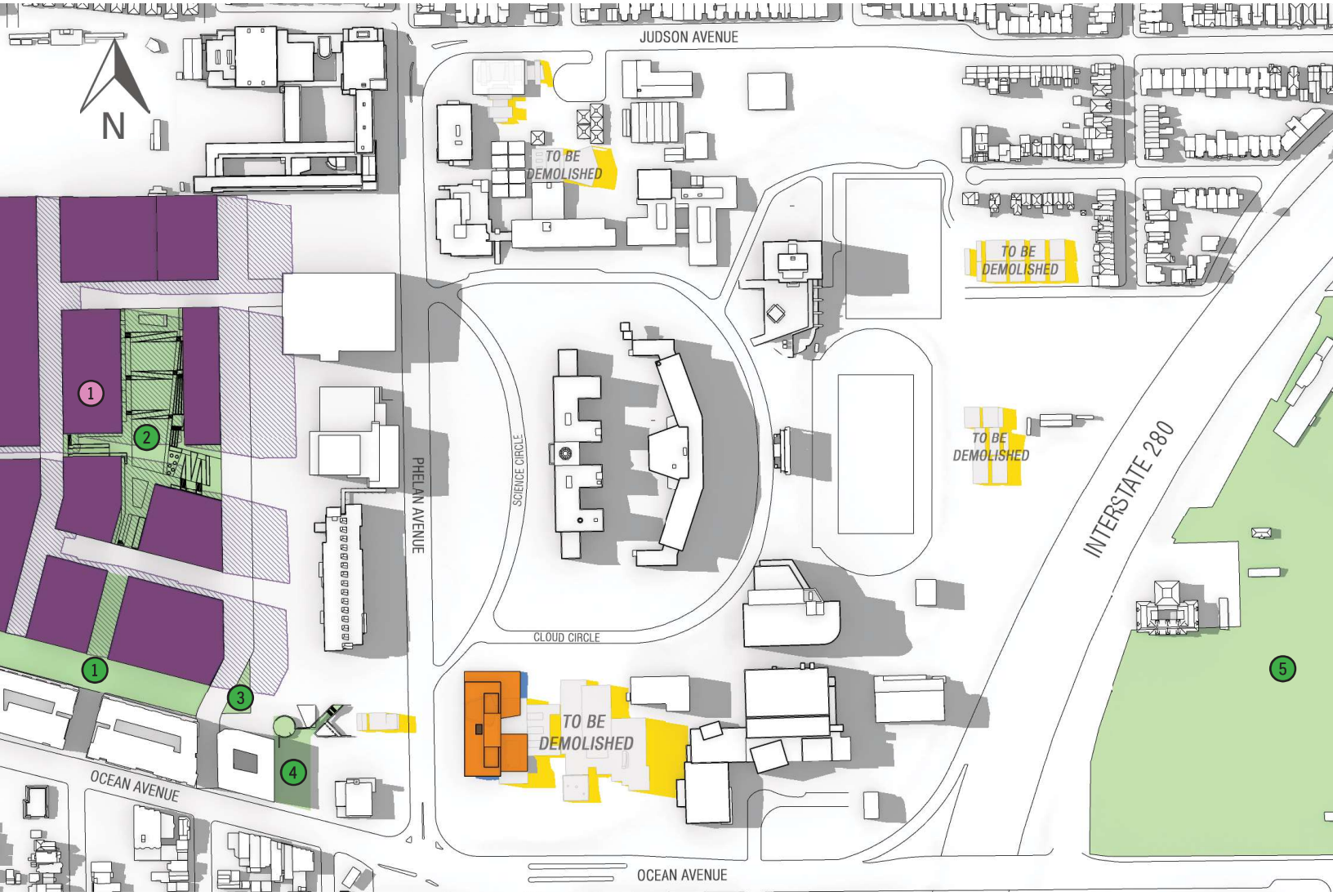
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

B1.13 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE JUNE 21

6:00 PM

- Proposed New Projects
- Existing (current) Shadows
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- New Shading from Cumulative Projects

Parks and Open Spaces

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Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

B1.14 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice

SUMMER SOLSTICE JUNE 21

7:00 PM

- Proposed New Projects
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Parks and Open Spaces

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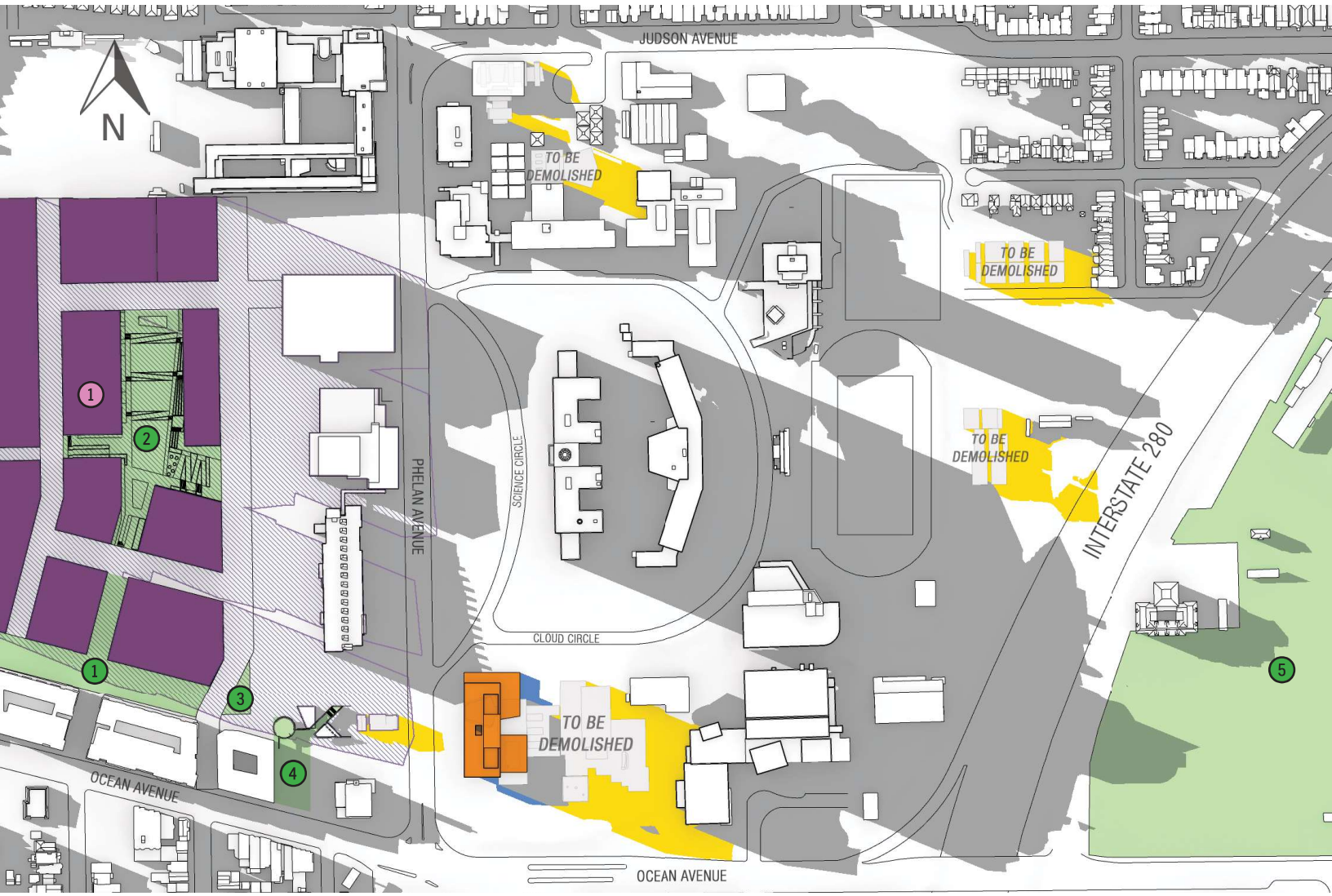
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

B1.15 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Summer Solstice



SUMMER SOLSTICE JUNE 21

7:36 PM

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- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

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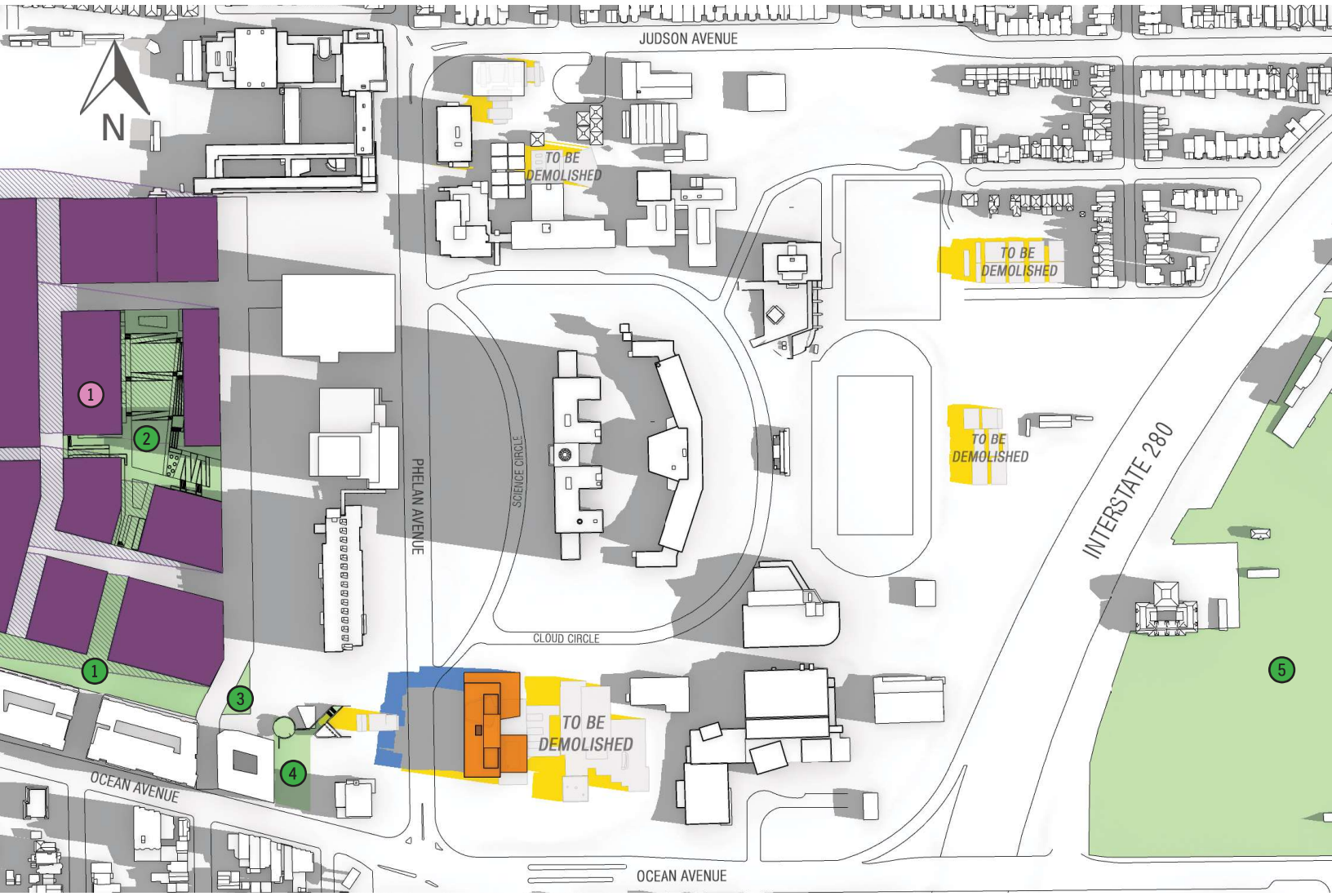
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.1 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

7:57 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
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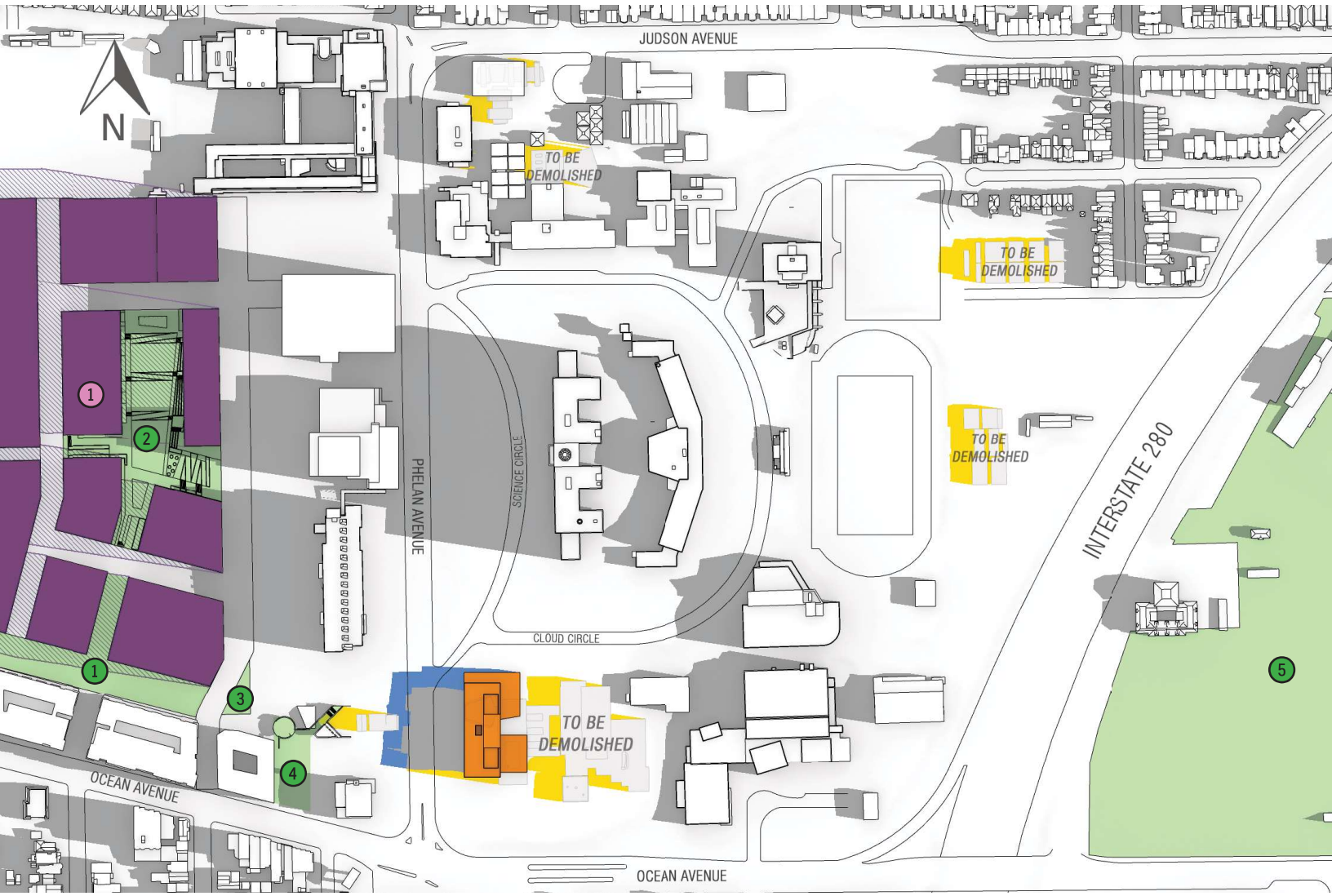
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.2 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

8:00 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

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Cumulative Projects

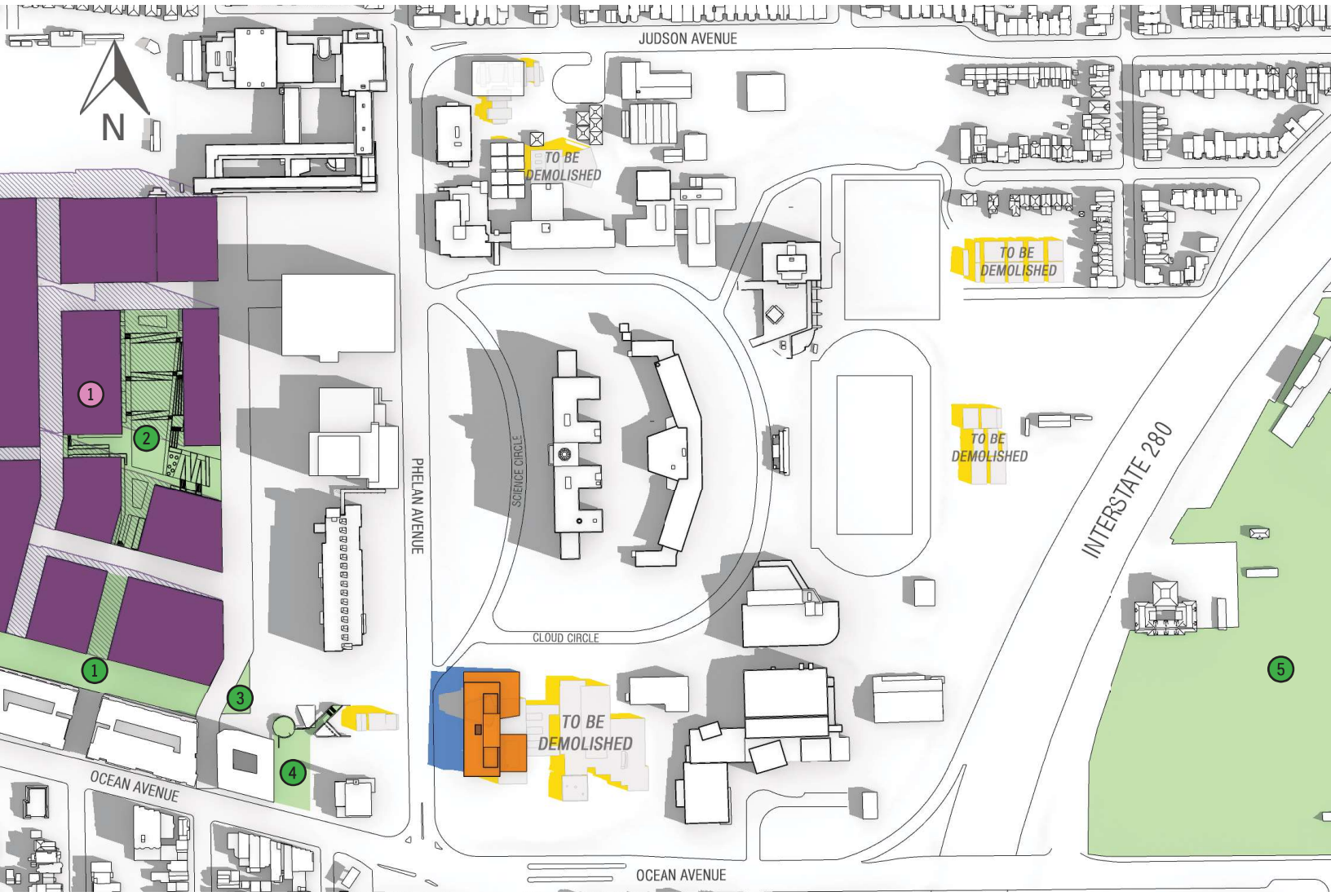
1. Balboa Resevoir Project

PREVISION DESIGN

C1.3

CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

9:00 AM

- Proposed New Projects
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Parks and Open Spaces

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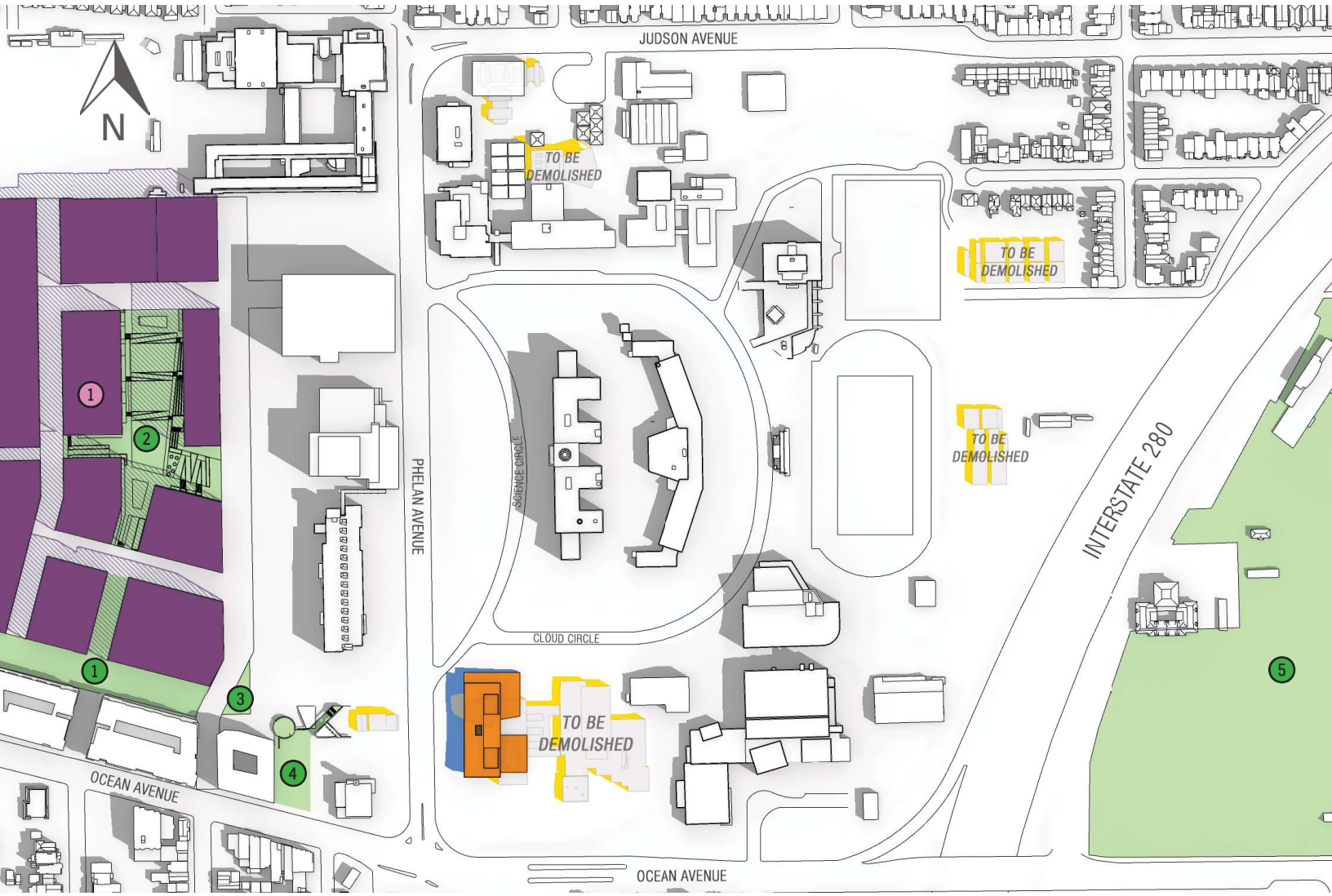
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.4 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

10:00 AM

- Proposed New Projects
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- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

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Cumulative Projects

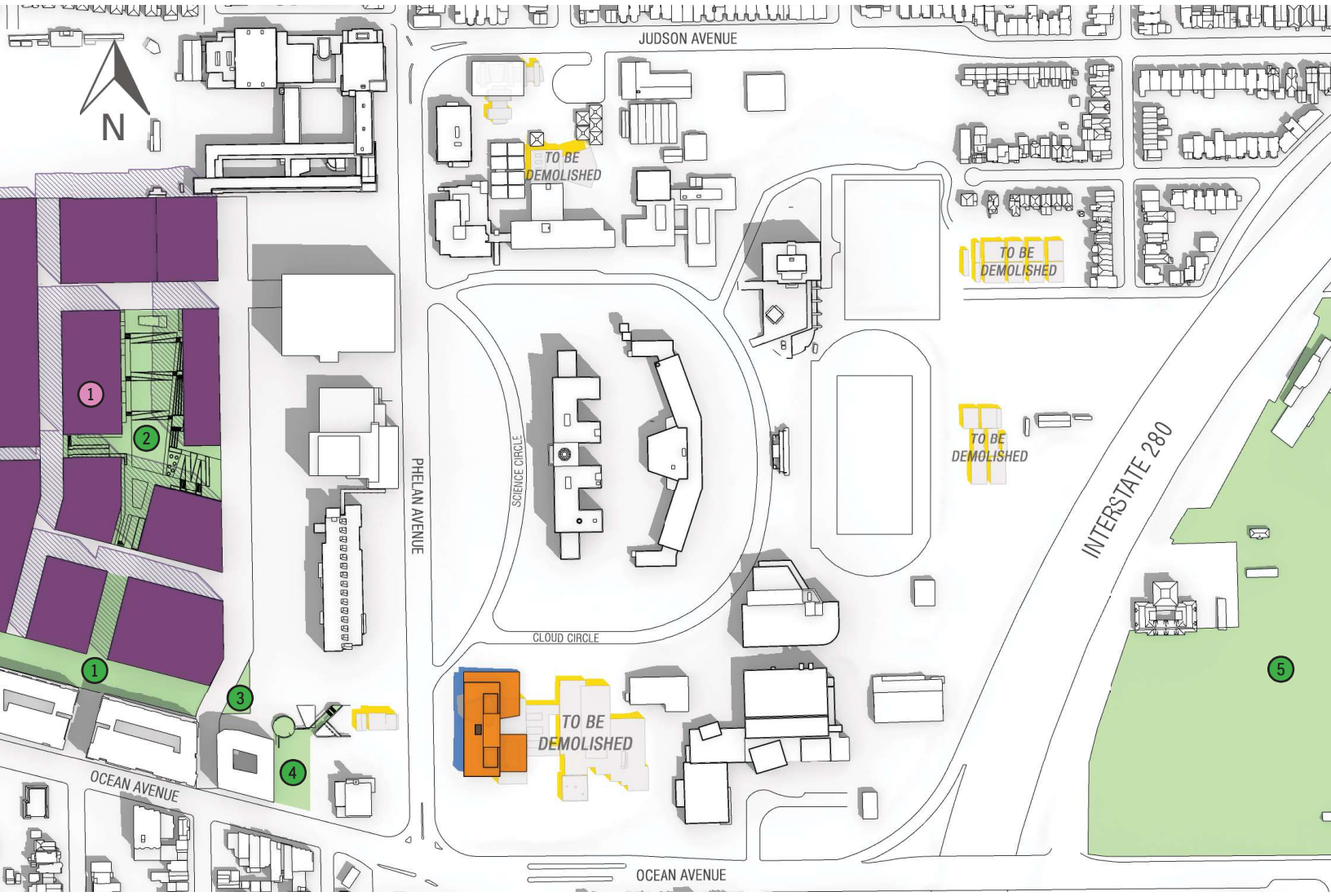
1. Balboa Resevoir Project

PREVISION DESIGN

C1.5

CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

11:00 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

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Cumulative Projects

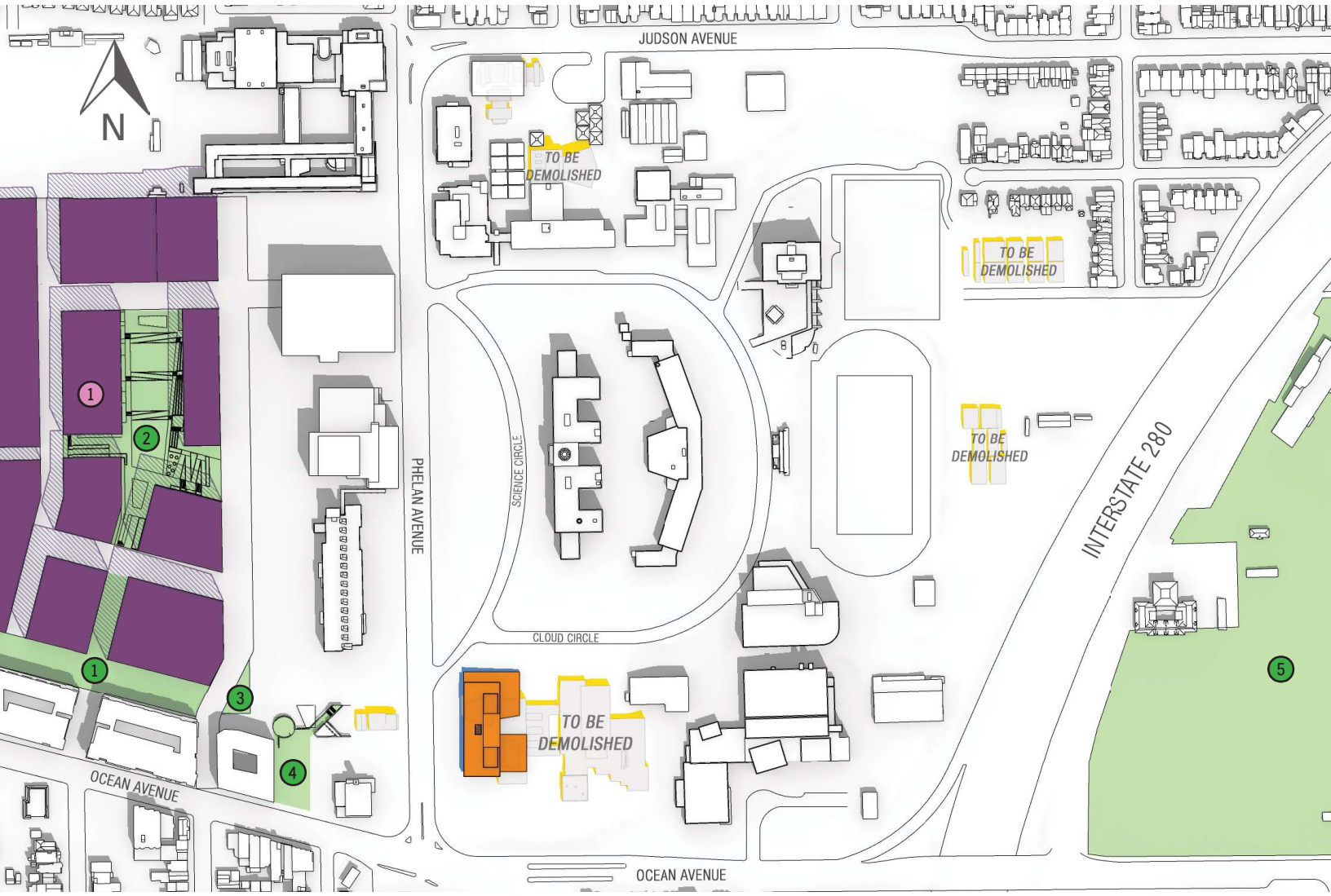
1. Balboa Resevoir Project

PREVISION DESIGN

C1.6

CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

12:00 PM

- Proposed New Projects
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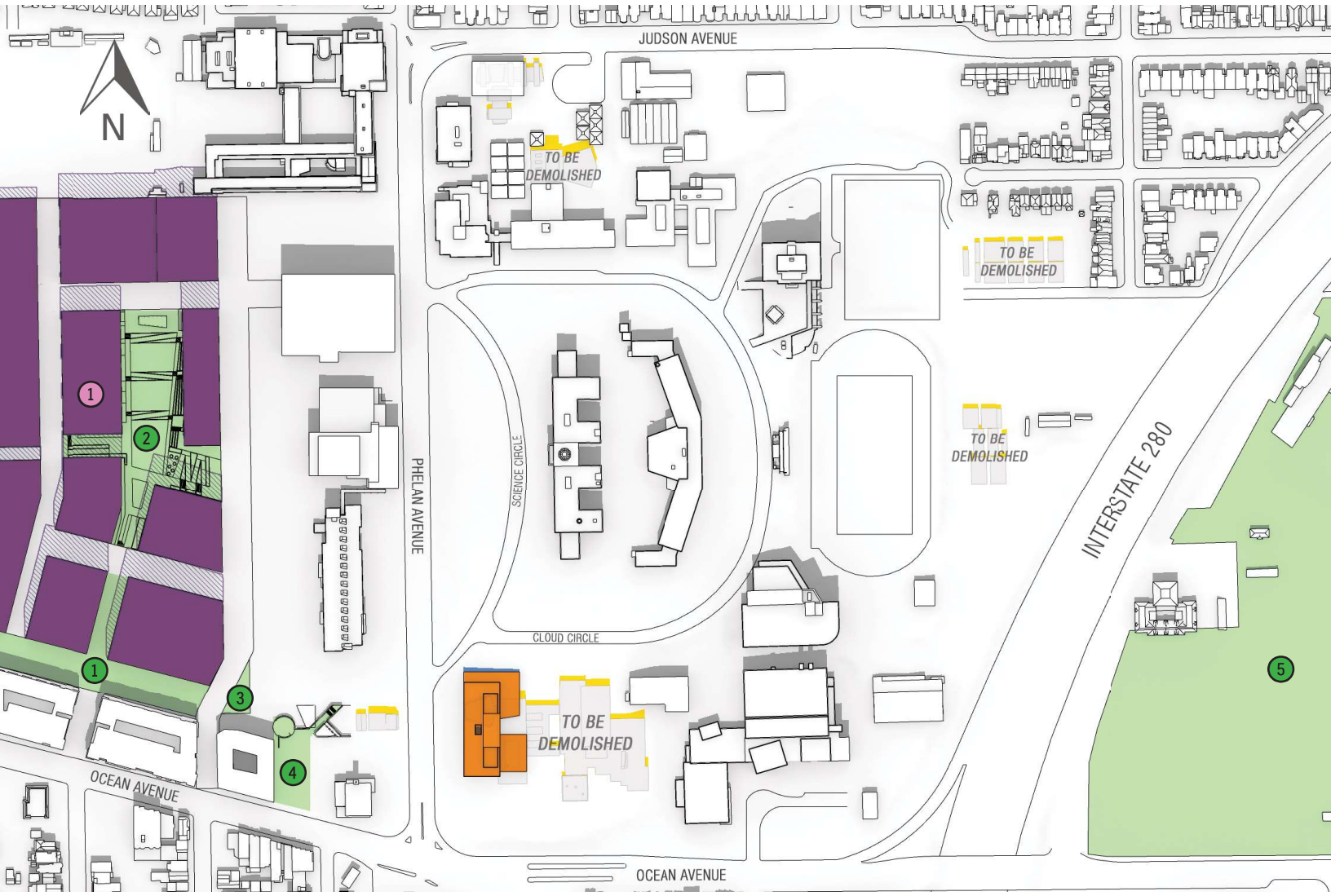
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.7 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

1:00 PM

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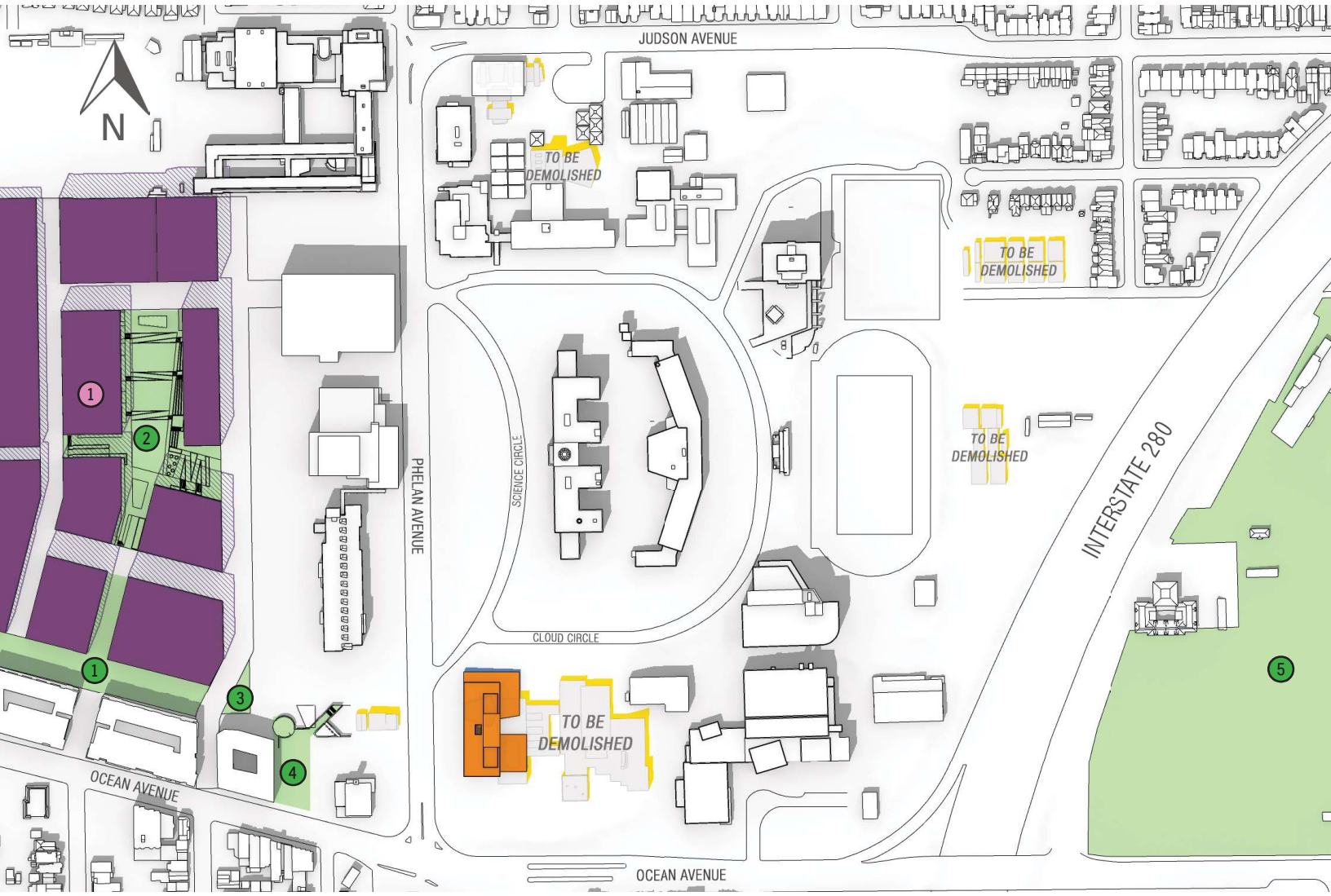
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.8 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

2:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

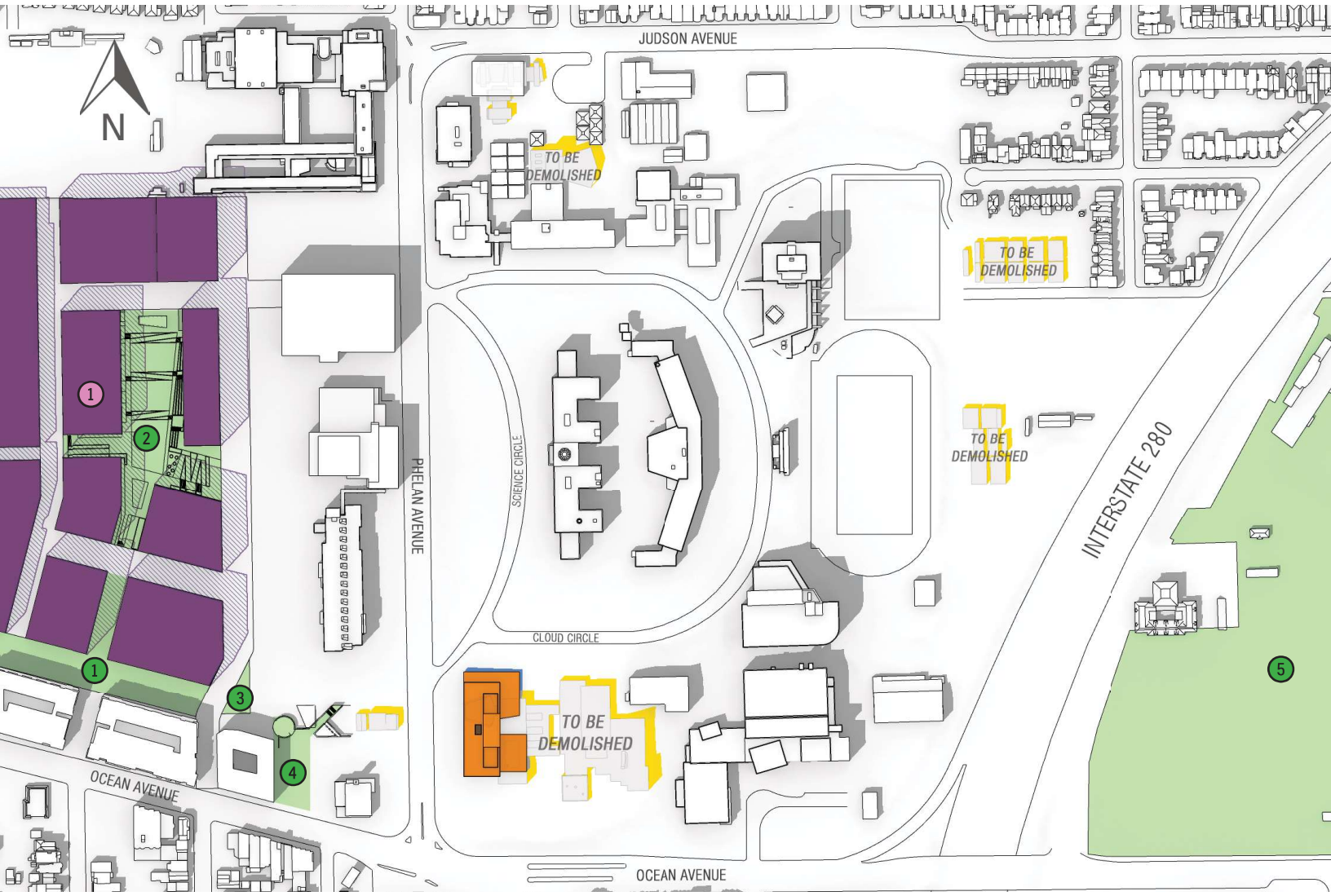
1. Balboa Resevoir Project

PREVISION DESIGN

C1.9

CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

3:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

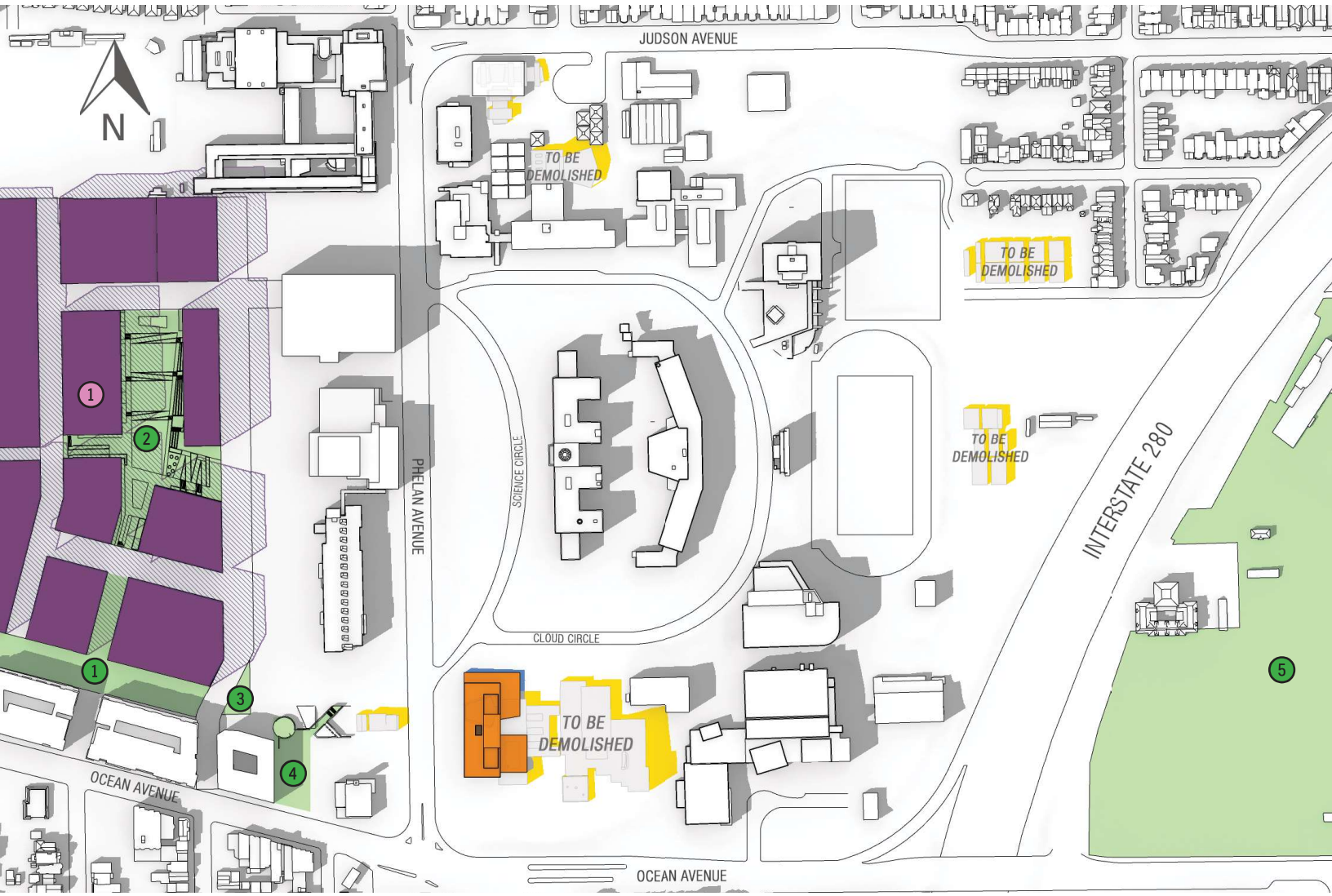
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.10 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

4:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

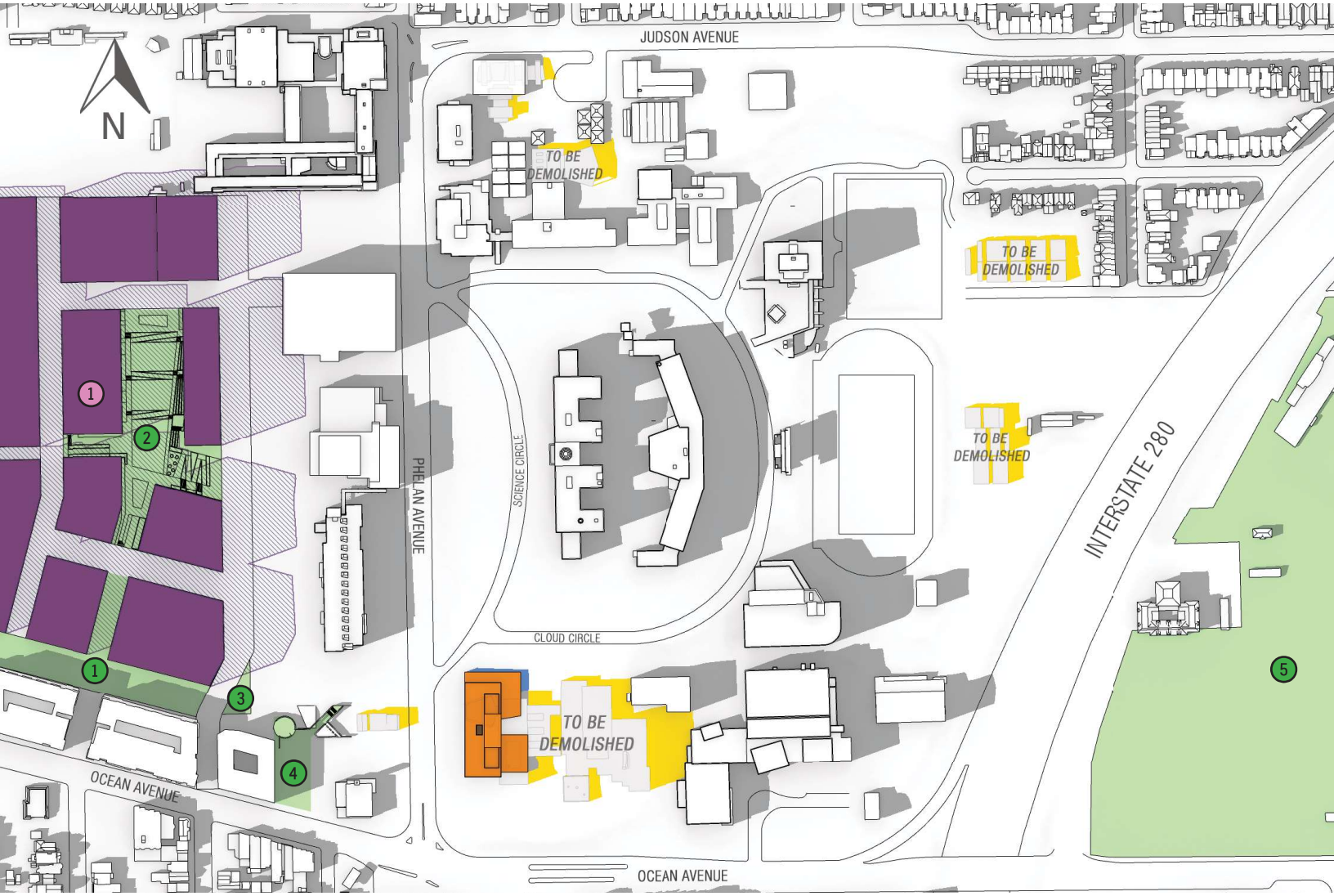
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.11 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes



APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

5:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.12 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes

APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

6:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

C1.13 CCSF FACILITIES MASTER PLAN

Shading diagrams near the Fall/Spring Equinoxes

APPROX. FALL/SPRING EQUINOX SEPTEMBER 20/MARCH 22

6:09 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

D1.1 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice

WINTER SOLSTICE
DECEMBER 20

8:19 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces
1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

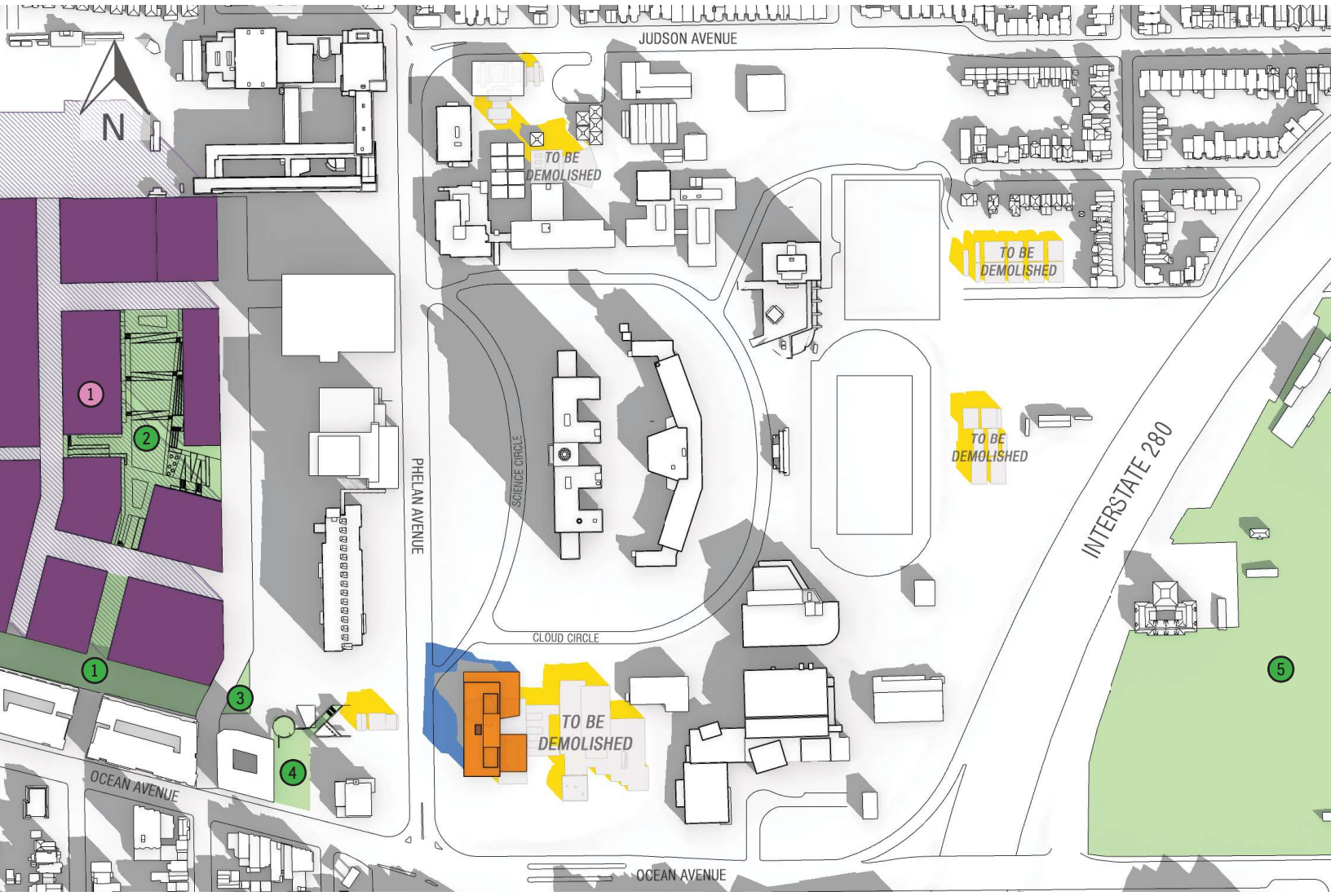
Cumulative Projects
1. Balboa Resevoir Project

PREVISION DESIGN

D1.2

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice



WINTER SOLSTICE
DECEMBER 20

9:00 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

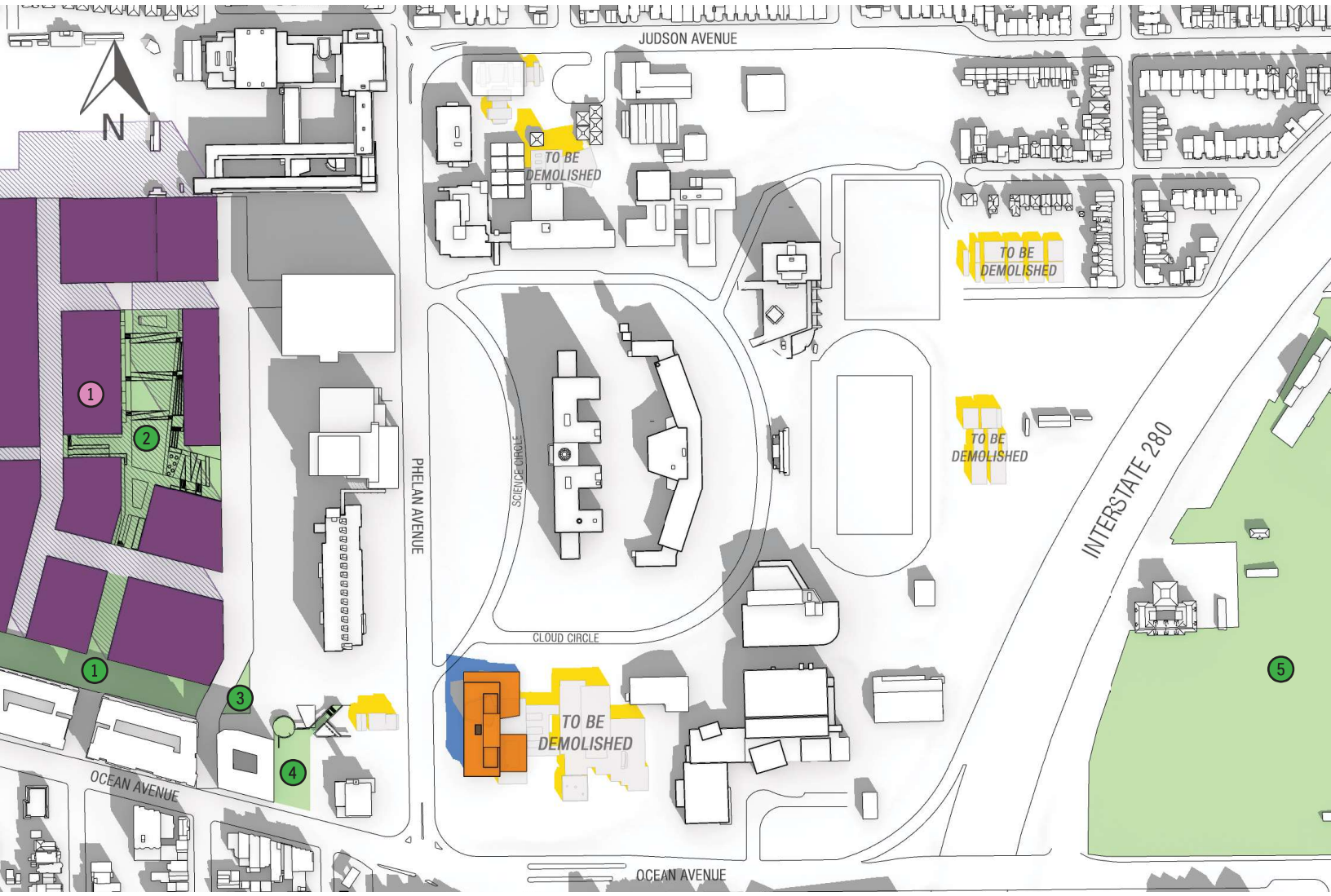
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

D1.3 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice



WINTER SOLSTICE DECEMBER 20

10:00 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

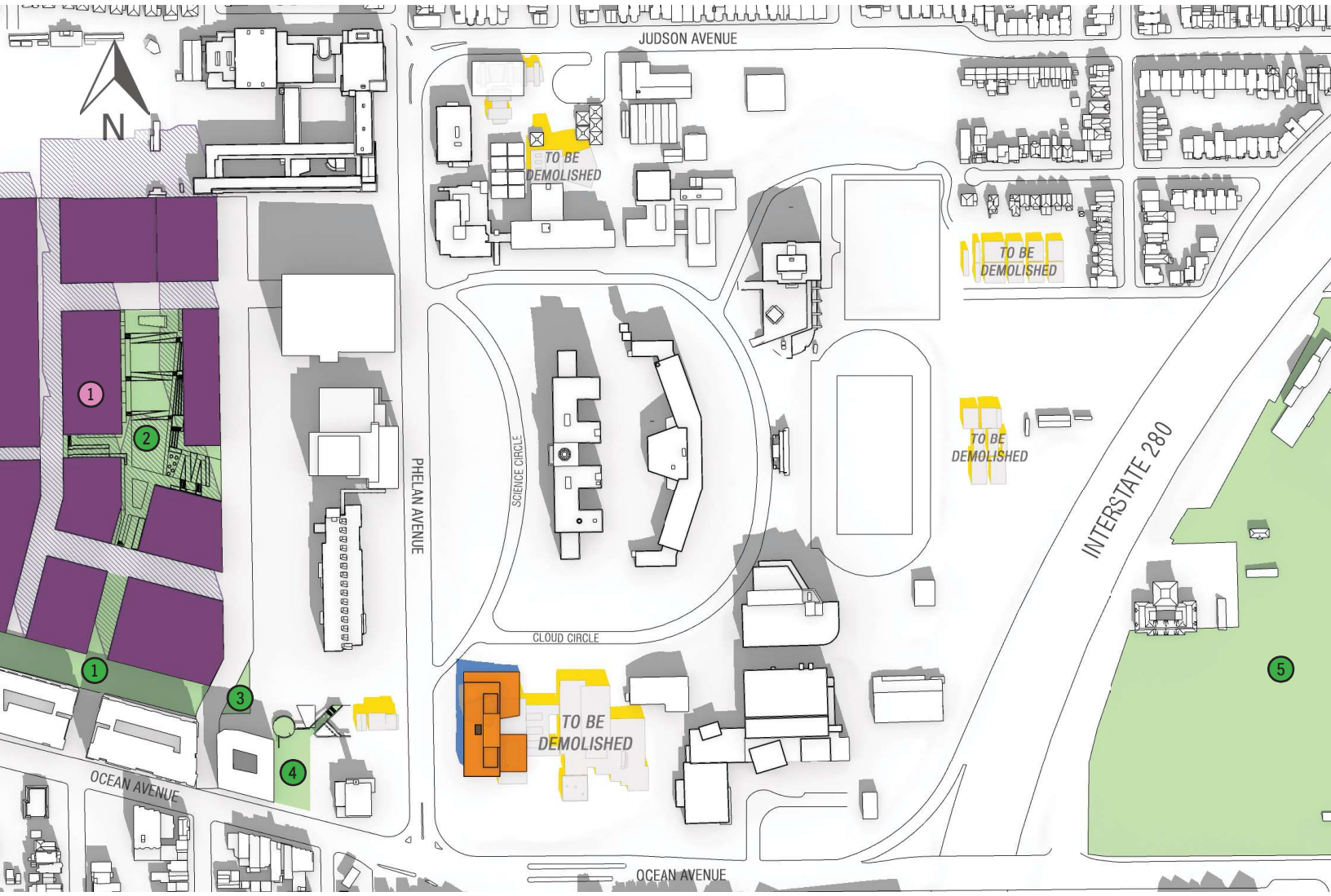
1. Balboa Resevoir Project

PREVISION DESIGN

D1.4

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice



WINTER SOLSTICE
DECEMBER 20

11:00 AM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

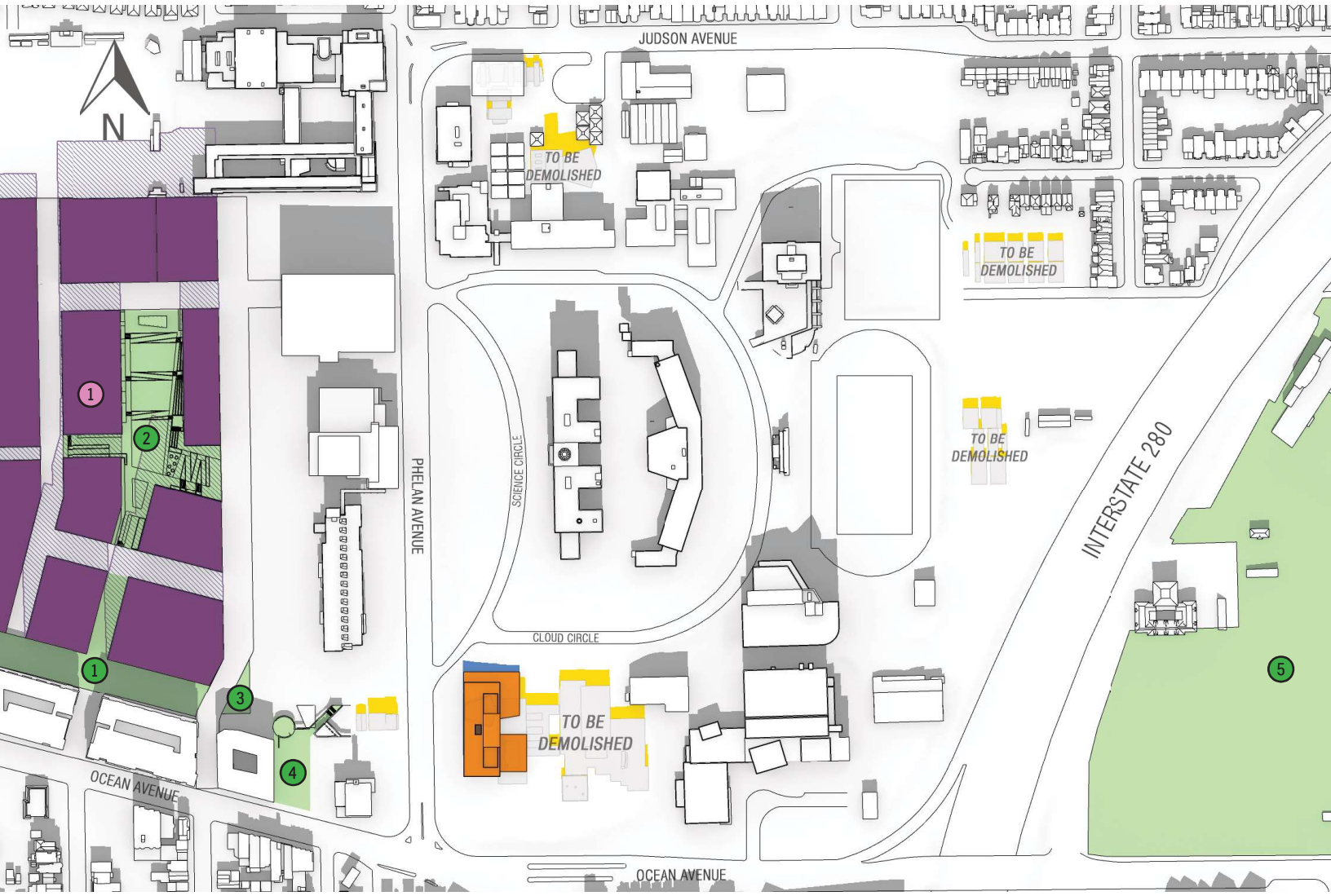
1. Balboa Resevoir Project

PREVISION DESIGN

D1.5

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice



WINTER SOLSTICE
DECEMBER 20

12:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

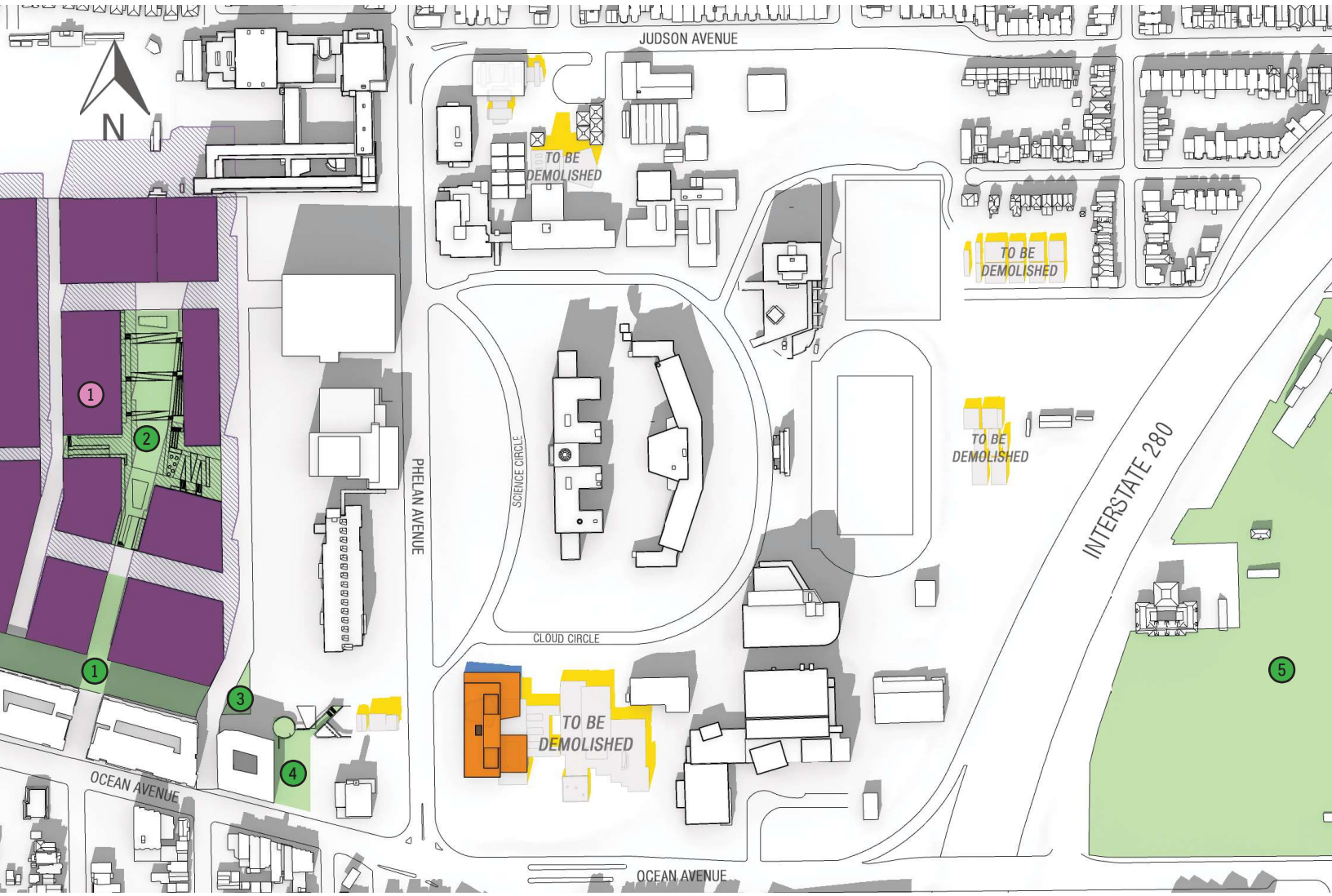
1. Balboa Resevoir Project

PREVISION DESIGN

D1.6

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice



WINTER SOLSTICE
DECEMBER 20

1:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

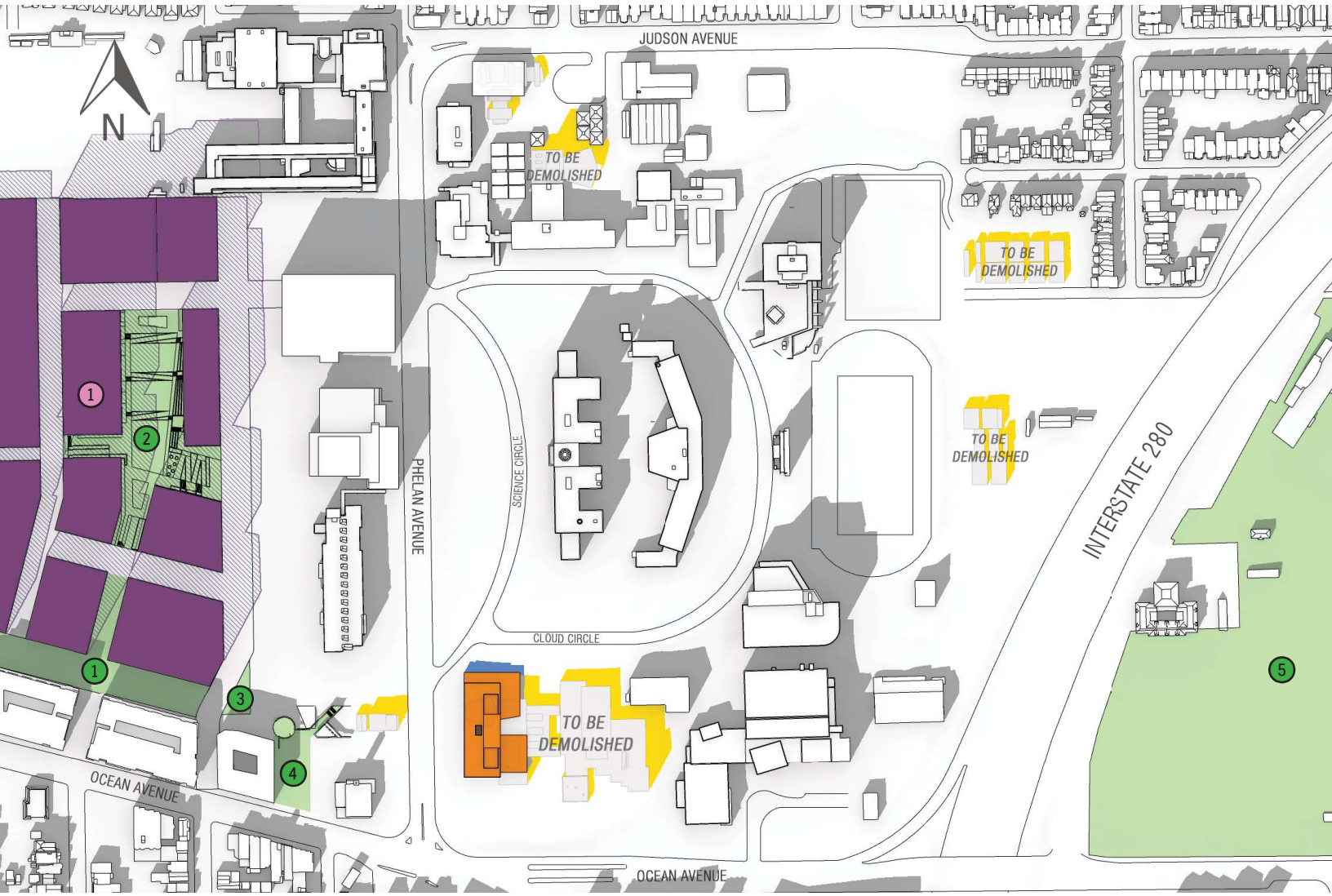
Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

D1.7 CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice



WINTER SOLSTICE DECEMBER 20

2:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

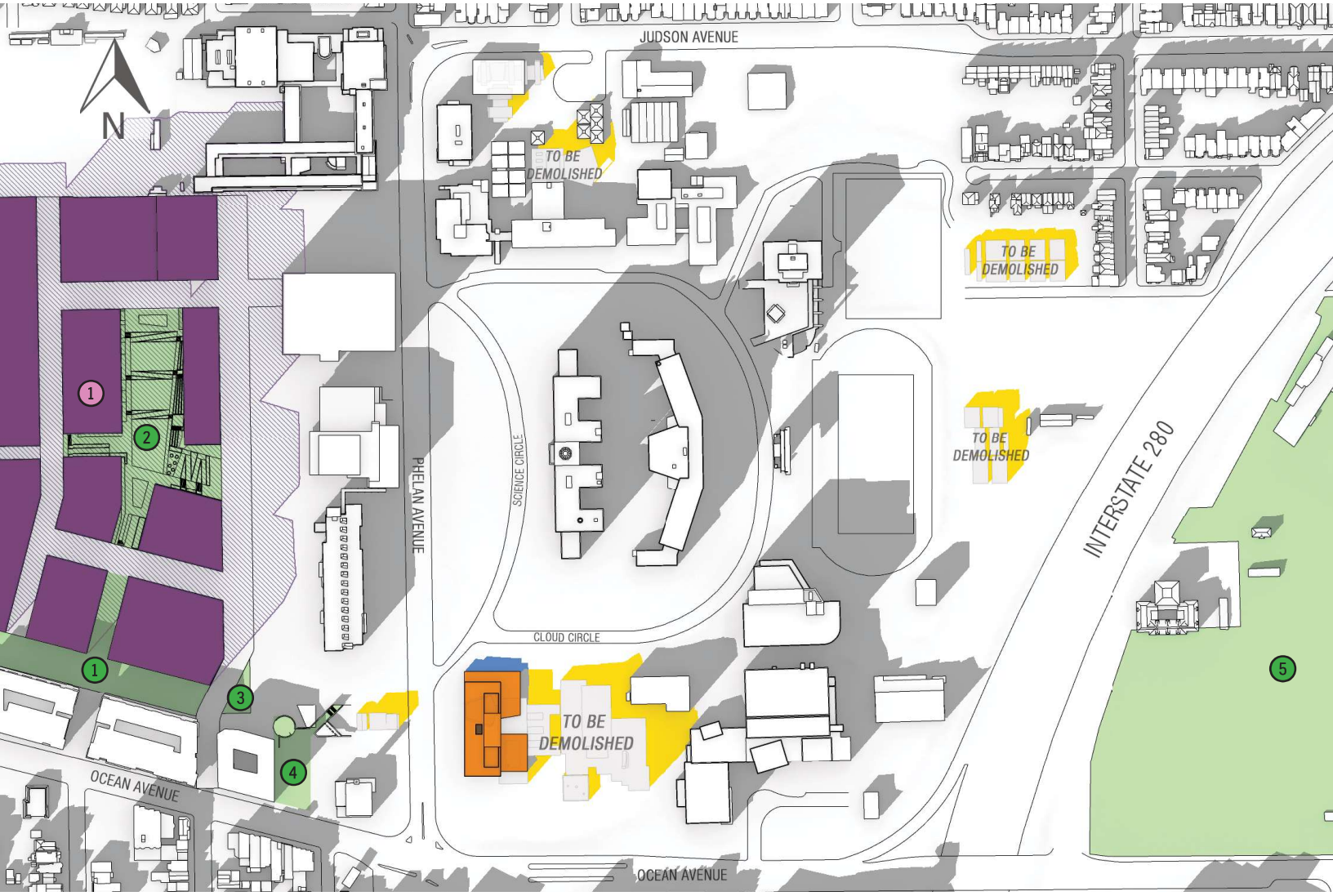
1. Balboa Resevoir Project

PREVISION DESIGN

D1.8

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice



WINTER SOLSTICE
DECEMBER 20

3:00 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

1. Balboa Resevoir Project

PREVISION DESIGN

D1.9

CCSF FACILITIES MASTER PLAN

Shading diagrams on the Winter Solstice

WINTER SOLSTICE
DECEMBER 20

3:54 PM

- Proposed New Projects
- Existing (current) Shadows
- New Shading by New Projects
- New Sunlight due to Demolition
- New Shading from Cumulative Projects

Parks and Open Spaces

1. SFPUC Open Space (Future)
2. Central Open Space (Future)
3. Gateway Open Space (Future)
4. Unity Plaza
5. Balboa Park (RPD)

Cumulative Projects

1. Balboa Resevoir Project

ATTACHMENT B

Biological Resources

CNDDB Special-Status Animals Map

Marin hesperian
double-crested cormorant
California black rail
monarch - California overwintering population
obscure bumble bee
monarch - California overwintering population
western bumble bee
California red-legged frog
California black rail
California red-legged frog, western pond turtle
obscure bumble bee
Steller (=northern) sea-lion
western bumble bee
California red-legged frog
monarch - California overwintering population
western bumble bee, western red bat
western pond turtle
American badger, hoary bat, North American porcupine
bank swallow, bumblebee scarab beetle
callippe silverspot butterfly
American badger
Bay checkerspot butterfly
San Francisco Bay Area leaf-cutter bee, sandy beach tiger beetle
western bumble bee
Mission blue butterfly, Townsend's big-eared bat, western bumble bee
San Francisco forktail damselfly
western pond turtle
western bumble bee
Bay checkerspot butterfly
California Ridgway's rail
double-crested cormorant
western pond turtle
bank swallow
Tomales isopod
Project Area
bank swallow
western bumble bee
hardhead, saltmarsh common yellowthroat
double-crested cormorant
Mission blue butterfly
hoary bat
callippe silverspot butterfly
California black rail, California red-legged frog, obscure bumble bee, Opler's longhorn moth, tidewater goby
SAN FRANCISCO COUNTY
SAN MATEO COUNTY
California Ridgway's rail
hoary bat
obscure bumble bee
callippe silverspot butterfly, Mission blue butterfly
San Francisco forktail damselfly
Mission blue butterfly
callippe silverspot butterfly
western bumble bee
Mission blue butterfly
San Bruno elfin butterfly
Stage's dufourine bee
incredible harvestman
Bay checkerspot butterfly
callippe silverspot butterfly, Mission blue butterfly
Mission blue butterfly
North American porcupine
western bumble bee
Alameda song sparrow
Tomales isopod
Leech's skyline diving beetle
California Ridgway's rail
Mission blue butterfly
San Bruno elfin butterfly
California red-legged frog
Alameda song sparrow

Vollmar NATURAL LANDS CONSULTING

Legend

- County Boundary
- Special-status Animal

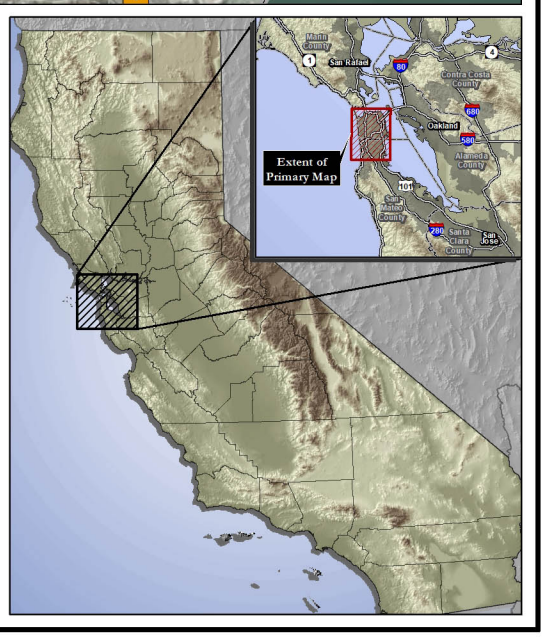
Regional Special-Status Animal Species Map

City College of San Francisco
San Francisco County, California

N W E S

1:65,000
(1 in = approx. 1 mi at Tabloid Layout)

0 0.5 1 2 Kilometers
0 0.5 1 2 Miles



Data Sources: ESRI/DigitalGlobe, 2019 | GAP, 1998
CNDDB, 07/2020 | USGS Various
GIS/Cartography by: K. Chinn, Nov. 2020
Map File: 489_CNDDB-Animals_B-P_2020-1123.mxd

CNDDB Special-Status Plants Map

Franciscan manzanita
marsh sandwort
Franciscan thistle
Presidio manzanita
Point Reyes salty bird's-beak
blue coast gilia
Presidio clarkia
Presidio manzanita
Marin western flax
Franciscan thistle
Kellogg's horkelia
Presidio clarkia
dark-eyed gilia,
marsh microseris,
Mt. Tamalpais thistle,
round-headed Chinese-houses
blue coast gilia
Choris' popcornflower
Presidio manzanita
Presidio clarkia
blue coast gilia
blue coast gilia
Marin western flax
Franciscan manzanita,
Marin western flax,
Presidio manzanita,
San Francisco Bay spineflower
Franciscan thistle
Kellogg's horkelia,
San Francisco gumplant
San Francisco popcornflower
blue coast gilia,
San Francisco campion
Franciscan manzanita
Presidio manzanita
Presidio manzanita
Choris' popcornflower
coastal triquetrella
fragrant fritillary,
San Francisco gumplant
dark-eyed gilia
fragrant fritillary
adobe sanicle,
alkali milk-vetch,
San Francisco owl's-clover
blue coast gilia
beach layia,
bristly sege,
congested-headed hayfield tarplant,
rose leptosiphon,
water star-grass
fragrant fritillary
California seablite
coastal triquetrella
chaparral ragwort
Franciscan thistle,
Kellogg's horkelia,
northern curly-leaved monardella,
round-headed Chinese-houses,
San Francisco campion,
San Francisco lessingia,
San Francisco owl's-clover
Franciscan manzanita,
Presidio manzanita
Project Area
Diablo helianthella
blue coast gilia
compact cobwebby thistle
robust spineflower
short-leaved evax
San Francisco owl's-clover,
Scouler's catchfly
SAN FRANCISCO COUNTY
SAN MATEO COUNTY
Scouler's catchfly
Kellogg's horkelia
bent-flowered fiddleneck,
dark-eyed gilia,
San Francisco gumplant,
San Francisco owl's-clover
Scouler's catchfly
coastal triquetrella
Montara manzanita
Choris' popcornflower
San Bruno Mountain manzanita
Scouler's catchfly
Pacific manzanita
white-rayed pentachaeta
San Bruno Mountain manzanita
Scouler's catchfly
Kellogg's horkelia,
Point Reyes horkelia,
robust spineflower,
two-fork clover
Diablo helianthella
congested-headed hayfield tarplant

Vollmar
NATURAL LANDS CONSULTING

Legend

County Boundary

Special-status Plant Occurrence

- Other Special-status Plant (with label)
- San Francisco Bay spineflower
- San Francisco campion
- San Francisco collinsia
- San Francisco gumplant
- San Francisco lessingia
- San Francisco owl's-clover

Data Sources: ESRI/DigitalGlobe, 2019 | GAP, 1998
CNDDB, 07/2020 | USGS Various
GIS/Cartography by: K. Chinn, Nov. 2020
Map File: 489_CNDDB-Plants_B-P_2020-1123.mxd

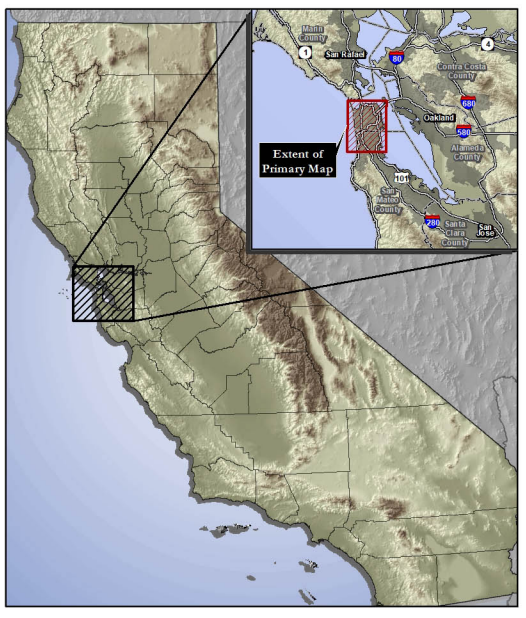
Regional Special-Status Plant Species Map

City College of San Francisco
San Francisco County, California

N
W E
S

1:65,000
(1 in = approx. 1 mi at Tabloid Layout)

0 0.5 1 2 Kilometers
0 0.5 1 2 Miles



Arborist Report

ARBORIST REPORT

Tree Condition Assessment • CCSF • September 2, 2019

Prepared by:

Stephen Howard

Davey Tree Expert Company • San Francisco

Assistant District Manager

ISA Certified Arborist #WE-10380A

Prepared for:

Farshid Samsami, Senior Project Manager

Kitchell CEM

71 Stevenson Street, Suite 400

San Francisco, CA 94105

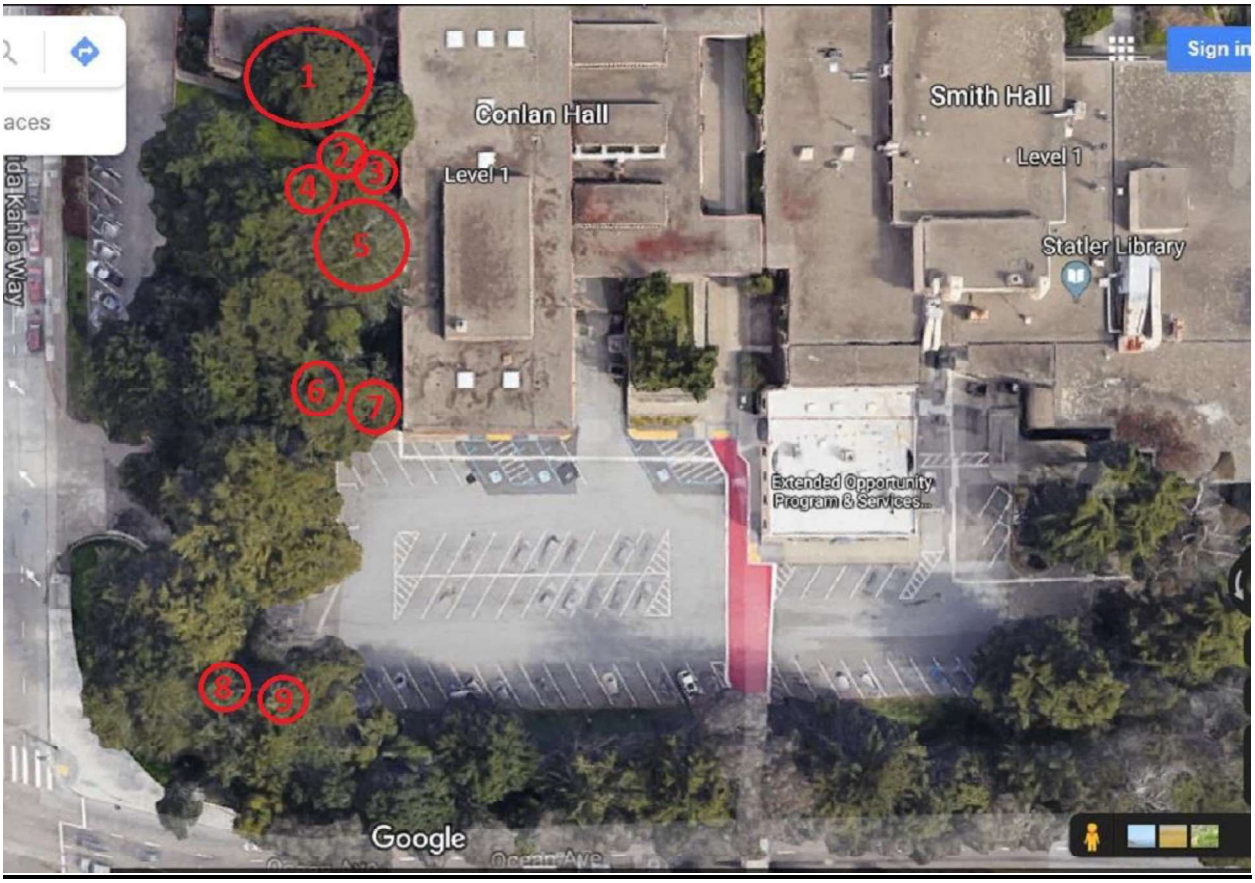
1400 Mission Rd ● South San Francisco, CA 94080
Office 415-468-9180 ● Field 415-818-3463 ● stephen.howard@davey.com

Scope of Work and Limitations

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk associated with living trees. Clients may choose to accept or disregard the recommendations of the arborist or to seek additional advice. This assessment is based on the circumstances and observations, as they existed at the time of the site inspection. The opinions in this assessment are given based on observations made and using generally accepted professional judgment, however, because trees are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this assessment are valid only at the date any such observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made by Davey as to the length of the validity of the results, observations, recommendations and analysis contained within this assessment. Conditions can be obscured within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specific period of time. As a result the client shall not rely upon this Assessment, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. It is recommended that trees be re--assessed periodically.

Site Description and Context

The City College of San Francisco is planning construction to tear down the existing Conlan Hall and replace it with a larger structure. There are numerous mature Monterey cypress (Cupressus macrocarpa) on the west side of the existing Conlan Hall that will potentially be impacted by the planned construction activity. I recommend removal of 7 trees west of the hall due to a combination of existing structural defects and expected interference from future construction. I recommend removal of 1 additional Monterey cypress and 1 Monterey pine south of the parking lot entrance due to existing structural defects.



Description of Subject Trees

Tree #1 is a Monterey cypress measuring 31" diameter at breast height (DBH). It is approximately 35ft tall with a crown spread of 30ft. The base of the tree is only about 3ft from the building. It is likely the tree or a majority of its root system are in the path of construction.

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Office 415-468-9180 ● Field 415-818-3463 ● stephen.howard@davey.com

Tree #2 is a Monterey cypress measuring 20" DBH. It is approximately 60ft tall with a crown spread of 20ft. It has a poorly formed crown and the crown is weighted toward the building. The trunk has a noticeable lean toward the building.

Tree #3 is a Monterey cypress measuring 24" DBH. It is approximately 70ft tall with a crown spread of 25ft. The crown is weighted heavily toward the building. The trunk has a noticeable lean toward the building.

Tree #4 is a Monterey cypress measuring 20" DBH. It is approximately 70ft tall with a crown spread of 20ft. It has a poorly formed crown and all the growth is concentrated at the top. This increases the 'lever arm' effect from the wind and makes the tree more likely to fail at the base.

Tree #5 is a Monterey cypress measuring 34" DBH. It is approximately 75ft tall with a crown spread of 40ft. The crown is sparse and has 10% deadwood accumulation. The base of the tree is about 25ft from the existing building. Root loss from construction combined with existing stresses would likely cause severe decline.

Tree #6 is a Monterey cypress measuring 32" DBH. It is approximately 75ft tall with a crown spread of 30ft. It has a poorly formed crown and the crown is weighted toward the building. The trunk has a noticeable lean toward the building.

Tree #7 is a Monterey cypress measuring 20" DBH. It is approximately 50ft tall with a crown spread of 25ft. The crown is weighted heavily toward the building. The trunk has a noticeable lean toward the building.

Tree #8 is a Monterey pine (Pinus radiata) measuring 18" DBH. It is approximately 50ft tall with a crown spread of 20ft. It has a poorly formed crown and all the growth is concentrated at the top. This increases the 'lever arm' effect from the wind and makes the tree more likely to fail at the base. It shows signs of heavy red turpentine bark beetle activity which usually leads to severe decline or death.

Tree #9 is a Monterey cypress measuring 19" DBH. It is approximately 60ft tall with a crown spread of 15ft. It has a poorly formed crown and all the growth is concentrated at the top.

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Special-Status Species Tables

TABLE 8. Special-status Wildlife Species Documented within the Project Region, Updated Facilities Master Plan for San Francisco City College, San Francisco, California.

Scientific Name (Common Name)	Status[1]	Preferred Habitat	Potential to Occur on Project Site
Mammals			
Corynorhinus townsendii (Townsend's big-eared bat)	BLM: S, SSC, USF: S	Prefers mesic habitats, maternity roosts in caves, tunnels, mines and buildings.	**Not expected.** The species tends to roost in older decrepit buildings, site does not provide preferred roosting habitat.
Enhydra lutris nereis (southern sea otter)	FT, FP	Inhabits the Pacific Ocean along the central California coast.	**Not expected.** No aquatic habitat present.
Lasiurus blossevillii (western red bat)	SSC	Strongly associated with riparian habitats, particularly mature stands of cottonwood/sycamore in the Central Valley and lower reaches of the large rivers that drain the Sierra Nevada.	**Not expected.** No riparian habitat present.
Reithrodontomys raviventris (salt-marsh harvest mouse)	FE, SE, FP	Uplands of salt marshes amongst salt-tolerant vegetation.	**Not expected.** No marsh habitat present.
Taxidea taxus (American badger)	SSC	Forages in dry, open shrub, forest, and herbaceous habitats. Digs burrows in dry, friable soils where young are born.	**Not expected.** Naturalized areas onsite do not provide quality habitat.
Birds			
Agelaius tricolor (tricolored blackbird)	ST, SSC, BLM: S	Typically nests in large colonies in dense stands of cattails or tules in freshwater, emergent wetlands.	**Not expected.** No wetland habitat present.
Aquila chrysaetos (golden eagle)	BLM: S, FP, WL, CDF: S, BCC	Prefers open and semi-open country with native vegetation, primarily in mountains, canyonlands, cliffs, and bluffs. Nests on cliffs and steep areas in grassland, chaparral, shrubland, and forest.	**Not expected.** No suitable foraging or nesting habitat present.
Athene cunicularia (western burrowing owl)	BCC, BLM: S, SSC	Prefers open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation and the presence of large mammal burrows (especially of California ground squirrels).	**Not expected.** The species has not been observed within five miles of project site.
Brachyramphus marmoratus (marbled murrelet)	FT, SE, CDF: S	Nests in mature, coastal coniferous forests, often in redwoods or Douglas fir trees, and feed in nearby coastal waters.	**Not expected.** No mature coniferous forest habitat present.

Scientific Name **(Common Name)**	**Status[1]**	**Preferred Habitat**	**Potential to Occur on Project Site**
Charadrius alexandrinus nivosus (western snowy plover)	FT, SSC, BCC	Prefers to breed in coastal beaches, dune-backed beaches, sparsely-vegetated dunes, sand spits, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Less common nesting habitat includes bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars.	**Not expected.** No aquatic habitat present.
Geothlypis trichas sinuosa (saltmarsh common yellowthroat)	SSC, BCC	Tall emergent herbaceous wetlands.	**Not expected.** No wetland habitat present.
Haliaeetus leucocephalus (bald eagle)	SE, BLM: S, CDF: S, FP, USFS: S, BCC	Nests in forested areas adjacent to large bodies of water. Perches in tall, mature coniferous or deciduous trees.	**Not expected.** No suitable nesting or foraging habitat present.
Laterallus jamaicensis coturniculus (California black rail)	ST, BLM: S, FP, BCC	Primarily found in tidal salt marshes in the San Pablo and Suisun Bays and elsewhere in the San Francisco Bay region. Also found in inland freshwater marshes.	**Not expected.** No marsh habitat present.
Melospiza melodia pusillula (Alameda song sparrow)	SSC, BCC	Found in tidal salt marsh habitat along the San Francisco Bay.	**Not expected.** No marsh habitat present.
Phalacrocorax auritus (double-crested cormorant)	WL	Found in estuarine, fresh, and salt waters along the California coast and inland areas. Feeds in water and roosts near water on islands, rocks, dead tree branches, and various man-made structures.	**Not expected.** No aquatic habitat present.
Phoebastria albatrus (short-tailed albatross)	FE, SSC	Breeds and nests on oceanic islands and atolls in Japan and Hawaii, then disperses throughout the North Pacific along coastal shelves to forage.	**Not expected.** No suitable nesting or foraging habitat present.
Rallus longirostris obsoletus (California Ridgway's rail)	FE, SE, FP	Salt marshes and tidal sloughs. Usually associated with heavy growth of pickleweed.	**Not expected.** No aquatic habitat present.
Riparia riparia (bank swallow)	ST, BLM: S	Nests near bodies of fresh and salt water in vertical banks and cliffs of fine or sandy soil. Feeds in grassland, shrubland, and savanna year-round, open riparian areas during breeding season, and cropland during migration.	**Not expected.** No suitable nesting habitat present.
Sterna antillarum browni (California least tern)	FE, SE, FP	Wide open beaches with little to no vegetation and a strong tide.	**Not expected.** No aquatic habitat present.

Scientific Name **(Common Name)**	**Status[1]**	**Preferred Habitat**	**Potential to Occur on Project Site**
Reptiles and Amphibians			
Actinemys marmorata (western pond turtle)	SSC, BLM: S, USFS: S	Ponds, marshes, streams, and ditches with emergent aquatic vegetation and basking areas.	**Not expected.** No aquatic habitat present.
Chelonia mydas (green sea turtle)	FT	Often found in open ocean, return to beaches to breed.	**Not expected.** No aquatic habitat present.
Rana draytonii (California red-legged frog)	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.	**Not expected.** No aquatic habitat present.
Thamnophis sirtalis tetrataenia (San Francisco gartersnake)	FE, SE, FP	Found in holes or crevices such as burrows, fissures in rocky accumulations, or under logs, often near bodies of water. Feeds on land or near pools or other water bodies.	**Not expected.** No aquatic habitat present.
Fish			
Eucyclogobius newberryi (tidewater goby)	FE	Prefers coastal lagoons and photic zone of brackish water within estuaries.	**Not expected.** No aquatic habitat present.
Hypomesus transpaci (Delta smelt)	FT, SE	Bays and estuaries. Mostly found in Suisun Bay and the associated delta.	**Not expected.** No aquatic habitat present.
Mylopharodon conocephalus (hardhead)	SSC, USFS: S	Found in undisturbed deep, slow, clear water with sandy or rocky bottoms within mid to low-elevation large streams.	**Not expected.** No aquatic habitat present.
Insects			
Bombus occidentalis (western bumble bee)	SC, USFS: S	Prefers open areas including prairies, urban parks, sagebrush steppe, alpine meadows, and other grassy areas.	**Not expected.** Lack of quality habitat onsite.
Callophrys mossii bayensis (San Bruno elfin butterfly)	FE	Found in coastal mountains and scrubland on north-facing slopes, primarily in rocky outcrops and cliffs.	**Not expected.** No coastal mountain or scrubland habitat present.
Euphydryas editha bayensis (bay checkerspot butterfly)	FT	Requires serpentine soil habitat. Larvae require dwarf plantain (*Plantago erecta*) and purple owl's clover (*Castilleja densifora* or *C. exserta*).	**Not expected.** Site is predominantly developed and landscaped, does not provide quality habitat.
Icaricia icarioides missionensis (Mission blue butterfly)	FE	Found in coastal chaparral and grasslands. Caterpillars feed exclusively on lupine.	**Not expected.** No coastal chaparral or grassland habitat present.

Scientific Name **(Common Name)**	**Status**[1]	**Preferred Habitat**	**Potential to Occur on Project Site**
Speyeria callippe callippe (callippe silverspot butterfly)	FE	Found in native San Francisco Bay area grasslands. Requires host plant California golden violet (*Viola pedunculata*) for egg-laying and larval growth.	**Not expected.** Native grassland not present onsite.
Speyeria zerene myrtleae (Myrtle's silverspot butterfly)	FE	Found in coastal dunes, bluffs, and prairies within 3 miles of the coast. Violets (primarily *Viola adunca*) are required for larval growth.	**Not expected.** No coastal dune, bluff or prairie habitat present.

1. FT – Federal Threatened; FE – Federal Endangered; ST – State Threatened; SE – State Endangered; SC – State Candidate; SSC – CDFW Species Special Concern; FP – CDFW Fully Protected; WL – CDFW Watch List; BCC – USFWS Birds of Conservation Concern; LC – IUCN Least Concern; NT – IUCN Near Threatened; BLM:S – Bureau of Land Management Sensitive; CDF:S – California Department of Forestry and Fire Protection Sensitive; USFS:S – U.S. Forest Service Sensitive; CNPS 1B – CA Native Plant Society – Plants Rare, Threatened, or Endangered in CA and Elsewhere; CNPS 2B – CA Native Plant Society – Plants Rare, Threatened, or Endangered in CA but More Common Elsewhere; CNPS 3 – CA Native Plant Society – Review List: Plants About Which More Information is Needed; CI – Critically Imperiled; SA – Special Animals List, no federal or state listing.

TABLE 9. Special-status Plant Species Documented within the Project Region, Updated Facilities Master Plan for San Francisco City College, San Francisco, California.

Botanical Name **Common Name (Plant Family)**	**Status (CRPR/ State/Federal)[1]**	**Preferred Habitat, Elevation Range, Bloom Time**	**Potential to Occur on Project Site**
Amsinckia lunaris bent-flowered fiddleneck (Boraginaceae)	1B.2/--/--	March-June, Coastal bluff scrub, Cismontane woodland, Valley and foothill grassland; 5-1,640 ft	**Not expected**. Site does not support appropriate habitat.
Arabis blepharophylla coast rockcress (Brassicaceae)	4.3/--/--	February-May, Broad-leafed upland forest, Coastal bluff scrub, Coastal prairie, Coastal scrub; rocky; 5-3,610 ft	**Not expected**. Site does not support coastal bluff scrub, coastal prairie or upland forest habitat.
Arctostaphylos franciscana Franciscan manzanita (Ericaceae)	1B.1/--/FE	February-April, Coastal scrub (serpentinite); 195-985 ft	**Not expected**. Site does not support coastal scrub habitat.
Arctostaphylos imbricata San Bruno Mountain manzanita (Ericaceae)	1B.1/SE/--	February-May, Chaparral, Coastal scrub; rocky; 902-1,213	**Not expected**. Site does not support coastal scrub or chaparral habitat.
Arctostaphylos montana ssp. *ravenii* Presidio manzanita (Ericaceae)	1B.1/SE/FE	February-March, Chaparral, Coastal prairie, Coastal scrub; serpentinite outcrop; 145-705 ft	**Not expected**. Site does not support coastal bluff scrub, grassland or cismontane woodland habitat.
Arctostaphylos pacifica Pacific manzanita (Ericaceae)	1B.1/SE/--	February-April, Coastal scrub, Chaparral; 1,080-1,085 ft	**Not expected**. Site does not support coastal scrub or chaparral habitat.
Arenaria paludicola marsh sandwort (Caryophyllaceae)	1B.1/SE/FE	May-August, Marshes and swamps (freshwater or brackish); sandy, openings; 5-560 ft	**Not expected**. Site does not support marsh or swamp habitat.
Astragalus nuttallii var. *nuttallii* ocean bluff milk-vetch (Fabaceae)	4.2/--/--	January-November, Coastal bluff scrub, Coastal dunes; 5-395 ft	**Not expected**. Site does not support coastal bluff scrub or coastal dunes habitat.
Astragalus tener var. *tener* alkali milk-vetch (Fabaceae)	1B.2/--/--	March-June, Playas, Valley and foothill grassland (adobe clay), Vernal pools; alkaline; 0-195 ft	**Not expected**. Site does not support playas, grassland, or vernal pool habitat.
Carex comosa bristly sedge (Cyperaceae)	2B.1/--/--	May-September, Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland; 0-2,050 ft	**Not expected**. Site does not support appropriate habitat.

Botanical Name **Common Name (Plant Family)**	**Status (CRPR/ State/Federal)[1]**	**Preferred Habitat, Elevation Range, Bloom Time**	**Potential to Occur on Project Site**
Castilleja ambigua var. *ambigua* johnny-nip (Orobanchaceae)	4.2/--/--	March-August, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Valley and foothill grassland, Vernal pools margins; 0-1,425 ft	**Not expected**. Site does not support appropriate habitat.
Chloropyron maritimum ssp. *palustre* Point Reyes bird's-beak (Orobanchaceae)	1B.2/--/--	June-October, Marshes and swamps (coastal salt); 0-35 ft	**Not expected**. Site does not support marsh or swamp habitat.
Chorizanthe cuspidata var. *cuspidata* San Francisco Bay spineflower (Polygonaceae)	1B.2/--/--	April-July (August), Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub; sandy; 5-705 ft	**Not expected**. Site does not support coastal scrub, coastal dune, or coastal prairie habitat.
Chorizanthe robusta var. *robusta* robust spineflower (Polygonaceae)	1B.1/--/FE	April-September, Chaparral (maritime), Cismontane woodland (openings), Coastal dunes, Coastal scrub; sandy or gravelly; 5-985 ft	**Not expected**. Site does not support coastal scrub, coastal dune, or cismontane woodland habitat.
Cirsium andrewsii Franciscan thistle (Asteraceae)	1B.2/--/--	March-July, Broad-leafed upland forest, Coastal bluff scrub, Coastal prairie, Coastal scrub; mesic, sometimes serpentinite; 0-490 ft	**Not expected**. Site does not support appropriate habitat.
Cirsium hydrophilum var. *vaseyi* Mt. Tamalpais thistle (Asteraceae)	1B.2/--/--	May-August, Broad-leafed upland forest, Chaparral, Meadows and seeps; serpentinite seeps; 785-2,035 ft	**Not expected**. Site does not support appropriate habitat.
Cirsium occidentale var. *compactum* compact cobwebby thistle (Asteraceae)	1B.2/--/--	April-June, Chaparral, Coastal dunes, Coastal prairie, Coastal scrub; 15-490 ft	**Not expected**. Site does not support coastal scrub, coastal dune, or coastal prairie habitat.
Clarkia franciscana Presidio clarkia (Onagraceae)	1B.1/SE/FE	May-July, Coastal scrub, Valley and foothill grassland (serpentinite); 80-1,100 ft	**Not expected**. Site does not support coastal scrub or grassland habitat.
Collinsia corymbosa round-headed Chinese-houses (Plantaginaceae)	1B.2/--/--	April-June, Coastal dunes; 0-65 ft	**Not expected**. Site does not support coastal dune habitat.
Collinsia multicolor San Francisco collinsia (Plantaginaceae)	1B.2/--/--	(February) March-May, Closed-cone coniferous forest, Coastal scrub; sometimes serpentinite; 95-820 ft	**Not expected**. Site does not support appropriate habitat.
Equisetum palustre marsh horsetail (Equisetaceae)	3/--/--	Marshes and swamps; 145-3,280 ft	**Not expected**. Site does not support marsh or swamp habitat.

Botanical Name **Common Name (Plant Family)**	**Status (CRPR/ State/Federal)[1]**	**Preferred Habitat, Elevation Range, Bloom Time**	**Potential to Occur on Project Site**
Eriophorum gracile slender cottongrass (Cyperaceae)	4.3/--/--	May-September, Bogs and fens, Meadows and seeps, Upper montane coniferous forest; acidic; 4,195-9,515 ft	**Not expected**. Site does not support appropriate habitat.
Erysimum franciscanum San Francisco wallflower (Brassicaceae)	4.2/--/--	March-June, Chaparral, Coastal dunes, Coastal scrub, Valley and foothill grassland; often serpentinite or granitic, sometimes roadsides; 0-1,805 ft	**Not expected**. Site does not support appropriate habitat.
Fritillaria liliacea fragrant fritillary (Liliaceae)	1B.2/--/--	February-April, Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland; Often serpentinite; 5-1,345 ft	**Not expected**. Site does not support appropriate habitat.
Gilia capitata ssp. *chamissonis* blue coast gilia (Polemoniaceae)	1B.1/--/--	April-July, Coastal dunes, Coastal scrub; 5-655 ft	**Not expected**. Site does not support coastal dune or coastal scrub habitat.
Gilia millefoliata dark-eyed gilia (Polemoniaceae)	1B.2/--/--	April-July, Coastal dunes; 5-100 ft	**Not expected**. Site does not support coastal dune habitat.
Grindelia hirsutula var. *maritima* San Francisco gumplant (Asteraceae)	3.2/--/--	June-September, Coastal bluff scrub, Coastal scrub, Valley and foothill grassland; sandy or serpentinite; 45-1,310 ft	**Not expected**. Site does not support appropriate habitat.
Helianthella castanea Diablo helianthella (Asteraceae)	1B.2/--/--	March-June, Broad-leafed upland forest, Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; Usually rocky, axonal soils; often in partial shade; 195-4,265 ft	**Not expected**. Site does not support appropriate habitat.
Hemizonia congesta ssp. *congesta* congested-headed hayfield tarplant (Asteraceae)	1B.2/--/--	April-November, Valley and foothill grassland; sometimes roadsides-65-1,835 ft	**Not expected**. Site does not support appropriate habitat.
Hesperevax sparsiflora var. *brevifolia* short-leaved evax (Asteraceae)	1B.2/--/--	March-June, Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie; 0-705 ft	**Not expected**. Site does not support coastal dune, coastal prairie or coastal scrub habitat.
Hesperolinon congestum Marin western flax (Linaceae)	1B.1/ST/FT	April-July, Chaparral, Valley and foothill grassland; serpentinite; 15-1,215 ft	**Not expected**. Site does not support chaparral or grassland habitat.

Botanical Name **Common Name (Plant Family)**	**Status (CRPR/ State/Federal)[1]**	**Preferred Habitat, Elevation Range, Bloom Time**	**Potential to Occur on Project Site**
Heteranthera dubia water star-grass (Pontederiaceae)	2B.2/--/--	July-October, Marshes and swamps (alkaline, still or slow-moving water); Requires a pH of 7 or higher, usually in slightly eutrophic waters; 95-4,905 ft	**Not expected**. Site does not support appropriate habitat.
Horkelia cuneata var. *sericea* Kellogg's horkelia (Rosaceae)	1B.1/--/--	April-September, Closed-cone coniferous forest, Chaparral (maritime), Coastal dunes, Coastal scrub; sandy or gravelly, openings; 30-655 ft	**Not expected**. Site does not support appropriate habitat.
Horkelia marinensis Point Reyes horkelia (Roasaceae)	1B.2/--/--	May-September, Coastal dunes, Coastal prairie, Coastal scrub; sandy; 15-2,475 ft	**Not expected**. Site does not support coastal dune, coastal prairie or coastal scrub habitat.
Iris longipetala coast iris (Iridaceae)	4.2/--/--	March-May, Coastal prairie, Lower montane coniferous forest, Meadows and seeps; mesic; 0-1,970 ft	**Not expected**. Site does not support appropriate habitat.
Layia carnosa beach layia (Asteraceae)	1B.1/SE/FE	March-July, Coastal dunes, Coastal scrub (sandy); 0-195 ft	**Not expected**. Site does not support coastal dune or coastal scrub habitat.
Leptosiphon rosaceus rose leptosiphon (Polemoniaceae)	1B.1/--/--	April-July, Coastal bluff scrub; 0-330 ft	**Not expected**. Site does not support appropriate habitat.
Lessingia germanorum San Francisco lessingia (Asteraceae)	1B.1/SE/FE	(June) July-November, Coastal scrub (remnant dunes); 80-360 ft	**Not expected**. Site does not support coastal scrub habitat.
Lilium maritimum coast lily (Liliaceae)	1B.1/--/--	May-August, Broad-leafed upland forest, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Marshes and swamps (freshwater), North Coast coniferous forest; sometimes roadside; 15-1,560 ft	**Not expected**. Site does not support appropriate habitat.
Microseris paludosa marsh microseris (Asteraceae)	1B.2/--/--	April-June (July), Closed-cone coniferous forest, Cismontane woodland, Coastal scrub, Valley and foothill grassland; 15-1,165 ft	**Not expected**. Site does not support appropriate habitat.

Botanical Name **Common Name (Plant Family)**	**Status (CRPR/ State/Federal)[1]**	**Preferred Habitat, Elevation Range, Bloom Time**	**Potential to Occur on Project Site**
Monardella sinuata ssp. *nigrescens* northern curly-leaved monardella (Lamiaceae)	1B.2/--/--	(April) May-July (August-September), Chaparral (SCR Co.), Coastal dunes, Coastal scrub, Lower montane coniferous forest (SCR Co., ponderosa pine sandhills); Sandy; 0-985 ft	**Not expected**. Site does not support appropriate habitat.
Pentachaeta bellidiflora white-rayed pentachaeta (Asteraceae)	1B.1/SE/FE	March-May, Cismontane woodland, Valley and foothill grassland (often serpentinite); 110-2,035 ft	**Not expected**. Site does not support cismontane woodland or grassland habitat.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower (Boraginaceae)	1B.2/--/--	March-June, Chaparral, Coastal prairie, Coastal scrub; mesic; 5-525 ft	**Not expected**. Site does not support appropriate habitat.
Plagiobothrys diffusus San Francisco popcornflower (Boraginaceae)	1B.1/SE/--	March-June, Coastal prairie, Valley and foothill grassland; 195-1,180 ft	**Not expected**. Site does not support coastal prairie or grassland habitat.
Polemonium carneum Oregon polemonium (Polemoniaceae)	2B.2/--/--	April-September, Coastal prairie, Coastal scrub, Lower montane coniferous forest; 0-6,005 ft	**Not expected**. Site does not support appropriate habitat.
Sanicula maritima adobe sanicle (Apiaceae)	1B.1/CR/--	February-May, Chaparral, Coastal prairie, Meadows and seeps, Valley and foothill grassland; clay, serpentinite; 95-785 ft	**Not expected**. Site does not support appropriate habitat.
Senecio aphanactis chaparral ragwort (Asteraceae)	2B.2/--/--	January-April (May), Chaparral, Cismontane woodland, Coastal scrub; sometimes alkaline-45-2,625 ft	**Not expected**. Site does not support appropriate habitat.
Silene scouleri ssp. *scouleri* Scouler's catchfly (Caryophyllaceae)	2B.2/--/--	(March-May) June-August (September), Coastal bluff scrub, Coastal prairie, Valley and foothill grassland; 0-1,970 ft	**Not expected**. Site does not support appropriate habitat.
Silene verecunda ssp. *verecunda* San Francisco campion (Caryophyllaceae)	1B.2/--/--	(February) March-June (August), Coastal bluff scrub, Chaparral, Coastal prairie, Coastal scrub, Valley and foothill grassland; sandy; 95-2,115 ft	**Not expected**. Site does not support appropriate habitat.
Stebbinsoseris decipiens Santa Cruz microseris (Asteraceae)	1B.2/--/--	April-May, Broad-leafed upland forest, Closed-cone coniferous forest, Chaparral, Coastal prairie, Coastal scrub, Valley and foothill grassland; open areas, sometimes serpentinite; 30-1,640 ft	**Not expected**. Site does not support appropriate habitat.

Botanical Name **Common Name (Plant Family)**	**Status (CRPR/ State/Federal)[1]**	**Preferred Habitat, Elevation Range, Bloom Time**	**Potential to Occur on Project Site**
Suaeda californica California seablite (Chenopodiaceae)	1B.1/--/FE	July-October, Marshes and swamps (coastal salt); 0-50 ft	**Not expected**. Site does not support marsh or swamp habitat.
Trifolium amoenum two-fork clover (Fabaceae)	1B.1/--/FE	April-June, Coastal bluff scrub, Valley and foothill grassland (sometimes serpentinite); 15-1,360 ft	**Not expected**. Site does not support coastal bluff scrub or grassland habitat.
Triphysaria floribunda San Francisco owl's-clover (Orobanchaceae)	1B.2/--/--	April-June, Coastal prairie, Coastal scrub, Valley and foothill grassland; usually serpentinite; 30-525 ft	**Not expected**. Site does not support appropriate habitat.
Triquetrella californica coastal triquetrella (Pottiaceae)	1B.2/--/--	Coastal bluff scrub, Coastal scrub; soil; 30-330 ft	**Not expected**. Site does not support coastal scrub habitat.

1. FT – Federal Threatened; FE – Federal Endangered; ST – State Threatened; SE – State Endangered; SC – State Candidate; SSC – CDFW Species Special Concern; FP – CDFW Fully Protected; WL – CDFW Watch List; BCC – USFWS Birds of Conservation Concern; LC – IUCN Least Concern; NT – IUCN Near Threatened; BLM:S – Bureau of Land Management Sensitive; CDF:S – California Department of Forestry and Fire Protection Sensitive; USFS:S – U.S. Forest Service Sensitive; CNPS 1B – CA Native Plant Society – Plants Rare, Threatened, or Endangered in CA and Elsewhere; CNPS 2B – CA Native Plant Society – Plants Rare, Threatened, or Endangered in CA but More Common Elsewhere; CNPS 3 – CA Native Plant Society – Review List: Plants About Which More Information is Needed; CI – Critically Imperiled; SA – Special Animals List, no federal or state listing; CR – Plant Rare under California Endangered Species Act.

ATTACHMENT C

Air Quality and Greenhouse Gases

CalEEMod Construction Output Files

Demolition - Conlan Hall and EOPS Bungalow

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
	0.00		0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.ca-ilg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use - Demolition only

Construction Phase - Six months of demolition for Conlan Hall and EOPS Bungalow.

Demolition - Demolition of Conlan Hall (37,410 SF) and EOPS Bungalow (3,600 SF)

Construction Off-road Equipment Mitigation -

Trips and VMT - Demolition only

Demolition - Conlan Hall and EOPS Bungalow - San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	0.00	132.00
tblConstructionPhase	PhaseEndDate	6/30/2021	12/31/2021
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0552	0.5101	0.5232	9.2000e-004	0.0286	0.0270	0.0557	5.1300e-003	0.0258	0.0309	0.0000	81.6856	81.6856	0.0144	0.0000	82.0458
Maximum	**0.0552**	**0.5101**	**0.5232**	**9.2000e-004**	**0.0286**	**0.0270**	**0.0557**	**5.1300e-003**	**0.0258**	**0.0309**	**0.0000**	**81.6856**	**81.6856**	**0.0144**	**0.0000**	**82.0458**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0552	0.5101	0.5232	9.2000e-004	0.0286	0.0270	0.0557	5.1300e-003	0.0258	0.0309	0.0000	81.6855	81.6855	0.0144	0.0000	82.0457
Maximum	**0.0552**	**0.5101**	**0.5232**	**9.2000e-004**	**0.0286**	**0.0270**	**0.0557**	**5.1300e-003**	**0.0258**	**0.0309**	**0.0000**	**81.6855**	**81.6855**	**0.0144**	**0.0000**	**82.0457**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Demolition - Conlan Hall and EOPS Bungalow - San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2021	9-30-2021	0.2810	0.2810
		Highest	0.2810	0.2810

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition of Conlan Hall and EOPS Bungalow	Demolition	7/1/2021	12/31/2021	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition of Conlan Hall and EOPS Bungalow	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition of Conlan Hall and EOPS Bungalow	Rubber Tired Dozers	1	1.00	247	0.40
Demolition of Conlan Hall and EOPS Bungalow	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition of Conlan Hall and EOPS Bunga	4	10.00	0.00	187.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition of Conlan Hall and EOPS Bungalow - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0219	0.0000	0.0219	3.3100e-003	0.0000	3.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0526	0.4787	0.4996	7.9000e-004		0.0269	0.0269		0.0257	0.0257	0.0000	68.7017	68.7017	0.0128	0.0000	69.0218
Total	**0.0526**	**0.4787**	**0.4996**	**7.9000e-004**	**0.0219**	**0.0269**	**0.0487**	**3.3100e-003**	**0.0257**	**0.0290**	**0.0000**	**68.7017**	**68.7017**	**0.0128**	**0.0000**	**69.0218**

3.2 Demolition of Conlan Hall and EOPS Bungalow - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.1000e-004	0.0302	9.8800e-003	8.0000e-005	1.5700e-003	9.0000e-005	1.6500e-003	4.3000e-004	8.0000e-005	5.1000e-004	0.0000	8.2044	8.2044	1.5000e-003	0.0000	8.2420
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.2000e-003	0.0137	5.0000e-005	5.2200e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.7795	4.7795	1.0000e-004	0.0000	4.7820
Total	**2.5900e-003**	**0.0314**	**0.0236**	**1.3000e-004**	**6.7900e-003**	**1.3000e-004**	**6.9000e-003**	**1.8200e-003**	**1.2000e-004**	**1.9300e-003**	**0.0000**	**12.9839**	**12.9839**	**1.6000e-003**	**0.0000**	**13.0240**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0219	0.0000	0.0219	3.3100e-003	0.0000	3.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0526	0.4787	0.4996	7.9000e-004		0.0269	0.0269		0.0257	0.0257	0.0000	68.7016	68.7016	0.0128	0.0000	69.0217
Total	**0.0526**	**0.4787**	**0.4996**	**7.9000e-004**	**0.0219**	**0.0269**	**0.0487**	**3.3100e-003**	**0.0257**	**0.0290**	**0.0000**	**68.7016**	**68.7016**	**0.0128**	**0.0000**	**69.0217**

3.2 Demolition of Conlan Hall and EOPS Bungalow - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.1000e-004	0.0302	9.8800e-003	8.0000e-005	1.5700e-003	9.0000e-005	1.6500e-003	4.3000e-004	8.0000e-005	5.1000e-004	0.0000	8.2044	8.2044	1.5000e-003	0.0000	8.2420
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.2000e-003	0.0137	5.0000e-005	5.2200e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.7795	4.7795	1.0000e-004	0.0000	4.7820
Total	**2.5900e-003**	**0.0314**	**0.0236**	**1.3000e-004**	**6.7900e-003**	**1.3000e-004**	**6.9000e-003**	**1.8200e-003**	**1.2000e-004**	**1.9300e-003**	**0.0000**	**12.9839**	**12.9839**	**1.6000e-003**	**0.0000**	**13.0240**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Total					

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Demolition - Smith/Statler and Bungalows (600s & 700s)

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	205.00	Space	1.84	82,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.ca-ilg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use - Demolition only of Smith Statler and Bungalows. Construction of a 205 surface parking lot where the bungalows are located.

Construction Phase - Six months of demolition for the bungalows and construction of the surface parking lot followed by six months of demolitions for Smith/Statler.

Off-road Equipment - Paving of surface parking lot

Trips and VMT -

Demolition - Demolition of Smith/Statler and the bungalows (600s and 700s).

Construction Off-road Equipment Mitigation -

Demolition - Smith/Statler and Bungalows (600s & 700s) - San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	129.00
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	10.00	22.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.1886	1.7807	1.8855	3.5500e-003	0.0603	0.0740	0.1343	0.0112	0.0691	0.0803	0.0000	313.8423	313.8423	0.0768	0.0000	315.7614
Maximum	**0.1886**	**1.7807**	**1.8855**	**3.5500e-003**	**0.0603**	**0.0740**	**0.1343**	**0.0112**	**0.0691**	**0.0803**	**0.0000**	**313.8423**	**313.8423**	**0.0768**	**0.0000**	**315.7614**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.1886	1.7807	1.8855	3.5500e-003	0.0603	0.0740	0.1343	0.0112	0.0691	0.0803	0.0000	313.8419	313.8419	0.0768	0.0000	315.7610
Maximum	**0.1886**	**1.7807**	**1.8855**	**3.5500e-003**	**0.0603**	**0.0740**	**0.1343**	**0.0112**	**0.0691**	**0.0803**	**0.0000**	**313.8419**	**313.8419**	**0.0768**	**0.0000**	**315.7610**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Demolition - Smith/Statler and Bungalows (600s & 700s) - San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2026	3-31-2026	0.4649	0.4649
2	4-1-2026	6-30-2026	0.6929	0.6929
3	7-1-2026	9-30-2026	0.4820	0.4820
		Highest	0.6929	0.6929

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.1800e-003	2.0000e-005	1.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6600e-003	3.6600e-003	1.0000e-005	0.0000	3.9000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7753	3.7753	3.8000e-004	8.0000e-005	3.8080
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1800e-003**	**2.0000e-005**	**1.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.7789**	**3.7789**	**3.9000e-004**	**8.0000e-005**	**3.8119**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.1800e-003	2.0000e-005	1.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6600e-003	3.6600e-003	1.0000e-005	0.0000	3.9000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7753	3.7753	3.8000e-004	8.0000e-005	3.8080
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.1800e-003**	**2.0000e-005**	**1.8800e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.7789**	**3.7789**	**3.9000e-004**	**8.0000e-005**	**3.8119**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Demolition - Smith/Statler and Bungalows (600s & 700s) - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition of Bungalows (600s and 700s)	Demolition	1/1/2026	6/30/2026	5	129	
2	Construction of Surface Parking Lot	Paving	6/1/2026	6/30/2026	5	22	
3	Demolition of Smith/Statler	Demolition	6/1/2026	12/1/2026	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.84

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition of Bungalows (600s and 700s)	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition of Bungalows (600s and 700s)	Rubber Tired Dozers	1	8.00	247	0.40
Demolition of Bungalows (600s and 700s)	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Construction of Surface Parking Lot	Cement and Mortar Mixers	1	6.00	9	0.56
Construction of Surface Parking Lot	Pavers	1	6.00	130	0.42
Construction of Surface Parking Lot	Paving Equipment	1	8.00	132	0.36
Construction of Surface Parking Lot	Rollers	1	7.00	80	0.38
Construction of Surface Parking Lot	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition of Smith/Statler	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition of Smith/Statler	Rubber Tired Dozers	1	8.00	247	0.40
Demolition of Smith/Statler	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition of Bungalows (600s and	5	13.00	0.00	109.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction of Surface Parking Lot	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition of Smith/Statler	5	13.00	0.00	255.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition of Bungalows (600s and 700s) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0128	0.0000	0.0128	1.9400e-003	0.0000	1.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0864	0.8324	0.8599	1.5600e-003		0.0352	0.0352		0.0328	0.0328	0.0000	136.0901	136.0901	0.0343	0.0000	136.9482
Total	**0.0864**	**0.8324**	**0.8599**	**1.5600e-003**	**0.0128**	**0.0352**	**0.0480**	**1.9400e-003**	**0.0328**	**0.0348**	**0.0000**	**136.0901**	**136.0901**	**0.0343**	**0.0000**	**136.9482**

3.2 Demolition of Bungalows (600s and 700s) - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0107	6.4600e-003	4.0000e-005	9.1000e-004	2.0000e-005	9.4000e-004	2.5000e-004	2.0000e-005	2.7000e-004	0.0000	4.3750	4.3750	9.1000e-004	0.0000	4.3978
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8600e-003	9.6000e-004	0.0125	6.0000e-005	6.6300e-003	5.0000e-005	6.6700e-003	1.7600e-003	4.0000e-005	1.8100e-003	0.0000	4.9851	4.9851	8.0000e-005	0.0000	4.9870
Total	**2.1400e-003**	**0.0117**	**0.0189**	**1.0000e-004**	**7.5400e-003**	**7.0000e-005**	**7.6100e-003**	**2.0100e-003**	**6.0000e-005**	**2.0800e-003**	**0.0000**	**9.3600**	**9.3600**	**9.9000e-004**	**0.0000**	**9.3848**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0128	0.0000	0.0128	1.9400e-003	0.0000	1.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0864	0.8324	0.8599	1.5600e-003		0.0352	0.0352		0.0328	0.0328	0.0000	136.0900	136.0900	0.0343	0.0000	136.9481
Total	**0.0864**	**0.8324**	**0.8599**	**1.5600e-003**	**0.0128**	**0.0352**	**0.0480**	**1.9400e-003**	**0.0328**	**0.0348**	**0.0000**	**136.0900**	**136.0900**	**0.0343**	**0.0000**	**136.9481**

3.2 Demolition of Bungalows (600s and 700s) - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0107	6.4600e-003	4.0000e-005	9.1000e-004	2.0000e-005	9.4000e-004	2.5000e-004	2.0000e-005	2.7000e-004	0.0000	4.3750	4.3750	9.1000e-004	0.0000	4.3978
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8600e-003	9.6000e-004	0.0125	6.0000e-005	6.6300e-003	5.0000e-005	6.6700e-003	1.7600e-003	4.0000e-005	1.8100e-003	0.0000	4.9851	4.9851	8.0000e-005	0.0000	4.9870
Total	**2.1400e-003**	**0.0117**	**0.0189**	**1.0000e-004**	**7.5400e-003**	**7.0000e-005**	**7.6100e-003**	**2.0100e-003**	**6.0000e-005**	**2.0800e-003**	**0.0000**	**9.3600**	**9.3600**	**9.9000e-004**	**0.0000**	**9.3848**

3.3 Construction of Surface Parking Lot - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3100e-003	0.0586	0.0968	1.5000e-004		2.7100e-003	2.7100e-003		2.5000e-003	2.5000e-003	0.0000	12.9509	12.9509	4.1100e-003	0.0000	13.0535
Paving	2.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.7200e-003**	**0.0586**	**0.0968**	**1.5000e-004**		**2.7100e-003**	**2.7100e-003**		**2.5000e-003**	**2.5000e-003**	**0.0000**	**12.9509**	**12.9509**	**4.1100e-003**	**0.0000**	**13.0535**

3.3 Construction of Surface Parking Lot - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	1.6000e-004	2.1300e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.8502	0.8502	1.0000e-005	0.0000	0.8505
Total	**3.2000e-004**	**1.6000e-004**	**2.1300e-003**	**1.0000e-005**	**1.1300e-003**	**1.0000e-005**	**1.1400e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.8502**	**0.8502**	**1.0000e-005**	**0.0000**	**0.8505**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3100e-003	0.0586	0.0968	1.5000e-004		2.7100e-003	2.7100e-003		2.5000e-003	2.5000e-003	0.0000	12.9509	12.9509	4.1100e-003	0.0000	13.0535
Paving	2.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.7200e-003**	**0.0586**	**0.0968**	**1.5000e-004**		**2.7100e-003**	**2.7100e-003**		**2.5000e-003**	**2.5000e-003**	**0.0000**	**12.9509**	**12.9509**	**4.1100e-003**	**0.0000**	**13.0535**

3.3 Construction of Surface Parking Lot - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	1.6000e-004	2.1300e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.8502	0.8502	1.0000e-005	0.0000	0.8505
Total	**3.2000e-004**	**1.6000e-004**	**2.1300e-003**	**1.0000e-005**	**1.1300e-003**	**1.0000e-005**	**1.1400e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.8502**	**0.8502**	**1.0000e-005**	**0.0000**	**0.8505**

3.4 Demolition of Smith/Statler - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0299	0.0000	0.0299	4.5200e-003	0.0000	4.5200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0884	0.8518	0.8799	1.5900e-003		0.0360	0.0360		0.0336	0.0336	0.0000	139.2550	139.2550	0.0351	0.0000	140.1331
Total	**0.0884**	**0.8518**	**0.8799**	**1.5900e-003**	**0.0299**	**0.0360**	**0.0659**	**4.5200e-003**	**0.0336**	**0.0381**	**0.0000**	**139.2550**	**139.2550**	**0.0351**	**0.0000**	**140.1331**

3.4 Demolition of Smith/Statler - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.6000e-004	0.0251	0.0151	9.0000e-005	2.1400e-003	5.0000e-005	2.1900e-003	5.9000e-004	5.0000e-005	6.4000e-004	0.0000	10.2350	10.2350	2.1300e-003	0.0000	10.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	9.8000e-004	0.0128	6.0000e-005	6.7800e-003	5.0000e-005	6.8300e-003	1.8000e-003	4.0000e-005	1.8500e-003	0.0000	5.1010	5.1010	8.0000e-005	0.0000	5.1030
Total	**2.5600e-003**	**0.0261**	**0.0279**	**1.5000e-004**	**8.9200e-003**	**1.0000e-004**	**9.0200e-003**	**2.3900e-003**	**9.0000e-005**	**2.4900e-003**	**0.0000**	**15.3360**	**15.3360**	**2.2100e-003**	**0.0000**	**15.3913**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0299	0.0000	0.0299	4.5200e-003	0.0000	4.5200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0884	0.8518	0.8799	1.5900e-003		0.0360	0.0360		0.0336	0.0336	0.0000	139.2548	139.2548	0.0351	0.0000	140.1329
Total	**0.0884**	**0.8518**	**0.8799**	**1.5900e-003**	**0.0299**	**0.0360**	**0.0659**	**4.5200e-003**	**0.0336**	**0.0381**	**0.0000**	**139.2548**	**139.2548**	**0.0351**	**0.0000**	**140.1329**

3.4 Demolition of Smith/Statler - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.6000e-004	0.0251	0.0151	9.0000e-005	2.1400e-003	5.0000e-005	2.1900e-003	5.9000e-004	5.0000e-005	6.4000e-004	0.0000	10.2350	10.2350	2.1300e-003	0.0000	10.2883
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	9.8000e-004	0.0128	6.0000e-005	6.7800e-003	5.0000e-005	6.8300e-003	1.8000e-003	4.0000e-005	1.8500e-003	0.0000	5.1010	5.1010	8.0000e-005	0.0000	5.1030
Total	**2.5600e-003**	**0.0261**	**0.0279**	**1.5000e-004**	**8.9200e-003**	**1.0000e-004**	**9.0200e-003**	**2.3900e-003**	**9.0000e-005**	**2.4900e-003**	**0.0000**	**15.3360**	**15.3360**	**2.2100e-003**	**0.0000**	**15.3913**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.7753	3.7753	3.8000e-004	8.0000e-005	3.8080
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.7753	3.7753	3.8000e-004	8.0000e-005	3.8080
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	28700	3.7753	3.8000e-004	8.0000e-005	3.8080
Total		**3.7753**	**3.8000e-004**	**8.0000e-005**	**3.8080**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	28700	3.7753	3.8000e-004	8.0000e-005	3.8080
Total		**3.7753**	**3.8000e-004**	**8.0000e-005**	**3.8080**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.1800e-003	2.0000e-005	1.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6600e-003	3.6600e-003	1.0000e-005	0.0000	3.9000e-003
Unmitigated	7.1800e-003	2.0000e-005	1.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6600e-003	3.6600e-003	1.0000e-005	0.0000	3.9000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.3000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6600e-003	3.6600e-003	1.0000e-005	0.0000	3.9000e-003
Total	**7.1800e-003**	**2.0000e-005**	**1.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.6600e-003**	**3.6600e-003**	**1.0000e-005**	**0.0000**	**3.9000e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.3000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6600e-003	3.6600e-003	1.0000e-005	0.0000	3.9000e-003
Total	**7.1800e-003**	**2.0000e-005**	**1.8800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.6600e-003**	**3.6600e-003**	**1.0000e-005**	**0.0000**	**3.9000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Demolition - Theater within the Creative Arts Building

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
	0.00		0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.ca-ilg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use - Demolition only

Construction Phase - Six months of demolition for the theater.

Trips and VMT - Demolition only

Demolition - Demolition of the theater

Construction Off-road Equipment Mitigation -

Demolition - Theater within the Creative Arts Building - San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	0.00	130.00
tblDemolition	PhaseName	Demolition of Conlan Hall and EOPS Bungalow	Demolition of Theater
tblOffRoadEquipment	PhaseName	Demolition of Conlan Hall and EOPS Bungalow	Demolition of Theater
tblOffRoadEquipment	PhaseName	Demolition of Conlan Hall and EOPS Bungalow	Demolition of Theater
tblOffRoadEquipment	PhaseName	Demolition of Conlan Hall and EOPS Bungalow	Demolition of Theater
tblOnRoadDust	PhaseName	Demolition of Conlan Hall and EOPS Bungalow	Demolition of Theater
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	PhaseName	Demolition of Conlan Hall and EOPS Bungalow	Demolition of Theater

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	7.0700e-003	0.0615	0.0838	1.4000e-004	2.5100e-003	2.7600e-003	5.2700e-003	5.2000e-004	2.6400e-003	3.1600e-003	0.0000	12.6020	12.6020	2.1700e-003	0.0000	12.6564
2025	0.0324	0.2814	0.4092	7.0000e-004	0.0108	0.0114	0.0222	2.1800e-003	0.0109	0.0131	0.0000	61.7181	61.7181	0.0106	0.0000	61.9824
Maximum	**0.0324**	**0.2814**	**0.4092**	**7.0000e-004**	**0.0108**	**0.0114**	**0.0222**	**2.1800e-003**	**0.0109**	**0.0131**	**0.0000**	**61.7181**	**61.7181**	**0.0106**	**0.0000**	**61.9824**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	7.0700e-003	0.0615	0.0838	1.4000e-004	2.5100e-003	2.7600e-003	5.2700e-003	5.2000e-004	2.6400e-003	3.1600e-003	0.0000	12.6020	12.6020	2.1700e-003	0.0000	12.6563
2025	0.0324	0.2814	0.4092	7.0000e-004	0.0108	0.0114	0.0222	2.1800e-003	0.0109	0.0131	0.0000	61.7180	61.7180	0.0106	0.0000	61.9823
Maximum	**0.0324**	**0.2814**	**0.4092**	**7.0000e-004**	**0.0108**	**0.0114**	**0.0222**	**2.1800e-003**	**0.0109**	**0.0131**	**0.0000**	**61.7180**	**61.7180**	**0.0106**	**0.0000**	**61.9823**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Demolition - Theater within the Creative Arts Building - San Francisco County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2024	2-28-2025	0.1916	0.1916
2	3-1-2025	5-31-2025	0.1888	0.1888
		Highest	0.1916	0.1916

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition of Theater	Demolition	12/1/2024	5/30/2025	5	130	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition of Theater	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition of Theater	Rubber Tired Dozers	1	1.00	247	0.40
Demolition of Theater	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition of Theater	4	10.00	0.00	62.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition of Theater - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2300e-003	0.0000	1.2300e-003	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7700e-003	0.0603	0.0813	1.3000e-004		2.7500e-003	2.7500e-003		2.6300e-003	2.6300e-003	0.0000	11.4628	11.4628	2.0800e-003	0.0000	11.5147
Total	**6.7700e-003**	**0.0603**	**0.0813**	**1.3000e-004**	**1.2300e-003**	**2.7500e-003**	**3.9800e-003**	**1.9000e-004**	**2.6300e-003**	**2.8200e-003**	**0.0000**	**11.4628**	**11.4628**	**2.0800e-003**	**0.0000**	**11.5147**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.1300e-003	5.9000e-004	0.0000	4.1000e-004	0.0000	4.2000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.4312	0.4312	9.0000e-005	0.0000	0.4333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.5000e-004	1.8600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7080	0.7080	1.0000e-005	0.0000	0.7083
Total	**3.0000e-004**	**1.2800e-003**	**2.4500e-003**	**1.0000e-005**	**1.2800e-003**	**1.0000e-005**	**1.3000e-003**	**3.3000e-004**	**1.0000e-005**	**3.5000e-004**	**0.0000**	**1.1392**	**1.1392**	**1.0000e-004**	**0.0000**	**1.1417**

3.2 Demolition of Theater - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2300e-003	0.0000	1.2300e-003	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7700e-003	0.0603	0.0813	1.3000e-004		2.7500e-003	2.7500e-003		2.6300e-003	2.6300e-003	0.0000	11.4628	11.4628	2.0800e-003	0.0000	11.5147
Total	**6.7700e-003**	**0.0603**	**0.0813**	**1.3000e-004**	**1.2300e-003**	**2.7500e-003**	**3.9800e-003**	**1.9000e-004**	**2.6300e-003**	**2.8200e-003**	**0.0000**	**11.4628**	**11.4628**	**2.0800e-003**	**0.0000**	**11.5147**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.1300e-003	5.9000e-004	0.0000	4.1000e-004	0.0000	4.2000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.4312	0.4312	9.0000e-005	0.0000	0.4333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.5000e-004	1.8600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7080	0.7080	1.0000e-005	0.0000	0.7083
Total	**3.0000e-004**	**1.2800e-003**	**2.4500e-003**	**1.0000e-005**	**1.2800e-003**	**1.0000e-005**	**1.3000e-003**	**3.3000e-004**	**1.0000e-005**	**3.5000e-004**	**0.0000**	**1.1392**	**1.1392**	**1.0000e-004**	**0.0000**	**1.1417**

3.2 Demolition of Theater - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0300e-003	0.0000	6.0300e-003	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.2754	0.3977	6.5000e-004		0.0114	0.0114		0.0109	0.0109	0.0000	56.2930	56.2930	0.0101	0.0000	56.5454
Total	**0.0310**	**0.2754**	**0.3977**	**6.5000e-004**	**6.0300e-003**	**0.0114**	**0.0174**	**9.1000e-004**	**0.0109**	**0.0118**	**0.0000**	**56.2930**	**56.2930**	**0.0101**	**0.0000**	**56.5454**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	5.2900e-003	2.9600e-003	2.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.5000e-004	0.0000	2.0914	2.0914	4.3000e-004	0.0000	2.1020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	6.7000e-004	8.5500e-003	4.0000e-005	4.2700e-003	3.0000e-005	4.3000e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.3336	3.3336	5.0000e-005	0.0000	3.3350
Total	**1.3900e-003**	**5.9600e-003**	**0.0115**	**6.0000e-005**	**4.7700e-003**	**4.0000e-005**	**4.8100e-003**	**1.2700e-003**	**4.0000e-005**	**1.3100e-003**	**0.0000**	**5.4250**	**5.4250**	**4.8000e-004**	**0.0000**	**5.4370**

3.2 Demolition of Theater - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0300e-003	0.0000	6.0300e-003	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.2754	0.3977	6.5000e-004		0.0114	0.0114		0.0109	0.0109	0.0000	56.2930	56.2930	0.0101	0.0000	56.5453
Total	**0.0310**	**0.2754**	**0.3977**	**6.5000e-004**	**6.0300e-003**	**0.0114**	**0.0174**	**9.1000e-004**	**0.0109**	**0.0118**	**0.0000**	**56.2930**	**56.2930**	**0.0101**	**0.0000**	**56.5453**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	5.2900e-003	2.9600e-003	2.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.3000e-004	1.0000e-005	1.5000e-004	0.0000	2.0914	2.0914	4.3000e-004	0.0000	2.1020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	6.7000e-004	8.5500e-003	4.0000e-005	4.2700e-003	3.0000e-005	4.3000e-003	1.1400e-003	3.0000e-005	1.1600e-003	0.0000	3.3336	3.3336	5.0000e-005	0.0000	3.3350
Total	**1.3900e-003**	**5.9600e-003**	**0.0115**	**6.0000e-005**	**4.7700e-003**	**4.0000e-005**	**4.8100e-003**	**1.2700e-003**	**4.0000e-005**	**1.3100e-003**	**0.0000**	**5.4250**	**5.4250**	**4.8000e-004**	**0.0000**	**5.4370**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Total					

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Creative Arts Extension Building and Cloud Hall Renovation

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	158.13	1000sqft	3.63	158,133.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.cailg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use -

Construction Phase - construction from late 2023 to 2025, 14 months

Off-road Equipment -

Off-road Equipment - Internal renovation, no cranes necessary.

Off-road Equipment -

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	51.00
tblConstructionPhase	NumDays	230.00	225.00
tblConstructionPhase	NumDays	5.00	30.00
tblConstructionPhase	PhaseEndDate	11/19/2024	2/1/2025
tblConstructionPhase	PhaseEndDate	10/24/2024	11/21/2024
tblConstructionPhase	PhaseEndDate	12/7/2023	1/11/2024
tblConstructionPhase	PhaseStartDate	10/25/2024	11/22/2024
tblConstructionPhase	PhaseStartDate	12/8/2023	1/12/2024
tblLandUse	LandUseSquareFeet	158,130.00	158,133.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0284	0.2893	0.1950	4.1000e-004	0.1912	0.0133	0.2045	0.1047	0.0122	0.1169	0.0000	36.3902	36.3902	0.0114	0.0000	36.6748
2024	0.6251	1.5740	1.9782	3.9600e-003	0.1612	0.0618	0.2230	0.0664	0.0584	0.1248	0.0000	355.2514	355.2514	0.0617	0.0000	356.7932
2025	0.3742	0.0134	0.0232	4.0000e-005	1.1800e-003	6.0000e-004	1.7800e-003	3.1000e-004	6.0000e-004	9.1000e-004	0.0000	3.8592	3.8592	1.8000e-004	0.0000	3.8635
Maximum	**0.6251**	**1.5740**	**1.9782**	**3.9600e-003**	**0.1912**	**0.0618**	**0.2230**	**0.1047**	**0.0584**	**0.1248**	**0.0000**	**355.2514**	**355.2514**	**0.0617**	**0.0000**	**356.7932**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0284	0.2893	0.1950	4.1000e-004	0.1912	0.0133	0.2045	0.1047	0.0122	0.1169	0.0000	36.3902	36.3902	0.0114	0.0000	36.6747
2024	0.6251	1.5740	1.9782	3.9600e-003	0.1612	0.0618	0.2230	0.0664	0.0584	0.1248	0.0000	355.2511	355.2511	0.0617	0.0000	356.7929
2025	0.3742	0.0134	0.0232	4.0000e-005	1.1800e-003	6.0000e-004	1.7800e-003	3.1000e-004	6.0000e-004	9.1000e-004	0.0000	3.8592	3.8592	1.8000e-004	0.0000	3.8635
Maximum	**0.6251**	**1.5740**	**1.9782**	**3.9600e-003**	**0.1912**	**0.0618**	**0.2230**	**0.1047**	**0.0584**	**0.1248**	**0.0000**	**355.2511**	**355.2511**	**0.0617**	**0.0000**	**356.7929**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-1-2023**	**2-29-2024**	0.7005	0.7005
2	**3-1-2024**	**5-31-2024**	0.4643	0.4643
3	**6-1-2024**	**8-31-2024**	0.4636	0.4636
4	**9-1-2024**	**11-30-2024**	0.5229	0.5229
5	**12-1-2024**	**2-28-2025**	0.7593	0.7593
		Highest	0.7593	0.7593

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7002	1.0000e-005	1.4500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.8300e-003	2.8300e-003	1.0000e-005	0.0000	3.0100e-003
Energy	0.0292	0.2651	0.2227	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	501.1866	501.1866	0.0268	9.6900e-003	504.7438
Mobile	0.7261	2.9034	8.3522	0.0332	3.2129	0.0346	3.2474	0.8650	0.0323	0.8973	0.0000	3,064.4339	3,064.4339	0.1244	0.0000	3,067.5446
Waste						0.0000	0.0000		0.0000	0.0000	41.7289	0.0000	41.7289	2.4661	0.0000	103.3815
Water						0.0000	0.0000		0.0000	0.0000	2.4607	11.1058	13.5665	0.2538	6.2000e-003	21.7594
Total	**1.4555**	**3.1685**	**8.5763**	**0.0348**	**3.2129**	**0.0547**	**3.2676**	**0.8650**	**0.0524**	**0.9175**	**44.1895**	**3,576.7292**	**3,620.9187**	**2.8712**	**0.0159**	**3,697.4323**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7002	1.0000e-005	1.4500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.8300e-003	2.8300e-003	1.0000e-005	0.0000	3.0100e-003
Energy	0.0292	0.2651	0.2227	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	501.1866	501.1866	0.0268	9.6900e-003	504.7438
Mobile	0.7261	2.9034	8.3522	0.0332	3.2129	0.0346	3.2474	0.8650	0.0323	0.8973	0.0000	3,064.4339	3,064.4339	0.1244	0.0000	3,067.5446
Waste						0.0000	0.0000		0.0000	0.0000	41.7289	0.0000	41.7289	2.4661	0.0000	103.3815
Water						0.0000	0.0000		0.0000	0.0000	2.4607	11.1058	13.5665	0.2538	6.2000e-003	21.7594
Total	**1.4555**	**3.1685**	**8.5763**	**0.0348**	**3.2129**	**0.0547**	**3.2676**	**0.8650**	**0.0524**	**0.9175**	**44.1895**	**3,576.7292**	**3,620.9187**	**2.8712**	**0.0159**	**3,697.4323**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Utilities	Site Preparation	12/1/2023	1/11/2024	5	30	
2	Building Construction	Building Construction	1/12/2024	11/21/2024	5	225	
3	Architectural Coating	Architectural Coating	11/22/2024	2/1/2025	5	51	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 237,200; Non-Residential Outdoor: 79,067; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utilities	Rubber Tired Dozers	3	8.00	247	0.40
Utilities	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utilities	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	66.00	26.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Utilities - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2890	0.1916	4.0000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	35.1232	35.1232	0.0114	0.0000	35.4072
Total	**0.0279**	**0.2890**	**0.1916**	**4.0000e-004**	**0.1897**	**0.0133**	**0.2030**	**0.1043**	**0.0122**	**0.1165**	**0.0000**	**35.1232**	**35.1232**	**0.0114**	**0.0000**	**35.4072**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.8000e-004	3.4200e-003	1.0000e-005	1.4900e-003	1.0000e-005	1.5000e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.2670	1.2670	2.0000e-005	0.0000	1.2675
Total	**4.8000e-004**	**2.8000e-004**	**3.4200e-003**	**1.0000e-005**	**1.4900e-003**	**1.0000e-005**	**1.5000e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.2670**	**1.2670**	**2.0000e-005**	**0.0000**	**1.2675**

3.2 Utilities - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2890	0.1916	4.0000e-004		0.0133	0.0133		0.0122	0.0122	0.0000	35.1232	35.1232	0.0114	0.0000	35.4072
Total	**0.0279**	**0.2890**	**0.1916**	**4.0000e-004**	**0.1897**	**0.0133**	**0.2030**	**0.1043**	**0.0122**	**0.1165**	**0.0000**	**35.1232**	**35.1232**	**0.0114**	**0.0000**	**35.4072**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.8000e-004	3.4200e-003	1.0000e-005	1.4900e-003	1.0000e-005	1.5000e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.2670	1.2670	2.0000e-005	0.0000	1.2675
Total	**4.8000e-004**	**2.8000e-004**	**3.4200e-003**	**1.0000e-005**	**1.4900e-003**	**1.0000e-005**	**1.5000e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.2670**	**1.2670**	**2.0000e-005**	**0.0000**	**1.2675**

3.2 Utilities - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0813	0.0000	0.0813	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.1223	0.0825	1.7000e-004		5.5300e-003	5.5300e-003		5.0900e-003	5.0900e-003	0.0000	15.0557	15.0557	4.8700e-003	0.0000	15.1774
Total	**0.0120**	**0.1223**	**0.0825**	**1.7000e-004**	**0.0813**	**5.5300e-003**	**0.0868**	**0.0447**	**5.0900e-003**	**0.0498**	**0.0000**	**15.0557**	**15.0557**	**4.8700e-003**	**0.0000**	**15.1774**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.1000e-004	1.3700e-003	1.0000e-005	6.4000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5214	0.5214	1.0000e-005	0.0000	0.5216
Total	**2.0000e-004**	**1.1000e-004**	**1.3700e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.4000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5214**	**0.5214**	**1.0000e-005**	**0.0000**	**0.5216**

3.2 Utilities - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0813	0.0000	0.0813	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.1223	0.0825	1.7000e-004		5.5300e-003	5.5300e-003		5.0900e-003	5.0900e-003	0.0000	15.0557	15.0557	4.8700e-003	0.0000	15.1774
Total	**0.0120**	**0.1223**	**0.0825**	**1.7000e-004**	**0.0813**	**5.5300e-003**	**0.0868**	**0.0447**	**5.0900e-003**	**0.0498**	**0.0000**	**15.0557**	**15.0557**	**4.8700e-003**	**0.0000**	**15.1774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.1000e-004	1.3700e-003	1.0000e-005	6.4000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5214	0.5214	1.0000e-005	0.0000	0.5216
Total	**2.0000e-004**	**1.1000e-004**	**1.3700e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.4000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5214**	**0.5214**	**1.0000e-005**	**0.0000**	**0.5216**

3.3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1329	1.1675	1.6441	2.4600e-003		0.0546	0.0546		0.0517	0.0517	0.0000	210.9282	210.9282	0.0455	0.0000	212.0667
Total	**0.1329**	**1.1675**	**1.6441**	**2.4600e-003**		**0.0546**	**0.0546**		**0.0517**	**0.0517**	**0.0000**	**210.9282**	**210.9282**	**0.0455**	**0.0000**	**212.0667**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4500e-003	0.2567	0.0960	7.3000e-004	0.0191	3.6000e-004	0.0195	5.5300e-003	3.5000e-004	5.8700e-003	0.0000	76.2080	76.2080	0.0102	0.0000	76.4632
Worker	0.0179	0.0101	0.1259	5.3000e-004	0.0587	4.3000e-004	0.0591	0.0156	3.9000e-004	0.0160	0.0000	47.7922	47.7922	8.2000e-004	0.0000	47.8127
Total	**0.0244**	**0.2668**	**0.2219**	**1.2600e-003**	**0.0778**	**7.9000e-004**	**0.0786**	**0.0211**	**7.4000e-004**	**0.0219**	**0.0000**	**124.0001**	**124.0001**	**0.0110**	**0.0000**	**124.2759**

3.3 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1329	1.1675	1.6441	2.4600e-003		0.0546	0.0546		0.0517	0.0517	0.0000	210.9279	210.9279	0.0455	0.0000	212.0664
Total	**0.1329**	**1.1675**	**1.6441**	**2.4600e-003**		**0.0546**	**0.0546**		**0.0517**	**0.0517**	**0.0000**	**210.9279**	**210.9279**	**0.0455**	**0.0000**	**212.0664**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4500e-003	0.2567	0.0960	7.3000e-004	0.0191	3.6000e-004	0.0195	5.5300e-003	3.5000e-004	5.8700e-003	0.0000	76.2080	76.2080	0.0102	0.0000	76.4632
Worker	0.0179	0.0101	0.1259	5.3000e-004	0.0587	4.3000e-004	0.0591	0.0156	3.9000e-004	0.0160	0.0000	47.7922	47.7922	8.2000e-004	0.0000	47.8127
Total	**0.0244**	**0.2668**	**0.2219**	**1.2600e-003**	**0.0778**	**7.9000e-004**	**0.0786**	**0.0211**	**7.4000e-004**	**0.0219**	**0.0000**	**124.0001**	**124.0001**	**0.0110**	**0.0000**	**124.2759**

3.4 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5300e-003	0.0171	0.0253	4.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	3.5746	3.5746	2.0000e-004	0.0000	3.5796
Total	**0.4552**	**0.0171**	**0.0253**	**4.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**3.5746**	**3.5746**	**2.0000e-004**	**0.0000**	**3.5796**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.5000e-004	3.0900e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1715	1.1715	2.0000e-005	0.0000	1.1720
Total	**4.4000e-004**	**2.5000e-004**	**3.0900e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1715**	**1.1715**	**2.0000e-005**	**0.0000**	**1.1720**

3.4 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5300e-003	0.0171	0.0253	4.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	3.5746	3.5746	2.0000e-004	0.0000	3.5796
Total	**0.4552**	**0.0171**	**0.0253**	**4.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**3.5746**	**3.5746**	**2.0000e-004**	**0.0000**	**3.5796**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.5000e-004	3.0900e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1715	1.1715	2.0000e-005	0.0000	1.1720
Total	**4.4000e-004**	**2.5000e-004**	**3.0900e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1715**	**1.1715**	**2.0000e-005**	**0.0000**	**1.1720**

3.4 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3719					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9403
Total	**0.3738**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9403**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	1.9000e-004	2.3700e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9229	0.9229	2.0000e-005	0.0000	0.9233
Total	**3.5000e-004**	**1.9000e-004**	**2.3700e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9229**	**0.9229**	**2.0000e-005**	**0.0000**	**0.9233**

3.4 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3719					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9402
Total	**0.3738**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	1.9000e-004	2.3700e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9229	0.9229	2.0000e-005	0.0000	0.9233
Total	**3.5000e-004**	**1.9000e-004**	**2.3700e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9229**	**0.9229**	**2.0000e-005**	**0.0000**	**0.9233**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7261	2.9034	8.3522	0.0332	3.2129	0.0346	3.2474	0.8650	0.0323	0.8973	0.0000	3,064.4339	3,064.4339	0.1244	0.0000	3,067.5446
Unmitigated	0.7261	2.9034	8.3522	0.0332	3.2129	0.0346	3.2474	0.8650	0.0323	0.8973	0.0000	3,064.4339	3,064.4339	0.1244	0.0000	3,067.5446

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	4,346.99	1,775.80	191.34	8,598,911	8,598,911
Total	4,346.99	1,775.80	191.34	8,598,911	8,598,911

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.604343	0.037677	0.192702	0.090337	0.013384	0.005111	0.031913	0.009324	0.004273	0.003317	0.006138	0.000948	0.000534

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	212.5872	212.5872	0.0213	4.4000e-003	214.4294
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	212.5872	212.5872	0.0213	4.4000e-003	214.4294
NaturalGas Mitigated	0.0292	0.2651	0.2227	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	288.5994	288.5994	5.5300e-003	5.2900e-003	290.3144
NaturalGas Unmitigated	0.0292	0.2651	0.2227	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	288.5994	288.5994	5.5300e-003	5.2900e-003	290.3144

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	5.40815e+006	0.0292	0.2651	0.2227	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	288.5994	288.5994	5.5300e-003	5.2900e-003	290.3144
Total		**0.0292**	**0.2651**	**0.2227**	**1.5900e-003**		**0.0202**	**0.0202**		**0.0202**	**0.0202**	**0.0000**	**288.5994**	**288.5994**	**5.5300e-003**	**5.2900e-003**	**290.3144**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	5.40815e+006	0.0292	0.2651	0.2227	1.5900e-003		0.0202	0.0202		0.0202	0.0202	0.0000	288.5994	288.5994	5.5300e-003	5.2900e-003	290.3144
Total		**0.0292**	**0.2651**	**0.2227**	**1.5900e-003**		**0.0202**	**0.0202**		**0.0202**	**0.0202**	**0.0000**	**288.5994**	**288.5994**	**5.5300e-003**	**5.2900e-003**	**290.3144**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.61612e+006	212.5872	0.0213	4.4000e-003	214.4294
Total		**212.5872**	**0.0213**	**4.4000e-003**	**214.4294**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.61612e+006	212.5872	0.0213	4.4000e-003	214.4294
Total		**212.5872**	**0.0213**	**4.4000e-003**	**214.4294**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7002	1.0000e-005	1.4500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.8300e-003	2.8300e-003	1.0000e-005	0.0000	3.0100e-003
Unmitigated	0.7002	1.0000e-005	1.4500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.8300e-003	2.8300e-003	1.0000e-005	0.0000	3.0100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0825					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.8300e-003	2.8300e-003	1.0000e-005	0.0000	3.0100e-003
Total	**0.7002**	**1.0000e-005**	**1.4500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.8300e-003**	**2.8300e-003**	**1.0000e-005**	**0.0000**	**3.0100e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0825					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.8300e-003	2.8300e-003	1.0000e-005	0.0000	3.0100e-003
Total	**0.7002**	**1.0000e-005**	**1.4500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.8300e-003**	**2.8300e-003**	**1.0000e-005**	**0.0000**	**3.0100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.5665	0.2538	6.2000e-003	21.7594
Unmitigated	13.5665	0.2538	6.2000e-003	21.7594

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	7.75612 / 12.1314	13.5665	0.2538	6.2000e-003	21.7594
Total		**13.5665**	**0.2538**	**6.2000e-003**	**21.7594**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	7.75612 / 12.1314	13.5665	0.2538	6.2000e-003	21.7594
Total		**13.5665**	**0.2538**	**6.2000e-003**	**21.7594**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	41.7289	2.4661	0.0000	103.3815
Unmitigated	41.7289	2.4661	0.0000	103.3815

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	205.57	41.7289	2.4661	0.0000	103.3815
Total		**41.7289**	**2.4661**	**0.0000**	**103.3815**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	205.57	41.7289	2.4661	0.0000	103.3815
Total		**41.7289**	**2.4661**	**0.0000**	**103.3815**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Science Hall Renovation

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	151.86	1000sqft	3.49	151,860.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.cailg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use -

Construction Phase - construction from late 2024 to early 2026.

Off-road Equipment -

Off-road Equipment - Internal renovation, no cranes necessary.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	60.00
tblConstructionPhase	NumDays	230.00	425.00
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	PhaseEndDate	11/19/2025	12/31/2025
tblConstructionPhase	PhaseEndDate	10/24/2025	10/8/2025
tblConstructionPhase	PhaseEndDate	12/6/2024	2/21/2025
tblConstructionPhase	PhaseStartDate	10/25/2025	10/9/2025
tblConstructionPhase	PhaseStartDate	12/7/2024	2/22/2024
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1855	1.7170	2.0552	4.1000e-003	0.2752	0.0687	0.3439	0.1300	0.0646	0.1946	0.0000	367.1571	367.1571	0.0678	0.0000	368.8528
2025	0.9758	1.7125	2.0544	4.1200e-003	0.4163	0.0641	0.4804	0.2085	0.0602	0.2687	0.0000	368.8328	368.8328	0.0709	0.0000	370.6040
Maximum	**0.9758**	**1.7170**	**2.0552**	**4.1200e-003**	**0.4163**	**0.0687**	**0.4804**	**0.2085**	**0.0646**	**0.2687**	**0.0000**	**368.8328**	**368.8328**	**0.0709**	**0.0000**	**370.6040**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1855	1.7170	2.0552	4.1000e-003	0.2752	0.0687	0.3439	0.1300	0.0646	0.1946	0.0000	367.1568	367.1568	0.0678	0.0000	368.8525
2025	0.9758	1.7125	2.0544	4.1200e-003	0.4163	0.0641	0.4804	0.2085	0.0602	0.2687	0.0000	368.8325	368.8325	0.0709	0.0000	370.6037
Maximum	**0.9758**	**1.7170**	**2.0552**	**4.1200e-003**	**0.4163**	**0.0687**	**0.4804**	**0.2085**	**0.0646**	**0.2687**	**0.0000**	**368.8325**	**368.8325**	**0.0709**	**0.0000**	**370.6037**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2024	2-28-2025	1.2817	1.2817
2	3-1-2025	5-31-2025	0.4336	0.4336
3	6-1-2025	8-31-2025	0.4330	0.4330
4	9-1-2025	9-30-2025	0.1412	0.1412
		Highest	1.2817	1.2817

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6724	1.0000e-005	1.3900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7100e-003	2.7100e-003	1.0000e-005	0.0000	2.8900e-003
Energy	0.0280	0.2546	0.2139	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	481.3050	481.3050	0.0257	9.3000e-003	484.7211
Mobile	0.6644	2.7017	7.6233	0.0310	3.0848	0.0318	3.1165	0.8304	0.0297	0.8601	0.0000	2,860.2763	2,860.2763	0.1156	0.0000	2,863.1661
Waste						0.0000	0.0000		0.0000	0.0000	40.0745	0.0000	40.0745	2.3683	0.0000	99.2828
Water						0.0000	0.0000		0.0000	0.0000	2.3631	10.6655	13.0286	0.2438	5.9500e-003	20.8966
Total	**1.3648**	**2.9563**	**7.8385**	**0.0325**	**3.0848**	**0.0511**	**3.1359**	**0.8304**	**0.0490**	**0.8794**	**42.4376**	**3,352.2494**	**3,394.6870**	**2.7534**	**0.0153**	**3,468.0695**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6724	1.0000e-005	1.3900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7100e-003	2.7100e-003	1.0000e-005	0.0000	2.8900e-003
Energy	0.0280	0.2546	0.2139	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	481.3050	481.3050	0.0257	9.3000e-003	484.7211
Mobile	0.6644	2.7017	7.6233	0.0310	3.0848	0.0318	3.1165	0.8304	0.0297	0.8601	0.0000	2,860.2763	2,860.2763	0.1156	0.0000	2,863.1661
Waste						0.0000	0.0000		0.0000	0.0000	40.0745	0.0000	40.0745	2.3683	0.0000	99.2828
Water						0.0000	0.0000		0.0000	0.0000	2.3631	10.6655	13.0286	0.2438	5.9500e-003	20.8966
Total	**1.3648**	**2.9563**	**7.8385**	**0.0325**	**3.0848**	**0.0511**	**3.1359**	**0.8304**	**0.0490**	**0.8794**	**42.4376**	**3,352.2494**	**3,394.6870**	**2.7534**	**0.0153**	**3,468.0695**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Utilities	Site Preparation	12/1/2024	2/21/2025	5	60	
2	Building Construction	Building Construction	2/22/2024	10/8/2025	5	425	
3	Architectural Coating	Architectural Coating	10/9/2025	12/31/2025	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 227,790; Non-Residential Outdoor: 75,930; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Rubber Tired Dozers	3	8.00	247	0.40
Utilities	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utilities	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	64.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Utilities - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.2989	0.2017	4.2000e-004		0.0135	0.0135		0.0124	0.0124	0.0000	36.8028	36.8028	0.0119	0.0000	37.1003
Total	**0.0293**	**0.2989**	**0.2017**	**4.2000e-004**	**0.1987**	**0.0135**	**0.2123**	**0.1092**	**0.0124**	**0.1217**	**0.0000**	**36.8028**	**36.8028**	**0.0119**	**0.0000**	**37.1003**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.7000e-004	3.3600e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2745	1.2745	2.0000e-005	0.0000	1.2750
Total	**4.8000e-004**	**2.7000e-004**	**3.3600e-003**	**1.0000e-005**	**1.5600e-003**	**1.0000e-005**	**1.5800e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.2745**	**1.2745**	**2.0000e-005**	**0.0000**	**1.2750**

3.2 Utilities - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.2989	0.2017	4.2000e-004		0.0135	0.0135		0.0124	0.0124	0.0000	36.8027	36.8027	0.0119	0.0000	37.1003
Total	**0.0293**	**0.2989**	**0.2017**	**4.2000e-004**	**0.1987**	**0.0135**	**0.2123**	**0.1092**	**0.0124**	**0.1217**	**0.0000**	**36.8027**	**36.8027**	**0.0119**	**0.0000**	**37.1003**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.7000e-004	3.3600e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5800e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2745	1.2745	2.0000e-005	0.0000	1.2750
Total	**4.8000e-004**	**2.7000e-004**	**3.3600e-003**	**1.0000e-005**	**1.5600e-003**	**1.0000e-005**	**1.5800e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.2745**	**1.2745**	**2.0000e-005**	**0.0000**	**1.2750**

3.2 Utilities - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3433	0.0000	0.3433	0.1887	0.0000	0.1887	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0470	0.4794	0.3403	7.2000e-004		0.0207	0.0207		0.0190	0.0190	0.0000	63.5873	63.5873	0.0206	0.0000	64.1014
Total	**0.0470**	**0.4794**	**0.3403**	**7.2000e-004**	**0.3433**	**0.0207**	**0.3639**	**0.1887**	**0.0190**	**0.2077**	**0.0000**	**63.5873**	**63.5873**	**0.0206**	**0.0000**	**64.1014**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	4.2000e-004	5.4200e-003	2.0000e-005	2.7000e-003	2.0000e-005	2.7200e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.1113	2.1113	3.0000e-005	0.0000	2.1122
Total	**7.9000e-004**	**4.2000e-004**	**5.4200e-003**	**2.0000e-005**	**2.7000e-003**	**2.0000e-005**	**2.7200e-003**	**7.2000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.1113**	**2.1113**	**3.0000e-005**	**0.0000**	**2.1122**

3.2 Utilities - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3433	0.0000	0.3433	0.1887	0.0000	0.1887	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0470	0.4794	0.3403	7.2000e-004		0.0207	0.0207		0.0190	0.0190	0.0000	63.5872	63.5872	0.0206	0.0000	64.1013
Total	**0.0470**	**0.4794**	**0.3403**	**7.2000e-004**	**0.3433**	**0.0207**	**0.3639**	**0.1887**	**0.0190**	**0.2077**	**0.0000**	**63.5872**	**63.5872**	**0.0206**	**0.0000**	**64.1013**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	4.2000e-004	5.4200e-003	2.0000e-005	2.7000e-003	2.0000e-005	2.7200e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.1113	2.1113	3.0000e-005	0.0000	2.1122
Total	**7.9000e-004**	**4.2000e-004**	**5.4200e-003**	**2.0000e-005**	**2.7000e-003**	**2.0000e-005**	**2.7200e-003**	**7.2000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.1113**	**2.1113**	**3.0000e-005**	**0.0000**	**2.1122**

3.3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1323	1.1623	1.6368	2.4500e-003		0.0544	0.0544		0.0515	0.0515	0.0000	209.9907	209.9907	0.0453	0.0000	211.1242
Total	**0.1323**	**1.1623**	**1.6368**	**2.4500e-003**		**0.0544**	**0.0544**		**0.0515**	**0.0515**	**0.0000**	**209.9907**	**209.9907**	**0.0453**	**0.0000**	**211.1242**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1800e-003	0.2458	0.0919	7.0000e-004	0.0183	3.5000e-004	0.0187	5.2900e-003	3.3000e-004	5.6200e-003	0.0000	72.9512	72.9512	9.7700e-003	0.0000	73.1956
Worker	0.0173	9.7100e-003	0.1215	5.1000e-004	0.0566	4.1000e-004	0.0571	0.0151	3.8000e-004	0.0155	0.0000	46.1380	46.1380	7.9000e-004	0.0000	46.1578
Total	**0.0235**	**0.2555**	**0.2134**	**1.2100e-003**	**0.0749**	**7.6000e-004**	**0.0757**	**0.0204**	**7.1000e-004**	**0.0211**	**0.0000**	**119.0892**	**119.0892**	**0.0106**	**0.0000**	**119.3533**

3.3 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1323	1.1623	1.6368	2.4500e-003		0.0544	0.0544		0.0515	0.0515	0.0000	209.9905	209.9905	0.0453	0.0000	211.1239
Total	**0.1323**	**1.1623**	**1.6368**	**2.4500e-003**		**0.0544**	**0.0544**		**0.0515**	**0.0515**	**0.0000**	**209.9905**	**209.9905**	**0.0453**	**0.0000**	**211.1239**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1800e-003	0.2458	0.0919	7.0000e-004	0.0183	3.5000e-004	0.0187	5.2900e-003	3.3000e-004	5.6200e-003	0.0000	72.9512	72.9512	9.7700e-003	0.0000	73.1956
Worker	0.0173	9.7100e-003	0.1215	5.1000e-004	0.0566	4.1000e-004	0.0571	0.0151	3.8000e-004	0.0155	0.0000	46.1380	46.1380	7.9000e-004	0.0000	46.1578
Total	**0.0235**	**0.2555**	**0.2134**	**1.2100e-003**	**0.0749**	**7.6000e-004**	**0.0757**	**0.0204**	**7.1000e-004**	**0.0211**	**0.0000**	**119.0892**	**119.0892**	**0.0106**	**0.0000**	**119.3533**

3.3 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1099	0.9746	1.4638	2.2000e-003		0.0412	0.0412		0.0390	0.0390	0.0000	188.4984	188.4984	0.0404	0.0000	189.5077
Total	**0.1099**	**0.9746**	**1.4638**	**2.2000e-003**		**0.0412**	**0.0412**		**0.0390**	**0.0390**	**0.0000**	**188.4984**	**188.4984**	**0.0404**	**0.0000**	**189.5077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3400e-003	0.2151	0.0826	6.2000e-004	0.0164	3.0000e-004	0.0167	4.7500e-003	2.9000e-004	5.0300e-003	0.0000	64.8614	64.8614	8.7700e-003	0.0000	65.0806
Worker	0.0148	7.9800e-003	0.1019	4.4000e-004	0.0508	3.7000e-004	0.0512	0.0135	3.4000e-004	0.0139	0.0000	39.7072	39.7072	6.5000e-004	0.0000	39.7234
Total	**0.0202**	**0.2231**	**0.1844**	**1.0600e-003**	**0.0672**	**6.7000e-004**	**0.0679**	**0.0183**	**6.3000e-004**	**0.0189**	**0.0000**	**104.5685**	**104.5685**	**9.4200e-003**	**0.0000**	**104.8040**

3.3 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1099	0.9746	1.4638	2.2000e-003		0.0412	0.0412		0.0390	0.0390	0.0000	188.4982	188.4982	0.0404	0.0000	189.5074
Total	**0.1099**	**0.9746**	**1.4638**	**2.2000e-003**		**0.0412**	**0.0412**		**0.0390**	**0.0390**	**0.0000**	**188.4982**	**188.4982**	**0.0404**	**0.0000**	**189.5074**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3400e-003	0.2151	0.0826	6.2000e-004	0.0164	3.0000e-004	0.0167	4.7500e-003	2.9000e-004	5.0300e-003	0.0000	64.8614	64.8614	8.7700e-003	0.0000	65.0806
Worker	0.0148	7.9800e-003	0.1019	4.4000e-004	0.0508	3.7000e-004	0.0512	0.0135	3.4000e-004	0.0139	0.0000	39.7072	39.7072	6.5000e-004	0.0000	39.7234
Total	**0.0202**	**0.2231**	**0.1844**	**1.0600e-003**	**0.0672**	**6.7000e-004**	**0.0679**	**0.0183**	**6.3000e-004**	**0.0189**	**0.0000**	**104.5685**	**104.5685**	**9.4200e-003**	**0.0000**	**104.8040**

3.4 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7919					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	**0.7970**	**0.0344**	**0.0543**	**9.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**7.6598**	**7.6598**	**4.2000e-004**	**0.0000**	**7.6702**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-004	4.8000e-004	6.1800e-003	3.0000e-005	3.0800e-003	2.0000e-005	3.1000e-003	8.2000e-004	2.0000e-005	8.4000e-004	0.0000	2.4076	2.4076	4.0000e-005	0.0000	2.4086
Total	**9.0000e-004**	**4.8000e-004**	**6.1800e-003**	**3.0000e-005**	**3.0800e-003**	**2.0000e-005**	**3.1000e-003**	**8.2000e-004**	**2.0000e-005**	**8.4000e-004**	**0.0000**	**2.4076**	**2.4076**	**4.0000e-005**	**0.0000**	**2.4086**

3.4 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7919					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	**0.7970**	**0.0344**	**0.0543**	**9.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**7.6598**	**7.6598**	**4.2000e-004**	**0.0000**	**7.6702**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-004	4.8000e-004	6.1800e-003	3.0000e-005	3.0800e-003	2.0000e-005	3.1000e-003	8.2000e-004	2.0000e-005	8.4000e-004	0.0000	2.4076	2.4076	4.0000e-005	0.0000	2.4086
Total	**9.0000e-004**	**4.8000e-004**	**6.1800e-003**	**3.0000e-005**	**3.0800e-003**	**2.0000e-005**	**3.1000e-003**	**8.2000e-004**	**2.0000e-005**	**8.4000e-004**	**0.0000**	**2.4076**	**2.4076**	**4.0000e-005**	**0.0000**	**2.4086**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6644	2.7017	7.6233	0.0310	3.0848	0.0318	3.1165	0.8304	0.0297	0.8601	0.0000	2,860.2763	2,860.2763	0.1156	0.0000	2,863.1661
Unmitigated	0.6644	2.7017	7.6233	0.0310	3.0848	0.0318	3.1165	0.8304	0.0297	0.8601	0.0000	2,860.2763	2,860.2763	0.1156	0.0000	2,863.1661

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	4,174.63	1,705.39	183.75	8,257,956	8,257,956
Total	4,174.63	1,705.39	183.75	8,257,956	8,257,956

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.603873	0.037286	0.192865	0.090708	0.013128	0.005155	0.032618	0.009408	0.004276	0.003135	0.006045	0.000953	0.000549

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	204.1541	204.1541	0.0204	4.2200e-003	205.9232
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	204.1541	204.1541	0.0204	4.2200e-003	205.9232
NaturalGas Mitigated	0.0280	0.2546	0.2139	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.1509	277.1509	5.3100e-003	5.0800e-003	278.7979
NaturalGas Unmitigated	0.0280	0.2546	0.2139	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.1509	277.1509	5.3100e-003	5.0800e-003	278.7979

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	5.19361e+006	0.0280	0.2546	0.2139	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.1509	277.1509	5.3100e-003	5.0800e-003	278.7979
Total		**0.0280**	**0.2546**	**0.2139**	**1.5300e-003**		**0.0194**	**0.0194**		**0.0194**	**0.0194**	**0.0000**	**277.1509**	**277.1509**	**5.3100e-003**	**5.0800e-003**	**278.7979**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	5.19361e+006	0.0280	0.2546	0.2139	1.5300e-003		0.0194	0.0194		0.0194	0.0194	0.0000	277.1509	277.1509	5.3100e-003	5.0800e-003	278.7979
Total		**0.0280**	**0.2546**	**0.2139**	**1.5300e-003**		**0.0194**	**0.0194**		**0.0194**	**0.0194**	**0.0000**	**277.1509**	**277.1509**	**5.3100e-003**	**5.0800e-003**	**278.7979**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.55201e+006	204.1541	0.0204	4.2200e-003	205.9232
Total		**204.1541**	**0.0204**	**4.2200e-003**	**205.9232**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.55201e+006	204.1541	0.0204	4.2200e-003	205.9232
Total		**204.1541**	**0.0204**	**4.2200e-003**	**205.9232**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6724	1.0000e-005	1.3900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7100e-003	2.7100e-003	1.0000e-005	0.0000	2.8900e-003
Unmitigated	0.6724	1.0000e-005	1.3900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7100e-003	2.7100e-003	1.0000e-005	0.0000	2.8900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7100e-003	2.7100e-003	1.0000e-005	0.0000	2.8900e-003
Total	**0.6724**	**1.0000e-005**	**1.3900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7100e-003**	**2.7100e-003**	**1.0000e-005**	**0.0000**	**2.8900e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7100e-003	2.7100e-003	1.0000e-005	0.0000	2.8900e-003
Total	**0.6724**	**1.0000e-005**	**1.3900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7100e-003**	**2.7100e-003**	**1.0000e-005**	**0.0000**	**2.8900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.0286	0.2438	5.9500e-003	20.8966
Unmitigated	13.0286	0.2438	5.9500e-003	20.8966

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	7.44859 / 11.6504	13.0286	0.2438	5.9500e-003	20.8966
Total		**13.0286**	**0.2438**	**5.9500e-003**	**20.8966**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	7.44859 / 11.6504	13.0286	0.2438	5.9500e-003	20.8966
Total		**13.0286**	**0.2438**	**5.9500e-003**	**20.8966**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	40.0745	2.3683	0.0000	99.2828
Unmitigated	40.0745	2.3683	0.0000	99.2828

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	197.42	40.0745	2.3683	0.0000	99.2828
Total		**40.0745**	**2.3683**	**0.0000**	**99.2828**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	197.42	40.0745	2.3683	0.0000	99.2828
Total		**40.0745**	**2.3683**	**0.0000**	**99.2828**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Student Union Renovation

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	18.00	1000sqft	0.41	17,998.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.cailg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use -

Construction Phase - construction from mid 2026 to mid 2027.

Off-road Equipment - Internal renovation, no cranes necessary.

Off-road Equipment -

Off-road Equipment -

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	60.00
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	PhaseEndDate	11/25/2026	7/13/2027
tblConstructionPhase	PhaseEndDate	11/18/2026	4/20/2027
tblConstructionPhase	PhaseEndDate	7/1/2026	7/14/2026
tblConstructionPhase	PhaseStartDate	11/19/2026	4/21/2027
tblConstructionPhase	PhaseStartDate	7/2/2026	7/15/2026
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.0278	0.2776	0.4086	6.5000e-004	7.9000e-003	0.0115	0.0194	1.7100e-003	0.0106	0.0123	0.0000	57.7250	57.7250	0.0169	0.0000	58.1464
2027	0.1154	0.1963	0.3037	4.7000e-004	3.7000e-003	8.3600e-003	0.0121	1.0000e-003	7.8200e-003	8.8200e-003	0.0000	41.9953	41.9953	0.0103	0.0000	42.2531
Maximum	**0.1154**	**0.2776**	**0.4086**	**6.5000e-004**	**7.9000e-003**	**0.0115**	**0.0194**	**1.7100e-003**	**0.0106**	**0.0123**	**0.0000**	**57.7250**	**57.7250**	**0.0169**	**0.0000**	**58.1464**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.0278	0.2776	0.4086	6.5000e-004	7.9000e-003	0.0115	0.0194	1.7100e-003	0.0106	0.0123	0.0000	57.7249	57.7249	0.0169	0.0000	58.1463
2027	0.1154	0.1963	0.3037	4.7000e-004	3.7000e-003	8.3600e-003	0.0121	1.0000e-003	7.8200e-003	8.8200e-003	0.0000	41.9952	41.9952	0.0103	0.0000	42.2530
Maximum	**0.1154**	**0.2776**	**0.4086**	**6.5000e-004**	**7.9000e-003**	**0.0115**	**0.0194**	**1.7100e-003**	**0.0106**	**0.0123**	**0.0000**	**57.7249**	**57.7249**	**0.0169**	**0.0000**	**58.1463**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2026	9-30-2026	0.1536	0.1536
2	10-1-2026	12-31-2026	0.1504	0.1504
3	1-1-2027	3-31-2027	0.1469	0.1469
4	4-1-2027	6-30-2027	0.1455	0.1455
5	7-1-2027	9-30-2027	0.0207	0.0207
		Highest	0.1536	0.1536

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0797	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Energy	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	57.0429	57.0429	3.0500e-003	1.1000e-003	57.4477
Mobile	0.0751	0.3112	0.8619	3.5800e-003	0.3655	3.5600e-003	0.3691	0.0984	3.3200e-003	0.1017	0.0000	330.3727	330.3727	0.0133	0.0000	330.7047
Waste						0.0000	0.0000		0.0000	0.0000	4.7500	0.0000	4.7500	0.2807	0.0000	11.7679
Water						0.0000	0.0000		0.0000	0.0000	0.2801	1.2642	1.5443	0.0289	7.1000e-004	2.4769
Total	**0.1582**	**0.3413**	**0.8874**	**3.7600e-003**	**0.3655**	**5.8500e-003**	**0.3714**	**0.0984**	**5.6100e-003**	**0.1040**	**5.0301**	**388.6801**	**393.7102**	**0.3260**	**1.8100e-003**	**402.3975**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0797	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Energy	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	57.0429	57.0429	3.0500e-003	1.1000e-003	57.4477
Mobile	0.0751	0.3112	0.8619	3.5800e-003	0.3655	3.5600e-003	0.3691	0.0984	3.3200e-003	0.1017	0.0000	330.3727	330.3727	0.0133	0.0000	330.7047
Waste						0.0000	0.0000		0.0000	0.0000	4.7500	0.0000	4.7500	0.2807	0.0000	11.7679
Water						0.0000	0.0000		0.0000	0.0000	0.2801	1.2642	1.5443	0.0289	7.1000e-004	2.4769
Total	**0.1582**	**0.3413**	**0.8874**	**3.7600e-003**	**0.3655**	**5.8500e-003**	**0.3714**	**0.0984**	**5.6100e-003**	**0.1040**	**5.0301**	**388.6801**	**393.7102**	**0.3260**	**1.8100e-003**	**402.3975**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Utilities	Site Preparation	7/1/2026	7/14/2026	5	10	
2	Building Construction	Building Construction	7/15/2026	4/20/2027	5	200	
3	Architectural Coating	Architectural Coating	4/21/2027	7/13/2027	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,997; Non-Residential Outdoor: 8,999; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utilities	Graders	1	8.00	187	0.41
Utilities	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utilities	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Utilities - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6500e-003	0.0000	2.6500e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2200e-003	0.0240	0.0191	5.0000e-005		8.3000e-004	8.3000e-004		7.6000e-004	7.6000e-004	0.0000	4.2742	4.2742	1.3800e-003	0.0000	4.3087
Total	**2.2200e-003**	**0.0240**	**0.0191**	**5.0000e-005**	**2.6500e-003**	**8.3000e-004**	**3.4800e-003**	**2.9000e-004**	**7.6000e-004**	**1.0500e-003**	**0.0000**	**4.2742**	**4.2742**	**1.3800e-003**	**0.0000**	**4.3087**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	3.0000e-005	3.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1486	0.1486	0.0000	0.0000	0.1487
Total	**6.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1486**	**0.1486**	**0.0000**	**0.0000**	**0.1487**

3.2 Utilities - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6500e-003	0.0000	2.6500e-003	2.9000e-004	0.0000	2.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2200e-003	0.0240	0.0191	5.0000e-005		8.3000e-004	8.3000e-004		7.6000e-004	7.6000e-004	0.0000	4.2742	4.2742	1.3800e-003	0.0000	4.3087
Total	**2.2200e-003**	**0.0240**	**0.0191**	**5.0000e-005**	**2.6500e-003**	**8.3000e-004**	**3.4800e-003**	**2.9000e-004**	**7.6000e-004**	**1.0500e-003**	**0.0000**	**4.2742**	**4.2742**	**1.3800e-003**	**0.0000**	**4.3087**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	3.0000e-005	3.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1486	0.1486	0.0000	0.0000	0.1487
Total	**6.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1486**	**0.1486**	**0.0000**	**0.0000**	**0.1487**

3.3 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2378	0.3758	5.2000e-004		0.0106	0.0106		9.7600e-003	9.7600e-003	0.0000	45.7182	45.7182	0.0148	0.0000	46.0878
Total	**0.0241**	**0.2378**	**0.3758**	**5.2000e-004**		**0.0106**	**0.0106**		**9.7600e-003**	**9.7600e-003**	**0.0000**	**45.7182**	**45.7182**	**0.0148**	**0.0000**	**46.0878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-004	0.0153	6.0700e-003	4.0000e-005	1.2000e-003	2.0000e-005	1.2200e-003	3.5000e-004	2.0000e-005	3.7000e-004	0.0000	4.6828	4.6828	6.4000e-004	0.0000	4.6987
Worker	1.0800e-003	5.6000e-004	7.2600e-003	3.0000e-005	3.8600e-003	3.0000e-005	3.8800e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	2.9013	2.9013	5.0000e-005	0.0000	2.9024
Total	**1.4600e-003**	**0.0159**	**0.0133**	**7.0000e-005**	**5.0600e-003**	**5.0000e-005**	**5.1000e-003**	**1.3800e-003**	**4.0000e-005**	**1.4200e-003**	**0.0000**	**7.5840**	**7.5840**	**6.9000e-004**	**0.0000**	**7.6011**

3.3 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2378	0.3758	5.2000e-004		0.0106	0.0106		9.7600e-003	9.7600e-003	0.0000	45.7181	45.7181	0.0148	0.0000	46.0878
Total	**0.0241**	**0.2378**	**0.3758**	**5.2000e-004**		**0.0106**	**0.0106**		**9.7600e-003**	**9.7600e-003**	**0.0000**	**45.7181**	**45.7181**	**0.0148**	**0.0000**	**46.0878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-004	0.0153	6.0700e-003	4.0000e-005	1.2000e-003	2.0000e-005	1.2200e-003	3.5000e-004	2.0000e-005	3.7000e-004	0.0000	4.6828	4.6828	6.4000e-004	0.0000	4.6987
Worker	1.0800e-003	5.6000e-004	7.2600e-003	3.0000e-005	3.8600e-003	3.0000e-005	3.8800e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	2.9013	2.9013	5.0000e-005	0.0000	2.9024
Total	**1.4600e-003**	**0.0159**	**0.0133**	**7.0000e-005**	**5.0600e-003**	**5.0000e-005**	**5.1000e-003**	**1.3800e-003**	**4.0000e-005**	**1.4200e-003**	**0.0000**	**7.5840**	**7.5840**	**6.9000e-004**	**0.0000**	**7.6011**

3.3 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.1520	0.2402	3.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	29.2296	29.2296	9.4500e-003	0.0000	29.4660
Total	**0.0154**	**0.1520**	**0.2402**	**3.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**29.2296**	**29.2296**	**9.4500e-003**	**0.0000**	**29.4660**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	9.5400e-003	3.9100e-003	3.0000e-005	7.6000e-004	1.0000e-005	7.8000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	2.9686	2.9686	4.1000e-004	0.0000	2.9788
Worker	6.6000e-004	3.3000e-004	4.3800e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.7926	1.7926	3.0000e-005	0.0000	1.7932
Total	**8.9000e-004**	**9.8700e-003**	**8.2900e-003**	**5.0000e-005**	**3.2300e-003**	**3.0000e-005**	**3.2600e-003**	**8.8000e-004**	**3.0000e-005**	**9.0000e-004**	**0.0000**	**4.7611**	**4.7611**	**4.4000e-004**	**0.0000**	**4.7720**

3.3 Building Construction - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.1520	0.2402	3.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	29.2296	29.2296	9.4500e-003	0.0000	29.4659
Total	**0.0154**	**0.1520**	**0.2402**	**3.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**29.2296**	**29.2296**	**9.4500e-003**	**0.0000**	**29.4659**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	9.5400e-003	3.9100e-003	3.0000e-005	7.6000e-004	1.0000e-005	7.8000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	2.9686	2.9686	4.1000e-004	0.0000	2.9788
Worker	6.6000e-004	3.3000e-004	4.3800e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.7926	1.7926	3.0000e-005	0.0000	1.7932
Total	**8.9000e-004**	**9.8700e-003**	**8.2900e-003**	**5.0000e-005**	**3.2300e-003**	**3.0000e-005**	**3.2600e-003**	**8.8000e-004**	**3.0000e-005**	**9.0000e-004**	**0.0000**	**4.7611**	**4.7611**	**4.4000e-004**	**0.0000**	**4.7720**

3.4 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0939					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	**0.0990**	**0.0344**	**0.0543**	**9.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**7.6598**	**7.6598**	**4.2000e-004**	**0.0000**	**7.6702**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	6.0000e-005	8.4000e-004	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3447	0.3447	1.0000e-005	0.0000	0.3449
Total	**1.3000e-004**	**6.0000e-005**	**8.4000e-004**	**0.0000**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3447**	**0.3447**	**1.0000e-005**	**0.0000**	**0.3449**

3.4 Architectural Coating - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0939					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	**0.0990**	**0.0344**	**0.0543**	**9.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**7.6598**	**7.6598**	**4.2000e-004**	**0.0000**	**7.6702**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	6.0000e-005	8.4000e-004	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3447	0.3447	1.0000e-005	0.0000	0.3449
Total	**1.3000e-004**	**6.0000e-005**	**8.4000e-004**	**0.0000**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3447**	**0.3447**	**1.0000e-005**	**0.0000**	**0.3449**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0751	0.3112	0.8619	3.5800e-003	0.3655	3.5600e-003	0.3691	0.0984	3.3200e-003	0.1017	0.0000	330.3727	330.3727	0.0133	0.0000	330.7047
Unmitigated	0.0751	0.3112	0.8619	3.5800e-003	0.3655	3.5600e-003	0.3691	0.0984	3.3200e-003	0.1017	0.0000	330.3727	330.3727	0.0133	0.0000	330.7047

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	494.77	202.12	21.78	978,709	978,709
Total	494.77	202.12	21.78	978,709	978,709

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	24.1957	24.1957	2.4200e-003	5.0000e-004	24.4054
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	24.1957	24.1957	2.4200e-003	5.0000e-004	24.4054
NaturalGas Mitigated	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8471	32.8471	6.3000e-004	6.0000e-004	33.0423
NaturalGas Unmitigated	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8471	32.8471	6.3000e-004	6.0000e-004	33.0423

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	615532	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8471	32.8471	6.3000e-004	6.0000e-004	33.0423
Total		**3.3200e-003**	**0.0302**	**0.0254**	**1.8000e-004**		**2.2900e-003**	**2.2900e-003**		**2.2900e-003**	**2.2900e-003**	**0.0000**	**32.8471**	**32.8471**	**6.3000e-004**	**6.0000e-004**	**33.0423**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	615532	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8471	32.8471	6.3000e-004	6.0000e-004	33.0423
Total		**3.3200e-003**	**0.0302**	**0.0254**	**1.8000e-004**		**2.2900e-003**	**2.2900e-003**		**2.2900e-003**	**2.2900e-003**	**0.0000**	**32.8471**	**32.8471**	**6.3000e-004**	**6.0000e-004**	**33.0423**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	183940	24.1957	2.4200e-003	5.0000e-004	24.4054
Total		**24.1957**	**2.4200e-003**	**5.0000e-004**	**24.4054**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	183940	24.1957	2.4200e-003	5.0000e-004	24.4054
Total		**24.1957**	**2.4200e-003**	**5.0000e-004**	**24.4054**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0797	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Unmitigated	0.0797	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0703					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Total	**0.0797**	**0.0000**	**1.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.0000**	**3.4000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0703					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Total	**0.0797**	**0.0000**	**1.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.2000e-004**	**3.2000e-004**	**0.0000**	**0.0000**	**3.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5443	0.0289	7.1000e-004	2.4769
Unmitigated	1.5443	0.0289	7.1000e-004	2.4769

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0.882883 / 1.38092	1.5443	0.0289	7.1000e-004	2.4769
Total		**1.5443**	**0.0289**	**7.1000e-004**	**2.4769**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0.882883 / 1.38092	1.5443	0.0289	7.1000e-004	2.4769
Total		**1.5443**	**0.0289**	**7.1000e-004**	**2.4769**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.7500	0.2807	0.0000	11.7679
Unmitigated	4.7500	0.2807	0.0000	11.7679

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	23.4	4.7500	0.2807	0.0000	11.7679
Total		**4.7500**	**0.2807**	**0.0000**	**11.7679**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	23.4	4.7500	0.2807	0.0000	11.7679
Total		**4.7500**	**0.2807**	**0.0000**	**11.7679**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Batmale Hall Renovation

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	103.89	1000sqft	2.38	103,888.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.cailg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use -

Construction Phase - construction from mid 2026 to early 2027, 6 month duration.

Off-road Equipment - Internal renovation, no cranes necessary.

Off-road Equipment -

Off-road Equipment -

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	220.00	100.00
tblConstructionPhase	NumDays	3.00	5.00
tblConstructionPhase	PhaseEndDate	5/21/2027	1/1/2027
tblConstructionPhase	PhaseEndDate	5/7/2027	11/20/2026
tblConstructionPhase	PhaseEndDate	7/3/2026	7/7/2026
tblConstructionPhase	PhaseStartDate	5/8/2027	11/23/2026
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.5947	0.5606	0.7253	1.4300e-003	0.0281	0.0188	0.0469	6.9800e-003	0.0182	0.0252	0.0000	123.3279	123.3279	0.0160	0.0000	123.7274
2027	0.0182	5.8000e-004	9.7000e-004	0.0000	4.0000e-005	3.0000e-005	6.0000e-005	1.0000e-005	3.0000e-005	4.0000e-005	0.0000	0.1535	0.1535	1.0000e-005	0.0000	0.1537
Maximum	**0.5947**	**0.5606**	**0.7253**	**1.4300e-003**	**0.0281**	**0.0188**	**0.0469**	**6.9800e-003**	**0.0182**	**0.0252**	**0.0000**	**123.3279**	**123.3279**	**0.0160**	**0.0000**	**123.7274**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.5947	0.5606	0.7253	1.4300e-003	0.0281	0.0188	0.0469	6.9800e-003	0.0182	0.0252	0.0000	123.3278	123.3278	0.0160	0.0000	123.7273
2027	0.0182	5.8000e-004	9.7000e-004	0.0000	4.0000e-005	3.0000e-005	6.0000e-005	1.0000e-005	3.0000e-005	4.0000e-005	0.0000	0.1535	0.1535	1.0000e-005	0.0000	0.1537
Maximum	**0.5947**	**0.5606**	**0.7253**	**1.4300e-003**	**0.0281**	**0.0188**	**0.0469**	**6.9800e-003**	**0.0182**	**0.0252**	**0.0000**	**123.3278**	**123.3278**	**0.0160**	**0.0000**	**123.7273**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2026	9-30-2026	0.3994	0.3994
2	10-1-2026	12-31-2026	0.7340	0.7340
3	1-1-2027	3-31-2027	0.0134	0.0134
		Highest	0.7340	0.7340

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4600	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8600e-003	1.8600e-003	0.0000	0.0000	1.9800e-003
Energy	0.0192	0.1742	0.1463	1.0400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	329.2626	329.2626	0.0176	6.3700e-003	331.5995
Mobile	0.4337	1.7960	4.9752	0.0206	2.1099	0.0206	2.1305	0.5679	0.0192	0.5871	0.0000	1,906.9765	1,906.9765	0.0767	0.0000	1,908.8926
Waste						0.0000	0.0000		0.0000	0.0000	27.4160	0.0000	27.4160	1.6202	0.0000	67.9219
Water						0.0000	0.0000		0.0000	0.0000	1.6166	7.2964	8.9131	0.1668	4.0700e-003	14.2957
Total	**0.9129**	**1.9702**	**5.1225**	**0.0217**	**2.1099**	**0.0338**	**2.1437**	**0.5679**	**0.0324**	**0.6004**	**29.0326**	**2,243.5374**	**2,272.5700**	**1.8813**	**0.0104**	**2,322.7117**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4600	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8600e-003	1.8600e-003	0.0000	0.0000	1.9800e-003
Energy	0.0192	0.1742	0.1463	1.0400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	329.2626	329.2626	0.0176	6.3700e-003	331.5995
Mobile	0.4337	1.7960	4.9752	0.0206	2.1099	0.0206	2.1305	0.5679	0.0192	0.5871	0.0000	1,906.9765	1,906.9765	0.0767	0.0000	1,908.8926
Waste						0.0000	0.0000		0.0000	0.0000	27.4160	0.0000	27.4160	1.6202	0.0000	67.9219
Water						0.0000	0.0000		0.0000	0.0000	1.6166	7.2964	8.9131	0.1668	4.0700e-003	14.2957
Total	**0.9129**	**1.9702**	**5.1225**	**0.0217**	**2.1099**	**0.0338**	**2.1437**	**0.5679**	**0.0324**	**0.6004**	**29.0326**	**2,243.5374**	**2,272.5700**	**1.8813**	**0.0104**	**2,322.7117**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Utilities	Site Preparation	7/1/2026	7/7/2026	5	5	
2	Building Construction	Building Construction	7/4/2026	11/20/2026	5	100	
3	Architectural Coating	Architectural Coating	11/23/2026	1/1/2027	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 155,832; Non-Residential Outdoor: 51,944; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Utilities	Graders	1	8.00	187	0.41
Utilities	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	0	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Scrapers	1	8.00	367	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Utilities	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	44.00	17.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Utilities - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.9800e-003	0.0000	3.9800e-003	4.3000e-004	0.0000	4.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7500e-003	0.0275	0.0223	6.0000e-005		1.0200e-003	1.0200e-003		9.4000e-004	9.4000e-004	0.0000	5.3812	5.3812	1.7400e-003	0.0000	5.4247
Total	**2.7500e-003**	**0.0275**	**0.0223**	**6.0000e-005**	**3.9800e-003**	**1.0200e-003**	**5.0000e-003**	**4.3000e-004**	**9.4000e-004**	**1.3700e-003**	**0.0000**	**5.3812**	**5.3812**	**1.7400e-003**	**0.0000**	**5.4247**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	3.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1189	0.1189	0.0000	0.0000	0.1190
Total	**4.0000e-005**	**2.0000e-005**	**3.0000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1189**	**0.1189**	**0.0000**	**0.0000**	**0.1190**

3.2 Utilities - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.9800e-003	0.0000	3.9800e-003	4.3000e-004	0.0000	4.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7500e-003	0.0275	0.0223	6.0000e-005		1.0200e-003	1.0200e-003		9.4000e-004	9.4000e-004	0.0000	5.3812	5.3812	1.7400e-003	0.0000	5.4247
Total	**2.7500e-003**	**0.0275**	**0.0223**	**6.0000e-005**	**3.9800e-003**	**1.0200e-003**	**5.0000e-003**	**4.3000e-004**	**9.4000e-004**	**1.3700e-003**	**0.0000**	**5.3812**	**5.3812**	**1.7400e-003**	**0.0000**	**5.4247**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	3.0000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1189	0.1189	0.0000	0.0000	0.1190
Total	**4.0000e-005**	**2.0000e-005**	**3.0000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1189**	**0.1189**	**0.0000**	**0.0000**	**0.1190**

3.3 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0589	0.4428	0.6135	9.6000e-004		0.0168	0.0168		0.0163	0.0163	0.0000	78.5197	78.5197	0.0109	0.0000	78.7910
Total	**0.0589**	**0.4428**	**0.6135**	**9.6000e-004**		**0.0168**	**0.0168**		**0.0163**	**0.0163**	**0.0000**	**78.5197**	**78.5197**	**0.0109**	**0.0000**	**78.7910**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7500e-003	0.0710	0.0282	2.1000e-004	5.5600e-003	1.0000e-004	5.6500e-003	1.6100e-003	9.0000e-005	1.7000e-003	0.0000	21.7505	21.7505	2.9700e-003	0.0000	21.8248
Worker	4.8700e-003	2.5100e-003	0.0328	1.4000e-004	0.0174	1.2000e-004	0.0175	4.6200e-003	1.1000e-004	4.7400e-003	0.0000	13.0795	13.0795	2.0000e-004	0.0000	13.0846
Total	**6.6200e-003**	**0.0735**	**0.0609**	**3.5000e-004**	**0.0229**	**2.2000e-004**	**0.0232**	**6.2300e-003**	**2.0000e-004**	**6.4400e-003**	**0.0000**	**34.8300**	**34.8300**	**3.1700e-003**	**0.0000**	**34.9094**

3.3 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0588	0.4428	0.6135	9.6000e-004		0.0168	0.0168		0.0163	0.0163	0.0000	78.5196	78.5196	0.0109	0.0000	78.7909
Total	**0.0588**	**0.4428**	**0.6135**	**9.6000e-004**		**0.0168**	**0.0168**		**0.0163**	**0.0163**	**0.0000**	**78.5196**	**78.5196**	**0.0109**	**0.0000**	**78.7909**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7500e-003	0.0710	0.0282	2.1000e-004	5.5600e-003	1.0000e-004	5.6500e-003	1.6100e-003	9.0000e-005	1.7000e-003	0.0000	21.7505	21.7505	2.9700e-003	0.0000	21.8248
Worker	4.8700e-003	2.5100e-003	0.0328	1.4000e-004	0.0174	1.2000e-004	0.0175	4.6200e-003	1.1000e-004	4.7400e-003	0.0000	13.0795	13.0795	2.0000e-004	0.0000	13.0846
Total	**6.6200e-003**	**0.0735**	**0.0609**	**3.5000e-004**	**0.0229**	**2.2000e-004**	**0.0232**	**6.2300e-003**	**2.0000e-004**	**6.4400e-003**	**0.0000**	**34.8300**	**34.8300**	**3.1700e-003**	**0.0000**	**34.9094**

3.4 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e-003	0.0166	0.0262	4.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	3.7022	3.7022	2.0000e-004	0.0000	3.7073
Total	**0.5261**	**0.0166**	**0.0262**	**4.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**3.7022**	**3.7022**	**2.0000e-004**	**0.0000**	**3.7073**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.5000e-004	1.9400e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.7759	0.7759	1.0000e-005	0.0000	0.7762
Total	**2.9000e-004**	**1.5000e-004**	**1.9400e-003**	**1.0000e-005**	**1.0300e-003**	**1.0000e-005**	**1.0400e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.7759**	**0.7759**	**1.0000e-005**	**0.0000**	**0.7762**

3.4 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e-003	0.0166	0.0262	4.0000e-005		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	3.7022	3.7022	2.0000e-004	0.0000	3.7073
Total	**0.5261**	**0.0166**	**0.0262**	**4.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.5000e-004**	**7.5000e-004**	**0.0000**	**3.7022**	**3.7022**	**2.0000e-004**	**0.0000**	**3.7073**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	1.5000e-004	1.9400e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.7759	0.7759	1.0000e-005	0.0000	0.7762
Total	**2.9000e-004**	**1.5000e-004**	**1.9400e-003**	**1.0000e-005**	**1.0300e-003**	**1.0000e-005**	**1.0400e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.7759**	**0.7759**	**1.0000e-005**	**0.0000**	**0.7762**

3.4 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	5.7000e-004	9.0000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
Total	**0.0182**	**5.7000e-004**	**9.0000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.1277**	**0.1277**	**1.0000e-005**	**0.0000**	**0.1278**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	6.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0259	0.0259	0.0000	0.0000	0.0259
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0259**	**0.0259**	**0.0000**	**0.0000**	**0.0259**

3.4 Architectural Coating - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	5.7000e-004	9.0000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
Total	**0.0182**	**5.7000e-004**	**9.0000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.1277**	**0.1277**	**1.0000e-005**	**0.0000**	**0.1278**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	6.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0259	0.0259	0.0000	0.0000	0.0259
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0259**	**0.0259**	**0.0000**	**0.0000**	**0.0259**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4337	1.7960	4.9752	0.0206	2.1099	0.0206	2.1305	0.5679	0.0192	0.5871	0.0000	1,906.9765	1,906.9765	0.0767	0.0000	1,908.8926
Unmitigated	0.4337	1.7960	4.9752	0.0206	2.1099	0.0206	2.1305	0.5679	0.0192	0.5871	0.0000	1,906.9765	1,906.9765	0.0767	0.0000	1,908.8926

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	2,855.88	1,166.66	125.70	5,649,299	5,649,299
Total	2,855.88	1,166.66	125.70	5,649,299	5,649,299

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.603481	0.036963	0.193002	0.091056	0.012889	0.005184	0.033230	0.009471	0.004272	0.002983	0.005952	0.000956	0.000561

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	139.6626	139.6626	0.0140	2.8900e-003	140.8728
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	139.6626	139.6626	0.0140	2.8900e-003	140.8728
NaturalGas Mitigated	0.0192	0.1742	0.1463	1.0400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.6000	189.6000	3.6300e-003	3.4800e-003	190.7267
NaturalGas Unmitigated	0.0192	0.1742	0.1463	1.0400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.6000	189.6000	3.6300e-003	3.4800e-003	190.7267

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	3.55297e+006	0.0192	0.1742	0.1463	1.0400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.6000	189.6000	3.6300e-003	3.4800e-003	190.7267
Total		**0.0192**	**0.1742**	**0.1463**	**1.0400e-003**		**0.0132**	**0.0132**		**0.0132**	**0.0132**	**0.0000**	**189.6000**	**189.6000**	**3.6300e-003**	**3.4800e-003**	**190.7267**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	3.55297e+006	0.0192	0.1742	0.1463	1.0400e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.6000	189.6000	3.6300e-003	3.4800e-003	190.7267
Total		**0.0192**	**0.1742**	**0.1463**	**1.0400e-003**		**0.0132**	**0.0132**		**0.0132**	**0.0132**	**0.0000**	**189.6000**	**189.6000**	**3.6300e-003**	**3.4800e-003**	**190.7267**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.06174e+006	139.6626	0.0140	2.8900e-003	140.8728
Total		**139.6626**	**0.0140**	**2.8900e-003**	**140.8728**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.06174e+006	139.6626	0.0140	2.8900e-003	140.8728
Total		**139.6626**	**0.0140**	**2.8900e-003**	**140.8728**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4600	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8600e-003	1.8600e-003	0.0000	0.0000	1.9800e-003
Unmitigated	0.4600	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8600e-003	1.8600e-003	0.0000	0.0000	1.9800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8600e-003	1.8600e-003	0.0000	0.0000	1.9800e-003
Total	**0.4600**	**1.0000e-005**	**9.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8600e-003**	**1.8600e-003**	**0.0000**	**0.0000**	**1.9800e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8600e-003	1.8600e-003	0.0000	0.0000	1.9800e-003
Total	**0.4600**	**1.0000e-005**	**9.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8600e-003**	**1.8600e-003**	**0.0000**	**0.0000**	**1.9800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.9131	0.1668	4.0700e-003	14.2957
Unmitigated	8.9131	0.1668	4.0700e-003	14.2957

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	5.0957 / 7.9702	8.9131	0.1668	4.0700e-003	14.2957
Total		**8.9131**	**0.1668**	**4.0700e-003**	**14.2957**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	5.0957 / 7.9702	8.9131	0.1668	4.0700e-003	14.2957
Total		**8.9131**	**0.1668**	**4.0700e-003**	**14.2957**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.4160	1.6202	0.0000	67.9219
Unmitigated	27.4160	1.6202	0.0000	67.9219

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	135.06	27.4160	1.6202	0.0000	67.9219
Total		**27.4160**	**1.6202**	**0.0000**	**67.9219**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	135.06	27.4160	1.6202	0.0000	67.9219
Total		**27.4160**	**1.6202**	**0.0000**	**67.9219**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Student Success Center

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	80.00	1000sqft	1.84	80,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Student Success Center - San Francisco County, Annual

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.ca-ilg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use -

Construction Phase - Demolition of Conlan Hall is expected to take place in 2021 over 6 months. SSC construction is expected to last from early 2022 to mid-2024.

Trips and VMT - Hauling trucks are estimated to carry 11 cubic yards of grading soil.

Demolition - Conlan Hall to be demolished.

Grading -

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation - CCSF employee commuter benefits https://www.wageworks.com/ccsf/

Area Mitigation -

Energy Mitigation - Title 24 reduction consistent with CCSF Sustainable Design Standard

Water Mitigation - Mitigation consistent with CCSF Sustainable Design Standard

Waste Mitigation - CCSF Design Standard strives to exceed state's 75% reduction goal

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	200.00	275.00
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	2.00	15.00
tblGrading	MaterialExported	0.00	10,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	HaulingTripNumber	1,250.00	1,818.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2275	2.0716	1.7700	4.1600e-003	0.1503	0.0774	0.2277	0.0629	0.0743	0.1372	0.0000	373.3709	373.3709	0.0637	0.0000	374.9639
2023	0.4715	0.4368	0.5061	9.7000e-004	0.0112	0.0187	0.0299	3.0300e-003	0.0179	0.0209	0.0000	83.1442	83.1442	0.0148	0.0000	83.5145
Maximum	**0.4715**	**2.0716**	**1.7700**	**4.1600e-003**	**0.1503**	**0.0774**	**0.2277**	**0.0629**	**0.0743**	**0.1372**	**0.0000**	**373.3709**	**373.3709**	**0.0637**	**0.0000**	**374.9639**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2275	2.0716	1.7700	4.1600e-003	0.0985	0.0774	0.1759	0.0367	0.0743	0.1110	0.0000	373.3707	373.3707	0.0637	0.0000	374.9636
2023	0.4715	0.4368	0.5061	9.7000e-004	0.0112	0.0187	0.0299	3.0300e-003	0.0179	0.0209	0.0000	83.1441	83.1441	0.0148	0.0000	83.5144
Maximum	**0.4715**	**2.0716**	**1.7700**	**4.1600e-003**	**0.0985**	**0.0774**	**0.1759**	**0.0367**	**0.0743**	**0.1110**	**0.0000**	**373.3707**	**373.3707**	**0.0637**	**0.0000**	**374.9636**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.06**	**0.00**	**20.10**	**39.73**	**0.00**	**16.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
3	**1-1-2022**	**3-31-2022**	0.7595	0.7595
4	**4-1-2022**	**6-30-2022**	0.5109	0.5109
5	**7-1-2022**	**9-30-2022**	0.5165	0.5165
6	**10-1-2022**	**12-31-2022**	0.5178	0.5178
7	**1-1-2023**	**3-31-2023**	0.4114	0.4114
8	**4-1-2023**	**6-30-2023**	0.4919	0.4919
		Highest	0.7595	0.7595

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3542	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Energy	0.0148	0.1341	0.1127	8.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	253.5519	253.5519	0.0136	4.9000e-003	255.3515
Mobile	0.3873	1.5299	4.4755	0.0174	1.6260	0.0183	1.6443	0.4379	0.0171	0.4550	0.0000	1,601.5858	1,601.5858	0.0653	0.0000	1,603.2176
Waste						0.0000	0.0000		0.0000	0.0000	21.1111	0.0000	21.1111	1.2476	0.0000	52.3018
Water						0.0000	0.0000		0.0000	0.0000	1.2449	5.6186	6.8635	0.1284	3.1400e-003	11.0084
Total	**0.7563**	**1.6641**	**4.5889**	**0.0182**	**1.6260**	**0.0285**	**1.6545**	**0.4379**	**0.0273**	**0.4652**	**22.3559**	**1,860.7577**	**1,883.1137**	**1.4549**	**8.0400e-003**	**1,921.8807**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3542	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Energy	0.0111	0.1013	0.0851	6.1000e-004		7.7000e-003	7.7000e-003		7.7000e-003	7.7000e-003	0.0000	206.9492	206.9492	0.0118	4.0200e-003	208.4422
Mobile	0.3503	1.3389	3.7410	0.0138	1.2821	0.0148	1.2968	0.3453	0.0138	0.3591	0.0000	1,275.4278	1,275.4278	0.0534	0.0000	1,276.7637
Waste						0.0000	0.0000		0.0000	0.0000	5.2778	0.0000	5.2778	0.3119	0.0000	13.0754
Water						0.0000	0.0000		0.0000	0.0000	0.9959	4.8876	5.8835	0.1028	2.5200e-003	9.2029
Total	**0.7156**	**1.4402**	**3.8268**	**0.0145**	**1.2821**	**0.0225**	**1.3045**	**0.3453**	**0.0215**	**0.3668**	**6.2737**	**1,487.2661**	**1,493.5398**	**0.4799**	**6.5400e-003**	**1,507.4858**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.37**	**13.45**	**16.61**	**20.52**	**21.15**	**21.08**	**21.15**	**21.15**	**21.20**	**21.15**	**71.94**	**20.07**	**20.69**	**67.01**	**18.66**	**21.56**

3.0 Construction Detail

Construction Phase

Student Success Center - San Francisco County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2022	1/21/2022	5	15	
2	Grading	Grading	1/22/2022	2/18/2022	5	20	
3	Building Construction	Building Construction	2/19/2022	3/10/2023	5	275	
4	Paving	Paving	3/11/2023	4/21/2023	5	30	
5	Architectural Coating	Architectural Coating	4/22/2023	6/2/2023	5	30	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,000; Non-Residential Outdoor: 40,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,818.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	34.00	13.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0435	0.0000	0.0435	0.0222	0.0000	0.0222	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8400e-003	0.1097	0.0532	1.3000e-004		4.6700e-003	4.6700e-003		4.3000e-003	4.3000e-003	0.0000	11.3365	11.3365	3.6700e-003	0.0000	11.4281
Total	**9.8400e-003**	**0.1097**	**0.0532**	**1.3000e-004**	**0.0435**	**4.6700e-003**	**0.0482**	**0.0222**	**4.3000e-003**	**0.0265**	**0.0000**	**11.3365**	**11.3365**	**3.6700e-003**	**0.0000**	**11.4281**

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.0000e-004	1.1600e-003	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4184	0.4184	1.0000e-005	0.0000	0.4186
Total	**1.6000e-004**	**1.0000e-004**	**1.1600e-003**	**0.0000**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4184**	**0.4184**	**1.0000e-005**	**0.0000**	**0.4186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0196	0.0000	0.0196	9.9700e-003	0.0000	9.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8400e-003	0.1097	0.0532	1.3000e-004		4.6700e-003	4.6700e-003		4.3000e-003	4.3000e-003	0.0000	11.3364	11.3364	3.6700e-003	0.0000	11.4281
Total	**9.8400e-003**	**0.1097**	**0.0532**	**1.3000e-004**	**0.0196**	**4.6700e-003**	**0.0242**	**9.9700e-003**	**4.3000e-003**	**0.0143**	**0.0000**	**11.3364**	**11.3364**	**3.6700e-003**	**0.0000**	**11.4281**

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.0000e-004	1.1600e-003	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4184	0.4184	1.0000e-005	0.0000	0.4186
Total	**1.6000e-004**	**1.0000e-004**	**1.1600e-003**	**0.0000**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4184**	**0.4184**	**1.0000e-005**	**0.0000**	**0.4186**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0506	0.0000	0.0506	0.0255	0.0000	0.0255	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1201	0.0594	1.4000e-004		5.1700e-003	5.1700e-003		4.7600e-003	4.7600e-003	0.0000	12.3814	12.3814	4.0000e-003	0.0000	12.4816
Total	**0.0108**	**0.1201**	**0.0594**	**1.4000e-004**	**0.0506**	**5.1700e-003**	**0.0558**	**0.0255**	**4.7600e-003**	**0.0302**	**0.0000**	**12.3814**	**12.3814**	**4.0000e-003**	**0.0000**	**12.4816**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5600e-003	0.2700	0.0987	7.2000e-004	0.0153	7.4000e-004	0.0160	4.1900e-003	7.1000e-004	4.8900e-003	0.0000	78.2909	78.2909	0.0147	0.0000	78.6585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.3000e-004	1.5500e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5578	0.5578	1.0000e-005	0.0000	0.5581
Total	**6.7700e-003**	**0.2702**	**0.1002**	**7.3000e-004**	**0.0159**	**7.4000e-004**	**0.0166**	**4.3600e-003**	**7.1000e-004**	**5.0600e-003**	**0.0000**	**78.8487**	**78.8487**	**0.0147**	**0.0000**	**79.2166**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0228	0.0000	0.0228	0.0115	0.0000	0.0115	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1201	0.0594	1.4000e-004		5.1700e-003	5.1700e-003		4.7600e-003	4.7600e-003	0.0000	12.3814	12.3814	4.0000e-003	0.0000	12.4815
Total	**0.0108**	**0.1201**	**0.0594**	**1.4000e-004**	**0.0228**	**5.1700e-003**	**0.0280**	**0.0115**	**4.7600e-003**	**0.0162**	**0.0000**	**12.3814**	**12.3814**	**4.0000e-003**	**0.0000**	**12.4815**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5600e-003	0.2700	0.0987	7.2000e-004	0.0153	7.4000e-004	0.0160	4.1900e-003	7.1000e-004	4.8900e-003	0.0000	78.2909	78.2909	0.0147	0.0000	78.6585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.3000e-004	1.5500e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5578	0.5578	1.0000e-005	0.0000	0.5581
Total	**6.7700e-003**	**0.2702**	**0.1002**	**7.3000e-004**	**0.0159**	**7.4000e-004**	**0.0166**	**4.3600e-003**	**7.1000e-004**	**5.0600e-003**	**0.0000**	**78.8487**	**78.8487**	**0.0147**	**0.0000**	**79.2166**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1855	1.4066	1.4317	2.4800e-003		0.0663	0.0663		0.0640	0.0640	0.0000	204.2740	204.2740	0.0356	0.0000	205.1635
Total	**0.1855**	**1.4066**	**1.4317**	**2.4800e-003**		**0.0663**	**0.0663**		**0.0640**	**0.0640**	**0.0000**	**204.2740**	**204.2740**	**0.0356**	**0.0000**	**205.1635**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1800e-003	0.1587	0.0502	3.8000e-004	9.5600e-003	3.3000e-004	9.8900e-003	2.7600e-003	3.2000e-004	3.0800e-003	0.0000	39.4408	39.4408	5.2300e-003	0.0000	39.5716
Worker	0.0103	6.2800e-003	0.0741	2.9000e-004	0.0302	2.3000e-004	0.0305	8.0400e-003	2.1000e-004	8.2500e-003	0.0000	26.6712	26.6712	5.1000e-004	0.0000	26.6840
Total	**0.0145**	**0.1650**	**0.1243**	**6.7000e-004**	**0.0398**	**5.6000e-004**	**0.0403**	**0.0108**	**5.3000e-004**	**0.0113**	**0.0000**	**66.1119**	**66.1119**	**5.7400e-003**	**0.0000**	**66.2556**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1855	1.4066	1.4317	2.4800e-003		0.0663	0.0663		0.0640	0.0640	0.0000	204.2738	204.2738	0.0356	0.0000	205.1632
Total	**0.1855**	**1.4066**	**1.4317**	**2.4800e-003**		**0.0663**	**0.0663**		**0.0640**	**0.0640**	**0.0000**	**204.2738**	**204.2738**	**0.0356**	**0.0000**	**205.1632**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1800e-003	0.1587	0.0502	3.8000e-004	9.5600e-003	3.3000e-004	9.8900e-003	2.7600e-003	3.2000e-004	3.0800e-003	0.0000	39.4408	39.4408	5.2300e-003	0.0000	39.5716
Worker	0.0103	6.2800e-003	0.0741	2.9000e-004	0.0302	2.3000e-004	0.0305	8.0400e-003	2.1000e-004	8.2500e-003	0.0000	26.6712	26.6712	5.1000e-004	0.0000	26.6840
Total	**0.0145**	**0.1650**	**0.1243**	**6.7000e-004**	**0.0398**	**5.6000e-004**	**0.0403**	**0.0108**	**5.3000e-004**	**0.0113**	**0.0000**	**66.1119**	**66.1119**	**5.7400e-003**	**0.0000**	**66.2556**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0381	0.2928	0.3153	5.5000e-004		0.0129	0.0129		0.0124	0.0124	0.0000	45.3998	45.3998	7.7100e-003	0.0000	45.5925
Total	**0.0381**	**0.2928**	**0.3153**	**5.5000e-004**		**0.0129**	**0.0129**		**0.0124**	**0.0124**	**0.0000**	**45.3998**	**45.3998**	**7.7100e-003**	**0.0000**	**45.5925**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5000e-004	0.0292	0.0108	8.0000e-005	2.1200e-003	4.0000e-005	2.1700e-003	6.1000e-004	4.0000e-005	6.5000e-004	0.0000	8.5468	8.5468	1.1400e-003	0.0000	8.5752
Worker	2.1600e-003	1.2700e-003	0.0154	6.0000e-005	6.7200e-003	5.0000e-005	6.7700e-003	1.7900e-003	5.0000e-005	1.8300e-003	0.0000	5.6980	5.6980	1.0000e-004	0.0000	5.7006
Total	**2.9100e-003**	**0.0305**	**0.0262**	**1.4000e-004**	**8.8400e-003**	**9.0000e-005**	**8.9400e-003**	**2.4000e-003**	**9.0000e-005**	**2.4800e-003**	**0.0000**	**14.2449**	**14.2449**	**1.2400e-003**	**0.0000**	**14.2758**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0381	0.2928	0.3153	5.5000e-004		0.0129	0.0129		0.0124	0.0124	0.0000	45.3997	45.3997	7.7100e-003	0.0000	45.5925
Total	**0.0381**	**0.2928**	**0.3153**	**5.5000e-004**		**0.0129**	**0.0129**		**0.0124**	**0.0124**	**0.0000**	**45.3997**	**45.3997**	**7.7100e-003**	**0.0000**	**45.5925**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5000e-004	0.0292	0.0108	8.0000e-005	2.1200e-003	4.0000e-005	2.1700e-003	6.1000e-004	4.0000e-005	6.5000e-004	0.0000	8.5468	8.5468	1.1400e-003	0.0000	8.5752
Worker	2.1600e-003	1.2700e-003	0.0154	6.0000e-005	6.7200e-003	5.0000e-005	6.7700e-003	1.7900e-003	5.0000e-005	1.8300e-003	0.0000	5.6980	5.6980	1.0000e-004	0.0000	5.7006
Total	**2.9100e-003**	**0.0305**	**0.0262**	**1.4000e-004**	**8.8400e-003**	**9.0000e-005**	**8.9400e-003**	**2.4000e-003**	**9.0000e-005**	**2.4800e-003**	**0.0000**	**14.2449**	**14.2449**	**1.2400e-003**	**0.0000**	**14.2758**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.6700e-003	0.0935	0.1320	2.0000e-004		4.6300e-003	4.6300e-003		4.2700e-003	4.2700e-003	0.0000	17.6586	17.6586	5.6000e-003	0.0000	17.7986
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6700e-003**	**0.0935**	**0.1320**	**2.0000e-004**		**4.6300e-003**	**4.6300e-003**		**4.2700e-003**	**4.2700e-003**	**0.0000**	**17.6586**	**17.6586**	**5.6000e-003**	**0.0000**	**17.7986**

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	2.9000e-004	3.5300e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3072	1.3072	2.0000e-005	0.0000	1.3078
Total	**5.0000e-004**	**2.9000e-004**	**3.5300e-003**	**1.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.3072**	**1.3072**	**2.0000e-005**	**0.0000**	**1.3078**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.6700e-003	0.0935	0.1320	2.0000e-004		4.6300e-003	4.6300e-003		4.2700e-003	4.2700e-003	0.0000	17.6586	17.6586	5.6000e-003	0.0000	17.7986
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6700e-003**	**0.0935**	**0.1320**	**2.0000e-004**		**4.6300e-003**	**4.6300e-003**		**4.2700e-003**	**4.2700e-003**	**0.0000**	**17.6586**	**17.6586**	**5.6000e-003**	**0.0000**	**17.7986**

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	2.9000e-004	3.5300e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.3072	1.3072	2.0000e-005	0.0000	1.3078
Total	**5.0000e-004**	**2.9000e-004**	**3.5300e-003**	**1.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.3072**	**1.3072**	**2.0000e-005**	**0.0000**	**1.3078**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0195	0.0272	4.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	3.8299	3.8299	2.3000e-004	0.0000	3.8356
Total	**0.4200**	**0.0195**	**0.0272**	**4.0000e-005**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**3.8299**	**3.8299**	**2.3000e-004**	**0.0000**	**3.8356**

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.6000e-004	1.9000e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7039	0.7039	1.0000e-005	0.0000	0.7042
Total	**2.7000e-004**	**1.6000e-004**	**1.9000e-003**	**1.0000e-005**	**8.3000e-004**	**1.0000e-005**	**8.4000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.7039**	**0.7039**	**1.0000e-005**	**0.0000**	**0.7042**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0195	0.0272	4.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	3.8299	3.8299	2.3000e-004	0.0000	3.8356
Total	**0.4200**	**0.0195**	**0.0272**	**4.0000e-005**		**1.0600e-003**	**1.0600e-003**		**1.0600e-003**	**1.0600e-003**	**0.0000**	**3.8299**	**3.8299**	**2.3000e-004**	**0.0000**	**3.8356**

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.6000e-004	1.9000e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7039	0.7039	1.0000e-005	0.0000	0.7042
Total	**2.7000e-004**	**1.6000e-004**	**1.9000e-003**	**1.0000e-005**	**8.3000e-004**	**1.0000e-005**	**8.4000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.7039**	**0.7039**	**1.0000e-005**	**0.0000**	**0.7042**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Implement Trip Reduction Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3503	1.3389	3.7410	0.0138	1.2821	0.0148	1.2968	0.3453	0.0138	0.3591	0.0000	1,275.4278	1,275.4278	0.0534	0.0000	1,276.7637
Unmitigated	0.3873	1.5299	4.4755	0.0174	1.6260	0.0183	1.6443	0.4379	0.0171	0.4550	0.0000	1,601.5858	1,601.5858	0.0653	0.0000	1,603.2176

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	2,199.20	898.40	96.80	4,350,299	3,430,041
Total	2,199.20	898.40	96.80	4,350,299	3,430,041

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	96.6569	96.6569	9.6700e-003	2.0000e-003	97.4945
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	107.5486	107.5486	0.0108	2.2300e-003	108.4805
NaturalGas Mitigated	0.0111	0.1013	0.0851	6.1000e-004		7.7000e-003	7.7000e-003		7.7000e-003	7.7000e-003	0.0000	110.2923	110.2923	2.1100e-003	2.0200e-003	110.9477
NaturalGas Unmitigated	0.0148	0.1341	0.1127	8.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	146.0034	146.0034	2.8000e-003	2.6800e-003	146.8710

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	2.736e+006	0.0148	0.1341	0.1127	8.0000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	146.0034	146.0034	2.8000e-003	2.6800e-003	146.8710
Total		**0.0148**	**0.1341**	**0.1127**	**8.0000e-004**		**0.0102**	**0.0102**		**0.0102**	**0.0102**	**0.0000**	**146.0034**	**146.0034**	**2.8000e-003**	**2.6800e-003**	**146.8710**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	2.0668e+006	0.0111	0.1013	0.0851	6.1000e-004		7.7000e-003	7.7000e-003		7.7000e-003	7.7000e-003	0.0000	110.2923	110.2923	2.1100e-003	2.0200e-003	110.9477
Total		**0.0111**	**0.1013**	**0.0851**	**6.1000e-004**		**7.7000e-003**	**7.7000e-003**		**7.7000e-003**	**7.7000e-003**	**0.0000**	**110.2923**	**110.2923**	**2.1100e-003**	**2.0200e-003**	**110.9477**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	817600	107.5486	0.0108	2.2300e-003	108.4805
Total		**107.5486**	**0.0108**	**2.2300e-003**	**108.4805**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	734800	96.6569	9.6700e-003	2.0000e-003	97.4945
Total		**96.6569**	**9.6700e-003**	**2.0000e-003**	**97.4945**

6.0 Area Detail

6.1 Mitigation Measures Area

Student Success Center - San Francisco County, Annual

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3542	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Unmitigated	0.3542	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Total	**0.3542**	**1.0000e-005**	**7.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4300e-003**	**1.4300e-003**	**0.0000**	**0.0000**	**1.5200e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3124					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Total	**0.3542**	**1.0000e-005**	**7.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4300e-003**	**1.4300e-003**	**0.0000**	**0.0000**	**1.5200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.8835	0.1028	2.5200e-003	9.2029
Unmitigated	6.8635	0.1284	3.1400e-003	11.0084

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	3.92392 / 6.13742	6.8635	0.1284	3.1400e-003	11.0084
Total		**6.8635**	**0.1284**	**3.1400e-003**	**11.0084**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	3.13914 / 5.76303	5.8835	0.1028	2.5200e-003	9.2029
Total		**5.8835**	**0.1028**	**2.5200e-003**	**9.2029**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.2778	0.3119	0.0000	13.0754
Unmitigated	21.1111	1.2476	0.0000	52.3018

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	104	21.1111	1.2476	0.0000	52.3018
Total		**21.1111**	**1.2476**	**0.0000**	**52.3018**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	26	5.2778	0.3119	0.0000	13.0754
Total		**5.2778**	**0.3119**	**0.0000**	**13.0754**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Operational Output Files

CCSF Existing Campus

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	1,129.18	1000sqft	25.92	1,129,180.00	0
Parking Lot	2,958.00	Space	26.62	1,183,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.cailg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use -

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Vehicle Trips - only evaluate additional mobile source emissions

CCSF Existing Campus - San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	1.00
tblConstructionPhase	PhaseEndDate	4/8/2021	1/1/2021
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.6000e-003	0.0157	0.0109	2.0000e-005	6.0000e-005	7.8000e-004	8.4000e-004	2.0000e-005	7.2000e-004	7.4000e-004	0.0000	1.7544	1.7544	4.8000e-004	0.0000	1.7663
Maximum	**1.6000e-003**	**0.0157**	**0.0109**	**2.0000e-005**	**6.0000e-005**	**7.8000e-004**	**8.4000e-004**	**2.0000e-005**	**7.2000e-004**	**7.4000e-004**	**0.0000**	**1.7544**	**1.7544**	**4.8000e-004**	**0.0000**	**1.7663**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.6000e-003	0.0157	0.0109	2.0000e-005	6.0000e-005	7.8000e-004	8.4000e-004	2.0000e-005	7.2000e-004	7.4000e-004	0.0000	1.7544	1.7544	4.8000e-004	0.0000	1.7663
Maximum	**1.6000e-003**	**0.0157**	**0.0109**	**2.0000e-005**	**6.0000e-005**	**7.8000e-004**	**8.4000e-004**	**2.0000e-005**	**7.2000e-004**	**7.4000e-004**	**0.0000**	**1.7544**	**1.7544**	**4.8000e-004**	**0.0000**	**1.7663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.0124	0.0124
		Highest	0.0124	0.0124

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1035	3.4000e-004	0.0376	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0730	0.0730	1.9000e-004	0.0000	0.0779
Energy	0.2082	1.8930	1.5902	0.0114		0.1439	0.1439		0.1439	0.1439	0.0000	3,633.2964	3,633.2964	0.1968	0.0703	3,659.1692
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	297.9765	0.0000	297.9765	17.6099	0.0000	738.2242
Water						0.0000	0.0000		0.0000	0.0000	17.5712	79.3049	96.8761	1.8127	0.0443	155.3803
Total	**5.3117**	**1.8934**	**1.6278**	**0.0114**	**0.0000**	**0.1440**	**0.1440**	**0.0000**	**0.1440**	**0.1440**	**315.5477**	**3,712.6744**	**4,028.2220**	**19.6195**	**0.1146**	**4,552.8516**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1035	3.4000e-004	0.0376	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0730	0.0730	1.9000e-004	0.0000	0.0779
Energy	0.2082	1.8930	1.5902	0.0114		0.1439	0.1439		0.1439	0.1439	0.0000	3,633.2964	3,633.2964	0.1968	0.0703	3,659.1692
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	297.9765	0.0000	297.9765	17.6099	0.0000	738.2242
Water						0.0000	0.0000		0.0000	0.0000	17.5712	79.3049	96.8761	1.8127	0.0443	155.3803
Total	**5.3117**	**1.8934**	**1.6278**	**0.0114**	**0.0000**	**0.1440**	**0.1440**	**0.0000**	**0.1440**	**0.1440**	**315.5477**	**3,712.6744**	**4,028.2220**	**19.6195**	**0.1146**	**4,552.8516**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/1/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 26.62

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
Total	**1.5800e-003**	**0.0157**	**0.0108**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.7000**	**1.7000**	**4.8000e-004**	**0.0000**	**1.7120**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0543	0.0543	0.0000	0.0000	0.0543
Total	**2.0000e-005**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0543**	**0.0543**	**0.0000**	**0.0000**	**0.0543**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
Total	**1.5800e-003**	**0.0157**	**0.0108**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.7000**	**1.7000**	**4.8000e-004**	**0.0000**	**1.7120**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0543	0.0543	0.0000	0.0000	0.0543
Total	**2.0000e-005**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0543**	**0.0543**	**0.0000**	**0.0000**	**0.0543**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Parking Lot	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,572.4952	1,572.4952	0.1573	0.0325	1,586.1217
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,572.4952	1,572.4952	0.1573	0.0325	1,586.1217
NaturalGas Mitigated	0.2082	1.8930	1.5902	0.0114		0.1439	0.1439		0.1439	0.1439	0.0000	2,060.8012	2,060.8012	0.0395	0.0378	2,073.0475
NaturalGas Unmitigated	0.2082	1.8930	1.5902	0.0114		0.1439	0.1439		0.1439	0.1439	0.0000	2,060.8012	2,060.8012	0.0395	0.0378	2,073.0475

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	3.8618e+007	0.2082	1.8930	1.5902	0.0114		0.1439	0.1439		0.1439	0.1439	0.0000	2,060.8012	2,060.8012	0.0395	0.0378	2,073.0475
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2082**	**1.8930**	**1.5902**	**0.0114**		**0.1439**	**0.1439**		**0.1439**	**0.1439**	**0.0000**	**2,060.8012**	**2,060.8012**	**0.0395**	**0.0378**	**2,073.0475**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	3.8618e+007	0.2082	1.8930	1.5902	0.0114		0.1439	0.1439		0.1439	0.1439	0.0000	2,060.8012	2,060.8012	0.0395	0.0378	2,073.0475
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2082**	**1.8930**	**1.5902**	**0.0114**		**0.1439**	**0.1439**		**0.1439**	**0.1439**	**0.0000**	**2,060.8012**	**2,060.8012**	**0.0395**	**0.0378**	**2,073.0475**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.15402e+007	1,518.0211	0.1518	0.0314	1,531.1756
Parking Lot	414120	54.4741	5.4500e-003	1.1300e-003	54.9461
Total		**1,572.4952**	**0.1573**	**0.0325**	**1,586.1217**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.15402e+007	1,518.0211	0.1518	0.0314	1,531.1756
Parking Lot	414120	54.4741	5.4500e-003	1.1300e-003	54.9461
Total		**1,572.4952**	**0.1573**	**0.0325**	**1,586.1217**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1035	3.4000e-004	0.0376	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0730	0.0730	1.9000e-004	0.0000	0.0779
Unmitigated	5.1035	3.4000e-004	0.0376	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0730	0.0730	1.9000e-004	0.0000	0.0779

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.4865					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.5000e-003	3.4000e-004	0.0376	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0730	0.0730	1.9000e-004	0.0000	0.0779
Total	**5.1035**	**3.4000e-004**	**0.0376**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0730**	**0.0730**	**1.9000e-004**	**0.0000**	**0.0779**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.4865					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.5000e-003	3.4000e-004	0.0376	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.0730	0.0730	1.9000e-004	0.0000	0.0779
Total	**5.1035**	**3.4000e-004**	**0.0376**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.0730**	**0.0730**	**1.9000e-004**	**0.0000**	**0.0779**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	96.8761	1.8127	0.0443	155.3803
Unmitigated	96.8761	1.8127	0.0443	155.3803

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	55.3852 / 86.6281	96.8761	1.8127	0.0443	155.3803
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**96.8761**	**1.8127**	**0.0443**	**155.3803**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	55.3852 / 86.6281	96.8761	1.8127	0.0443	155.3803
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**96.8761**	**1.8127**	**0.0443**	**155.3803**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	297.9765	17.6099	0.0000	738.2242
Unmitigated	297.9765	17.6099	0.0000	738.2242

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	1467.93	297.9765	17.6099	0.0000	738.2242
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**297.9765**	**17.6099**	**0.0000**	**738.2242**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	1467.93	297.9765	17.6099	0.0000	738.2242
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**297.9765**	**17.6099**	**0.0000**	**738.2242**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CCSF Baseline Campus

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	1,352.46	1000sqft	31.05	1,352,460.00	0
Parking Lot	1,430.00	Space	12.87	572,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.cailg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use - Baseline conditions.

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Vehicle Trips - only evaluate additional mobile source emissions

Energy Use -

CCSF Baseline Campus - San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	50.00	1.00
tblConstructionPhase	PhaseEndDate	3/11/2021	1/1/2021
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.6000e-003	0.0157	0.0109	2.0000e-005	6.0000e-005	7.8000e-004	8.4000e-004	2.0000e-005	7.2000e-004	7.4000e-004	0.0000	1.7544	1.7544	4.8000e-004	0.0000	1.7663
Maximum	**1.6000e-003**	**0.0157**	**0.0109**	**2.0000e-005**	**6.0000e-005**	**7.8000e-004**	**8.4000e-004**	**2.0000e-005**	**7.2000e-004**	**7.4000e-004**	**0.0000**	**1.7544**	**1.7544**	**4.8000e-004**	**0.0000**	**1.7663**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.6000e-003	0.0157	0.0109	2.0000e-005	6.0000e-005	7.8000e-004	8.4000e-004	2.0000e-005	7.2000e-004	7.4000e-004	0.0000	1.7544	1.7544	4.8000e-004	0.0000	1.7663
Maximum	**1.6000e-003**	**0.0157**	**0.0109**	**2.0000e-005**	**6.0000e-005**	**7.8000e-004**	**8.4000e-004**	**2.0000e-005**	**7.2000e-004**	**7.4000e-004**	**0.0000**	**1.7544**	**1.7544**	**4.8000e-004**	**0.0000**	**1.7663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.0124	0.0124
		Highest	0.0124	0.0124

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.0385	2.3000e-004	0.0256	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0497	0.0497	1.3000e-004	0.0000	0.0530
Energy	0.2494	2.2674	1.9046	0.0136		0.1723	0.1723		0.1723	0.1723	0.0000	4,312.8205	4,312.8205	0.2318	0.0834	4,343.4721
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	356.8987	0.0000	356.8987	21.0921	0.0000	884.2015
Water						0.0000	0.0000		0.0000	0.0000	21.0456	94.9864	116.0320	2.1711	0.0530	186.1047
Total	**6.2880**	**2.2676**	**1.9302**	**0.0136**	**0.0000**	**0.1724**	**0.1724**	**0.0000**	**0.1724**	**0.1724**	**377.9443**	**4,407.8566**	**4,785.8009**	**23.4951**	**0.1364**	**5,413.8312**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.0385	2.3000e-004	0.0256	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0497	0.0497	1.3000e-004	0.0000	0.0530
Energy	0.2494	2.2674	1.9046	0.0136		0.1723	0.1723		0.1723	0.1723	0.0000	4,312.8205	4,312.8205	0.2318	0.0834	4,343.4721
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	356.8987	0.0000	356.8987	21.0921	0.0000	884.2015
Water						0.0000	0.0000		0.0000	0.0000	21.0456	94.9864	116.0320	2.1711	0.0530	186.1047
Total	**6.2880**	**2.2676**	**1.9302**	**0.0136**	**0.0000**	**0.1724**	**0.1724**	**0.0000**	**0.1724**	**0.1724**	**377.9443**	**4,407.8566**	**4,785.8009**	**23.4951**	**0.1364**	**5,413.8312**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/1/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 12.87

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
Total	**1.5800e-003**	**0.0157**	**0.0108**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.7000**	**1.7000**	**4.8000e-004**	**0.0000**	**1.7120**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0543	0.0543	0.0000	0.0000	0.0543
Total	**2.0000e-005**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0543**	**0.0543**	**0.0000**	**0.0000**	**0.0543**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
Total	**1.5800e-003**	**0.0157**	**0.0108**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.7000**	**1.7000**	**4.8000e-004**	**0.0000**	**1.7120**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0543	0.0543	0.0000	0.0000	0.0543
Total	**2.0000e-005**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0543**	**0.0543**	**0.0000**	**0.0000**	**0.0543**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492
Parking Lot	0.605720	0.039347	0.191789	0.088945	0.014469	0.004989	0.029396	0.009044	0.004299	0.004006	0.006568	0.000937	0.000492

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,844.5238	1,844.5238	0.1845	0.0382	1,860.5076
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,844.5238	1,844.5238	0.1845	0.0382	1,860.5076
NaturalGas Mitigated	0.2494	2.2674	1.9046	0.0136		0.1723	0.1723		0.1723	0.1723	0.0000	2,468.2966	2,468.2966	0.0473	0.0453	2,482.9645
NaturalGas Unmitigated	0.2494	2.2674	1.9046	0.0136		0.1723	0.1723		0.1723	0.1723	0.0000	2,468.2966	2,468.2966	0.0473	0.0453	2,482.9645

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	4.62541e+007	0.2494	2.2674	1.9046	0.0136		0.1723	0.1723		0.1723	0.1723	0.0000	2,468.2966	2,468.2966	0.0473	0.0453	2,482.9645
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2494**	**2.2674**	**1.9046**	**0.0136**		**0.1723**	**0.1723**		**0.1723**	**0.1723**	**0.0000**	**2,468.2966**	**2,468.2966**	**0.0473**	**0.0453**	**2,482.9645**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	4.62541e+007	0.2494	2.2674	1.9046	0.0136		0.1723	0.1723		0.1723	0.1723	0.0000	2,468.2966	2,468.2966	0.0473	0.0453	2,482.9645
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2494**	**2.2674**	**1.9046**	**0.0136**		**0.1723**	**0.1723**		**0.1723**	**0.1723**	**0.0000**	**2,468.2966**	**2,468.2966**	**0.0473**	**0.0453**	**2,482.9645**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.38221e+007	1,818.1892	0.1818	0.0376	1,833.9447
Parking Lot	200200	26.3347	2.6300e-003	5.4000e-004	26.5629
Total		**1,844.5238**	**0.1845**	**0.0382**	**1,860.5076**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.38221e+007	1,818.1892	0.1818	0.0376	1,833.9447
Parking Lot	200200	26.3347	2.6300e-003	5.4000e-004	26.5629
Total		**1,844.5238**	**0.1845**	**0.0382**	**1,860.5076**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.0385	2.3000e-004	0.0256	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0497	0.0497	1.3000e-004	0.0000	0.0530
Unmitigated	6.0385	2.3000e-004	0.0256	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0497	0.0497	1.3000e-004	0.0000	0.0530

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.3190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0256	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0497	0.0497	1.3000e-004	0.0000	0.0530
Total	**6.0385**	**2.3000e-004**	**0.0256**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0497**	**0.0497**	**1.3000e-004**	**0.0000**	**0.0530**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.3190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0256	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0497	0.0497	1.3000e-004	0.0000	0.0530
Total	**6.0385**	**2.3000e-004**	**0.0256**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0497**	**0.0497**	**1.3000e-004**	**0.0000**	**0.0530**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	116.0320	2.1711	0.0530	186.1047
Unmitigated	116.0320	2.1711	0.0530	186.1047

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	66.3369 / 103.758	116.0320	2.1711	0.0530	186.1047
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**116.0320**	**2.1711**	**0.0530**	**186.1047**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	66.3369 / 103.758	116.0320	2.1711	0.0530	186.1047
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**116.0320**	**2.1711**	**0.0530**	**186.1047**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	356.8987	21.0921	0.0000	884.2015
Unmitigated	356.8987	21.0921	0.0000	884.2015

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	1758.2	356.8987	21.0921	0.0000	884.2015
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**356.8987**	**21.0921**	**0.0000**	**884.2015**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	1758.2	356.8987	21.0921	0.0000	884.2015
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**356.8987**	**21.0921**	**0.0000**	**884.2015**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CCSF Proposed Project Campus

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	1,215.15	1000sqft	27.90	1,215,150.00	0
Parking Lot	1,486.00	Space	13.37	594,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's GHG Emissions Factor Info Sheet, estimated 2020 GHG intensity factor, see: https://www.cailg.org/sites/main/files/fileattachments/ghg_emission_factor_guidance.pdf.

Land Use - Proposed Project conditions.

Construction Phase - Operation Only

Off-road Equipment - Operation Only

Vehicle Trips - only evaluate additional mobile source emissions.

Energy Use -

CCSF Proposed Project Campus - San Francisco County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	50.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	11.23	7.40
tblVehicleTrips	SU_TR	1.21	7.40
tblVehicleTrips	WD_TR	27.49	7.40

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.6000e-003	0.0157	0.0109	2.0000e-005	6.0000e-005	7.8000e-004	8.4000e-004	2.0000e-005	7.2000e-004	7.4000e-004	0.0000	1.7544	1.7544	4.8000e-004	0.0000	1.7663
Maximum	**1.6000e-003**	**0.0157**	**0.0109**	**2.0000e-005**	**6.0000e-005**	**7.8000e-004**	**8.4000e-004**	**2.0000e-005**	**7.2000e-004**	**7.4000e-004**	**0.0000**	**1.7544**	**1.7544**	**4.8000e-004**	**0.0000**	**1.7663**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.6000e-003	0.0157	0.0109	2.0000e-005	6.0000e-005	7.8000e-004	8.4000e-004	2.0000e-005	7.2000e-004	7.4000e-004	0.0000	1.7544	1.7544	4.8000e-004	0.0000	1.7663
Maximum	**1.6000e-003**	**0.0157**	**0.0109**	**2.0000e-005**	**6.0000e-005**	**7.8000e-004**	**8.4000e-004**	**2.0000e-005**	**7.2000e-004**	**7.4000e-004**	**0.0000**	**1.7544**	**1.7544**	**4.8000e-004**	**0.0000**	**1.7663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.0124	0.0124
		Highest	0.0124	0.0124

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.4325	2.2000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0483	0.0483	1.2000e-004	0.0000	0.0514
Energy	0.2241	2.0372	1.7112	0.0122		0.1548	0.1548		0.1548	0.1548	0.0000	3,878.6615	3,878.6615	0.2086	0.0750	3,906.2333
Mobile	1.5048	6.4794	17.4803	0.0782	8.5232	0.0627	8.5859	2.2929	0.0584	2.3513	0.0000	7,240.9180	7,240.9180	0.2782	0.0000	7,247.8741
Waste						0.0000	0.0000		0.0000	0.0000	320.6648	0.0000	320.6648	18.9508	0.0000	794.4335
Water						0.0000	0.0000		0.0000	0.0000	18.9089	85.3428	104.2517	1.9507	0.0476	167.2102
Total	**7.1613**	**8.5168**	**19.2162**	**0.0904**	**8.5232**	**0.2176**	**8.7408**	**2.2929**	**0.2133**	**2.5062**	**339.5738**	**11,204.9706**	**11,544.5443**	**21.3884**	**0.1226**	**12,115.8024**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.4325	2.2000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0483	0.0483	1.2000e-004	0.0000	0.0514
Energy	0.2241	2.0372	1.7112	0.0122		0.1548	0.1548		0.1548	0.1548	0.0000	3,878.6615	3,878.6615	0.2086	0.0750	3,906.2333
Mobile	1.5048	6.4794	17.4803	0.0782	8.5232	0.0627	8.5859	2.2929	0.0584	2.3513	0.0000	7,240.9180	7,240.9180	0.2782	0.0000	7,247.8741
Waste						0.0000	0.0000		0.0000	0.0000	320.6648	0.0000	320.6648	18.9508	0.0000	794.4335
Water						0.0000	0.0000		0.0000	0.0000	18.9089	85.3428	104.2517	1.9507	0.0476	167.2102
Total	**7.1613**	**8.5168**	**19.2162**	**0.0904**	**8.5232**	**0.2176**	**8.7408**	**2.2929**	**0.2133**	**2.5062**	**339.5738**	**11,204.9706**	**11,544.5443**	**21.3884**	**0.1226**	**12,115.8024**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/1/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 13.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
Total	**1.5800e-003**	**0.0157**	**0.0108**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.7000**	**1.7000**	**4.8000e-004**	**0.0000**	**1.7120**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0543	0.0543	0.0000	0.0000	0.0543
Total	**2.0000e-005**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0543**	**0.0543**	**0.0000**	**0.0000**	**0.0543**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0157	0.0108	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.7000	1.7000	4.8000e-004	0.0000	1.7120
Total	**1.5800e-003**	**0.0157**	**0.0108**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.7000**	**1.7000**	**4.8000e-004**	**0.0000**	**1.7120**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0543	0.0543	0.0000	0.0000	0.0543
Total	**2.0000e-005**	**1.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0543**	**0.0543**	**0.0000**	**0.0000**	**0.0543**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5048	6.4794	17.4803	0.0782	8.5232	0.0627	8.5859	2.2929	0.0584	2.3513	0.0000	7,240.9180	7,240.9180	0.2782	0.0000	7,247.8741
Unmitigated	1.5048	6.4794	17.4803	0.0782	8.5232	0.0627	8.5859	2.2929	0.0584	2.3513	0.0000	7,240.9180	7,240.9180	0.2782	0.0000	7,247.8741

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	8,994.54	8,994.54	8994.54	22,841,968	22,841,968
Parking Lot	0.00	0.00	0.00		
Total	8,994.54	8,994.54	8,994.54	22,841,968	22,841,968

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.602408	0.036316	0.193185	0.092029	0.012351	0.005268	0.034818	0.009679	0.004284	0.002352	0.005755	0.000958	0.000595
Parking Lot	0.602408	0.036316	0.193185	0.092029	0.012351	0.005268	0.034818	0.009679	0.004284	0.002352	0.005755	0.000958	0.000595

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,660.9614	1,660.9614	0.1661	0.0344	1,675.3545
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,660.9614	1,660.9614	0.1661	0.0344	1,675.3545
NaturalGas Mitigated	0.2241	2.0372	1.7112	0.0122		0.1548	0.1548		0.1548	0.1548	0.0000	2,217.7001	2,217.7001	0.0425	0.0407	2,230.8788
NaturalGas Unmitigated	0.2241	2.0372	1.7112	0.0122		0.1548	0.1548		0.1548	0.1548	0.0000	2,217.7001	2,217.7001	0.0425	0.0407	2,230.8788

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	4.15581e+007	0.2241	2.0372	1.7112	0.0122		0.1548	0.1548		0.1548	0.1548	0.0000	2,217.7001	2,217.7001	0.0425	0.0407	2,230.8788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2241**	**2.0372**	**1.7112**	**0.0122**		**0.1548**	**0.1548**		**0.1548**	**0.1548**	**0.0000**	**2,217.7001**	**2,217.7001**	**0.0425**	**0.0407**	**2,230.8788**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	4.15581e+007	0.2241	2.0372	1.7112	0.0122		0.1548	0.1548		0.1548	0.1548	0.0000	2,217.7001	2,217.7001	0.0425	0.0407	2,230.8788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2241**	**2.0372**	**1.7112**	**0.0122**		**0.1548**	**0.1548**		**0.1548**	**0.1548**	**0.0000**	**2,217.7001**	**2,217.7001**	**0.0425**	**0.0407**	**2,230.8788**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.24188e+007	1,633.5955	0.1634	0.0338	1,647.7514
Parking Lot	208040	27.3660	2.7400e-003	5.7000e-004	27.6031
Total		**1,660.9614**	**0.1661**	**0.0344**	**1,675.3545**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.24188e+007	1,633.5955	0.1634	0.0338	1,647.7514
Parking Lot	208040	27.3660	2.7400e-003	5.7000e-004	27.6031
Total		**1,660.9614**	**0.1661**	**0.0344**	**1,675.3545**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.4325	2.2000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0483	0.0483	1.2000e-004	0.0000	0.0514
Unmitigated	5.4325	2.2000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0483	0.0483	1.2000e-004	0.0000	0.0514

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6460					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7842					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2600e-003	2.2000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0483	0.0483	1.2000e-004	0.0000	0.0514
Total	**5.4325**	**2.2000e-004**	**0.0247**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0483**	**0.0483**	**1.2000e-004**	**0.0000**	**0.0514**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6460					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7842					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2600e-003	2.2000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0483	0.0483	1.2000e-004	0.0000	0.0514
Total	**5.4325**	**2.2000e-004**	**0.0247**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0483**	**0.0483**	**1.2000e-004**	**0.0000**	**0.0514**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	104.2517	1.9507	0.0476	167.2102
Unmitigated	104.2517	1.9507	0.0476	167.2102

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	59.6019 / 93.2235	104.2517	1.9507	0.0476	167.2102
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**104.2517**	**1.9507**	**0.0476**	**167.2102**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	59.6019 / 93.2235	104.2517	1.9507	0.0476	167.2102
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**104.2517**	**1.9507**	**0.0476**	**167.2102**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	320.6648	18.9508	0.0000	794.4335
Unmitigated	320.6648	18.9508	0.0000	794.4335

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	1579.7	320.6648	18.9508	0.0000	794.4335
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**320.6648**	**18.9508**	**0.0000**	**794.4335**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	1579.7	320.6648	18.9508	0.0000	794.4335
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**320.6648**	**18.9508**	**0.0000**	**794.4335**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

AERMOD and HARP2 Output Files

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 10/19/2020
** File: C:\Lakes\AERMOD View\CCSF_FMP_exhastPM2\CCSF_FMP_exhastPM2.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\CCSF_Diego Rivera Theater\CCSF_Diego Rivera The
   MODELOPT DFAULT CONC
   AVERTIME 1 ANNUAL
   URBANOPT 884363
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL CCSF_FMP_exhastPM2.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA3       AREAPOLY   548276.944  4175243.734      106.500
** Source Parameters **
   SRCPARAM PAREA3       5.5235E-09     3.000        21
   AREAVERT PAREA3       548276.944 4175243.734 548175.021 4175272.855
   AREAVERT PAREA3       548172.595 4175338.376 548104.646 4175340.803
   AREAVERT PAREA3       547993.017 4175367.497 547999.083 4175703.599
   AREAVERT PAREA3       548261.170 4175704.812 548264.810 4175816.442
   AREAVERT PAREA3       548648.234 4175809.162 548643.380 4175646.571
   AREAVERT PAREA3       548643.380 4175634.437 548807.184 4175633.224
   AREAVERT PAREA3       548742.876 4175524.021 548690.701 4175430.592
   AREAVERT PAREA3       548659.154 4175363.857 548637.313 4175317.749
   AREAVERT PAREA3       548609.406 4175272.855 548592.419 4175257.081
   AREAVERT PAREA3       548566.938 4175240.094 548303.638 4175238.880
   AREAVERT PAREA3       548286.651 4175242.520
**
```

```
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED CCSF_FMP_exhastPM2.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.SFC"
   PROFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.PFL"
   SURFDATA 23234 2009 SAN_FRANCISCO/INT'L_ARPT
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 4.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST CCSF_FMP_EXHASTPM2.AD\01H1GALL.PLT 31
   PLOTFILE ANNUAL ALL CCSF_FMP_EXHASTPM2.AD\AN00GALL.PLT 32
   SUMMFILE CCSF_FMP_exhastPM2.sum
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
```

```
** ZONE     10
** ZONEINX  0
**
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 10/19/2020
** File: C:\Lakes\AERMOD View\CCSF_FMP_exhastPM2\CCSF_FMP_exhastPM2.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\CCSF_Diego Rivera Theater\CCSF_Diego Rivera The
   MODELOPT DFAULT CONC
   AVERTIME 1 ANNUAL
   URBANOPT 884363
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL CCSF_FMP_exhastPM2.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA3       AREAPOLY   548276.944  4175243.734      106.500
** Source Parameters **
   SRCPARAM PAREA3       5.5235E-09     3.000        21
   AREAVERT PAREA3       548276.944 4175243.734 548175.021 4175272.855
   AREAVERT PAREA3       548172.595 4175338.376 548104.646 4175340.803
   AREAVERT PAREA3       547993.017 4175367.497 547999.083 4175703.599
   AREAVERT PAREA3       548261.170 4175704.812 548264.810 4175816.442
   AREAVERT PAREA3       548648.234 4175809.162 548643.380 4175646.571
   AREAVERT PAREA3       548643.380 4175634.437 548807.184 4175633.224
   AREAVERT PAREA3       548742.876 4175524.021 548690.701 4175430.592
   AREAVERT PAREA3       548659.154 4175363.857 548637.313 4175317.749
   AREAVERT PAREA3       548609.406 4175272.855 548592.419 4175257.081
   AREAVERT PAREA3       548566.938 4175240.094 548303.638 4175238.880
   AREAVERT PAREA3       548286.651 4175242.520
**
```

```
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED CCSF_FMP_exhastPM2.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.SFC"
   PROFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.PFL"
   SURFDATA 23234 2009 SAN_FRANCISCO/INT'L_ARPT
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 4.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST CCSF_FMP_EXHASTPM2.AD\01H1GALL.PLT 31
   PLOTFILE ANNUAL ALL CCSF_FMP_EXHASTPM2.AD\AN00GALL.PLT 32
   SUMMFILE CCSF_FMP_exhastPM2.sum
OU FINISHED

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************

 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                         ***       14:15:34
```

```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                                         ***     MODEL SETUP OPTIONS SUMMARY
 ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

  --  DEPOSITION LOGIC  --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for     1 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =    884363.0 ;  Urban Roughness Length =  1.000 m

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  PM_2.5

**Model Calculates  1 Short Term Average(s) of:   1-HR
    and Calculates ANNUAL Averages

**This Run Includes:      1 Source(s);       1 Source Group(s); and     450
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:      0 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with      0 line(s)
```

```
 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     4.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   CCSF_FMP_exhastPM2.err

 **File for Summary of Results:   CCSF_FMP_exhastPM2.sum

↟ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***        14:15:34

                                   PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN


                                                *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
```

```
  INIT.   URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 PAREA3           0   0.55235E-08  548276.9 4175243.7   106.5     3.00      21
   0.00     YES
↑ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       14:15:34

                                  PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN


                                       *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        PAREA3      ,
↑ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       14:15:34

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN


                                       *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


              884363.   PAREA3      ,
↑ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       14:15:34

                                  PAGE   5
```

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

547911.6,

*** Y-COORDINATES OF GRID ***
(METERS)

4175400.3, 4175417.4, 4175434.5, 4175451.6, 4175468.7, 4175485.9, 4175503.0, 4175520.1,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 547911.59
4175520.10	120.00
4175502.98	120.00
4175485.86	120.00
4175468.74	120.00
4175451.62	120.00
4175434.50	120.00
4175417.38	120.00
4175400.26	120.00

```
    Y-COORD  |                                                  X-COORD (METERS)
    (METERS) |     547911.59
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -

  4175520.10 |        260.00
  4175502.98 |        260.00
  4175485.86 |        260.00
  4175468.74 |        260.00
  4175451.62 |        260.00
  4175434.50 |        260.00
  4175417.38 |        260.00
  4175400.26 |        260.00
```


 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
     ( 548247.1, 4175147.9,     108.3,     108.3,       0.0);         ( 548253.9,
4175147.9,     108.0,     108.0,       0.0);
     ( 548260.6, 4175147.9,     107.7,     107.7,       0.0);         ( 548267.3,
4175147.9,     107.3,     107.3,       0.0);
     ( 548274.1, 4175147.9,     107.0,     107.0,       0.0);         ( 548280.8,
4175147.9,     106.6,     106.6,       0.0);
     ( 548287.5, 4175147.9,     106.3,     106.3,       0.0);         ( 548294.2,
4175147.9,     105.9,     105.9,       0.0);
     ( 548301.0, 4175147.9,     105.6,     105.6,       0.0);         ( 548307.7,
4175147.9,     105.2,     105.2,       0.0);
     ( 548314.4, 4175147.9,     104.9,     104.9,       0.0);         ( 548321.2,
4175147.9,     104.5,     104.5,       0.0);
     ( 548327.9, 4175147.9,     104.2,     104.2,       0.0);         ( 548334.6,
4175147.9,     103.9,     103.9,       0.0);
     ( 548341.4, 4175147.9,     103.6,     103.6,       0.0);         ( 548348.1,
4175147.9,     103.3,     103.3,       0.0);
     ( 548354.8, 4175147.9,     103.1,     103.1,       0.0);         ( 548238.4,
4175148.9,     108.7,     108.7,       0.0);
     ( 548363.5, 4175147.3,     102.7,     102.7,       0.0);         ( 548212.7,
```

```
4175137.8,     110.0,     110.0,       0.0);
     ( 548212.7, 4175147.8,     109.8,     109.8,       0.0);         ( 548212.7,
4175157.8,     109.7,     109.7,       0.0);
     ( 548212.7, 4175167.8,     109.5,     109.5,       0.0);         ( 548212.7,
4175177.8,     109.5,     109.5,       0.0);
     ( 548212.7, 4175187.8,     109.5,     109.5,       0.0);         ( 548212.7,
4175197.8,     109.5,     109.5,       0.0);
     ( 548212.7, 4175207.8,     109.5,     109.5,       0.0);         ( 548239.2,
4175192.0,     108.4,     108.4,       0.0);
     ( 548247.1, 4175192.8,     108.1,     108.1,       0.0);         ( 548254.2,
4175193.2,     107.8,     107.8,       0.0);
     ( 548261.4, 4175194.4,     107.4,     107.4,       0.0);         ( 548270.5,
4175193.6,     106.9,     106.9,       0.0);
     ( 548277.2, 4175194.8,     106.5,     106.5,       0.0);         ( 548298.2,
4175187.3,     105.4,     105.4,       0.0);
     ( 548372.5, 4175128.4,     102.6,     102.6,       0.0);         ( 548534.2,
4175153.4,      91.9,     260.0,       0.0);
     ( 548407.2, 4175198.2,     100.4,     260.0,       0.0);         ( 548415.2,
4175198.2,     100.0,     260.0,       0.0);
     ( 548423.2, 4175198.2,      99.5,     260.0,       0.0);         ( 548431.2,
4175198.2,      99.1,     260.0,       0.0);
     ( 548439.2, 4175198.2,      98.7,     260.0,       0.0);         ( 548447.2,
4175198.2,      98.2,     260.0,       0.0);
     ( 548455.2, 4175198.2,      97.8,     260.0,       0.0);         ( 548385.5,
4175199.3,     101.5,     260.0,       0.0);
     ( 548392.6, 4175199.3,     101.2,     260.0,       0.0);         ( 548391.5,
4175176.8,     101.2,     101.2,       0.0);
     ( 548403.0, 4175173.0,     100.6,     100.6,       0.0);         ( 548410.7,
4175168.6,     100.2,     100.2,       0.0);
     ( 548419.4, 4175165.9,      99.8,      99.8,       0.0);         ( 548427.1,
4175161.5,      99.4,      99.4,       0.0);
     ( 548434.8, 4175159.3,      99.0,      99.0,       0.0);         ( 548453.4,
4175146.7,      98.2,      98.2,       0.0);
     ( 548455.0, 4175153.8,      98.0,      98.0,       0.0);         ( 548458.3,
4175161.5,      97.7,     260.0,       0.0);
     ( 548461.6, 4175169.1,      97.5,     260.0,       0.0);         ( 548462.7,
4175176.8,      97.4,     260.0,       0.0);
     ( 548467.6, 4175183.4,      97.1,     260.0,       0.0);         ( 548470.9,
4175188.9,      96.9,     260.0,       0.0);
     ( 548476.4, 4175196.0,      96.5,     260.0,       0.0);         ( 548480.2,
4175203.1,      96.2,     260.0,       0.0);
     ( 548175.9, 4175143.3,     111.5,     111.5,       0.0);         ( 548175.9,
4175151.3,     111.4,     111.4,       0.0);
     ( 548175.9, 4175159.3,     111.2,     111.2,       0.0);         ( 548175.9,
4175167.3,     111.0,     111.0,       0.0);
     ( 548175.9, 4175175.3,     111.0,     111.0,       0.0);         ( 548175.9,
4175183.3,     111.0,     111.0,       0.0);
     ( 548175.9, 4175191.3,     111.0,     111.0,       0.0);         ( 548175.9,
4175199.3,     111.0,     111.0,       0.0);
     ( 548175.9, 4175207.3,     111.0,     111.0,       0.0);         ( 548217.5,
```

4175110.7,   110.2,   110.2,   0.0);
     (548225.5, 4175110.7,   109.8,   109.8,   0.0);   (548233.5,
4175110.7,   109.4,   109.4,   0.0);
     (548241.5, 4175110.7,   109.0,   109.0,   0.0);   (548249.5,
4175110.7,   108.6,   108.6,   0.0);
     (548257.5, 4175110.7,   108.3,   108.3,   0.0);   (548265.5,
4175110.7,   107.9,   107.9,   0.0);
     (548273.5, 4175110.7,   107.5,   107.5,   0.0);   (548215.1,
4174930.7,   116.8,   116.8,   0.0);
     (548215.1, 4174940.8,   116.2,   116.2,   0.0);   (548215.1,
4174950.8,   115.7,   115.7,   0.0);
     (548215.1, 4174960.8,   115.1,   115.1,   0.0);   (548215.1,
4174970.8,   114.6,   114.6,   0.0);
     (548215.1, 4174980.8,   114.0,   114.0,   0.0);   (548215.1,
4174990.8,   113.7,   113.7,   0.0);
     (548215.1, 4175000.9,   113.3,   113.3,   0.0);   (548215.1,
4175010.9,   113.0,   113.0,   0.0);
     (548215.1, 4175020.9,   112.7,   112.7,   0.0);   (548215.1,
4175030.9,   112.4,   112.4,   0.0);
     (548215.1, 4175040.9,   112.0,   112.0,   0.0);   (548215.1,
4175051.0,   111.7,   111.7,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                    *** DISCRETE CARTESIAN RECEPTORS ***
                                  (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                               (METERS)

     (548215.1, 4175061.0,   111.4,   111.4,   0.0);   (548215.1,
4175071.0,   111.0,   111.0,   0.0);
     (548215.1, 4175081.0,   110.8,   110.8,   0.0);   (548210.9,
4175099.7,   110.7,   110.7,   0.0);
     (548180.0, 4174906.5,   120.0,   120.0,   0.0);   (548180.0,
4174914.5,   119.5,   119.5,   0.0);
     (548180.0, 4174922.5,   119.1,   119.1,   0.0);   (548180.0,
4174930.5,   118.7,   118.7,   0.0);
     (548180.0, 4174938.5,   118.2,   118.2,   0.0);   (548180.0,
4174946.5,   117.8,   117.8,   0.0);
     (548180.0, 4174954.5,   117.4,   117.4,   0.0);   (548180.0,
4174962.5,   116.9,   116.9,   0.0);
     (548180.0, 4174970.5,   116.5,   116.5,   0.0);   (548180.0,
4174978.5,   116.1,   116.1,   0.0);
     (548180.0, 4174986.5,   115.7,   115.7,   0.0);   (548180.0,
4174994.5,   115.5,   115.5,   0.0);
     (548180.0, 4175002.5,   115.2,   115.2,   0.0);   (548180.0,

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4175010.5,     114.9,     114.9,       0.0);
     ( 548180.0, 4175018.5,     114.7,     114.7,       0.0);         ( 548180.0,
4175026.5,     114.4,     114.4,       0.0);
     ( 548180.0, 4175034.5,     114.1,     114.1,       0.0);         ( 548180.0,
4175042.5,     113.9,     113.9,       0.0);
     ( 548180.0, 4175050.5,     113.6,     113.6,       0.0);         ( 548291.6,
4175108.8,     106.7,     106.7,       0.0);
     ( 548299.6, 4175108.8,     106.4,     106.4,       0.0);         ( 548307.6,
4175108.8,     106.0,     106.0,       0.0);
     ( 548315.6, 4175108.8,     105.6,     105.6,       0.0);         ( 548323.6,
4175108.8,     105.3,     105.3,       0.0);
     ( 548331.6, 4175108.8,     104.9,     104.9,       0.0);         ( 548339.6,
4175108.8,     104.5,     104.5,       0.0);
     ( 548347.6, 4175108.8,     104.1,     104.1,       0.0);         ( 548297.7,
4175101.0,     106.6,     106.6,       0.0);
     ( 548318.0, 4175029.8,     107.3,     107.3,       0.0);         ( 548328.9,
4175032.5,     106.7,     106.7,       0.0);
     ( 548335.0, 4175030.4,     106.4,     106.4,       0.0);         ( 548339.9,
4175026.5,     106.2,     106.2,       0.0);
     ( 548345.4, 4175024.3,     106.0,     106.0,       0.0);         ( 548354.7,
4175020.5,     105.5,     105.5,       0.0);
     ( 548361.8, 4175016.7,     105.2,     105.2,       0.0);         ( 548300.2,
4175042.5,     107.8,     107.8,       0.0);
     ( 548300.2, 4175050.5,     107.6,     107.6,       0.0);         ( 548300.2,
4175058.5,     107.4,     107.4,       0.0);
     ( 548300.2, 4175066.5,     107.2,     107.2,       0.0);         ( 548300.2,
4175074.5,     107.0,     107.0,       0.0);
     ( 548300.2, 4175082.5,     106.8,     106.8,       0.0);         ( 548300.2,
4175090.5,     106.7,     106.7,       0.0);
     ( 548261.3, 4174979.3,     111.6,     111.6,       0.0);         ( 548261.3,
4174987.3,     111.3,     111.3,       0.0);
     ( 548261.3, 4174995.3,     111.0,     111.0,       0.0);         ( 548261.3,
4175003.3,     110.8,     110.8,       0.0);
     ( 548261.3, 4175011.3,     110.5,     110.5,       0.0);         ( 548261.3,
4175019.3,     110.3,     110.3,       0.0);
     ( 548261.3, 4175027.3,     110.0,     110.0,       0.0);         ( 548261.3,
4175035.3,     109.8,     109.8,       0.0);
     ( 548261.3, 4175043.3,     109.5,     109.5,       0.0);         ( 548261.3,
4175051.3,     109.3,     109.3,       0.0);
     ( 548261.3, 4175059.3,     109.0,     109.0,       0.0);         ( 548261.3,
4175067.3,     108.8,     108.8,       0.0);
     ( 548261.3, 4175075.3,     108.5,     108.5,       0.0);         ( 548261.3,
4175083.3,     108.5,     108.5,       0.0);
     ( 548251.9, 4174967.9,     112.8,     112.8,       0.0);         ( 548216.4,
4174923.8,     117.1,     117.1,       0.0);
     ( 548217.1, 4174914.1,     117.6,     117.6,       0.0);         ( 548123.2,
4175141.4,     113.5,     113.5,       0.0);
     ( 548123.2, 4175149.4,     113.4,     113.4,       0.0);         ( 548123.2,
4175157.4,     113.3,     113.3,       0.0);
     ( 548123.2, 4175165.4,     113.2,     113.2,       0.0);         ( 548123.2,
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4175173.4,   113.2,   113.2,   0.0);
     (548123.2, 4175181.4,   113.2,   113.2,   0.0);   (548123.2,
4175189.4,   113.2,   113.2,   0.0);
     (548123.2, 4175197.4,   113.2,   113.2,   0.0);   (548123.2,
4175205.4,   113.2,   113.2,   0.0);
     (548123.2, 4175213.4,   113.2,   113.2,   0.0);   (548123.5,
4175113.0,   113.9,   113.9,   0.0);
     (548131.5, 4175113.0,   113.6,   113.6,   0.0);   (548139.5,
4175113.0,   113.4,   113.4,   0.0);
     (548147.5, 4175113.0,   113.1,   113.1,   0.0);   (548155.5,
4175113.0,   112.9,   112.9,   0.0);
     (548163.5, 4175113.0,   112.6,   112.6,   0.0);   (548171.5,
4175113.0,   112.3,   112.3,   0.0);
     (548179.5, 4175113.0,   112.0,   112.0,   0.0);   (548085.4,
4175141.0,   115.4,   115.4,   0.0);
     (548085.4, 4175149.0,   115.3,   115.3,   0.0);   (548085.4,
4175157.0,   115.3,   115.3,   0.0);
     (548085.4, 4175165.0,   115.2,   115.2,   0.0);   (548085.4,
4175173.0,   115.2,   115.2,   0.0);
     (548085.4, 4175181.0,   115.2,   115.2,   0.0);   (548085.4,
4175189.0,   115.2,   115.2,   0.0);
     (548085.4, 4175197.0,   115.2,   115.2,   0.0);   (548085.4,
4175205.0,   115.2,   115.2,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     (548085.4, 4175213.0,   115.2,   115.2,   0.0);   (548085.4,
4175221.0,   115.2,   115.2,   0.0);
     (548085.4, 4175229.0,   115.2,   115.2,   0.0);   (548035.6,
4175114.4,   118.6,   118.6,   0.0);
     (548043.6, 4175114.4,   118.2,   118.2,   0.0);   (548051.6,
4175114.4,   117.7,   117.7,   0.0);
     (548059.6, 4175114.4,   117.2,   117.2,   0.0);   (548067.6,
4175114.4,   116.7,   116.7,   0.0);
     (548075.6, 4175114.4,   116.2,   116.2,   0.0);   (548083.6,
4175114.4,   115.8,   115.8,   0.0);
     (548091.6, 4175114.4,   115.3,   115.3,   0.0);   (548037.2,
4175151.7,   118.5,   118.5,   0.0);
     (548037.2, 4175161.7,   118.5,   118.5,   0.0);   (548037.2,
4175171.7,   118.5,   118.5,   0.0);
     (548037.2, 4175181.7,   118.5,   118.5,   0.0);   (548037.2,

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4175191.7,     118.5,     118.5,       0.0);
     ( 548037.2, 4175201.7,     118.5,     118.5,       0.0);         ( 548037.2,
4175211.7,     118.5,     118.5,       0.0);
     ( 548037.2, 4175221.7,     118.5,     118.5,       0.0);         ( 548036.4,
4175144.8,     118.6,     118.6,       0.0);
     ( 548037.0, 4175136.6,     118.5,     118.5,       0.0);         ( 548036.9,
4175077.0,     118.6,     118.6,       0.0);
     ( 548046.9, 4175077.0,     118.1,     118.1,       0.0);         ( 548056.9,
4175077.0,     117.5,     117.5,       0.0);
     ( 548066.9, 4175077.0,     117.0,     117.0,       0.0);         ( 548076.9,
4175077.0,     116.4,     116.4,       0.0);
     ( 548086.9, 4175077.0,     115.9,     115.9,       0.0);         ( 548096.9,
4175077.0,     115.3,     115.3,       0.0);
     ( 548118.8, 4175077.0,     114.5,     114.5,       0.0);         ( 548128.8,
4175077.0,     114.3,     114.3,       0.0);
     ( 548138.8, 4175077.0,     114.0,     114.0,       0.0);         ( 548148.8,
4175077.0,     113.7,     113.7,       0.0);
     ( 548158.8, 4175077.0,     113.5,     113.5,       0.0);         ( 548168.8,
4175077.0,     113.2,     113.2,       0.0);
     ( 548178.8, 4175077.0,     112.8,     112.8,       0.0);         ( 548188.8,
4175077.0,     112.3,     112.3,       0.0);
     ( 548134.0, 4174938.6,     118.4,     118.4,       0.0);         ( 548134.0,
4174948.6,     118.0,     118.0,       0.0);
     ( 548134.0, 4174958.6,     117.6,     117.6,       0.0);         ( 548134.0,
4174968.6,     117.1,     117.1,       0.0);
     ( 548134.0, 4174978.6,     116.7,     116.7,       0.0);         ( 548134.0,
4174988.6,     116.4,     116.4,       0.0);
     ( 548134.0, 4174998.6,     116.2,     116.2,       0.0);         ( 548134.0,
4175008.6,     115.9,     115.9,       0.0);
     ( 548134.0, 4175018.6,     115.6,     115.6,       0.0);         ( 548134.0,
4175028.6,     115.4,     115.4,       0.0);
     ( 548134.0, 4175038.6,     115.1,     115.1,       0.0);         ( 548134.0,
4175048.6,     114.8,     114.8,       0.0);
     ( 548092.7, 4175060.2,     115.8,     115.8,       0.0);         ( 548090.5,
4175051.4,     116.1,     116.1,       0.0);
     ( 548089.4, 4175039.9,     116.4,     116.4,       0.0);         ( 548089.9,
4175027.9,     116.6,     116.6,       0.0);
     ( 548091.0, 4175021.8,     116.6,     116.6,       0.0);         ( 548089.9,
4175014.7,     116.8,     116.8,       0.0);
     ( 548091.0, 4175008.1,     116.9,     116.9,       0.0);         ( 548088.3,
4174999.9,     117.1,     117.1,       0.0);
     ( 548090.5, 4174992.2,     117.2,     117.2,       0.0);         ( 548088.8,
4174984.6,     117.4,     117.4,       0.0);
     ( 548146.9, 4175286.7,     112.7,     260.0,       0.0);         ( 548092.3,
4175299.6,     115.9,     260.0,       0.0);
     ( 548476.8, 4175131.2,      96.9,      96.9,       0.0);         ( 548484.4,
4175142.6,      96.1,      96.1,       0.0);
     ( 548495.8, 4175163.9,      95.0,     260.0,       0.0);         ( 548491.1,
4175153.2,      95.5,     260.0,       0.0);
     ( 548486.9, 4175145.8,      95.9,      95.9,       0.0);         ( 548401.5,
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4175129.1,   101.2,   101.2,   0.0);
     (548410.2, 4175126.7,   100.7,   100.7,   0.0);   (548420.9,
4175123.9,   100.2,   100.2,   0.0);
     (548430.8, 4175120.8,   99.7,   99.7,   0.0);   (548439.9,
4175116.4,   99.2,   99.2,   0.0);
     (548430.8, 4175103.3,   99.9,   99.9,   0.0);   (548427.6,
4175096.6,   100.1,   100.1,   0.0);
     (548424.5, 4175090.3,   100.4,   100.4,   0.0);   (548419.3,
4175082.0,   100.7,   100.7,   0.0);
     (548417.3, 4175076.4,   100.9,   100.9,   0.0);   (548414.2,
4175070.1,   101.2,   101.2,   0.0);
     (548409.4, 4175063.0,   101.6,   101.6,   0.0);   (548409.4,
4175055.4,   101.8,   101.8,   0.0);
     (548404.3, 4175050.7,   102.2,   102.2,   0.0);   (548403.5,
4175043.2,   102.4,   102.4,   0.0);
     (548400.3, 4175036.8,   102.7,   102.7,   0.0);   (548394.8,
4175030.1,   103.1,   103.1,   0.0);
     (548392.4, 4175023.4,   103.4,   103.4,   0.0);   (548388.0,
4175017.4,   103.8,   103.8,   0.0);
     (548386.1, 4175009.9,   104.1,   104.1,   0.0);   (548377.7,
4175003.2,   104.7,   104.7,   0.0);
     (548298.2, 4175011.5,   108.7,   108.7,   0.0);   (548304.1,
4175005.2,   108.5,   108.5,   0.0);
     (548312.8, 4175003.2,   108.1,   108.1,   0.0);   (548297.4,
4174988.5,   109.3,   109.3,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                    *** DISCRETE CARTESIAN RECEPTORS ***
                                  (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                               (METERS)

     (548295.0, 4174979.4,   109.8,   109.8,   0.0);   (548291.0,
4174972.7,   110.3,   110.3,   0.0);
     (548285.9, 4174967.9,   110.8,   110.8,   0.0);   (548283.5,
4174960.0,   111.4,   111.4,   0.0);
     (548335.0, 4174994.5,   107.2,   107.2,   0.0);   (548331.0,
4174988.9,   107.5,   107.5,   0.0);
     (548327.5, 4174980.2,   108.0,   108.0,   0.0);   (548325.5,
4174973.5,   108.3,   108.3,   0.0);
     (548321.1, 4174968.3,   108.8,   108.8,   0.0);   (548316.4,
4174961.6,   109.4,   109.4,   0.0);
     (548313.2, 4174953.7,   109.9,   109.9,   0.0);   (548309.2,
4174947.4,   110.5,   110.5,   0.0);
     (548344.5, 4174984.6,   106.9,   106.9,   0.0);   (548366.7,

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4174978.6,     105.9,     105.9,       0.0);
     ( 548363.9, 4174970.7,     106.3,     106.3,       0.0);         ( 548359.5,
4174964.8,     106.8,     106.8,       0.0);
     ( 548358.4, 4174958.4,     107.1,     107.1,       0.0);         ( 548392.0,
4174960.4,     105.1,     105.1,       0.0);
     ( 548399.1, 4174956.1,     104.8,     104.8,       0.0);         ( 548409.8,
4174951.7,     104.3,     104.3,       0.0);
     ( 548418.5, 4174947.8,     103.9,     103.9,       0.0);         ( 548417.7,
4175002.8,     102.5,     102.5,       0.0);
     ( 548419.7, 4175009.5,     102.2,     102.2,       0.0);         ( 548425.2,
4175021.0,     101.7,     101.7,       0.0);
     ( 548429.2, 4175030.5,     101.3,     101.3,       0.0);         ( 548434.0,
4175038.8,     100.8,     100.8,       0.0);
     ( 548437.1, 4175046.3,     100.5,     100.5,       0.0);         ( 548440.7,
4175055.0,     100.1,     100.1,       0.0);
     ( 548448.6, 4175066.1,      99.4,      99.4,       0.0);         ( 548453.4,
4175078.0,      98.9,      98.9,       0.0);
     ( 548460.9, 4175099.0,      98.3,      98.3,       0.0);         ( 548467.2,
4175096.6,      98.0,      98.0,       0.0);
     ( 548474.4, 4175094.2,      97.5,      97.5,       0.0);         ( 548482.3,
4175091.1,      96.9,      96.9,       0.0);
     ( 548489.8, 4175087.5,      96.3,      96.3,       0.0);         ( 548495.3,
4175084.3,      95.9,      95.9,       0.0);
     ( 548504.4, 4175079.2,      95.2,      95.2,       0.0);         ( 548513.5,
4175076.0,      94.5,      94.5,       0.0);
     ( 548499.7, 4175055.8,      96.1,      96.1,       0.0);         ( 548495.3,
4175045.5,      96.7,      96.7,       0.0);
     ( 548486.2, 4175031.7,      97.7,      97.7,       0.0);         ( 548481.1,
4175023.0,      98.3,      98.3,       0.0);
     ( 548477.9, 4175015.5,      98.8,      98.8,       0.0);         ( 548473.6,
4175008.5,      99.3,      99.3,       0.0);
     ( 548469.2, 4175001.8,      99.7,      99.7,       0.0);         ( 548465.2,
4174994.2,     100.1,     100.1,       0.0);
     ( 548462.9, 4174989.0,     100.3,     100.3,       0.0);         ( 548460.1,
4174982.2,     100.6,     100.6,       0.0);
     ( 548456.9, 4174967.9,     101.2,     101.2,       0.0);         ( 548449.7,
4174970.7,     101.5,     101.5,       0.0);
     ( 548441.7, 4174974.7,     101.8,     101.8,       0.0);         ( 548435.0,
4174977.9,     102.1,     102.1,       0.0);
     ( 548429.4, 4174983.0,     102.3,     102.3,       0.0);         ( 548423.0,
4174986.2,     102.6,     102.6,       0.0);
     ( 548415.5, 4174988.6,     102.9,     102.9,       0.0);         ( 548407.9,
4174988.6,     103.3,     103.3,       0.0);
     ( 548541.0, 4175067.1,      92.5,      92.5,       0.0);         ( 548536.1,
4175056.6,      93.1,      93.1,       0.0);
     ( 548532.5, 4175051.5,      93.5,      93.5,       0.0);         ( 548528.1,
4175043.4,      94.0,      94.0,       0.0);
     ( 548524.6, 4175035.3,      94.5,      94.5,       0.0);         ( 548521.2,
4175030.4,      94.9,      94.9,       0.0);
     ( 548517.8, 4175023.1,      95.3,      95.3,       0.0);         ( 548510.7,
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4175017.2,   96.0,   96.0,   0.0);
     (548203.0, 4175764.2,   116.8,   260.0,   0.0);   (547922.6,
4175370.6,   120.0,   260.0,   0.0);
     (547927.0, 4175381.6,   120.0,   260.0,   0.0);   (547914.9,
4175394.8,   120.0,   260.0,   0.0);
     (547919.5, 4175407.8,   120.0,   260.0,   0.0);   (547923.6,
4175419.1,   120.0,   260.0,   0.0);
     (547923.6, 4175432.5,   120.0,   260.0,   0.0);   (547919.5,
4175445.9,   120.0,   260.0,   0.0);
     (547918.4, 4175460.4,   120.0,   260.0,   0.0);   (547918.4,
4175476.9,   120.0,   260.0,   0.0);
     (547910.2, 4175495.4,   120.0,   260.0,   0.0);   (547910.2,
4175504.7,   120.0,   260.0,   0.0);
     (547908.1, 4175519.2,   120.0,   260.0,   0.0);   (547910.2,
4175544.9,   120.1,   260.0,   0.0);
     (547917.4, 4175553.2,   120.2,   260.0,   0.0);   (547917.4,
4175566.6,   120.3,   260.0,   0.0);
     (547917.4, 4175582.1,   120.5,   260.0,   0.0);   (547918.4,
4175597.5,   120.7,   260.0,   0.0);
     (547921.5, 4175606.8,   120.8,   260.0,   0.0);   (547924.6,
4175621.2,   120.9,   260.0,   0.0);
     (547920.5, 4175630.5,   121.0,   260.0,   0.0);   (547920.5,
4175640.8,   121.0,   260.0,   0.0);
     (547915.4, 4175653.2,   121.0,   260.0,   0.0);   (547914.3,
4175664.6,   121.0,   260.0,   0.0);
     (547912.3, 4175678.0,   121.0,   260.0,   0.0);   (547913.3,
4175690.3,   121.0,   260.0,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (547913.3, 4175703.8,   121.0,   260.0,   0.0);   (547913.3,
4175720.2,   121.0,   260.0,   0.0);
     (548267.0, 4175832.6,   116.8,   260.0,   0.0);   (548267.0,
4175845.0,   117.1,   260.0,   0.0);
     (548291.7, 4175837.8,   116.2,   260.0,   0.0);   (548301.0,
4175839.9,   116.0,   260.0,   0.0);
     (548310.3, 4175840.9,   115.8,   260.0,   0.0);   (548317.5,
4175837.8,   115.5,   260.0,   0.0);
     (548324.7, 4175838.8,   115.3,   260.0,   0.0);   (548623.8,
4176021.4,   107.3,   260.0,   0.0);
     (547608.1, 4175979.1,   127.2,   260.0,   0.0);   (547591.6,

```
4174866.4,     118.0,     118.0,       0.0);
     ( 548961.5, 4176028.4,     104.5,     260.0,       0.0);         ( 548975.2,
4174863.6,      63.9,      63.9,       0.0);
     ( 548349.3, 4175832.3,     114.2,     260.0,       0.0);         ( 548347.4,
4175846.2,     114.6,     260.0,       0.0);
     ( 548351.9, 4175851.9,     114.6,     260.0,       0.0);         ( 548385.4,
4175836.7,     113.0,     260.0,       0.0);
     ( 548386.1, 4175845.0,     113.2,     260.0,       0.0);         ( 548383.5,
4175853.2,     113.5,     260.0,       0.0);
     ( 548401.3, 4175837.4,     112.3,     260.0,       0.0);         ( 548409.5,
4175836.1,     111.8,     260.0,       0.0);
     ( 548416.5, 4175838.6,     111.5,     260.0,       0.0);         ( 548426.0,
4175844.3,     111.2,     260.0,       0.0);
     ( 548432.3, 4175840.5,     110.8,     260.0,       0.0);         ( 548441.8,
4175839.3,     110.2,     260.0,       0.0);
     ( 548446.2, 4175839.9,     110.0,     260.0,       0.0);         ( 548454.5,
4175838.0,     109.5,     260.0,       0.0);
     ( 548464.0, 4175840.5,     109.2,     260.0,       0.0);         ( 548472.2,
4175838.0,     108.4,     260.0,       0.0);
     ( 548479.2, 4175837.4,     107.7,     260.0,       0.0);         ( 548484.9,
4175838.6,     107.2,     260.0,       0.0);
     ( 548494.4, 4175839.9,     106.3,     260.0,       0.0);         ( 548501.3,
4175838.6,     105.6,     260.0,       0.0);
     ( 548510.8, 4175840.5,     104.8,     260.0,       0.0);         ( 548516.5,
4175839.9,     104.2,     260.0,       0.0);
     ( 548522.2, 4175839.9,     103.7,     260.0,       0.0);         ( 548533.0,
4175840.5,     102.7,     260.0,       0.0);
     ( 548540.6, 4175842.4,     102.0,     260.0,       0.0);         ( 548550.1,
4175841.2,     101.3,     260.0,       0.0);
     ( 548543.8, 4175853.8,     102.3,     260.0,       0.0);         ( 548545.0,
4175862.7,     102.6,     260.0,       0.0);
     ( 548588.1, 4175838.6,      98.3,     260.0,       0.0);         ( 548586.2,
4175847.5,      98.9,     260.0,       0.0);
     ( 548585.6, 4175853.2,      99.3,     260.0,       0.0);         ( 548611.5,
4175839.3,      96.6,     260.0,       0.0);
     ( 548621.0, 4175841.2,      96.2,     260.0,       0.0);         ( 548625.5,
4175840.5,      95.9,     260.0,       0.0);
     ( 548633.7, 4175840.5,      95.5,     260.0,       0.0);         ( 548640.0,
4175839.3,      95.1,     260.0,       0.0);
     ( 548648.3, 4175836.7,      94.5,     260.0,       0.0);         ( 548655.9,
4175792.4,      91.6,     260.0,       0.0);
     ( 548654.0, 4175703.7,      88.2,     260.0,       0.0);         ( 548665.4,
4175703.7,      87.6,     260.0,       0.0);
     ( 548653.9, 4175738.5,      89.4,     260.0,       0.0);         ( 548665.2,
4175740.9,      88.9,     260.0,       0.0);
     ( 548663.7, 4175790.8,      91.1,     260.0,       0.0);         ( 548670.9,
4175790.4,      90.7,     260.0,       0.0);
     ( 548672.1, 4175738.5,      88.4,     260.0,       0.0);         ( 548682.4,
4175738.5,      87.8,     260.0,       0.0);
     ( 548685.9, 4175738.5,      87.6,     260.0,       0.0);         ( 548680.0,
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

               NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON

WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.SFC
Met Version: 14134
Profile file: C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 23234 Upper air station no.: 23230
Name: SAN_FRANCISCO/INT'L_ARPT Name: OAKLAND/WSO_AP
Year: 2009 Year: 2009

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
09	01	01	1	01	-28.0	0.491	-9.000	-9.000	-999.	826.	386.1	0.49	0.45	1.00	3.86	71.	10.0	282.5	2.0
09	01	01	1	02	-15.7	0.275	-9.000	-9.000	-999.	390.	121.4	0.49	0.45	1.00	2.36	78.	10.0	282.5	2.0
09	01	01	1	03	-24.0	0.421	-9.000	-9.000	-999.	656.	284.0	0.49	0.45	1.00	3.36	94.	10.0	282.5	2.0
09	01	01	1	04	-20.7	0.364	-9.000	-9.000	-999.	529.	211.5	0.32	0.45	1.00	3.36	43.	10.0	282.0	2.0
09	01	01	1	05	-17.2	0.301	-9.000	-9.000	-999.	398.	144.1	0.32	0.45	1.00	2.86	13.	10.0	281.4	2.0
09	01	01	1	06	-27.0	0.472	-9.000	-9.000	-999.	779.	355.0	0.44	0.45						

```
1.00    3.86  352.   10.0  280.9    2.0
 09 01 01   1 07  -27.9  0.486 -9.000 -9.000 -999.  812.    374.7  0.32   0.45
1.00    4.36   15.   10.0  280.4    2.0
 09 01 01   1 08  -20.9  0.364 -9.000 -9.000 -999.  538.    209.6  0.32   0.45
1.00    3.36   13.   10.0  279.9    2.0
 09 01 01   1 09   -8.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
0.38    0.00    0.   10.0  280.4    2.0
 09 01 01   1 10    4.9  0.280  0.224  0.016   83.  355.   -405.2  0.32   0.45
0.25    2.36   21.   10.0  280.9    2.0
 09 01 01   1 11   10.7 -9.000 -9.000 -9.000  147. -999. -99999.0  0.51   0.45
0.20    0.00    0.   10.0  280.4    2.0
 09 01 01   1 12   14.1  0.289  0.429  0.016  203.  373.   -156.0  0.32   0.45
0.19    2.36   26.   10.0  280.9    2.0
 09 01 01   1 13   14.7 -9.000 -9.000 -9.000  247. -999. -99999.0  0.51   0.45
0.18    0.00    0.   10.0  280.9    2.0
 09 01 01   1 14   61.1 -9.000 -9.000 -9.000  379. -999. -99999.0  0.51   0.45
0.19    0.00    0.   10.0  282.0    2.0
 09 01 01   1 15   43.2  0.307  0.805  0.017  439.  408.    -60.8  0.32   0.45
0.22    2.36   22.   10.0  282.5    2.0
 09 01 01   1 16   17.1  0.345  0.594  0.015  445.  487.   -219.0  0.32   0.45
0.30    2.86   14.   10.0  282.5    2.0
 09 01 01   1 17   -7.0  0.102 -9.000 -9.000 -999.  169.     13.7  0.32   0.45
0.54    1.76   31.   10.0  282.5    2.0
 09 01 01   1 18   -9.9  0.112 -9.000 -9.000 -999.   91.     13.0  0.44   0.45
1.00    1.76  357.   10.0  282.0    2.0
 09 01 01   1 19  -18.1  0.159 -9.000 -9.000 -999.  152.     20.2  0.32   0.45
1.00    2.36    4.   10.0  282.0    2.0
 09 01 01   1 20 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  281.4    2.0
 09 01 01   1 21 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  282.0    2.0
 09 01 01   1 22 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  282.0    2.0
 09 01 01   1 23 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  281.4    2.0
 09 01 01   1 24   -9.9  0.173 -9.000 -9.000 -999.  173.     47.9  0.49   0.45
1.00    1.76  100.   10.0  281.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 09 01 01 01   10.0 1   71.    3.86   282.6   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        14:15:34

                                  PAGE  15
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                   *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                        ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                   **

    Y-COORD  |                                              X-COORD (METERS)
    (METERS) |     547911.59
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -

  4175520.10 |       0.00219
  4175502.98 |       0.00214
  4175485.86 |       0.00208
  4175468.74 |       0.00202
  4175451.62 |       0.00196
  4175434.50 |       0.00189
  4175417.38 |       0.00183
  4175400.26 |       0.00176
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       14:15:34

                                  PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                   **

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         548247.13    4175147.89        0.00324                      548253.86
4175147.89        0.00333
         548260.59    4175147.89        0.00342                      548267.32
```

4175147.89 0.00352
548274.05 4175147.89 0.00361 548280.78
4175147.89 0.00370
548287.51 4175147.89 0.00379 548294.24
4175147.89 0.00387
548300.97 4175147.89 0.00396 548307.70
4175147.89 0.00405
548314.43 4175147.89 0.00413 548321.16
4175147.89 0.00422
548327.89 4175147.89 0.00430 548334.62
4175147.89 0.00438
548341.35 4175147.89 0.00446 548348.08
4175147.89 0.00454
548354.81 4175147.89 0.00462 548238.42
4175148.87 0.00315
548363.49 4175147.29 0.00469 548212.73
4175137.85 0.00266
548212.73 4175147.85 0.00284 548212.73
4175157.85 0.00304
548212.73 4175167.85 0.00328 548212.73
4175177.85 0.00354
548212.73 4175187.85 0.00386 548212.73
4175197.85 0.00423
548212.73 4175207.85 0.00468 548239.21
4175192.01 0.00462
548247.13 4175192.80 0.00487 548254.25
4175193.20 0.00509
548261.38 4175194.39 0.00537 548270.48
4175193.59 0.00559
548277.21 4175194.78 0.00586 548298.19
4175187.26 0.00583
548372.46 4175128.44 0.00407 548534.18
4175153.41 0.00578
548407.20 4175198.17 0.00859 548415.20
4175198.17 0.00865
548423.20 4175198.17 0.00870 548431.20
4175198.17 0.00875
548439.20 4175198.17 0.00879 548447.20
4175198.17 0.00883
548455.20 4175198.17 0.00886 548385.47
4175199.28 0.00850
548392.59 4175199.28 0.00858 548391.49
4175176.82 0.00661
548403.00 4175172.99 0.00646 548410.67
4175168.61 0.00625
548419.43 4175165.87 0.00615 548427.10
4175161.48 0.00595
548434.77 4175159.29 0.00588 548453.40
4175146.69 0.00536
548455.04 4175153.81 0.00571 548458.33

4175161.48   0.00613
         548461.61   4175169.15   0.00659   548462.71
4175176.82   0.00710
         548467.64   4175183.40   0.00760   548470.93
4175188.88   0.00805
         548476.41   4175196.00   0.00869   548480.24
4175203.12   0.00942
         548175.94   4175143.29   0.00226   548175.94
4175151.29   0.00253
         548175.94   4175159.29   0.00266   548175.94
4175167.29   0.00280
         548175.94   4175175.29   0.00296   548175.94
4175183.29   0.00312
         548175.94   4175191.29   0.00331   548175.94
4175199.29   0.00352
         548175.94   4175207.29   0.00376   548217.50
4175110.67   0.00229
         548225.50   4175110.67   0.00234   548233.50
4175110.67   0.00240
         548241.50   4175110.67   0.00246   548249.50
4175110.67   0.00252
         548257.50   4175110.67   0.00259   548265.50
4175110.67   0.00265
         548273.50   4175110.67   0.00272   548215.07
4174930.73   0.00097
         548215.07   4174940.75   0.00101   548215.07
4174950.77   0.00104

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   PAREA3   ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         548215.07   4174960.79   0.00108   548215.07

4174970.81 0.00113
548215.07 4174980.83 0.00117 548215.07
4174990.85 0.00122
548215.07 4175000.87 0.00127 548215.07
4175010.89 0.00132
548215.07 4175020.91 0.00137 548215.07
4175030.93 0.00144
548215.07 4175040.95 0.00150 548215.07
4175050.97 0.00157
548215.07 4175060.99 0.00176 548215.07
4175071.01 0.00184
548215.07 4175081.03 0.00194 548210.90
4175099.67 0.00211
548180.01 4174906.49 0.00085 548180.01
4174914.49 0.00087
548180.01 4174922.49 0.00090 548180.01
4174930.49 0.00092
548180.01 4174938.49 0.00095 548180.01
4174946.49 0.00098
548180.01 4174954.49 0.00101 548180.01
4174962.49 0.00104
548180.01 4174970.49 0.00107 548180.01
4174978.49 0.00110
548180.01 4174986.49 0.00113 548180.01
4174994.49 0.00116
548180.01 4175002.49 0.00120 548180.01
4175010.49 0.00123
548180.01 4175018.49 0.00127 548180.01
4175026.49 0.00131
548180.01 4175034.49 0.00136 548180.01
4175042.49 0.00140
548180.01 4175050.49 0.00145 548291.59
4175108.78 0.00285
548299.59 4175108.78 0.00291 548307.59
4175108.78 0.00297
548315.59 4175108.78 0.00304 548323.59
4175108.78 0.00310
548331.59 4175108.78 0.00317 548339.59
4175108.78 0.00323
548347.59 4175108.78 0.00330 548297.71
4175101.03 0.00275
548317.98 4175029.81 0.00188 548328.94
4175032.55 0.00196
548334.97 4175030.36 0.00196 548339.90
4175026.52 0.00193
548345.38 4175024.33 0.00193 548354.69
4175020.50 0.00192
548361.81 4175016.66 0.00191 548300.18
4175042.53 0.00194
548300.18 4175050.53 0.00203 548300.18

```
4175058.53        0.00212
         548300.18    4175066.53        0.00222                        548300.18
4175074.53        0.00233
         548300.18    4175082.53        0.00245                        548300.18
4175090.53        0.00258
         548261.27    4174979.26        0.00125                        548261.27
4174987.26        0.00138
         548261.27    4174995.26        0.00143                        548261.27
4175003.26        0.00148
         548261.27    4175011.26        0.00154                        548261.27
4175019.26        0.00159
         548261.27    4175027.26        0.00165                        548261.27
4175035.26        0.00172
         548261.27    4175043.26        0.00179                        548261.27
4175051.26        0.00186
         548261.27    4175059.26        0.00194                        548261.27
4175067.26        0.00202
         548261.27    4175075.26        0.00212                        548261.27
4175083.26        0.00221
         548251.90    4174967.92        0.00117                        548216.40
4174923.76        0.00095
         548217.05    4174914.09        0.00092                        548123.21
4175141.42        0.00186
         548123.21    4175149.42        0.00193                        548123.21
4175157.42        0.00200
         548123.21    4175165.42        0.00208                        548123.21
4175173.42        0.00217
         548123.21    4175181.42        0.00225                        548123.21
4175189.42        0.00235
↟ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        14:15:34

                                  PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                         ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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- -
548123.21 4175197.42 0.00245 548123.21
4175205.42 0.00256
548123.21 4175213.42 0.00268 548123.46
4175113.02 0.00165
548131.46 4175113.02 0.00168 548139.46
4175113.02 0.00172
548147.46 4175113.02 0.00176 548155.46
4175113.02 0.00180
548163.46 4175113.02 0.00184 548171.46
4175113.02 0.00189
548179.46 4175113.02 0.00193 548085.41
4175141.04 0.00164
548085.41 4175149.04 0.00169 548085.41
4175157.04 0.00174
548085.41 4175165.04 0.00180 548085.41
4175173.04 0.00186
548085.41 4175181.04 0.00192 548085.41
4175189.04 0.00199
548085.41 4175197.04 0.00206 548085.41
4175205.04 0.00213
548085.41 4175213.04 0.00222 548085.41
4175221.04 0.00230
548085.41 4175229.04 0.00240 548035.55
4175114.41 0.00127
548043.55 4175114.41 0.00130 548051.55
4175114.41 0.00133
548059.55 4175114.41 0.00137 548067.55
4175114.41 0.00140
548075.55 4175114.41 0.00144 548083.55
4175114.41 0.00147
548091.55 4175114.41 0.00151 548037.24
4175151.70 0.00144
548037.24 4175161.70 0.00149 548037.24
4175171.70 0.00154
548037.24 4175181.70 0.00159 548037.24
4175191.70 0.00165
548037.24 4175201.70 0.00172 548037.24
4175211.70 0.00179
548037.24 4175221.70 0.00186 548036.40
4175144.81 0.00140
548036.95 4175136.59 0.00137 548036.86
4175077.00 0.00114
548046.86 4175077.00 0.00117 548056.86
4175077.00 0.00121
548066.86 4175077.00 0.00124 548076.86
4175077.00 0.00127
548086.86 4175077.00 0.00131 548096.86
4175077.00 0.00134
548118.80 4175076.97 0.00142 548128.80

4175076.97   0.00145
         548138.80   4175076.97   0.00148   548148.80
4175076.97   0.00152
         548158.80   4175076.97   0.00155   548168.80
4175076.97   0.00159
         548178.80   4175076.97   0.00162   548188.80
4175076.97   0.00167
         548133.99   4174938.58   0.00091   548133.99
4174948.58   0.00094
         548133.99   4174958.58   0.00097   548133.99
4174968.58   0.00100
         548133.99   4174978.58   0.00104   548133.99
4174988.58   0.00107
         548133.99   4174998.58   0.00110   548133.99
4175008.58   0.00114
         548133.99   4175018.58   0.00118   548133.99
4175028.58   0.00122
         548133.99   4175038.58   0.00127   548133.99
4175048.58   0.00132
         548092.65   4175060.20   0.00125   548090.45
4175051.43   0.00121
         548089.36   4175039.92   0.00116   548089.91
4175027.87   0.00112
         548091.00   4175021.84   0.00110   548089.91
4175014.72   0.00108
         548091.00   4175008.14   0.00106   548088.26
4174999.92   0.00103
         548090.45   4174992.25   0.00101   548088.81
4174984.58   0.00098
         548146.86   4175286.67   0.00569   548092.26
4175299.56   0.00399

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   PAREA3   ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)

Y-COORD (M)   CONC

- -

548476.78   4175131.19   0.00481   548484.36
4175142.57   0.00528
548495.78   4175163.91   0.00634   548491.13
4175153.20   0.00578
548486.93   4175145.75   0.00543   548401.50
4175129.08   0.00433
548410.21   4175126.71   0.00430   548420.90
4175123.94   0.00428
548430.80   4175120.77   0.00423   548439.90
4175116.42   0.00414
548430.80   4175103.35   0.00370   548427.63
4175096.62   0.00351
548424.46   4175090.29   0.00334   548419.32
4175081.97   0.00313
548417.34   4175076.43   0.00300   548414.17
4175070.09   0.00286
548409.42   4175062.97   0.00271   548409.42
4175055.45   0.00259
548404.27   4175050.70   0.00249   548403.48
4175043.17   0.00238
548400.31   4175036.84   0.00228   548394.77
4175030.11   0.00217
548392.39   4175023.38   0.00208   548388.04
4175017.44   0.00200
548386.06   4175009.92   0.00191   548377.74
4175003.19   0.00182
548298.17   4175011.50   0.00165   548304.11
4175005.17   0.00162
548312.82   4175003.19   0.00163   548297.38
4174988.54   0.00148
548295.00   4174979.43   0.00141   548291.04
4174972.70   0.00136
548285.89   4174967.95   0.00133   548283.52
4174960.03   0.00128
548334.99   4174994.48   0.00163   548331.03
4174988.93   0.00157
548327.46   4174980.22   0.00150   548325.49
4174973.49   0.00145
548321.13   4174968.35   0.00140   548316.38
4174961.62   0.00135
548313.21   4174953.70   0.00130   548309.25
4174947.36   0.00126
548344.49   4174984.58   0.00158   548366.66
4174978.64   0.00158
548363.89   4174970.72   0.00152   548359.53
4174964.78   0.00147
548358.35   4174958.45   0.00142   548392.00

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4174960.43        0.00150
         548399.12    4174956.07        0.00149                        548409.81
4174951.72        0.00148
         548418.52    4174947.76        0.00146                        548417.73
4175002.79        0.00193
         548419.71    4175009.52        0.00201                        548425.25
4175021.00        0.00216
         548429.21    4175030.50        0.00229                        548433.96
4175038.82        0.00242
         548437.13    4175046.34        0.00255                        548440.69
4175055.05        0.00270
         548448.61    4175066.14        0.00293                        548453.36
4175078.01        0.00319
         548460.89    4175099.00        0.00372                        548467.22
4175096.62        0.00368
         548474.35    4175094.25        0.00365                        548482.26
4175091.08        0.00359
         548489.79    4175087.51        0.00352                        548495.33
4175084.35        0.00346
         548504.43    4175079.20        0.00336                        548513.54
4175076.03        0.00330
         548499.68    4175055.84        0.00288                        548495.33
4175045.55        0.00270
         548486.22    4175031.69        0.00247                        548481.08
4175022.98        0.00233
         548477.91    4175015.46        0.00223                        548473.61
4175008.53        0.00213
         548469.23    4175001.76        0.00205                        548465.25
4174994.19        0.00195
         548462.86    4174989.01        0.00190                        548460.07
4174982.24        0.00182
         548456.88    4174967.90        0.00169                        548449.71
4174970.69        0.00170
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        14:15:34

                                  PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                   **
```

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
548441.74	4174974.67	0.00172	548434.97	4174977.86	0.00173
548429.39	4174983.04	0.00176	548423.02	4174986.22	0.00178
548415.45	4174988.61	0.00178	548407.88	4174988.61	0.00176
548541.03	4175067.11	0.00316	548536.12	4175056.63	0.00296
548532.45	4175051.49	0.00287	548528.05	4175043.42	0.00272
548524.62	4175035.35	0.00259	548521.20	4175030.45	0.00251
548517.77	4175023.11	0.00241	548510.68	4175017.24	0.00231
548202.96	4175764.20	0.00775	547922.58	4175370.57	0.00179
547926.98	4175381.57	0.00189	547914.89	4175394.76	0.00178
547919.47	4175407.79	0.00190	547923.60	4175419.14	0.00201
547923.60	4175432.54	0.00207	547919.47	4175445.95	0.00206
547918.44	4175460.38	0.00210	547918.44	4175476.88	0.00217
547910.19	4175495.44	0.00209	547910.19	4175504.73	0.00212
547908.13	4175519.16	0.00213	547910.19	4175544.94	0.00222
547917.41	4175553.19	0.00236	547917.41	4175566.60	0.00238
547917.41	4175582.07	0.00239	547918.44	4175597.53	0.00242
547921.54	4175606.81	0.00248	547924.63	4175621.25	0.00253
547920.51	4175630.53	0.00245	547920.51	4175640.84	0.00245
547915.35	4175653.22	0.00236	547914.32	4175664.56	0.00234
547912.26	4175677.97	0.00230	547913.29	4175690.34	0.00231
547913.29	4175703.75	0.00230	547913.29	4175720.25	0.00228
548266.99	4175832.65	0.00737	548266.99	4175845.02	0.00682
548291.74	4175837.80	0.00803	548301.02		

4175839.87   0.00821
         548310.30   4175840.90   0.00845   548317.52
4175837.80   0.00893
         548324.74   4175838.84   0.00910   548623.79
4176021.36   0.00380
         547608.05   4175979.08   0.00067   547591.62
4174866.36   0.00032
         548961.49   4176028.43   0.00236   548975.16
4174863.63   0.00151
         548349.34   4175832.29   0.01077   548347.44
4175846.22   0.00919
         548351.88   4175851.92   0.00883   548385.44
4175836.72   0.01143
         548386.08   4175844.96   0.01039   548383.54
4175853.19   0.00949
         548401.28   4175837.36   0.01184   548409.51
4175836.09   0.01232
         548416.48   4175838.62   0.01213   548425.98
4175844.32   0.01228
         548432.31   4175840.52   0.01297   548441.81
4175839.26   0.01331
         548446.24   4175839.89   0.01325   548454.48
4175837.99   0.01367
         548463.98   4175840.52   0.01331   548472.21
4175837.99   0.01383
         548479.18   4175837.36   0.01402   548484.88
4175838.62   0.01382
         548494.38   4175839.89   0.01359   548501.34
4175838.62   0.01374
         548510.84   4175840.52   0.01328   548516.54
4175839.89   0.01327
         548522.24   4175839.89   0.01315   548533.01
4175840.52   0.01282
         548540.61   4175842.42   0.01241   548550.11
4175841.16   0.01239

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   PAREA3   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
548543.78	4175853.82	0.01105	548545.04	4175862.69	0.01019
548588.11	4175838.62	0.01187	548586.21	4175847.49	0.01088
548585.58	4175853.19	0.01034	548611.54	4175839.26	0.01112
548621.04	4175841.16	0.01060	548625.48	4175840.52	0.01053
548633.71	4175840.52	0.01024	548640.04	4175839.26	0.01014
548648.28	4175836.72	0.01007	548655.88	4175792.39	0.01680
548653.98	4175703.73	0.02240	548665.38	4175703.73	0.01930
548653.93	4175738.53	0.02118	548665.15	4175740.92	0.01790
548663.72	4175790.84	0.01492	548670.89	4175790.36	0.01363
548672.08	4175738.53	0.01661	548682.35	4175738.53	0.01503
548685.93	4175738.53	0.01457	548679.96	4175789.17	0.01248
548686.89	4175793.23	0.01147	548694.77	4175794.18	0.01075
548695.25	4175740.92	0.01343	548673.51	4175702.46	0.01781
548690.23	4175702.94	0.01555	548697.40	4175701.98	0.01484
548703.85	4175701.98	0.01425	548708.87	4175701.50	0.01385
548719.61	4175701.98	0.01302	548726.30	4175702.70	0.01254
548750.67	4175707.71	0.01092	548749.95	4175700.31	0.01128
548752.82	4175691.71	0.01154	548752.10	4175683.59	0.01201
548753.77	4175676.42	0.01237	548748.52	4175668.54	0.01324
548750.43	4175660.42	0.01390	548753.77	4175653.01	0.01463
548753.29	4175645.13	0.01602	548787.21	4175648.00	0.01332

*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA3 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 547911.59
4175520.1	0.10949 (13021523)
4175503.0	0.10935 (13121702)
4175485.9	0.10962 (13121702)
4175468.7	0.10978 (09011919)
4175451.6	0.11042 (09011919)
4175434.5	0.11089 (09011919)
4175417.4	0.11117 (09011919)
4175400.3	0.11120 (09011919)

*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)

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 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
        548247.13  4175147.89        0.12356  (13121718)                548253.86
 4175147.89         0.12395  (09011618)
        548260.59  4175147.89        0.12429  (09011618)                548267.32
 4175147.89         0.12457  (09012107)
        548274.05  4175147.89        0.12482  (09012107)                548280.78
 4175147.89         0.12497  (09012107)
        548287.51  4175147.89        0.12499  (11012721)                548294.24
 4175147.89         0.12496  (10121123)
        548300.97  4175147.89        0.12486  (10121123)                548307.70
 4175147.89         0.12465  (10121123)
        548314.43  4175147.89        0.12434  (10121123)                548321.16
 4175147.89         0.12396  (10121123)
        548327.89  4175147.89        0.12362  (09121819)                548334.62
 4175147.89         0.12340  (09121819)
        548341.35  4175147.89        0.12314  (09121819)                548348.08
 4175147.89         0.12281  (09121819)
        548354.81  4175147.89        0.12245  (09121819)                548238.42
 4175148.87         0.12348  (13121718)
        548363.49  4175147.29        0.12173  (09121819)                548212.73
 4175137.85         0.11794  (13121718)
        548212.73  4175147.85        0.12107  (13121718)                548212.73
 4175157.85         0.12442  (13121718)
        548212.73  4175167.85        0.12802  (13121718)                548212.73
 4175177.85         0.13188  (13121718)
        548212.73  4175187.85        0.13616  (13010321)                548212.73
 4175197.85         0.14095  (13010321)
        548212.73  4175207.85        0.14631  (13010321)                548239.21
 4175192.01         0.14229  (13121718)
        548247.13  4175192.80        0.14385  (13121718)                548254.25
 4175193.20         0.14502  (13121718)
        548261.38  4175194.39        0.14659  (13121718)                548270.48
 4175193.59         0.14692  (09011618)
        548277.21  4175194.78        0.14829  (09011618)                548298.19
 4175187.26         0.14325  (11012721)
        548372.46  4175128.44        0.11546  (09121819)                548534.18
 4175153.41         0.10701  (12120624)
        548407.20  4175198.17        0.13873  (11012623)                548415.20
 4175198.17         0.13775  (11012623)
        548423.20  4175198.17        0.13679  (11012623)                548431.20
 4175198.17         0.13580  (11012623)
        548439.20  4175198.17        0.13480  (11012623)                548447.20
 4175198.17         0.13382  (11012623)
        548455.20  4175198.17        0.13281  (11012623)                548385.47
 4175199.28         0.14171  (09121819)
        548392.59  4175199.28        0.14095  (11012623)                548391.49
 4175176.82         0.13040  (11012623)
        548403.00  4175172.99        0.12784  (11012623)                548410.67
 4175168.61         0.12542  (11012623)
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       548419.43   4175165.87        0.12359  (11012623)               548427.10
 4175161.48        0.12136  (11012623)
       548434.77   4175159.29        0.11987  (11012623)               548453.40
 4175146.69        0.11419  (11012623)
       548455.04   4175153.81        0.11600  (11012623)               548458.33
 4175161.48        0.11788  (11012623)
       548461.61   4175169.15        0.11991  (11012623)               548462.71
 4175176.82        0.12254  (11012623)
       548467.64   4175183.40        0.12449  (11012623)               548470.93
 4175188.88        0.12634  (11012623)
       548476.41   4175196.00        0.12872  (11012623)               548480.24
 4175203.12        0.13182  (11012623)
       548175.94   4175143.29        0.11598  (13010321)               548175.94
 4175151.29        0.11773  (13010321)
       548175.94   4175159.29        0.12009  (13010321)               548175.94
 4175167.29        0.12279  (11122422)
       548175.94   4175175.29        0.12572  (11122422)               548175.94
 4175183.29        0.12881  (11122422)
       548175.94   4175191.29        0.13208  (11122422)               548175.94
 4175199.29        0.13558  (11122422)
       548175.94   4175207.29        0.13933  (11122422)               548217.50
 4175110.67        0.11061  (13121718)
       548225.50   4175110.67        0.11098  (13121718)               548233.50
 4175110.67        0.11130  (09011618)
       548241.50   4175110.67        0.11168  (09011618)               548249.50
 4175110.67        0.11200  (09012107)
       548257.50   4175110.67        0.11230  (09012107)               548265.50
 4175110.67        0.11251  (09012107)
       548273.50   4175110.67        0.11262  (11012721)               548215.07
 4174930.73        0.07867  (11012721)
       548215.07   4174940.75        0.08019  (11012721)               548215.07
 4174950.77        0.08174  (11012721)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       14:15:34

                                  PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_2.5   IN MICROGRAMS/M**3
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X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548215.07	4174960.79	0.08328	(11012721)	548215.07	4174970.81	0.08485	(11012721)
548215.07	4174980.83	0.08643	(11012721)	548215.07	4174990.85	0.08792	(09012107)
548215.07	4175000.87	0.08950	(09011618)	548215.07	4175010.89	0.09113	(09011618)
548215.07	4175020.91	0.09281	(09011618)	548215.07	4175030.93	0.09454	(09011618)
548215.07	4175040.95	0.09633	(09011618)	548215.07	4175050.97	0.09817	(09011618)
548215.07	4175060.99	0.09903	(09011618)	548215.07	4175071.01	0.10108	(09011618)
548215.07	4175081.03	0.10329	(13121718)	548210.90	4175099.67	0.10749	(13121718)
548180.01	4174906.49	0.07251	(09011618)	548180.01	4174914.49	0.07375	(09011618)
548180.01	4174922.49	0.07501	(09011618)	548180.01	4174930.49	0.07627	(09011618)
548180.01	4174938.49	0.07755	(09011618)	548180.01	4174946.49	0.07883	(09011618)
548180.01	4174954.49	0.08013	(09011618)	548180.01	4174962.49	0.08142	(09011618)
548180.01	4174970.49	0.08274	(09011618)	548180.01	4174978.49	0.08405	(09011618)
548180.01	4174986.49	0.08530	(13121718)	548180.01	4174994.49	0.08656	(13121718)
548180.01	4175002.49	0.08784	(13121718)	548180.01	4175010.49	0.08916	(13121718)
548180.01	4175018.49	0.09049	(13121718)	548180.01	4175026.49	0.09185	(13121718)
548180.01	4175034.49	0.09324	(13121718)	548180.01	4175042.49	0.09466	(13121718)
548180.01	4175050.49	0.09611	(13121718)	548291.59	4175108.78	0.11249	(10121123)
548299.59	4175108.78	0.11249	(10121123)	548307.59	4175108.78	0.11233	(10121123)
548315.59	4175108.78	0.11209	(10121123)	548323.59	4175108.78	0.11197	(09121819)
548331.59	4175108.78	0.11188	(09121819)	548339.59	4175108.78	0.11169	(09121819)
548347.59	4175108.78	0.11144	(09121819)	548297.71	4175101.03	0.11041	(10121123)
548317.98	4175029.81	0.09509	(09121819)	548328.94	4175032.55	0.09566	(09121819)
548334.97	4175030.36	0.09526	(09121819)	548339.90	4175026.52	0.09454	(09121819)

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       548345.38   4175024.33        0.09407  (09121819)               548354.69
 4175020.50        0.09327  (09022721)
       548361.81   4175016.66        0.09260  (11012623)               548300.18
 4175042.53        0.09716  (10121123)
       548300.18   4175050.53        0.09874  (10121123)               548300.18
 4175058.53        0.10039  (10121123)
       548300.18   4175066.53        0.10210  (10121123)               548300.18
 4175074.53        0.10388  (10121123)
       548300.18   4175082.53        0.10575  (10121123)               548300.18
 4175090.53        0.10770  (10121123)
       548261.27   4174979.26        0.08759  (10121123)               548261.27
 4174987.26        0.08767  (10121123)
       548261.27   4174995.26        0.08888  (10121123)               548261.27
 4175003.26        0.09013  (10121123)
       548261.27   4175011.26        0.09142  (10121123)               548261.27
 4175019.26        0.09275  (10121123)
       548261.27   4175027.26        0.09412  (10121123)               548261.27
 4175035.26        0.09554  (10121123)
       548261.27   4175043.26        0.09701  (10121123)               548261.27
 4175051.26        0.09853  (10121123)
       548261.27   4175059.26        0.10011  (10121123)               548261.27
 4175067.26        0.10176  (10121123)
       548261.27   4175075.26        0.10352  (09012107)               548261.27
 4175083.26        0.10537  (09012107)
       548251.90   4174967.92        0.08573  (10121123)               548216.40
 4174923.76        0.07769  (11012721)
       548217.05   4174914.09        0.07628  (11012721)               548123.21
 4175141.42        0.10938  (11122422)
       548123.21   4175149.42        0.11109  (11122422)               548123.21
 4175157.42        0.11283  (13012103)
       548123.21   4175165.42        0.11488  (13012103)               548123.21
 4175173.42        0.11687  (09012106)
       548123.21   4175181.42        0.11891  (09012106)               548123.21
 4175189.42        0.12089  (09012106)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       14:15:34

                                  PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_2.5   IN MICROGRAMS/M**3
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**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548123.21	4175197.42	0.12281	(09012106)	548123.21	4175205.42	0.12456	(09012106)
548123.21	4175213.42	0.12615	(09022107)	548123.46	4175113.02	0.10343	(11122422)
548131.46	4175113.02	0.10409	(11122422)	548139.46	4175113.02	0.10465	(11122422)
548147.46	4175113.02	0.10535	(10010521)	548155.46	4175113.02	0.10625	(13010321)
548163.46	4175113.02	0.10720	(13010321)	548171.46	4175113.02	0.10802	(13010321)
548179.46	4175113.02	0.10877	(13010321)	548085.41	4175141.04	0.10288	(09012106)
548085.41	4175149.04	0.10421	(09012106)	548085.41	4175157.04	0.10546	(09012106)
548085.41	4175165.04	0.10661	(09012106)	548085.41	4175173.04	0.10757	(13021107)
548085.41	4175181.04	0.10860	(09022107)	548085.41	4175189.04	0.10956	(09022107)
548085.41	4175197.04	0.11060	(09011519)	548085.41	4175205.04	0.11184	(09011519)
548085.41	4175213.04	0.11286	(09011519)	548085.41	4175221.04	0.11363	(09011519)
548085.41	4175229.04	0.11426	(13121620)	548035.55	4175114.41	0.08908	(09012106)
548043.55	4175114.41	0.09078	(09012106)	548051.55	4175114.41	0.09243	(09012106)
548059.55	4175114.41	0.09396	(09012106)	548067.55	4175114.41	0.09537	(09012106)
548075.55	4175114.41	0.09676	(13012103)	548083.55	4175114.41	0.09813	(13012103)
548091.55	4175114.41	0.09933	(13012103)	548037.24	4175151.70	0.09214	(09022107)
548037.24	4175161.70	0.09275	(09011519)	548037.24	4175171.70	0.09368	(09011519)
548037.24	4175181.70	0.09440	(09011519)	548037.24	4175191.70	0.09503	(09011519)
548037.24	4175201.70	0.09558	(09011519)	548037.24	4175211.70	0.09620	(09011519)
548037.24	4175221.70	0.09696	(09011519)	548036.40	4175144.81	0.09147	(09022107)
548036.95	4175136.59	0.09102	(09022107)	548036.86	4175077.00	0.08600	(09012106)
548046.86	4175077.00	0.08755	(13012103)	548056.86	4175077.00	0.08895	(13012103)

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       548066.86   4175077.00        0.09034  (11122422)               548076.86
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       548086.86   4175077.00        0.09332  (11122422)               548096.86
 4175077.00        0.09451  (11122422)
       548118.80   4175076.97        0.09607  (10010521)               548128.80
 4175076.97        0.09681  (10010521)
       548138.80   4175076.97        0.09780  (13010321)               548148.80
 4175076.97        0.09879  (13010321)
       548158.80   4175076.97        0.09961  (13010321)               548168.80
 4175076.97        0.10030  (13010321)
       548178.80   4175076.97        0.10103  (13121718)               548188.80
 4175076.97        0.10193  (13121718)
       548133.99   4174938.58        0.07699  (13121718)               548133.99
 4174948.58        0.07834  (13121718)
       548133.99   4174958.58        0.07971  (13121718)               548133.99
 4174968.58        0.08110  (13121718)
       548133.99   4174978.58        0.08250  (13121718)               548133.99
 4174988.58        0.08390  (13010321)
       548133.99   4174998.58        0.08531  (13010321)               548133.99
 4175008.58        0.08674  (13010321)
       548133.99   4175018.58        0.08821  (13010321)               548133.99
 4175028.58        0.08969  (13010321)
       548133.99   4175038.58        0.09120  (13010321)               548133.99
 4175048.58        0.09274  (13010321)
       548092.65   4175060.20        0.09133  (11122422)               548090.45
 4175051.43        0.08974  (11122422)
       548089.36   4175039.92        0.08783  (11122422)               548089.91
 4175027.87        0.08616  (10010521)
       548091.00   4175021.84        0.08544  (10010521)               548089.91
 4175014.72        0.08441  (10010521)
       548091.00   4175008.14        0.08367  (12110521)               548088.26
 4174999.92        0.08249  (12110521)
       548090.45   4174992.25        0.08175  (12110521)               548088.81
 4174984.58        0.08079  (13010321)
       548146.86   4175286.67        0.14863  (10010418)               548092.26
 4175299.56        0.12413  (09022107)
↑ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        14:15:34

                                  PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548476.78	4175131.19	0.10726	(11012623)	548484.36	4175142.57	0.10882	(11012623)
548495.78	4175163.91	0.11310	(12120624)	548491.13	4175153.20	0.11049	(11012623)
548486.93	4175145.75	0.10922	(11012623)	548401.50	4175129.08	0.11415	(11012623)
548410.21	4175126.71	0.11291	(11012623)	548420.90	4175123.94	0.11139	(11012623)
548430.80	4175120.77	0.10980	(11012623)	548439.90	4175116.42	0.10799	(11012623)
548430.80	4175103.35	0.10582	(11012623)	548427.63	4175096.62	0.10461	(11012623)
548424.46	4175090.29	0.10351	(11012623)	548419.32	4175081.97	0.10216	(11012623)
548417.34	4175076.43	0.10119	(11012623)	548414.17	4175070.09	0.10020	(11012623)
548409.42	4175062.97	0.09916	(11012623)	548409.42	4175055.45	0.09784	(11012623)
548404.27	4175050.70	0.09725	(11012623)	548403.48	4175043.17	0.09601	(11012623)
548400.31	4175036.84	0.09509	(11012623)	548394.77	4175030.11	0.09419	(11012623)
548392.39	4175023.38	0.09319	(11012623)	548388.04	4175017.44	0.09238	(11012623)
548386.06	4175009.92	0.09129	(11012623)	548377.74	4175003.19	0.09043	(11012623)
548298.17	4175011.50	0.09159	(09121819)	548304.11	4175005.17	0.09076	(09121819)
548312.82	4175003.19	0.09062	(09121819)	548297.38	4174988.54	0.08807	(09121819)
548295.00	4174979.43	0.08669	(09121819)	548291.04	4174972.70	0.08562	(09121819)
548285.89	4174967.95	0.08484	(10121123)	548283.52	4174960.03	0.08371	(10121123)
548334.99	4174994.48	0.08939	(09121819)	548331.03	4174988.93	0.08857	(09121819)
548327.46	4174980.22	0.08729	(09121819)	548325.49	4174973.49	0.08633	(09121819)
548321.13	4174968.35	0.08559	(09121819)	548316.38	4174961.62	0.08463	(09121819)
548313.21	4174953.70	0.08354	(09121819)	548309.25	4174947.36	0.08266	(09121819)

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       548344.49   4174984.58        0.08782  (09121819)               548366.66
 4174978.64        0.08705  (11012623)
       548363.89   4174970.72        0.08600  (11012623)               548359.53
 4174964.78        0.08518  (11012623)
       548358.35   4174958.45        0.08434  (11012623)               548392.00
 4174960.43        0.08438  (11012623)
       548399.12   4174956.07        0.08365  (11012623)               548409.81
 4174951.72        0.08275  (11012623)
       548418.52   4174947.76        0.08189  (11012623)               548417.73
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       548419.71   4175009.52        0.09002  (11012623)               548425.25
 4175021.00        0.09143  (11012623)
       548429.21   4175030.50        0.09266  (11012623)               548433.96
 4175038.82        0.09366  (11012623)
       548437.13   4175046.34        0.09465  (11012623)               548440.69
 4175055.05        0.09583  (11012623)
       548448.61   4175066.14        0.09707  (11012623)               548453.36
 4175078.01        0.09876  (11012623)
       548460.89   4175099.00        0.10216  (11012623)               548467.22
 4175096.62        0.10099  (11012623)
       548474.35   4175094.25        0.09959  (11012623)               548482.26
 4175091.08        0.09774  (11012623)
       548489.79   4175087.51        0.09610  (11010323)               548495.33
 4175084.35        0.09518  (11010323)
       548504.43   4175079.20        0.09372  (12120624)               548513.54
 4175076.03        0.09270  (12120624)
       548499.68   4175055.84        0.09033  (11010323)               548495.33
 4175045.55        0.08908  (11010323)
       548486.22   4175031.69        0.08754  (11010323)               548481.08
 4175022.98        0.08653  (11010323)
       548477.91   4175015.46        0.08586  (11012623)               548473.61
 4175008.53        0.08545  (11012623)
       548469.23   4175001.76        0.08503  (11012623)               548465.25
 4174994.19        0.08440  (11012623)
       548462.86   4174989.01        0.08393  (11012623)               548460.07
 4174982.24        0.08329  (11012623)
       548456.88   4174967.90        0.08172  (11012623)               548449.71
 4174970.69        0.08271  (11012623)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        14:15:34

                                  PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,
```

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548441.74	4174974.67	0.08386	(11012623)	548434.97	4174977.86	0.08475	(11012623)
548429.39	4174983.04	0.08578	(11012623)	548423.02	4174986.22	0.08656	(11012623)
548415.45	4174988.61	0.08726	(11012623)	548407.88	4174988.61	0.08758	(11012623)
548541.03	4175067.11	0.08946	(12120624)	548536.12	4175056.63	0.08836	(12120624)
548532.45	4175051.49	0.08791	(12120624)	548528.05	4175043.42	0.08709	(12120624)
548524.62	4175035.35	0.08621	(12120624)	548521.20	4175030.45	0.08574	(12120624)
548517.77	4175023.11	0.08495	(12120624)	548510.68	4175017.24	0.08447	(12120624)
548202.96	4175764.20	0.10544	(11012521)	547922.58	4175370.57	0.11294	(13011920)
547926.98	4175381.57	0.11391	(10011418)	547914.89	4175394.76	0.11165	(09011919)
547919.47	4175407.79	0.11252	(09011919)	547923.60	4175419.14	0.11314	(09011919)
547923.60	4175432.54	0.11293	(09011919)	547919.47	4175445.95	0.11190	(09011919)
547918.44	4175460.38	0.11124	(09011919)	547918.44	4175476.88	0.11077	(13121702)
547910.19	4175495.44	0.10927	(13121702)	547910.19	4175504.73	0.10909	(13121702)
547908.13	4175519.16	0.10895	(13021523)	547910.19	4175544.94	0.10896	(13021523)
547917.41	4175553.19	0.10965	(13021523)	547917.41	4175566.60	0.10884	(13021523)
547917.41	4175582.07	0.10781	(13021523)	547918.44	4175597.53	0.10745	(11012608)
547921.54	4175606.81	0.10761	(11012608)	547924.63	4175621.25	0.10746	(11012608)
547920.51	4175630.53	0.10660	(13122905)	547920.51	4175640.84	0.10659	(13122905)
547915.35	4175653.22	0.10559	(13122905)	547914.32	4175664.56	0.10548	(13010722)
547912.26	4175677.97	0.10490	(13010722)	547913.29	4175690.34	0.10429	(11112202)

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 4175720.25        0.10306  (09011420)
       548266.99   4175832.65        0.12555  (09011522)               548266.99
 4175845.02        0.12104  (09011522)
       548291.74   4175837.80        0.12641  (13010320)               548301.02
 4175839.87        0.12664  (13010320)
       548310.30   4175840.90        0.12736  (09011822)               548317.52
 4175837.80        0.12946  (11012319)
       548324.74   4175838.84        0.13036  (11012319)               548623.79
 4176021.36        0.08440  (12101822)
       547608.05   4175979.08        0.05745  (12122006)               547591.62
 4174866.36        0.05917  (09011519)
       548961.49   4176028.43        0.06152  (13101702)               548975.16
 4174863.63        0.04769  (13013024)
       548349.34   4175832.29        0.13825  (12110518)               548347.44
 4175846.22        0.13114  (12110518)
       548351.88   4175851.92        0.12899  (12110518)               548385.44
 4175836.72        0.14322  (12110519)
       548386.08   4175844.96        0.13816  (12110519)               548383.54
 4175853.19        0.13295  (12110519)
       548401.28   4175837.36        0.14642  (12110519)               548409.51
 4175836.09        0.14939  (12110519)
       548416.48   4175838.62        0.14886  (12110519)               548425.98
 4175844.32        0.15031  (12020408)
       548432.31   4175840.52        0.15381  (12020408)               548441.81
 4175839.26        0.15533  (12020408)
       548446.24   4175839.89        0.15488  (12020408)               548454.48
 4175837.99        0.15686  (12020408)
       548463.98   4175840.52        0.15452  (12020408)               548472.21
 4175837.99        0.15713  (12020408)
       548479.18   4175837.36        0.15777  (12020408)               548484.88
 4175838.62        0.15637  (12020408)
       548494.38   4175839.89        0.15436  (12020408)               548501.34
 4175838.62        0.15371  (12020408)
       548510.84   4175840.52        0.14957  (12020408)               548516.54
 4175839.89        0.14825  (12020408)
       548522.24   4175839.89        0.14737  (12101822)               548533.01
 4175840.52        0.14519  (12101822)
       548540.61   4175842.42        0.14275  (12101822)               548550.11
 4175841.16        0.14235  (12101822)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        14:15:34

                                  PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
```

INCLUDING SOURCE(S): PAREA3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548543.78	4175853.82	0.13569	(12101822)	548545.04	4175862.69	0.13103	(12101822)
548588.11	4175838.62	0.13945	(10090202)	548586.21	4175847.49	0.13450	(10090202)
548585.58	4175853.19	0.13161	(10090202)	548611.54	4175839.26	0.13639	(10090202)
548621.04	4175841.16	0.13409	(10090202)	548625.48	4175840.52	0.13376	(10090202)
548633.71	4175840.52	0.13284	(09042001)	548640.04	4175839.26	0.13270	(09042001)
548648.28	4175836.72	0.13220	(09082904)	548655.88	4175792.39	0.15148	(10101303)
548653.98	4175703.73	0.14691	(10101003)	548665.38	4175703.73	0.13470	(10101003)
548653.93	4175738.53	0.14977	(10101003)	548665.15	4175740.92	0.13765	(10101003)
548663.72	4175790.84	0.14184	(10101303)	548670.89	4175790.36	0.13464	(09103124)
548672.08	4175738.53	0.13139	(10101003)	548682.35	4175738.53	0.12410	(10101003)
548685.93	4175738.53	0.12193	(10101003)	548679.96	4175789.17	0.12746	(09103124)
548686.89	4175793.23	0.12276	(09103124)	548694.77	4175794.18	0.11817	(09103124)
548695.25	4175740.92	0.11696	(10101003)	548673.51	4175702.46	0.12794	(10101003)
548690.23	4175702.94	0.11802	(10101003)	548697.40	4175701.98	0.11475	(10101003)
548703.85	4175701.98	0.11222	(10101003)	548708.87	4175701.50	0.11048	(10101003)
548719.61	4175701.98	0.10720	(10101003)	548726.30	4175702.70	0.10541	(10101003)
548750.67	4175707.71	0.09981	(10101003)	548749.95	4175700.31	0.10086	(10101003)
548752.82	4175691.71	0.10188	(10101003)	548752.10	4175683.59	0.10384	(10101003)
548753.77	4175676.42	0.10580	(10101003)	548748.52	4175668.54	0.10935	(10101003)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

GROUP ID	NETWORK AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.02240 AT (548653.98, 4175703.73, 88.24, 260.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.02118 AT (548653.93, 4175738.53, 89.40, 260.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.01930 AT (548665.38, 4175703.73, 87.58, 260.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.01790 AT (548665.15, 4175740.92, 88.89, 260.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.01781 AT (548673.51, 4175702.46, 87.07, 260.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.01680 AT (548655.88, 4175792.39, 91.61, 260.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.01661 AT (548672.08, 4175738.53, 88.41, 260.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.01602 AT (548753.29, 4175645.13, 80.70, 260.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.01555 AT (548690.23, 4175702.94, 86.10, 260.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.01503 AT (548682.35, 4175738.53, 87.85, 260.00, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_2.5   IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE	NETWORK CONC OF TYPE	DATE (YYMMDDHH) GRID-ID	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)
ALL	HIGH	1ST HIGH VALUE IS	0.15777 ON 12020408:	AT (548479.18, 4175837.36, 107.68, 260.00, 0.00) DC

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   1 Warning Message(s)
 A Total of   6306 Informational Message(s)

 A Total of   43872 Hours Were Processed

```
A Total of         5804 Calm Hours Identified

A Total of          502 Missing Hours Identified (  1.14 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
MX W481   43873         MAIN: Data Remaining After End of Year. Number of Hours=
       48

   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 10/19/2020
** File: C:\Lakes\AERMOD View\CCSF_FMP_totalPM2\CCSF_FMP_totalPM2.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\CCSF_Diego Rivera Theater\CCSF_Diego Rivera The
   MODELOPT DFAULT CONC
   AVERTIME 1 ANNUAL
   URBANOPT 884363
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL CCSF_FMP_totalPM2.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA3       AREAPOLY   548276.944  4175243.734      106.500
** Source Parameters **
   SRCPARAM PAREA3       8.3122E-09     3.000        21
   AREAVERT PAREA3       548276.944 4175243.734 548175.021 4175272.855
   AREAVERT PAREA3       548172.595 4175338.376 548104.646 4175340.803
   AREAVERT PAREA3       547993.017 4175367.497 547999.083 4175703.599
   AREAVERT PAREA3       548261.170 4175704.812 548264.810 4175816.442
   AREAVERT PAREA3       548648.234 4175809.162 548643.380 4175646.571
   AREAVERT PAREA3       548643.380 4175634.437 548807.184 4175633.224
   AREAVERT PAREA3       548742.876 4175524.021 548690.701 4175430.592
   AREAVERT PAREA3       548659.154 4175363.857 548637.313 4175317.749
   AREAVERT PAREA3       548609.406 4175272.855 548592.419 4175257.081
   AREAVERT PAREA3       548566.938 4175240.094 548303.638 4175238.880
   AREAVERT PAREA3       548286.651 4175242.520
**
```

```
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED CCSF_FMP_totalPM2.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.SFC"
   PROFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.PFL"
   SURFDATA 23234 2009 SAN_FRANCISCO/INT'L_ARPT
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 4.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST CCSF_FMP_TOTALPM2.AD\01H1GALL.PLT 31
   PLOTFILE ANNUAL ALL CCSF_FMP_TOTALPM2.AD\AN00GALL.PLT 32
   SUMMFILE CCSF_FMP_totalPM2.sum
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
```

```
** ZONE     10
** ZONEINX  0
**
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.7.0
** Lakes Environmental Software Inc.
** Date: 10/19/2020
** File: C:\Lakes\AERMOD View\CCSF_FMP_totalPM2\CCSF_FMP_totalPM2.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\CCSF_Diego Rivera Theater\CCSF_Diego Rivera The
   MODELOPT DFAULT CONC
   AVERTIME 1 ANNUAL
   URBANOPT 884363
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL CCSF_FMP_totalPM2.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA3       AREAPOLY   548276.944  4175243.734      106.500
** Source Parameters **
   SRCPARAM PAREA3       8.3122E-09     3.000        21
   AREAVERT PAREA3       548276.944 4175243.734 548175.021 4175272.855
   AREAVERT PAREA3       548172.595 4175338.376 548104.646 4175340.803
   AREAVERT PAREA3       547993.017 4175367.497 547999.083 4175703.599
   AREAVERT PAREA3       548261.170 4175704.812 548264.810 4175816.442
   AREAVERT PAREA3       548648.234 4175809.162 548643.380 4175646.571
   AREAVERT PAREA3       548643.380 4175634.437 548807.184 4175633.224
   AREAVERT PAREA3       548742.876 4175524.021 548690.701 4175430.592
   AREAVERT PAREA3       548659.154 4175363.857 548637.313 4175317.749
   AREAVERT PAREA3       548609.406 4175272.855 548592.419 4175257.081
   AREAVERT PAREA3       548566.938 4175240.094 548303.638 4175238.880
   AREAVERT PAREA3       548286.651 4175242.520
**
```

```
** No Building Downwash **
**
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED CCSF_FMP_totalPM2.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.SFC"
   PROFFILE "C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.PFL"
   SURFDATA 23234 2009 SAN_FRANCISCO/INT'L_ARPT
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 4.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST CCSF_FMP_TOTALPM2.AD\01H1GALL.PLT 31
   PLOTFILE ANNUAL ALL CCSF_FMP_TOTALPM2.AD\AN00GALL.PLT 32
   SUMMFILE CCSF_FMP_totalPM2.sum
OU FINISHED

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************

 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                         ***       13:22:57
```

```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                                        ***     MODEL SETUP OPTIONS SUMMARY
 ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

  --  DEPOSITION LOGIC  --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for     1 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =    884363.0 ;  Urban Roughness Length =  1.000 m

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  PM_2.5

**Model Calculates  1 Short Term Average(s) of:   1-HR
    and Calculates ANNUAL Averages

**This Run Includes:      1 Source(s);       1 Source Group(s); and     450
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:      0 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with      0 line(s)
```

```
 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing
Hours
                                                                 b for Both Calm
and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     4.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   CCSF_FMP_totalPM2.err

 **File for Summary of Results:   CCSF_FMP_totalPM2.sum

↟ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***        13:22:57

                                   PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN


                                                *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
```

```
  INIT.   URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
   SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -

 PAREA3           0   0.83122E-08  548276.9 4175243.7   106.5     3.00      21
   0.00     YES
↑ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       13:22:57

                                  PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN


                                       *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        PAREA3      ,
↑ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       13:22:57

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN


                                       *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


              884363.   PAREA3      ,
↑ *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***       13:22:57

                                  PAGE   5
```

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

547911.6,

*** Y-COORDINATES OF GRID ***
(METERS)

4175400.3, 4175417.4, 4175434.5, 4175451.6, 4175468.7, 4175485.9, 4175503.0, 4175520.1,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 547911.59
4175520.10	120.00
4175502.98	120.00
4175485.86	120.00
4175468.74	120.00
4175451.62	120.00
4175434.50	120.00
4175417.38	120.00
4175400.26	120.00

Y-COORD (METERS)	X-COORD (METERS) 547911.59
4175520.10	260.00
4175502.98	260.00
4175485.86	260.00
4175468.74	260.00
4175451.62	260.00
4175434.50	260.00
4175417.38	260.00
4175400.26	260.00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(548247.1, 4175147.9, 108.3, 108.3, 0.0); (548253.9, 4175147.9, 108.0, 108.0, 0.0);
(548260.6, 4175147.9, 107.7, 107.7, 0.0); (548267.3, 4175147.9, 107.3, 107.3, 0.0);
(548274.1, 4175147.9, 107.0, 107.0, 0.0); (548280.8, 4175147.9, 106.6, 106.6, 0.0);
(548287.5, 4175147.9, 106.3, 106.3, 0.0); (548294.2, 4175147.9, 105.9, 105.9, 0.0);
(548301.0, 4175147.9, 105.6, 105.6, 0.0); (548307.7, 4175147.9, 105.2, 105.2, 0.0);
(548314.4, 4175147.9, 104.9, 104.9, 0.0); (548321.2, 4175147.9, 104.5, 104.5, 0.0);
(548327.9, 4175147.9, 104.2, 104.2, 0.0); (548334.6, 4175147.9, 103.9, 103.9, 0.0);
(548341.4, 4175147.9, 103.6, 103.6, 0.0); (548348.1, 4175147.9, 103.3, 103.3, 0.0);
(548354.8, 4175147.9, 103.1, 103.1, 0.0); (548238.4, 4175148.9, 108.7, 108.7, 0.0);
(548363.5, 4175147.3, 102.7, 102.7, 0.0); (548212.7,

```
4175137.8,     110.0,     110.0,       0.0);
     ( 548212.7, 4175147.8,     109.8,     109.8,       0.0);         ( 548212.7,
4175157.8,     109.7,     109.7,       0.0);
     ( 548212.7, 4175167.8,     109.5,     109.5,       0.0);         ( 548212.7,
4175177.8,     109.5,     109.5,       0.0);
     ( 548212.7, 4175187.8,     109.5,     109.5,       0.0);         ( 548212.7,
4175197.8,     109.5,     109.5,       0.0);
     ( 548212.7, 4175207.8,     109.5,     109.5,       0.0);         ( 548239.2,
4175192.0,     108.4,     108.4,       0.0);
     ( 548247.1, 4175192.8,     108.1,     108.1,       0.0);         ( 548254.2,
4175193.2,     107.8,     107.8,       0.0);
     ( 548261.4, 4175194.4,     107.4,     107.4,       0.0);         ( 548270.5,
4175193.6,     106.9,     106.9,       0.0);
     ( 548277.2, 4175194.8,     106.5,     106.5,       0.0);         ( 548298.2,
4175187.3,     105.4,     105.4,       0.0);
     ( 548372.5, 4175128.4,     102.6,     102.6,       0.0);         ( 548534.2,
4175153.4,      91.9,     260.0,       0.0);
     ( 548407.2, 4175198.2,     100.4,     260.0,       0.0);         ( 548415.2,
4175198.2,     100.0,     260.0,       0.0);
     ( 548423.2, 4175198.2,      99.5,     260.0,       0.0);         ( 548431.2,
4175198.2,      99.1,     260.0,       0.0);
     ( 548439.2, 4175198.2,      98.7,     260.0,       0.0);         ( 548447.2,
4175198.2,      98.2,     260.0,       0.0);
     ( 548455.2, 4175198.2,      97.8,     260.0,       0.0);         ( 548385.5,
4175199.3,     101.5,     260.0,       0.0);
     ( 548392.6, 4175199.3,     101.2,     260.0,       0.0);         ( 548391.5,
4175176.8,     101.2,     101.2,       0.0);
     ( 548403.0, 4175173.0,     100.6,     100.6,       0.0);         ( 548410.7,
4175168.6,     100.2,     100.2,       0.0);
     ( 548419.4, 4175165.9,      99.8,      99.8,       0.0);         ( 548427.1,
4175161.5,      99.4,      99.4,       0.0);
     ( 548434.8, 4175159.3,      99.0,      99.0,       0.0);         ( 548453.4,
4175146.7,      98.2,      98.2,       0.0);
     ( 548455.0, 4175153.8,      98.0,      98.0,       0.0);         ( 548458.3,
4175161.5,      97.7,     260.0,       0.0);
     ( 548461.6, 4175169.1,      97.5,     260.0,       0.0);         ( 548462.7,
4175176.8,      97.4,     260.0,       0.0);
     ( 548467.6, 4175183.4,      97.1,     260.0,       0.0);         ( 548470.9,
4175188.9,      96.9,     260.0,       0.0);
     ( 548476.4, 4175196.0,      96.5,     260.0,       0.0);         ( 548480.2,
4175203.1,      96.2,     260.0,       0.0);
     ( 548175.9, 4175143.3,     111.5,     111.5,       0.0);         ( 548175.9,
4175151.3,     111.4,     111.4,       0.0);
     ( 548175.9, 4175159.3,     111.2,     111.2,       0.0);         ( 548175.9,
4175167.3,     111.0,     111.0,       0.0);
     ( 548175.9, 4175175.3,     111.0,     111.0,       0.0);         ( 548175.9,
4175183.3,     111.0,     111.0,       0.0);
     ( 548175.9, 4175191.3,     111.0,     111.0,       0.0);         ( 548175.9,
4175199.3,     111.0,     111.0,       0.0);
     ( 548175.9, 4175207.3,     111.0,     111.0,       0.0);         ( 548217.5,
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4175110.7,   110.2,   110.2,   0.0);
     (548225.5, 4175110.7,   109.8,   109.8,   0.0);   (548233.5,
4175110.7,   109.4,   109.4,   0.0);
     (548241.5, 4175110.7,   109.0,   109.0,   0.0);   (548249.5,
4175110.7,   108.6,   108.6,   0.0);
     (548257.5, 4175110.7,   108.3,   108.3,   0.0);   (548265.5,
4175110.7,   107.9,   107.9,   0.0);
     (548273.5, 4175110.7,   107.5,   107.5,   0.0);   (548215.1,
4174930.7,   116.8,   116.8,   0.0);
     (548215.1, 4174940.8,   116.2,   116.2,   0.0);   (548215.1,
4174950.8,   115.7,   115.7,   0.0);
     (548215.1, 4174960.8,   115.1,   115.1,   0.0);   (548215.1,
4174970.8,   114.6,   114.6,   0.0);
     (548215.1, 4174980.8,   114.0,   114.0,   0.0);   (548215.1,
4174990.8,   113.7,   113.7,   0.0);
     (548215.1, 4175000.9,   113.3,   113.3,   0.0);   (548215.1,
4175010.9,   113.0,   113.0,   0.0);
     (548215.1, 4175020.9,   112.7,   112.7,   0.0);   (548215.1,
4175030.9,   112.4,   112.4,   0.0);
     (548215.1, 4175040.9,   112.0,   112.0,   0.0);   (548215.1,
4175051.0,   111.7,   111.7,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     (548215.1, 4175061.0,   111.4,   111.4,   0.0);   (548215.1,
4175071.0,   111.0,   111.0,   0.0);
     (548215.1, 4175081.0,   110.8,   110.8,   0.0);   (548210.9,
4175099.7,   110.7,   110.7,   0.0);
     (548180.0, 4174906.5,   120.0,   120.0,   0.0);   (548180.0,
4174914.5,   119.5,   119.5,   0.0);
     (548180.0, 4174922.5,   119.1,   119.1,   0.0);   (548180.0,
4174930.5,   118.7,   118.7,   0.0);
     (548180.0, 4174938.5,   118.2,   118.2,   0.0);   (548180.0,
4174946.5,   117.8,   117.8,   0.0);
     (548180.0, 4174954.5,   117.4,   117.4,   0.0);   (548180.0,
4174962.5,   116.9,   116.9,   0.0);
     (548180.0, 4174970.5,   116.5,   116.5,   0.0);   (548180.0,
4174978.5,   116.1,   116.1,   0.0);
     (548180.0, 4174986.5,   115.7,   115.7,   0.0);   (548180.0,
4174994.5,   115.5,   115.5,   0.0);
     (548180.0, 4175002.5,   115.2,   115.2,   0.0);   (548180.0,

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4175010.5,     114.9,     114.9,       0.0);
     ( 548180.0, 4175018.5,     114.7,     114.7,       0.0);         ( 548180.0,
4175026.5,     114.4,     114.4,       0.0);
     ( 548180.0, 4175034.5,     114.1,     114.1,       0.0);         ( 548180.0,
4175042.5,     113.9,     113.9,       0.0);
     ( 548180.0, 4175050.5,     113.6,     113.6,       0.0);         ( 548291.6,
4175108.8,     106.7,     106.7,       0.0);
     ( 548299.6, 4175108.8,     106.4,     106.4,       0.0);         ( 548307.6,
4175108.8,     106.0,     106.0,       0.0);
     ( 548315.6, 4175108.8,     105.6,     105.6,       0.0);         ( 548323.6,
4175108.8,     105.3,     105.3,       0.0);
     ( 548331.6, 4175108.8,     104.9,     104.9,       0.0);         ( 548339.6,
4175108.8,     104.5,     104.5,       0.0);
     ( 548347.6, 4175108.8,     104.1,     104.1,       0.0);         ( 548297.7,
4175101.0,     106.6,     106.6,       0.0);
     ( 548318.0, 4175029.8,     107.3,     107.3,       0.0);         ( 548328.9,
4175032.5,     106.7,     106.7,       0.0);
     ( 548335.0, 4175030.4,     106.4,     106.4,       0.0);         ( 548339.9,
4175026.5,     106.2,     106.2,       0.0);
     ( 548345.4, 4175024.3,     106.0,     106.0,       0.0);         ( 548354.7,
4175020.5,     105.5,     105.5,       0.0);
     ( 548361.8, 4175016.7,     105.2,     105.2,       0.0);         ( 548300.2,
4175042.5,     107.8,     107.8,       0.0);
     ( 548300.2, 4175050.5,     107.6,     107.6,       0.0);         ( 548300.2,
4175058.5,     107.4,     107.4,       0.0);
     ( 548300.2, 4175066.5,     107.2,     107.2,       0.0);         ( 548300.2,
4175074.5,     107.0,     107.0,       0.0);
     ( 548300.2, 4175082.5,     106.8,     106.8,       0.0);         ( 548300.2,
4175090.5,     106.7,     106.7,       0.0);
     ( 548261.3, 4174979.3,     111.6,     111.6,       0.0);         ( 548261.3,
4174987.3,     111.3,     111.3,       0.0);
     ( 548261.3, 4174995.3,     111.0,     111.0,       0.0);         ( 548261.3,
4175003.3,     110.8,     110.8,       0.0);
     ( 548261.3, 4175011.3,     110.5,     110.5,       0.0);         ( 548261.3,
4175019.3,     110.3,     110.3,       0.0);
     ( 548261.3, 4175027.3,     110.0,     110.0,       0.0);         ( 548261.3,
4175035.3,     109.8,     109.8,       0.0);
     ( 548261.3, 4175043.3,     109.5,     109.5,       0.0);         ( 548261.3,
4175051.3,     109.3,     109.3,       0.0);
     ( 548261.3, 4175059.3,     109.0,     109.0,       0.0);         ( 548261.3,
4175067.3,     108.8,     108.8,       0.0);
     ( 548261.3, 4175075.3,     108.5,     108.5,       0.0);         ( 548261.3,
4175083.3,     108.5,     108.5,       0.0);
     ( 548251.9, 4174967.9,     112.8,     112.8,       0.0);         ( 548216.4,
4174923.8,     117.1,     117.1,       0.0);
     ( 548217.1, 4174914.1,     117.6,     117.6,       0.0);         ( 548123.2,
4175141.4,     113.5,     113.5,       0.0);
     ( 548123.2, 4175149.4,     113.4,     113.4,       0.0);         ( 548123.2,
4175157.4,     113.3,     113.3,       0.0);
     ( 548123.2, 4175165.4,     113.2,     113.2,       0.0);         ( 548123.2,
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4175173.4,   113.2,   113.2,   0.0);
     (548123.2, 4175181.4,   113.2,   113.2,   0.0);   (548123.2,
4175189.4,   113.2,   113.2,   0.0);
     (548123.2, 4175197.4,   113.2,   113.2,   0.0);   (548123.2,
4175205.4,   113.2,   113.2,   0.0);
     (548123.2, 4175213.4,   113.2,   113.2,   0.0);   (548123.5,
4175113.0,   113.9,   113.9,   0.0);
     (548131.5, 4175113.0,   113.6,   113.6,   0.0);   (548139.5,
4175113.0,   113.4,   113.4,   0.0);
     (548147.5, 4175113.0,   113.1,   113.1,   0.0);   (548155.5,
4175113.0,   112.9,   112.9,   0.0);
     (548163.5, 4175113.0,   112.6,   112.6,   0.0);   (548171.5,
4175113.0,   112.3,   112.3,   0.0);
     (548179.5, 4175113.0,   112.0,   112.0,   0.0);   (548085.4,
4175141.0,   115.4,   115.4,   0.0);
     (548085.4, 4175149.0,   115.3,   115.3,   0.0);   (548085.4,
4175157.0,   115.3,   115.3,   0.0);
     (548085.4, 4175165.0,   115.2,   115.2,   0.0);   (548085.4,
4175173.0,   115.2,   115.2,   0.0);
     (548085.4, 4175181.0,   115.2,   115.2,   0.0);   (548085.4,
4175189.0,   115.2,   115.2,   0.0);
     (548085.4, 4175197.0,   115.2,   115.2,   0.0);   (548085.4,
4175205.0,   115.2,   115.2,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)

     (548085.4, 4175213.0,   115.2,   115.2,   0.0);   (548085.4,
4175221.0,   115.2,   115.2,   0.0);
     (548085.4, 4175229.0,   115.2,   115.2,   0.0);   (548035.6,
4175114.4,   118.6,   118.6,   0.0);
     (548043.6, 4175114.4,   118.2,   118.2,   0.0);   (548051.6,
4175114.4,   117.7,   117.7,   0.0);
     (548059.6, 4175114.4,   117.2,   117.2,   0.0);   (548067.6,
4175114.4,   116.7,   116.7,   0.0);
     (548075.6, 4175114.4,   116.2,   116.2,   0.0);   (548083.6,
4175114.4,   115.8,   115.8,   0.0);
     (548091.6, 4175114.4,   115.3,   115.3,   0.0);   (548037.2,
4175151.7,   118.5,   118.5,   0.0);
     (548037.2, 4175161.7,   118.5,   118.5,   0.0);   (548037.2,
4175171.7,   118.5,   118.5,   0.0);
     (548037.2, 4175181.7,   118.5,   118.5,   0.0);   (548037.2,

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4175191.7,     118.5,     118.5,       0.0);
     ( 548037.2, 4175201.7,     118.5,     118.5,       0.0);         ( 548037.2,
4175211.7,     118.5,     118.5,       0.0);
     ( 548037.2, 4175221.7,     118.5,     118.5,       0.0);         ( 548036.4,
4175144.8,     118.6,     118.6,       0.0);
     ( 548037.0, 4175136.6,     118.5,     118.5,       0.0);         ( 548036.9,
4175077.0,     118.6,     118.6,       0.0);
     ( 548046.9, 4175077.0,     118.1,     118.1,       0.0);         ( 548056.9,
4175077.0,     117.5,     117.5,       0.0);
     ( 548066.9, 4175077.0,     117.0,     117.0,       0.0);         ( 548076.9,
4175077.0,     116.4,     116.4,       0.0);
     ( 548086.9, 4175077.0,     115.9,     115.9,       0.0);         ( 548096.9,
4175077.0,     115.3,     115.3,       0.0);
     ( 548118.8, 4175077.0,     114.5,     114.5,       0.0);         ( 548128.8,
4175077.0,     114.3,     114.3,       0.0);
     ( 548138.8, 4175077.0,     114.0,     114.0,       0.0);         ( 548148.8,
4175077.0,     113.7,     113.7,       0.0);
     ( 548158.8, 4175077.0,     113.5,     113.5,       0.0);         ( 548168.8,
4175077.0,     113.2,     113.2,       0.0);
     ( 548178.8, 4175077.0,     112.8,     112.8,       0.0);         ( 548188.8,
4175077.0,     112.3,     112.3,       0.0);
     ( 548134.0, 4174938.6,     118.4,     118.4,       0.0);         ( 548134.0,
4174948.6,     118.0,     118.0,       0.0);
     ( 548134.0, 4174958.6,     117.6,     117.6,       0.0);         ( 548134.0,
4174968.6,     117.1,     117.1,       0.0);
     ( 548134.0, 4174978.6,     116.7,     116.7,       0.0);         ( 548134.0,
4174988.6,     116.4,     116.4,       0.0);
     ( 548134.0, 4174998.6,     116.2,     116.2,       0.0);         ( 548134.0,
4175008.6,     115.9,     115.9,       0.0);
     ( 548134.0, 4175018.6,     115.6,     115.6,       0.0);         ( 548134.0,
4175028.6,     115.4,     115.4,       0.0);
     ( 548134.0, 4175038.6,     115.1,     115.1,       0.0);         ( 548134.0,
4175048.6,     114.8,     114.8,       0.0);
     ( 548092.7, 4175060.2,     115.8,     115.8,       0.0);         ( 548090.5,
4175051.4,     116.1,     116.1,       0.0);
     ( 548089.4, 4175039.9,     116.4,     116.4,       0.0);         ( 548089.9,
4175027.9,     116.6,     116.6,       0.0);
     ( 548091.0, 4175021.8,     116.6,     116.6,       0.0);         ( 548089.9,
4175014.7,     116.8,     116.8,       0.0);
     ( 548091.0, 4175008.1,     116.9,     116.9,       0.0);         ( 548088.3,
4174999.9,     117.1,     117.1,       0.0);
     ( 548090.5, 4174992.2,     117.2,     117.2,       0.0);         ( 548088.8,
4174984.6,     117.4,     117.4,       0.0);
     ( 548146.9, 4175286.7,     112.7,     260.0,       0.0);         ( 548092.3,
4175299.6,     115.9,     260.0,       0.0);
     ( 548476.8, 4175131.2,      96.9,      96.9,       0.0);         ( 548484.4,
4175142.6,      96.1,      96.1,       0.0);
     ( 548495.8, 4175163.9,      95.0,     260.0,       0.0);         ( 548491.1,
4175153.2,      95.5,     260.0,       0.0);
     ( 548486.9, 4175145.8,      95.9,      95.9,       0.0);         ( 548401.5,
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4175129.1,   101.2,   101.2,   0.0);
     (548410.2, 4175126.7,   100.7,   100.7,   0.0);   (548420.9,
4175123.9,   100.2,   100.2,   0.0);
     (548430.8, 4175120.8,   99.7,   99.7,   0.0);   (548439.9,
4175116.4,   99.2,   99.2,   0.0);
     (548430.8, 4175103.3,   99.9,   99.9,   0.0);   (548427.6,
4175096.6,   100.1,   100.1,   0.0);
     (548424.5, 4175090.3,   100.4,   100.4,   0.0);   (548419.3,
4175082.0,   100.7,   100.7,   0.0);
     (548417.3, 4175076.4,   100.9,   100.9,   0.0);   (548414.2,
4175070.1,   101.2,   101.2,   0.0);
     (548409.4, 4175063.0,   101.6,   101.6,   0.0);   (548409.4,
4175055.4,   101.8,   101.8,   0.0);
     (548404.3, 4175050.7,   102.2,   102.2,   0.0);   (548403.5,
4175043.2,   102.4,   102.4,   0.0);
     (548400.3, 4175036.8,   102.7,   102.7,   0.0);   (548394.8,
4175030.1,   103.1,   103.1,   0.0);
     (548392.4, 4175023.4,   103.4,   103.4,   0.0);   (548388.0,
4175017.4,   103.8,   103.8,   0.0);
     (548386.1, 4175009.9,   104.1,   104.1,   0.0);   (548377.7,
4175003.2,   104.7,   104.7,   0.0);
     (548298.2, 4175011.5,   108.7,   108.7,   0.0);   (548304.1,
4175005.2,   108.5,   108.5,   0.0);
     (548312.8, 4175003.2,   108.1,   108.1,   0.0);   (548297.4,
4174988.5,   109.3,   109.3,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                    *** DISCRETE CARTESIAN RECEPTORS ***
                                  (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                               (METERS)

     (548295.0, 4174979.4,   109.8,   109.8,   0.0);   (548291.0,
4174972.7,   110.3,   110.3,   0.0);
     (548285.9, 4174967.9,   110.8,   110.8,   0.0);   (548283.5,
4174960.0,   111.4,   111.4,   0.0);
     (548335.0, 4174994.5,   107.2,   107.2,   0.0);   (548331.0,
4174988.9,   107.5,   107.5,   0.0);
     (548327.5, 4174980.2,   108.0,   108.0,   0.0);   (548325.5,
4174973.5,   108.3,   108.3,   0.0);
     (548321.1, 4174968.3,   108.8,   108.8,   0.0);   (548316.4,
4174961.6,   109.4,   109.4,   0.0);
     (548313.2, 4174953.7,   109.9,   109.9,   0.0);   (548309.2,
4174947.4,   110.5,   110.5,   0.0);
     (548344.5, 4174984.6,   106.9,   106.9,   0.0);   (548366.7,

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4174978.6,     105.9,     105.9,       0.0);
     ( 548363.9, 4174970.7,     106.3,     106.3,       0.0);         ( 548359.5,
4174964.8,     106.8,     106.8,       0.0);
     ( 548358.4, 4174958.4,     107.1,     107.1,       0.0);         ( 548392.0,
4174960.4,     105.1,     105.1,       0.0);
     ( 548399.1, 4174956.1,     104.8,     104.8,       0.0);         ( 548409.8,
4174951.7,     104.3,     104.3,       0.0);
     ( 548418.5, 4174947.8,     103.9,     103.9,       0.0);         ( 548417.7,
4175002.8,     102.5,     102.5,       0.0);
     ( 548419.7, 4175009.5,     102.2,     102.2,       0.0);         ( 548425.2,
4175021.0,     101.7,     101.7,       0.0);
     ( 548429.2, 4175030.5,     101.3,     101.3,       0.0);         ( 548434.0,
4175038.8,     100.8,     100.8,       0.0);
     ( 548437.1, 4175046.3,     100.5,     100.5,       0.0);         ( 548440.7,
4175055.0,     100.1,     100.1,       0.0);
     ( 548448.6, 4175066.1,      99.4,      99.4,       0.0);         ( 548453.4,
4175078.0,      98.9,      98.9,       0.0);
     ( 548460.9, 4175099.0,      98.3,      98.3,       0.0);         ( 548467.2,
4175096.6,      98.0,      98.0,       0.0);
     ( 548474.4, 4175094.2,      97.5,      97.5,       0.0);         ( 548482.3,
4175091.1,      96.9,      96.9,       0.0);
     ( 548489.8, 4175087.5,      96.3,      96.3,       0.0);         ( 548495.3,
4175084.3,      95.9,      95.9,       0.0);
     ( 548504.4, 4175079.2,      95.2,      95.2,       0.0);         ( 548513.5,
4175076.0,      94.5,      94.5,       0.0);
     ( 548499.7, 4175055.8,      96.1,      96.1,       0.0);         ( 548495.3,
4175045.5,      96.7,      96.7,       0.0);
     ( 548486.2, 4175031.7,      97.7,      97.7,       0.0);         ( 548481.1,
4175023.0,      98.3,      98.3,       0.0);
     ( 548477.9, 4175015.5,      98.8,      98.8,       0.0);         ( 548473.6,
4175008.5,      99.3,      99.3,       0.0);
     ( 548469.2, 4175001.8,      99.7,      99.7,       0.0);         ( 548465.2,
4174994.2,     100.1,     100.1,       0.0);
     ( 548462.9, 4174989.0,     100.3,     100.3,       0.0);         ( 548460.1,
4174982.2,     100.6,     100.6,       0.0);
     ( 548456.9, 4174967.9,     101.2,     101.2,       0.0);         ( 548449.7,
4174970.7,     101.5,     101.5,       0.0);
     ( 548441.7, 4174974.7,     101.8,     101.8,       0.0);         ( 548435.0,
4174977.9,     102.1,     102.1,       0.0);
     ( 548429.4, 4174983.0,     102.3,     102.3,       0.0);         ( 548423.0,
4174986.2,     102.6,     102.6,       0.0);
     ( 548415.5, 4174988.6,     102.9,     102.9,       0.0);         ( 548407.9,
4174988.6,     103.3,     103.3,       0.0);
     ( 548541.0, 4175067.1,      92.5,      92.5,       0.0);         ( 548536.1,
4175056.6,      93.1,      93.1,       0.0);
     ( 548532.5, 4175051.5,      93.5,      93.5,       0.0);         ( 548528.1,
4175043.4,      94.0,      94.0,       0.0);
     ( 548524.6, 4175035.3,      94.5,      94.5,       0.0);         ( 548521.2,
4175030.4,      94.9,      94.9,       0.0);
     ( 548517.8, 4175023.1,      95.3,      95.3,       0.0);         ( 548510.7,
```

4175017.2,   96.0,   96.0,   0.0);
     (548203.0, 4175764.2,   116.8,   260.0,   0.0);   (547922.6,
4175370.6,   120.0,   260.0,   0.0);
     (547927.0, 4175381.6,   120.0,   260.0,   0.0);   (547914.9,
4175394.8,   120.0,   260.0,   0.0);
     (547919.5, 4175407.8,   120.0,   260.0,   0.0);   (547923.6,
4175419.1,   120.0,   260.0,   0.0);
     (547923.6, 4175432.5,   120.0,   260.0,   0.0);   (547919.5,
4175445.9,   120.0,   260.0,   0.0);
     (547918.4, 4175460.4,   120.0,   260.0,   0.0);   (547918.4,
4175476.9,   120.0,   260.0,   0.0);
     (547910.2, 4175495.4,   120.0,   260.0,   0.0);   (547910.2,
4175504.7,   120.0,   260.0,   0.0);
     (547908.1, 4175519.2,   120.0,   260.0,   0.0);   (547910.2,
4175544.9,   120.1,   260.0,   0.0);
     (547917.4, 4175553.2,   120.2,   260.0,   0.0);   (547917.4,
4175566.6,   120.3,   260.0,   0.0);
     (547917.4, 4175582.1,   120.5,   260.0,   0.0);   (547918.4,
4175597.5,   120.7,   260.0,   0.0);
     (547921.5, 4175606.8,   120.8,   260.0,   0.0);   (547924.6,
4175621.2,   120.9,   260.0,   0.0);
     (547920.5, 4175630.5,   121.0,   260.0,   0.0);   (547920.5,
4175640.8,   121.0,   260.0,   0.0);
     (547915.4, 4175653.2,   121.0,   260.0,   0.0);   (547914.3,
4175664.6,   121.0,   260.0,   0.0);
     (547912.3, 4175678.0,   121.0,   260.0,   0.0);   (547913.3,
4175690.3,   121.0,   260.0,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                          (METERS)

     (547913.3, 4175703.8,   121.0,   260.0,   0.0);   (547913.3,
4175720.2,   121.0,   260.0,   0.0);
     (548267.0, 4175832.6,   116.8,   260.0,   0.0);   (548267.0,
4175845.0,   117.1,   260.0,   0.0);
     (548291.7, 4175837.8,   116.2,   260.0,   0.0);   (548301.0,
4175839.9,   116.0,   260.0,   0.0);
     (548310.3, 4175840.9,   115.8,   260.0,   0.0);   (548317.5,
4175837.8,   115.5,   260.0,   0.0);
     (548324.7, 4175838.8,   115.3,   260.0,   0.0);   (548623.8,
4176021.4,   107.3,   260.0,   0.0);
     (547608.1, 4175979.1,   127.2,   260.0,   0.0);   (547591.6,

```
4174866.4,     118.0,     118.0,       0.0);
     ( 548961.5, 4176028.4,     104.5,     260.0,       0.0);         ( 548975.2,
4174863.6,      63.9,      63.9,       0.0);
     ( 548349.3, 4175832.3,     114.2,     260.0,       0.0);         ( 548347.4,
4175846.2,     114.6,     260.0,       0.0);
     ( 548351.9, 4175851.9,     114.6,     260.0,       0.0);         ( 548385.4,
4175836.7,     113.0,     260.0,       0.0);
     ( 548386.1, 4175845.0,     113.2,     260.0,       0.0);         ( 548383.5,
4175853.2,     113.5,     260.0,       0.0);
     ( 548401.3, 4175837.4,     112.3,     260.0,       0.0);         ( 548409.5,
4175836.1,     111.8,     260.0,       0.0);
     ( 548416.5, 4175838.6,     111.5,     260.0,       0.0);         ( 548426.0,
4175844.3,     111.2,     260.0,       0.0);
     ( 548432.3, 4175840.5,     110.8,     260.0,       0.0);         ( 548441.8,
4175839.3,     110.2,     260.0,       0.0);
     ( 548446.2, 4175839.9,     110.0,     260.0,       0.0);         ( 548454.5,
4175838.0,     109.5,     260.0,       0.0);
     ( 548464.0, 4175840.5,     109.2,     260.0,       0.0);         ( 548472.2,
4175838.0,     108.4,     260.0,       0.0);
     ( 548479.2, 4175837.4,     107.7,     260.0,       0.0);         ( 548484.9,
4175838.6,     107.2,     260.0,       0.0);
     ( 548494.4, 4175839.9,     106.3,     260.0,       0.0);         ( 548501.3,
4175838.6,     105.6,     260.0,       0.0);
     ( 548510.8, 4175840.5,     104.8,     260.0,       0.0);         ( 548516.5,
4175839.9,     104.2,     260.0,       0.0);
     ( 548522.2, 4175839.9,     103.7,     260.0,       0.0);         ( 548533.0,
4175840.5,     102.7,     260.0,       0.0);
     ( 548540.6, 4175842.4,     102.0,     260.0,       0.0);         ( 548550.1,
4175841.2,     101.3,     260.0,       0.0);
     ( 548543.8, 4175853.8,     102.3,     260.0,       0.0);         ( 548545.0,
4175862.7,     102.6,     260.0,       0.0);
     ( 548588.1, 4175838.6,      98.3,     260.0,       0.0);         ( 548586.2,
4175847.5,      98.9,     260.0,       0.0);
     ( 548585.6, 4175853.2,      99.3,     260.0,       0.0);         ( 548611.5,
4175839.3,      96.6,     260.0,       0.0);
     ( 548621.0, 4175841.2,      96.2,     260.0,       0.0);         ( 548625.5,
4175840.5,      95.9,     260.0,       0.0);
     ( 548633.7, 4175840.5,      95.5,     260.0,       0.0);         ( 548640.0,
4175839.3,      95.1,     260.0,       0.0);
     ( 548648.3, 4175836.7,      94.5,     260.0,       0.0);         ( 548655.9,
4175792.4,      91.6,     260.0,       0.0);
     ( 548654.0, 4175703.7,      88.2,     260.0,       0.0);         ( 548665.4,
4175703.7,      87.6,     260.0,       0.0);
     ( 548653.9, 4175738.5,      89.4,     260.0,       0.0);         ( 548665.2,
4175740.9,      88.9,     260.0,       0.0);
     ( 548663.7, 4175790.8,      91.1,     260.0,       0.0);         ( 548670.9,
4175790.4,      90.7,     260.0,       0.0);
     ( 548672.1, 4175738.5,      88.4,     260.0,       0.0);         ( 548682.4,
4175738.5,      87.8,     260.0,       0.0);
     ( 548685.9, 4175738.5,      87.6,     260.0,       0.0);         ( 548680.0,
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                                (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

               NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON

WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.SFC
Met Version: 14134
Profile file: C:\Users\kheck\Desktop\MET DATA\SF AIRPORT\724940.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 23234 Upper air station no.: 23230
Name: SAN_FRANCISCO/INT'L_ARPT Name: OAKLAND/WSO_AP
Year: 2009 Year: 2009

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
09	01	01	1	01	-28.0	0.491	-9.000	-9.000	-999.	826.	386.1	0.49	0.45	1.00	3.86	71.	10.0	282.5	2.0
09	01	01	1	02	-15.7	0.275	-9.000	-9.000	-999.	390.	121.4	0.49	0.45	1.00	2.36	78.	10.0	282.5	2.0
09	01	01	1	03	-24.0	0.421	-9.000	-9.000	-999.	656.	284.0	0.49	0.45	1.00	3.36	94.	10.0	282.5	2.0
09	01	01	1	04	-20.7	0.364	-9.000	-9.000	-999.	529.	211.5	0.32	0.45	1.00	3.36	43.	10.0	282.0	2.0
09	01	01	1	05	-17.2	0.301	-9.000	-9.000	-999.	398.	144.1	0.32	0.45	1.00	2.86	13.	10.0	281.4	2.0
09	01	01	1	06	-27.0	0.472	-9.000	-9.000	-999.	779.	355.0	0.44	0.45						

```
1.00    3.86  352.   10.0  280.9    2.0
 09 01 01   1 07  -27.9  0.486 -9.000 -9.000 -999.  812.    374.7  0.32   0.45
1.00    4.36   15.   10.0  280.4    2.0
 09 01 01   1 08  -20.9  0.364 -9.000 -9.000 -999.  538.    209.6  0.32   0.45
1.00    3.36   13.   10.0  279.9    2.0
 09 01 01   1 09   -8.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
0.38    0.00    0.   10.0  280.4    2.0
 09 01 01   1 10    4.9  0.280  0.224  0.016   83.  355.   -405.2  0.32   0.45
0.25    2.36   21.   10.0  280.9    2.0
 09 01 01   1 11   10.7 -9.000 -9.000 -9.000  147. -999. -99999.0  0.51   0.45
0.20    0.00    0.   10.0  280.4    2.0
 09 01 01   1 12   14.1  0.289  0.429  0.016  203.  373.   -156.0  0.32   0.45
0.19    2.36   26.   10.0  280.9    2.0
 09 01 01   1 13   14.7 -9.000 -9.000 -9.000  247. -999. -99999.0  0.51   0.45
0.18    0.00    0.   10.0  280.9    2.0
 09 01 01   1 14   61.1 -9.000 -9.000 -9.000  379. -999. -99999.0  0.51   0.45
0.19    0.00    0.   10.0  282.0    2.0
 09 01 01   1 15   43.2  0.307  0.805  0.017  439.  408.    -60.8  0.32   0.45
0.22    2.36   22.   10.0  282.5    2.0
 09 01 01   1 16   17.1  0.345  0.594  0.015  445.  487.   -219.0  0.32   0.45
0.30    2.86   14.   10.0  282.5    2.0
 09 01 01   1 17   -7.0  0.102 -9.000 -9.000 -999.  169.     13.7  0.32   0.45
0.54    1.76   31.   10.0  282.5    2.0
 09 01 01   1 18   -9.9  0.112 -9.000 -9.000 -999.   91.     13.0  0.44   0.45
1.00    1.76  357.   10.0  282.0    2.0
 09 01 01   1 19  -18.1  0.159 -9.000 -9.000 -999.  152.     20.2  0.32   0.45
1.00    2.36    4.   10.0  282.0    2.0
 09 01 01   1 20 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  281.4    2.0
 09 01 01   1 21 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  282.0    2.0
 09 01 01   1 22 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  282.0    2.0
 09 01 01   1 23 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.51   0.45
1.00    0.00    0.   10.0  281.4    2.0
 09 01 01   1 24   -9.9  0.173 -9.000 -9.000 -999.  173.     47.9  0.49   0.45
1.00    1.76  100.   10.0  281.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 09 01 01 01   10.0 1   71.    3.86   282.6   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        13:22:57
```

Y-COORD (METERS)	X-COORD (METERS) 547911.59
4175520.10	0.00329
4175502.98	0.00322
4175485.86	0.00313
4175468.74	0.00304
4175451.62	0.00294
4175434.50	0.00285
4175417.38	0.00275
4175400.26	0.00265

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
548247.13	4175147.89	0.00487	548253.86	4175147.89	0.00501
548260.59	4175147.89	0.00515	548267.32		

4175147.89 0.00529
548274.05 4175147.89 0.00544 548280.78
4175147.89 0.00557
548287.51 4175147.89 0.00570 548294.24
4175147.89 0.00583
548300.97 4175147.89 0.00596 548307.70
4175147.89 0.00609
548314.43 4175147.89 0.00622 548321.16
4175147.89 0.00634
548327.89 4175147.89 0.00647 548334.62
4175147.89 0.00659
548341.35 4175147.89 0.00672 548348.08
4175147.89 0.00683
548354.81 4175147.89 0.00695 548238.42
4175148.87 0.00474
548363.49 4175147.29 0.00706 548212.73
4175137.85 0.00400
548212.73 4175147.85 0.00427 548212.73
4175157.85 0.00458
548212.73 4175167.85 0.00493 548212.73
4175177.85 0.00533
548212.73 4175187.85 0.00580 548212.73
4175197.85 0.00636
548212.73 4175207.85 0.00704 548239.21
4175192.01 0.00696
548247.13 4175192.80 0.00733 548254.25
4175193.20 0.00766
548261.38 4175194.39 0.00809 548270.48
4175193.59 0.00841
548277.21 4175194.78 0.00881 548298.19
4175187.26 0.00878
548372.46 4175128.44 0.00612 548534.18
4175153.41 0.00870
548407.20 4175198.17 0.01293 548415.20
4175198.17 0.01302
548423.20 4175198.17 0.01310 548431.20
4175198.17 0.01317
548439.20 4175198.17 0.01323 548447.20
4175198.17 0.01329
548455.20 4175198.17 0.01333 548385.47
4175199.28 0.01278
548392.59 4175199.28 0.01291 548391.49
4175176.82 0.00995
548403.00 4175172.99 0.00973 548410.67
4175168.61 0.00940
548419.43 4175165.87 0.00926 548427.10
4175161.48 0.00896
548434.77 4175159.29 0.00885 548453.40
4175146.69 0.00807
548455.04 4175153.81 0.00859 548458.33

4175161.48   0.00922
         548461.61   4175169.15   0.00992   548462.71
4175176.82   0.01068
         548467.64   4175183.40   0.01143   548470.93
4175188.88   0.01211
         548476.41   4175196.00   0.01307   548480.24
4175203.12   0.01418
         548175.94   4175143.29   0.00340   548175.94
4175151.29   0.00381
         548175.94   4175159.29   0.00400   548175.94
4175167.29   0.00422
         548175.94   4175175.29   0.00445   548175.94
4175183.29   0.00470
         548175.94   4175191.29   0.00498   548175.94
4175199.29   0.00530
         548175.94   4175207.29   0.00565   548217.50
4175110.67   0.00344
         548225.50   4175110.67   0.00353   548233.50
4175110.67   0.00361
         548241.50   4175110.67   0.00370   548249.50
4175110.67   0.00380
         548257.50   4175110.67   0.00389   548265.50
4175110.67   0.00399
         548273.50   4175110.67   0.00410   548215.07
4174930.73   0.00146
         548215.07   4174940.75   0.00151   548215.07
4174950.77   0.00157

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   PAREA3   ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         548215.07   4174960.79   0.00163   548215.07

4174970.81 0.00170
548215.07 4174980.83 0.00176 548215.07
4174990.85 0.00183
548215.07 4175000.87 0.00191 548215.07
4175010.89 0.00198
548215.07 4175020.91 0.00207 548215.07
4175030.93 0.00216
548215.07 4175040.95 0.00226 548215.07
4175050.97 0.00237
548215.07 4175060.99 0.00264 548215.07
4175071.01 0.00277
548215.07 4175081.03 0.00292 548210.90
4175099.67 0.00318
548180.01 4174906.49 0.00128 548180.01
4174914.49 0.00132
548180.01 4174922.49 0.00135 548180.01
4174930.49 0.00139
548180.01 4174938.49 0.00143 548180.01
4174946.49 0.00147
548180.01 4174954.49 0.00151 548180.01
4174962.49 0.00156
548180.01 4174970.49 0.00160 548180.01
4174978.49 0.00165
548180.01 4174986.49 0.00170 548180.01
4174994.49 0.00175
548180.01 4175002.49 0.00180 548180.01
4175010.49 0.00186
548180.01 4175018.49 0.00192 548180.01
4175026.49 0.00198
548180.01 4175034.49 0.00204 548180.01
4175042.49 0.00211
548180.01 4175050.49 0.00218 548291.59
4175108.78 0.00428
548299.59 4175108.78 0.00438 548307.59
4175108.78 0.00448
548315.59 4175108.78 0.00457 548323.59
4175108.78 0.00467
548331.59 4175108.78 0.00477 548339.59
4175108.78 0.00486
548347.59 4175108.78 0.00496 548297.71
4175101.03 0.00413
548317.98 4175029.81 0.00284 548328.94
4175032.55 0.00294
548334.97 4175030.36 0.00294 548339.90
4175026.52 0.00291
548345.38 4175024.33 0.00290 548354.69
4175020.50 0.00289
548361.81 4175016.66 0.00287 548300.18
4175042.53 0.00292
548300.18 4175050.53 0.00305 548300.18

4175058.53   0.00319
         548300.18   4175066.53   0.00335   548300.18
4175074.53   0.00351
         548300.18   4175082.53   0.00369   548300.18
4175090.53   0.00388
         548261.27   4174979.26   0.00188   548261.27
4174987.26   0.00208
         548261.27   4174995.26   0.00215   548261.27
4175003.26   0.00223
         548261.27   4175011.26   0.00231   548261.27
4175019.26   0.00240
         548261.27   4175027.26   0.00249   548261.27
4175035.26   0.00258
         548261.27   4175043.26   0.00269   548261.27
4175051.26   0.00280
         548261.27   4175059.26   0.00292   548261.27
4175067.26   0.00305
         548261.27   4175075.26   0.00319   548261.27
4175083.26   0.00333
         548251.90   4174967.92   0.00177   548216.40
4174923.76   0.00143
         548217.05   4174914.09   0.00138   548123.21
4175141.42   0.00280
         548123.21   4175149.42   0.00290   548123.21
4175157.42   0.00302
         548123.21   4175165.42   0.00313   548123.21
4175173.42   0.00326
         548123.21   4175181.42   0.00339   548123.21
4175189.42   0.00353

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   PAREA3   ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -

- -
548123.21 4175197.42 0.00369 548123.21
4175205.42 0.00385
548123.21 4175213.42 0.00403 548123.46
4175113.02 0.00248
548131.46 4175113.02 0.00254 548139.46
4175113.02 0.00259
548147.46 4175113.02 0.00265 548155.46
4175113.02 0.00271
548163.46 4175113.02 0.00278 548171.46
4175113.02 0.00284
548179.46 4175113.02 0.00291 548085.41
4175141.04 0.00246
548085.41 4175149.04 0.00254 548085.41
4175157.04 0.00262
548085.41 4175165.04 0.00271 548085.41
4175173.04 0.00280
548085.41 4175181.04 0.00289 548085.41
4175189.04 0.00299
548085.41 4175197.04 0.00310 548085.41
4175205.04 0.00321
548085.41 4175213.04 0.00333 548085.41
4175221.04 0.00346
548085.41 4175229.04 0.00361 548035.55
4175114.41 0.00191
548043.55 4175114.41 0.00196 548051.55
4175114.41 0.00201
548059.55 4175114.41 0.00206 548067.55
4175114.41 0.00211
548075.55 4175114.41 0.00216 548083.55
4175114.41 0.00222
548091.55 4175114.41 0.00227 548037.24
4175151.70 0.00216
548037.24 4175161.70 0.00224 548037.24
4175171.70 0.00232
548037.24 4175181.70 0.00240 548037.24
4175191.70 0.00249
548037.24 4175201.70 0.00258 548037.24
4175211.70 0.00269
548037.24 4175221.70 0.00280 548036.40
4175144.81 0.00211
548036.95 4175136.59 0.00206 548036.86
4175077.00 0.00172
548046.86 4175077.00 0.00176 548056.86
4175077.00 0.00181
548066.86 4175077.00 0.00187 548076.86
4175077.00 0.00192
548086.86 4175077.00 0.00197 548096.86
4175077.00 0.00202
548118.80 4175076.97 0.00213 548128.80

4175076.97   0.00218
         548138.80   4175076.97   0.00223   548148.80
4175076.97   0.00228
         548158.80   4175076.97   0.00233   548168.80
4175076.97   0.00239
         548178.80   4175076.97   0.00244   548188.80
4175076.97   0.00251
         548133.99   4174938.58   0.00137   548133.99
4174948.58   0.00141
         548133.99   4174958.58   0.00146   548133.99
4174968.58   0.00151
         548133.99   4174978.58   0.00156   548133.99
4174988.58   0.00161
         548133.99   4174998.58   0.00166   548133.99
4175008.58   0.00172
         548133.99   4175018.58   0.00178   548133.99
4175028.58   0.00184
         548133.99   4175038.58   0.00191   548133.99
4175048.58   0.00198
         548092.65   4175060.20   0.00189   548090.45
4175051.43   0.00182
         548089.36   4175039.92   0.00175   548089.91
4175027.87   0.00169
         548091.00   4175021.84   0.00166   548089.91
4175014.72   0.00162
         548091.00   4175008.14   0.00159   548088.26
4174999.92   0.00155
         548090.45   4174992.25   0.00152   548088.81
4174984.58   0.00148
         548146.86   4175286.67   0.00856   548092.26
4175299.56   0.00601

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   PAREA3   ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                     ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)

Y-COORD (M)   CONC
 -
- -
548476.78   4175131.19   0.00723   548484.36
4175142.57   0.00795
548495.78   4175163.91   0.00954   548491.13
4175153.20   0.00870
548486.93   4175145.75   0.00817   548401.50
4175129.08   0.00651
548410.21   4175126.71   0.00648   548420.90
4175123.94   0.00644
548430.80   4175120.77   0.00636   548439.90
4175116.42   0.00623
548430.80   4175103.35   0.00557   548427.63
4175096.62   0.00528
548424.46   4175090.29   0.00503   548419.32
4175081.97   0.00471
548417.34   4175076.43   0.00452   548414.17
4175070.09   0.00431
548409.42   4175062.97   0.00408   548409.42
4175055.45   0.00389
548404.27   4175050.70   0.00375   548403.48
4175043.17   0.00357
548400.31   4175036.84   0.00342   548394.77
4175030.11   0.00326
548392.39   4175023.38   0.00313   548388.04
4175017.44   0.00301
548386.06   4175009.92   0.00288   548377.74
4175003.19   0.00274
548298.17   4175011.50   0.00248   548304.11
4175005.17   0.00243
548312.82   4175003.19   0.00245   548297.38
4174988.54   0.00222
548295.00   4174979.43   0.00213   548291.04
4174972.70   0.00205
548285.89   4174967.95   0.00200   548283.52
4174960.03   0.00192
548334.99   4174994.48   0.00245   548331.03
4174988.93   0.00236
548327.46   4174980.22   0.00225   548325.49
4174973.49   0.00218
548321.13   4174968.35   0.00211   548316.38
4174961.62   0.00204
548313.21   4174953.70   0.00196   548309.25
4174947.36   0.00190
548344.49   4174984.58   0.00237   548366.66
4174978.64   0.00238
548363.89   4174970.72   0.00229   548359.53
4174964.78   0.00221
548358.35   4174958.45   0.00214   548392.00

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4174960.43        0.00226
         548399.12    4174956.07        0.00224                       548409.81
4174951.72        0.00222
         548418.52    4174947.76        0.00220                       548417.73
4175002.79        0.00290
         548419.71    4175009.52        0.00302                       548425.25
4175021.00        0.00324
         548429.21    4175030.50        0.00345                       548433.96
4175038.82        0.00364
         548437.13    4175046.34        0.00383                       548440.69
4175055.05        0.00407
         548448.61    4175066.14        0.00441                       548453.36
4175078.01        0.00480
         548460.89    4175099.00        0.00560                       548467.22
4175096.62        0.00554
         548474.35    4175094.25        0.00549                       548482.26
4175091.08        0.00540
         548489.79    4175087.51        0.00529                       548495.33
4175084.35        0.00520
         548504.43    4175079.20        0.00505                       548513.54
4175076.03        0.00497
         548499.68    4175055.84        0.00434                       548495.33
4175045.55        0.00406
         548486.22    4175031.69        0.00371                       548481.08
4175022.98        0.00351
         548477.91    4175015.46        0.00335                       548473.61
4175008.53        0.00321
         548469.23    4175001.76        0.00308                       548465.25
4174994.19        0.00294
         548462.86    4174989.01        0.00285                       548460.07
4174982.24        0.00274
         548456.88    4174967.90        0.00254                       548449.71
4174970.69        0.00256
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        13:22:57

                                  PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                   **
```

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
548441.74	4174974.67	0.00258	548434.97	4174977.86	0.00260
548429.39	4174983.04	0.00265	548423.02	4174986.22	0.00268
548415.45	4174988.61	0.00268	548407.88	4174988.61	0.00266
548541.03	4175067.11	0.00476	548536.12	4175056.63	0.00446
548532.45	4175051.49	0.00431	548528.05	4175043.42	0.00410
548524.62	4175035.35	0.00390	548521.20	4175030.45	0.00378
548517.77	4175023.11	0.00362	548510.68	4175017.24	0.00348
548202.96	4175764.20	0.01166	547922.58	4175370.57	0.00269
547926.98	4175381.57	0.00285	547914.89	4175394.76	0.00268
547919.47	4175407.79	0.00286	547923.60	4175419.14	0.00303
547923.60	4175432.54	0.00312	547919.47	4175445.95	0.00310
547918.44	4175460.38	0.00317	547918.44	4175476.88	0.00326
547910.19	4175495.44	0.00314	547910.19	4175504.73	0.00319
547908.13	4175519.16	0.00320	547910.19	4175544.94	0.00334
547917.41	4175553.19	0.00356	547917.41	4175566.60	0.00358
547917.41	4175582.07	0.00360	547918.44	4175597.53	0.00364
547921.54	4175606.81	0.00373	547924.63	4175621.25	0.00381
547920.51	4175630.53	0.00369	547920.51	4175640.84	0.00369
547915.35	4175653.22	0.00355	547914.32	4175664.56	0.00352
547912.26	4175677.97	0.00346	547913.29	4175690.34	0.00347
547913.29	4175703.75	0.00346	547913.29	4175720.25	0.00343
548266.99	4175832.65	0.01109	548266.99	4175845.02	0.01026
548291.74	4175837.80	0.01208	548301.02		

4175839.87   0.01236
         548310.30   4175840.90   0.01271   548317.52
4175837.80   0.01344
         548324.74   4175838.84   0.01369   548623.79
4176021.36   0.00572
         547608.05   4175979.08   0.00101   547591.62
4174866.36   0.00048
         548961.49   4176028.43   0.00355   548975.16
4174863.63   0.00227
         548349.34   4175832.29   0.01621   548347.44
4175846.22   0.01383
         548351.88   4175851.92   0.01330   548385.44
4175836.72   0.01720
         548386.08   4175844.96   0.01563   548383.54
4175853.19   0.01428
         548401.28   4175837.36   0.01782   548409.51
4175836.09   0.01854
         548416.48   4175838.62   0.01825   548425.98
4175844.32   0.01849
         548432.31   4175840.52   0.01951   548441.81
4175839.26   0.02003
         548446.24   4175839.89   0.01994   548454.48
4175837.99   0.02058
         548463.98   4175840.52   0.02002   548472.21
4175837.99   0.02081
         548479.18   4175837.36   0.02110   548484.88
4175838.62   0.02079
         548494.38   4175839.89   0.02045   548501.34
4175838.62   0.02067
         548510.84   4175840.52   0.01998   548516.54
4175839.89   0.01997
         548522.24   4175839.89   0.01979   548533.01
4175840.52   0.01930
         548540.61   4175842.42   0.01868   548550.11
4175841.16   0.01865

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   PAREA3   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
548543.78	4175853.82	0.01663	548545.04	4175862.69	0.01534
548588.11	4175838.62	0.01786	548586.21	4175847.49	0.01638
548585.58	4175853.19	0.01555	548611.54	4175839.26	0.01674
548621.04	4175841.16	0.01596	548625.48	4175840.52	0.01585
548633.71	4175840.52	0.01541	548640.04	4175839.26	0.01525
548648.28	4175836.72	0.01515	548655.88	4175792.39	0.02528
548653.98	4175703.73	0.03371	548665.38	4175703.73	0.02905
548653.93	4175738.53	0.03188	548665.15	4175740.92	0.02694
548663.72	4175790.84	0.02246	548670.89	4175790.36	0.02050
548672.08	4175738.53	0.02500	548682.35	4175738.53	0.02262
548685.93	4175738.53	0.02193	548679.96	4175789.17	0.01878
548686.89	4175793.23	0.01726	548694.77	4175794.18	0.01618
548695.25	4175740.92	0.02021	548673.51	4175702.46	0.02681
548690.23	4175702.94	0.02339	548697.40	4175701.98	0.02234
548703.85	4175701.98	0.02144	548708.87	4175701.50	0.02084
548719.61	4175701.98	0.01960	548726.30	4175702.70	0.01887
548750.67	4175707.71	0.01643	548749.95	4175700.31	0.01697
548752.82	4175691.71	0.01736	548752.10	4175683.59	0.01808
548753.77	4175676.42	0.01862	548748.52	4175668.54	0.01993
548750.43	4175660.42	0.02092	548753.77	4175653.01	0.02201
548753.29	4175645.13	0.02411	548787.21	4175648.00	0.02005

*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA3 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 547911.59
4175520.1	0.16477 (13021523)
4175503.0	0.16455 (13121702)
4175485.9	0.16497 (13121702)
4175468.7	0.16520 (09011919)
4175451.6	0.16617 (09011919)
4175434.5	0.16687 (09011919)
4175417.4	0.16730 (09011919)
4175400.3	0.16734 (09011919)

*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)

- -
- -
548247.13 4175147.89 0.18595 (13121718) 548253.86
4175147.89 0.18654 (09011618)
548260.59 4175147.89 0.18703 (09011618) 548267.32
4175147.89 0.18747 (09012107)
548274.05 4175147.89 0.18785 (09012107) 548280.78
4175147.89 0.18807 (09012107)
548287.51 4175147.89 0.18810 (11012721) 548294.24
4175147.89 0.18805 (10121123)
548300.97 4175147.89 0.18790 (10121123) 548307.70
4175147.89 0.18758 (10121123)
548314.43 4175147.89 0.18712 (10121123) 548321.16
4175147.89 0.18654 (10121123)
548327.89 4175147.89 0.18603 (09121819) 548334.62
4175147.89 0.18571 (09121819)
548341.35 4175147.89 0.18531 (09121819) 548348.08
4175147.89 0.18482 (09121819)
548354.81 4175147.89 0.18428 (09121819) 548238.42
4175148.87 0.18582 (13121718)
548363.49 4175147.29 0.18319 (09121819) 548212.73
4175137.85 0.17749 (13121718)
548212.73 4175147.85 0.18219 (13121718) 548212.73
4175157.85 0.18723 (13121718)
548212.73 4175167.85 0.19266 (13121718) 548212.73
4175177.85 0.19846 (13121718)
548212.73 4175187.85 0.20491 (13010321) 548212.73
4175197.85 0.21211 (13010321)
548212.73 4175207.85 0.22017 (13010321) 548239.21
4175192.01 0.21413 (13121718)
548247.13 4175192.80 0.21648 (13121718) 548254.25
4175193.20 0.21824 (13121718)
548261.38 4175194.39 0.22059 (13121718) 548270.48
4175193.59 0.22110 (09011618)
548277.21 4175194.78 0.22316 (09011618) 548298.19
4175187.26 0.21557 (11012721)
548372.46 4175128.44 0.17375 (09121819) 548534.18
4175153.41 0.16104 (12120624)
548407.20 4175198.17 0.20877 (11012623) 548415.20
4175198.17 0.20730 (11012623)
548423.20 4175198.17 0.20585 (11012623) 548431.20
4175198.17 0.20436 (11012623)
548439.20 4175198.17 0.20286 (11012623) 548447.20
4175198.17 0.20138 (11012623)
548455.20 4175198.17 0.19986 (11012623) 548385.47
4175199.28 0.21326 (09121819)
548392.59 4175199.28 0.21211 (11012623) 548391.49
4175176.82 0.19624 (11012623)
548403.00 4175172.99 0.19239 (11012623) 548410.67
4175168.61 0.18875 (11012623)

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       548419.43   4175165.87        0.18599  (11012623)               548427.10
 4175161.48        0.18263  (11012623)
       548434.77   4175159.29        0.18039  (11012623)               548453.40
 4175146.69        0.17185  (11012623)
       548455.04   4175153.81        0.17456  (11012623)               548458.33
 4175161.48        0.17739  (11012623)
       548461.61   4175169.15        0.18045  (11012623)               548462.71
 4175176.82        0.18441  (11012623)
       548467.64   4175183.40        0.18734  (11012623)               548470.93
 4175188.88        0.19013  (11012623)
       548476.41   4175196.00        0.19371  (11012623)               548480.24
 4175203.12        0.19838  (11012623)
       548175.94   4175143.29        0.17453  (13010321)               548175.94
 4175151.29        0.17717  (13010321)
       548175.94   4175159.29        0.18073  (13010321)               548175.94
 4175167.29        0.18478  (11122422)
       548175.94   4175175.29        0.18920  (11122422)               548175.94
 4175183.29        0.19384  (11122422)
       548175.94   4175191.29        0.19877  (11122422)               548175.94
 4175199.29        0.20403  (11122422)
       548175.94   4175207.29        0.20967  (11122422)               548217.50
 4175110.67        0.16646  (13121718)
       548225.50   4175110.67        0.16701  (13121718)               548233.50
 4175110.67        0.16749  (09011618)
       548241.50   4175110.67        0.16806  (09011618)               548249.50
 4175110.67        0.16855  (09012107)
       548257.50   4175110.67        0.16901  (09012107)               548265.50
 4175110.67        0.16931  (09012107)
       548273.50   4175110.67        0.16948  (11012721)               548215.07
 4174930.73        0.11839  (11012721)
       548215.07   4174940.75        0.12068  (11012721)               548215.07
 4174950.77        0.12300  (11012721)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***        13:22:57

                                   PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **
```

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548215.07	4174960.79	0.12533	(11012721)	548215.07	4174970.81	0.12769	(11012721)
548215.07	4174980.83	0.13006	(11012721)	548215.07	4174990.85	0.13230	(09012107)
548215.07	4175000.87	0.13469	(09011618)	548215.07	4175010.89	0.13715	(09011618)
548215.07	4175020.91	0.13967	(09011618)	548215.07	4175030.93	0.14228	(09011618)
548215.07	4175040.95	0.14496	(09011618)	548215.07	4175050.97	0.14773	(09011618)
548215.07	4175060.99	0.14903	(09011618)	548215.07	4175071.01	0.15211	(09011618)
548215.07	4175081.03	0.15544	(13121718)	548210.90	4175099.67	0.16176	(13121718)
548180.01	4174906.49	0.10912	(09011618)	548180.01	4174914.49	0.11098	(09011618)
548180.01	4174922.49	0.11289	(09011618)	548180.01	4174930.49	0.11478	(09011618)
548180.01	4174938.49	0.11671	(09011618)	548180.01	4174946.49	0.11863	(09011618)
548180.01	4174954.49	0.12058	(09011618)	548180.01	4174962.49	0.12253	(09011618)
548180.01	4174970.49	0.12451	(09011618)	548180.01	4174978.49	0.12649	(09011618)
548180.01	4174986.49	0.12837	(13121718)	548180.01	4174994.49	0.13026	(13121718)
548180.01	4175002.49	0.13219	(13121718)	548180.01	4175010.49	0.13418	(13121718)
548180.01	4175018.49	0.13618	(13121718)	548180.01	4175026.49	0.13823	(13121718)
548180.01	4175034.49	0.14032	(13121718)	548180.01	4175042.49	0.14245	(13121718)
548180.01	4175050.49	0.14464	(13121718)	548291.59	4175108.78	0.16929	(10121123)
548299.59	4175108.78	0.16929	(10121123)	548307.59	4175108.78	0.16904	(10121123)
548315.59	4175108.78	0.16867	(10121123)	548323.59	4175108.78	0.16851	(09121819)
548331.59	4175108.78	0.16836	(09121819)	548339.59	4175108.78	0.16809	(09121819)
548347.59	4175108.78	0.16770	(09121819)	548297.71	4175101.03	0.16615	(10121123)
548317.98	4175029.81	0.14310	(09121819)	548328.94	4175032.55	0.14396	(09121819)
548334.97	4175030.36	0.14335	(09121819)	548339.90	4175026.52	0.14227	(09121819)

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       548345.38   4175024.33        0.14156  (09121819)               548354.69
 4175020.50        0.14036  (09022721)
       548361.81   4175016.66        0.13935  (11012623)               548300.18
 4175042.53        0.14621  (10121123)
       548300.18   4175050.53        0.14859  (10121123)               548300.18
 4175058.53        0.15107  (10121123)
       548300.18   4175066.53        0.15365  (10121123)               548300.18
 4175074.53        0.15633  (10121123)
       548300.18   4175082.53        0.15914  (10121123)               548300.18
 4175090.53        0.16207  (10121123)
       548261.27   4174979.26        0.13181  (10121123)               548261.27
 4174987.26        0.13194  (10121123)
       548261.27   4174995.26        0.13376  (10121123)               548261.27
 4175003.26        0.13564  (10121123)
       548261.27   4175011.26        0.13758  (10121123)               548261.27
 4175019.26        0.13957  (10121123)
       548261.27   4175027.26        0.14164  (10121123)               548261.27
 4175035.26        0.14377  (10121123)
       548261.27   4175043.26        0.14598  (10121123)               548261.27
 4175051.26        0.14828  (10121123)
       548261.27   4175059.26        0.15066  (10121123)               548261.27
 4175067.26        0.15314  (10121123)
       548261.27   4175075.26        0.15578  (09012107)               548261.27
 4175083.26        0.15858  (09012107)
       548251.90   4174967.92        0.12901  (10121123)               548216.40
 4174923.76        0.11692  (11012721)
       548217.05   4174914.09        0.11479  (11012721)               548123.21
 4175141.42        0.16460  (11122422)
       548123.21   4175149.42        0.16718  (11122422)               548123.21
 4175157.42        0.16980  (13012103)
       548123.21   4175165.42        0.17288  (13012103)               548123.21
 4175173.42        0.17588  (09012106)
       548123.21   4175181.42        0.17894  (09012106)               548123.21
 4175189.42        0.18193  (09012106)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                        ***        13:22:57

                                   PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                         ** CONC OF PM_2.5   IN MICROGRAMS/M**3
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**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548123.21	4175197.42	0.18481	(09012106)	548123.21	4175205.42	0.18745	(09012106)
548123.21	4175213.42	0.18984	(09022107)	548123.46	4175113.02	0.15565	(11122422)
548131.46	4175113.02	0.15665	(11122422)	548139.46	4175113.02	0.15748	(11122422)
548147.46	4175113.02	0.15854	(10010521)	548155.46	4175113.02	0.15989	(13010321)
548163.46	4175113.02	0.16132	(13010321)	548171.46	4175113.02	0.16256	(13010321)
548179.46	4175113.02	0.16368	(13010321)	548085.41	4175141.04	0.15482	(09012106)
548085.41	4175149.04	0.15682	(09012106)	548085.41	4175157.04	0.15871	(09012106)
548085.41	4175165.04	0.16043	(09012106)	548085.41	4175173.04	0.16188	(13021107)
548085.41	4175181.04	0.16343	(09022107)	548085.41	4175189.04	0.16487	(09022107)
548085.41	4175197.04	0.16644	(09011519)	548085.41	4175205.04	0.16830	(09011519)
548085.41	4175213.04	0.16984	(09011519)	548085.41	4175221.04	0.17099	(09011519)
548085.41	4175229.04	0.17195	(13121620)	548035.55	4175114.41	0.13405	(09012106)
548043.55	4175114.41	0.13662	(09012106)	548051.55	4175114.41	0.13909	(09012106)
548059.55	4175114.41	0.14139	(09012106)	548067.55	4175114.41	0.14352	(09012106)
548075.55	4175114.41	0.14562	(13012103)	548083.55	4175114.41	0.14767	(13012103)
548091.55	4175114.41	0.14949	(13012103)	548037.24	4175151.70	0.13865	(09022107)
548037.24	4175161.70	0.13958	(09011519)	548037.24	4175171.70	0.14097	(09011519)
548037.24	4175181.70	0.14207	(09011519)	548037.24	4175191.70	0.14301	(09011519)
548037.24	4175201.70	0.14383	(09011519)	548037.24	4175211.70	0.14477	(09011519)
548037.24	4175221.70	0.14592	(09011519)	548036.40	4175144.81	0.13765	(09022107)
548036.95	4175136.59	0.13698	(09022107)	548036.86	4175077.00	0.12941	(09012106)
548046.86	4175077.00	0.13175	(13012103)	548056.86	4175077.00	0.13386	(13012103)

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       548086.86   4175077.00        0.14043  (11122422)               548096.86
 4175077.00        0.14222  (11122422)
       548118.80   4175076.97        0.14457  (10010521)               548128.80
 4175076.97        0.14568  (10010521)
       548138.80   4175076.97        0.14717  (13010321)               548148.80
 4175076.97        0.14867  (13010321)
       548158.80   4175076.97        0.14990  (13010321)               548168.80
 4175076.97        0.15093  (13010321)
       548178.80   4175076.97        0.15203  (13121718)               548188.80
 4175076.97        0.15339  (13121718)
       548133.99   4174938.58        0.11586  (13121718)               548133.99
 4174948.58        0.11790  (13121718)
       548133.99   4174958.58        0.11996  (13121718)               548133.99
 4174968.58        0.12204  (13121718)
       548133.99   4174978.58        0.12416  (13121718)               548133.99
 4174988.58        0.12626  (13010321)
       548133.99   4174998.58        0.12838  (13010321)               548133.99
 4175008.58        0.13053  (13010321)
       548133.99   4175018.58        0.13274  (13010321)               548133.99
 4175028.58        0.13497  (13010321)
       548133.99   4175038.58        0.13724  (13010321)               548133.99
 4175048.58        0.13956  (13010321)
       548092.65   4175060.20        0.13744  (11122422)               548090.45
 4175051.43        0.13504  (11122422)
       548089.36   4175039.92        0.13218  (11122422)               548089.91
 4175027.87        0.12966  (10010521)
       548091.00   4175021.84        0.12858  (10010521)               548089.91
 4175014.72        0.12703  (10010521)
       548091.00   4175008.14        0.12592  (12110521)               548088.26
 4174999.92        0.12414  (12110521)
       548090.45   4174992.25        0.12302  (12110521)               548088.81
 4174984.58        0.12157  (13010321)
       548146.86   4175286.67        0.22367  (10010418)               548092.26
 4175299.56        0.18680  (09022107)
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     PAREA3      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***
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** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548476.78	4175131.19	0.16142	(11012623)	548484.36	4175142.57	0.16377	(11012623)
548495.78	4175163.91	0.17020	(12120624)	548491.13	4175153.20	0.16627	(11012623)
548486.93	4175145.75	0.16436	(11012623)	548401.50	4175129.08	0.17178	(11012623)
548410.21	4175126.71	0.16992	(11012623)	548420.90	4175123.94	0.16763	(11012623)
548430.80	4175120.77	0.16523	(11012623)	548439.90	4175116.42	0.16250	(11012623)
548430.80	4175103.35	0.15924	(11012623)	548427.63	4175096.62	0.15743	(11012623)
548424.46	4175090.29	0.15577	(11012623)	548419.32	4175081.97	0.15374	(11012623)
548417.34	4175076.43	0.15228	(11012623)	548414.17	4175070.09	0.15079	(11012623)
548409.42	4175062.97	0.14922	(11012623)	548409.42	4175055.45	0.14723	(11012623)
548404.27	4175050.70	0.14635	(11012623)	548403.48	4175043.17	0.14448	(11012623)
548400.31	4175036.84	0.14310	(11012623)	548394.77	4175030.11	0.14174	(11012623)
548392.39	4175023.38	0.14024	(11012623)	548388.04	4175017.44	0.13902	(11012623)
548386.06	4175009.92	0.13738	(11012623)	548377.74	4175003.19	0.13608	(11012623)
548298.17	4175011.50	0.13784	(09121819)	548304.11	4175005.17	0.13658	(09121819)
548312.82	4175003.19	0.13637	(09121819)	548297.38	4174988.54	0.13253	(09121819)
548295.00	4174979.43	0.13046	(09121819)	548291.04	4174972.70	0.12885	(09121819)
548285.89	4174967.95	0.12768	(10121123)	548283.52	4174960.03	0.12598	(10121123)
548334.99	4174994.48	0.13452	(09121819)	548331.03	4174988.93	0.13328	(09121819)
548327.46	4174980.22	0.13137	(09121819)	548325.49	4174973.49	0.12991	(09121819)
548321.13	4174968.35	0.12880	(09121819)	548316.38	4174961.62	0.12736	(09121819)
548313.21	4174953.70	0.12571	(09121819)	548309.25	4174947.36	0.12439	(09121819)

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       548344.49   4174984.58        0.13216  (09121819)               548366.66
 4174978.64        0.13099  (11012623)
       548363.89   4174970.72        0.12941  (11012623)               548359.53
 4174964.78        0.12819  (11012623)
       548358.35   4174958.45        0.12692  (11012623)               548392.00
 4174960.43        0.12698  (11012623)
       548399.12   4174956.07        0.12588  (11012623)               548409.81
 4174951.72        0.12453  (11012623)
       548418.52   4174947.76        0.12324  (11012623)               548417.73
 4175002.79        0.13415  (11012623)
       548419.71   4175009.52        0.13548  (11012623)               548425.25
 4175021.00        0.13759  (11012623)
       548429.21   4175030.50        0.13944  (11012623)               548433.96
 4175038.82        0.14095  (11012623)
       548437.13   4175046.34        0.14244  (11012623)               548440.69
 4175055.05        0.14422  (11012623)
       548448.61   4175066.14        0.14608  (11012623)               548453.36
 4175078.01        0.14862  (11012623)
       548460.89   4175099.00        0.15374  (11012623)               548467.22
 4175096.62        0.15198  (11012623)
       548474.35   4175094.25        0.14987  (11012623)               548482.26
 4175091.08        0.14709  (11012623)
       548489.79   4175087.51        0.14461  (11010323)               548495.33
 4175084.35        0.14323  (11010323)
       548504.43   4175079.20        0.14104  (12120624)               548513.54
 4175076.03        0.13950  (12120624)
       548499.68   4175055.84        0.13594  (11010323)               548495.33
 4175045.55        0.13405  (11010323)
       548486.22   4175031.69        0.13174  (11010323)               548481.08
 4175022.98        0.13022  (11010323)
       548477.91   4175015.46        0.12921  (11012623)               548473.61
 4175008.53        0.12859  (11012623)
       548469.23   4175001.76        0.12796  (11012623)               548465.25
 4174994.19        0.12701  (11012623)
       548462.86   4174989.01        0.12630  (11012623)               548460.07
 4174982.24        0.12534  (11012623)
       548456.88   4174967.90        0.12297  (11012623)               548449.71
 4174970.69        0.12447  (11012623)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        13:22:57

                                  PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA3      ,
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*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548441.74	4174974.67	0.12619	(11012623)	548434.97	4174977.86	0.12753	(11012623)
548429.39	4174983.04	0.12909	(11012623)	548423.02	4174986.22	0.13027	(11012623)
548415.45	4174988.61	0.13132	(11012623)	548407.88	4174988.61	0.13179	(11012623)
548541.03	4175067.11	0.13463	(12120624)	548536.12	4175056.63	0.13297	(12120624)
548532.45	4175051.49	0.13229	(12120624)	548528.05	4175043.42	0.13106	(12120624)
548524.62	4175035.35	0.12974	(12120624)	548521.20	4175030.45	0.12902	(12120624)
548517.77	4175023.11	0.12783	(12120624)	548510.68	4175017.24	0.12712	(12120624)
548202.96	4175764.20	0.15867	(11012521)	547922.58	4175370.57	0.16996	(13011920)
547926.98	4175381.57	0.17142	(10011418)	547914.89	4175394.76	0.16802	(09011919)
547919.47	4175407.79	0.16932	(09011919)	547923.60	4175419.14	0.17026	(09011919)
547923.60	4175432.54	0.16994	(09011919)	547919.47	4175445.95	0.16839	(09011919)
547918.44	4175460.38	0.16741	(09011919)	547918.44	4175476.88	0.16670	(13121702)
547910.19	4175495.44	0.16444	(13121702)	547910.19	4175504.73	0.16417	(13121702)
547908.13	4175519.16	0.16396	(13021523)	547910.19	4175544.94	0.16397	(13021523)
547917.41	4175553.19	0.16500	(13021523)	547917.41	4175566.60	0.16380	(13021523)
547917.41	4175582.07	0.16224	(13021523)	547918.44	4175597.53	0.16170	(11012608)
547921.54	4175606.81	0.16194	(11012608)	547924.63	4175621.25	0.16171	(11012608)
547920.51	4175630.53	0.16042	(13122905)	547920.51	4175640.84	0.16041	(13122905)
547915.35	4175653.22	0.15890	(13122905)	547914.32	4175664.56	0.15874	(13010722)
547912.26	4175677.97	0.15786	(13010722)	547913.29	4175690.34	0.15694	(11112202)

```
       547913.29   4175703.75        0.15617  (09011420)                547913.29
 4175720.25        0.15509  (09011420)
       548266.99   4175832.65        0.18894  (09011522)                548266.99
 4175845.02        0.18215  (09011522)
       548291.74   4175837.80        0.19024  (13010320)                548301.02
 4175839.87        0.19058  (13010320)
       548310.30   4175840.90        0.19166  (09011822)                548317.52
 4175837.80        0.19482  (11012319)
       548324.74   4175838.84        0.19618  (11012319)                548623.79
 4176021.36        0.12701  (12101822)
       547608.05   4175979.08        0.08646  (12122006)                547591.62
 4174866.36        0.08905  (09011519)
       548961.49   4176028.43        0.09259  (13101702)                548975.16
 4174863.63        0.07177  (13013024)
       548349.34   4175832.29        0.20805  (12110518)                548347.44
 4175846.22        0.19735  (12110518)
       548351.88   4175851.92        0.19412  (12110518)                548385.44
 4175836.72        0.21553  (12110519)
       548386.08   4175844.96        0.20791  (12110519)                548383.54
 4175853.19        0.20008  (12110519)
       548401.28   4175837.36        0.22035  (12110519)                548409.51
 4175836.09        0.22481  (12110519)
       548416.48   4175838.62        0.22401  (12110519)                548425.98
 4175844.32        0.22619  (12020408)
       548432.31   4175840.52        0.23147  (12020408)                548441.81
 4175839.26        0.23376  (12020408)
       548446.24   4175839.89        0.23307  (12020408)                548454.48
 4175837.99        0.23606  (12020408)
       548463.98   4175840.52        0.23254  (12020408)                548472.21
 4175837.99        0.23646  (12020408)
       548479.18   4175837.36        0.23742  (12020408)                548484.88
 4175838.62        0.23531  (12020408)
       548494.38   4175839.89        0.23229  (12020408)                548501.34
 4175838.62        0.23132  (12020408)
       548510.84   4175840.52        0.22508  (12020408)                548516.54
 4175839.89        0.22310  (12020408)
       548522.24   4175839.89        0.22177  (12101822)                548533.01
 4175840.52        0.21849  (12101822)
       548540.61   4175842.42        0.21482  (12101822)                548550.11
 4175841.16        0.21422  (12101822)
 *** AERMOD - VERSION  18081 ***   *** C:\Lakes\AERMOD View\CCSF_Diego Rivera
Theater\CCSF_Diego Rivera The ***        10/19/20
 *** AERMET - VERSION  14134 ***   ***
                       ***        13:22:57

                                  PAGE  28
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
```

INCLUDING SOURCE(S): PAREA3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
548543.78	4175853.82	0.20420	(12101822)	548545.04	4175862.69	0.19719	(12101822)
548588.11	4175838.62	0.20986	(10090202)	548586.21	4175847.49	0.20241	(10090202)
548585.58	4175853.19	0.19805	(10090202)	548611.54	4175839.26	0.20526	(10090202)
548621.04	4175841.16	0.20179	(10090202)	548625.48	4175840.52	0.20129	(10090202)
548633.71	4175840.52	0.19991	(09042001)	548640.04	4175839.26	0.19970	(09042001)
548648.28	4175836.72	0.19895	(09082904)	548655.88	4175792.39	0.22796	(10101303)
548653.98	4175703.73	0.22108	(10101003)	548665.38	4175703.73	0.20270	(10101003)
548653.93	4175738.53	0.22539	(10101003)	548665.15	4175740.92	0.20715	(10101003)
548663.72	4175790.84	0.21345	(10101303)	548670.89	4175790.36	0.20262	(09103124)
548672.08	4175738.53	0.19773	(10101003)	548682.35	4175738.53	0.18676	(10101003)
548685.93	4175738.53	0.18349	(10101003)	548679.96	4175789.17	0.19181	(09103124)
548686.89	4175793.23	0.18474	(09103124)	548694.77	4175794.18	0.17783	(09103124)
548695.25	4175740.92	0.17601	(10101003)	548673.51	4175702.46	0.19253	(10101003)
548690.23	4175702.94	0.17760	(10101003)	548697.40	4175701.98	0.17269	(10101003)
548703.85	4175701.98	0.16888	(10101003)	548708.87	4175701.50	0.16626	(10101003)
548719.61	4175701.98	0.16133	(10101003)	548726.30	4175702.70	0.15862	(10101003)
548750.67	4175707.71	0.15021	(10101003)	548749.95	4175700.31	0.15178	(10101003)
548752.82	4175691.71	0.15332	(10101003)	548752.10	4175683.59	0.15626	(10101003)
548753.77	4175676.42	0.15921	(10101003)	548748.52	4175668.54	0.16456	(10101003)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN

                                  *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS
AVERAGED OVER   5 YEARS ***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3
             **

                        NETWORK
GROUP ID   AVERAGE CONC   RECEPTOR (XR, YR,
ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- -
- - - - - - - - - - - - - - - - - - -

ALL   1ST HIGHEST VALUE IS   0.03371 AT (548653.98, 4175703.73,
88.24,   260.00,   0.00) DC
          2ND HIGHEST VALUE IS   0.03188 AT (548653.93, 4175738.53,
89.40,   260.00,   0.00) DC
          3RD HIGHEST VALUE IS   0.02905 AT (548665.38, 4175703.73,
87.58,   260.00,   0.00) DC
          4TH HIGHEST VALUE IS   0.02694 AT (548665.15, 4175740.92,
88.89,   260.00,   0.00) DC
          5TH HIGHEST VALUE IS   0.02681 AT (548673.51, 4175702.46,
87.07,   260.00,   0.00) DC
          6TH HIGHEST VALUE IS   0.02528 AT (548655.88, 4175792.39,
91.61,   260.00,   0.00) DC
          7TH HIGHEST VALUE IS   0.02500 AT (548672.08, 4175738.53,
88.41,   260.00,   0.00) DC
          8TH HIGHEST VALUE IS   0.02411 AT (548753.29, 4175645.13,
80.70,   260.00,   0.00) DC
          9TH HIGHEST VALUE IS   0.02339 AT (548690.23, 4175702.94,
86.10,   260.00,   0.00) DC
         10TH HIGHEST VALUE IS   0.02262 AT (548682.35, 4175738.53,
87.85,   260.00,   0.00) DC

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_2.5   IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE	NETWORK CONC OF TYPE	DATE (YYMMDDHH) GRID-ID	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)
ALL	HIGH	1ST HIGH VALUE IS	0.23742 ON 12020408:	AT (548479.18, 4175837.36, 107.68, 260.00, 0.00) DC

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   1 Warning Message(s)
 A Total of   6306 Informational Message(s)

 A Total of   43872 Hours Were Processed

```
A Total of         5804 Calm Hours Identified

A Total of          502 Missing Hours Identified (  1.14 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
MX W481   43873         MAIN: Data Remaining After End of Year. Number of Hours=
       48

   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

Construction Cancer Risk

Residential Receptor (6 years of construction exposure)

*HARP - HRACalc v19044 11/16/2020 1:31:51 PM - Cancer Risk - Input File: C:\Users\kheck\Desktop\HARP2\CCSF_Residential_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	Residential		9901	DieselExhF	0.0224	9.02E-06	6YrCancer	*	9.02E-06

Elementary School Student (6 years of construction exposure)

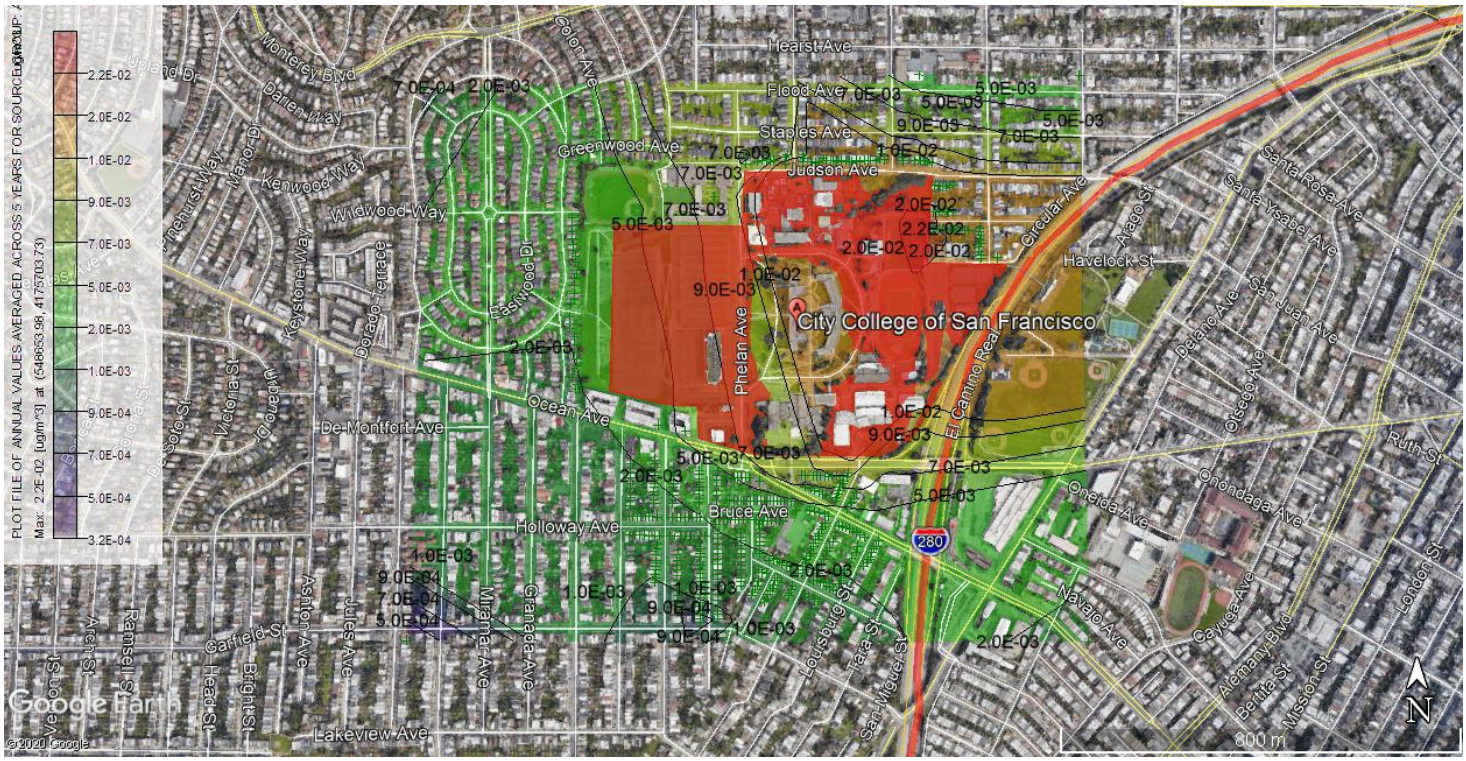
*HARP - HRACalc v19044 11/16/2020 1:36:51 PM - Cancer Risk - Input File: C:\Users\kheck\Desktop\HARP2\CCSF_Sunnyside ElementaryHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	CCSF_FMP_Sunnyside Elementary		9901	DieselExhF	0.0038	6.10E-07	6YrCancer	*	6.10E-07
2	CCSF_FMP_Seventh Day Adventist Eleme		9901	DieselExhF	0.00407	6.54E-07	6YrCancer	*	6.54E-07

High School Student (4 years of construction exposure)

*HARP - HRACalc v19044 10/19/2020 3:31:18 PM - Cancer Risk - Input File: C:\Users\kheck\Desktop\HARP2\CCSF_FMP_HIGHSCHOOLHRAInput.hra

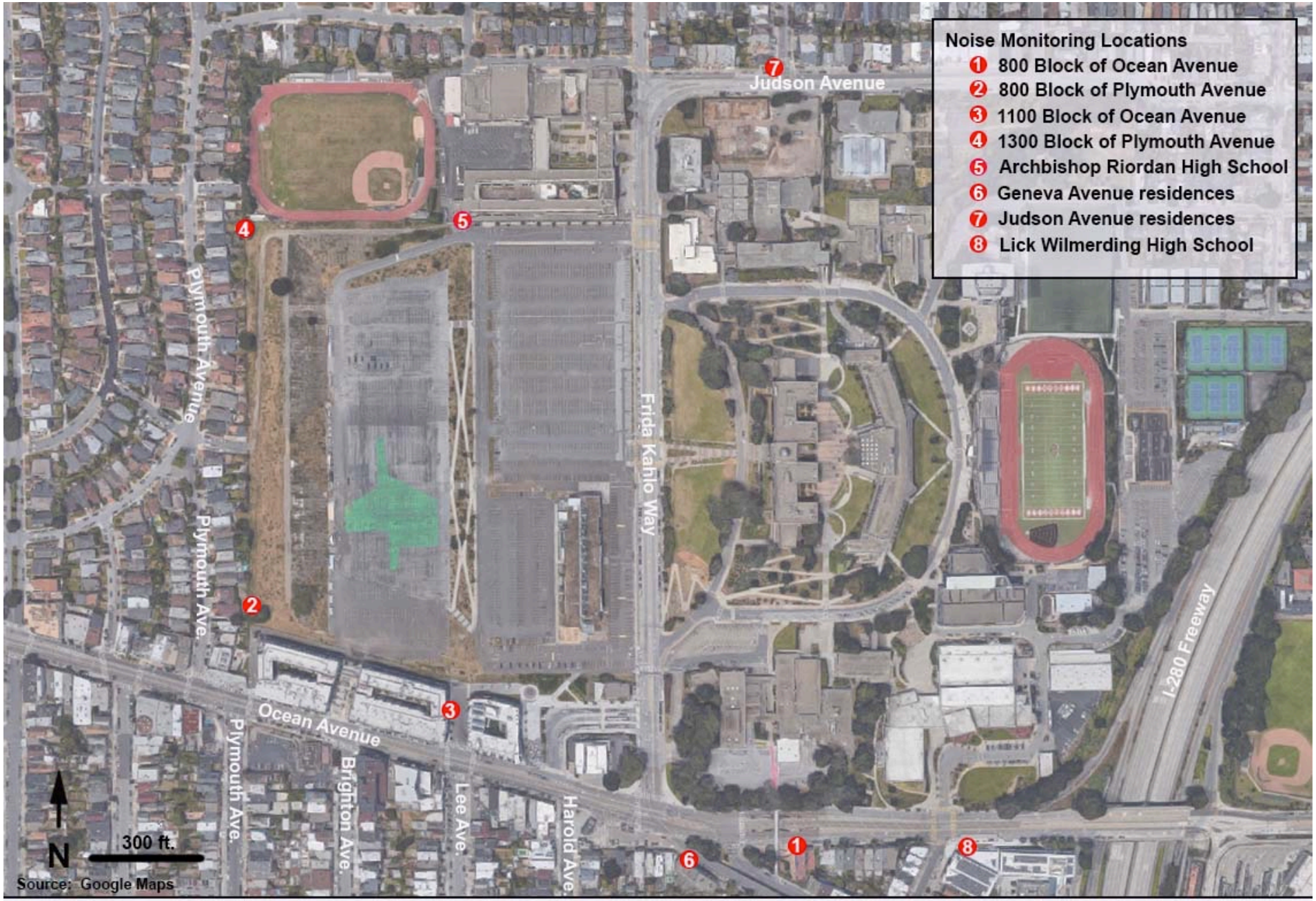
INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	CCSF_FMP_LICK WILMERDING		9901	DieselExhF	0.00578	4.32E-07	4YrCancer	*	4.32E-07
2	CCSF_FMP_ARHS		9901	DieselExhF	0.00775	5.79E-07	4YrCancer	*	5.79E-07


PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ALL
Max: 2.2E-02 [ug/m^3] at (548653.98, 4175703.73)
2.2E-02
2.0E-02
1.0E-02
9.0E-03
7.0E-03
5.0E-03
2.0E-03
1.0E-03
9.0E-04
7.0E-04
5.0E-04
3.2E-04
City College of San Francisco
Hearst Ave
Flood Ave
Staples Ave
Judson Ave
Greenwood Ave
Ocean Ave
De Montfort Ave
Holloway Ave
Bruce Ave
Lakeview Ave
Phelan Ave
El Camino Real
Circular Ave
Havelock St
Onondaga Ave
Oneida Ave
Nevelo Ave
280
Monterey Blvd
Darien Way
Kenwood Way
Midwood Way
Eastwood Dr
Dorado Terrace
Victoria St
Orizaba Ave
Keystone Way
Manor Dr
Colon Ave
Granada Ave
Mirenat Ave
Jules Ave
Ashton Ave
Garfield St
Head St
Bright St
Ramsell St
Acadia St
Vernon St
Louisburg St
San Miguel St
Ina St
Araba St
Santa Rosa Ave
Santa Ysabel Ave
San Juan Ave
Delano Ave
Ruth St
London St
Cayuga Ave
Alemany Blvd
Berna St
Mission St
Google Earth
© 2020 Google
800 m
N

ATTACHMENT D

Noise

NOISE MEASUREMENTS


Noise Monitoring Locations
1 800 Block of Ocean Avenue
2 800 Block of Plymouth Avenue
3 1100 Block of Ocean Avenue
4 1300 Block of Plymouth Avenue
5 Archbishop Riordan High School
6 Geneva Avenue residences
7 Judson Avenue residences
8 Lick Wilmerding High School
Judson Avenue
Plymouth Avenue
Plymouth Ave.
Frida Kahlo Way
Ocean Avenue
Plymouth Ave.
Brighton Ave.
Lee Ave.
Harold Ave.
I-280 Freeway
N
300 ft.
Source: Google Maps

Session Report

11/30/2020

Information Panel

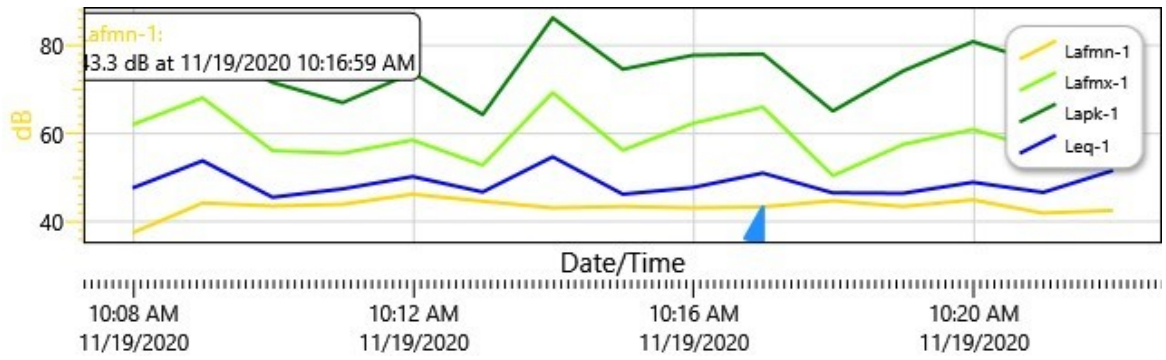
Name	300 Block Judson Avenue (north side)
Comments	
Start Time	11/19/2020 10:06:59 AM
Stop Time	11/19/2020 10:22:14 AM
Run Time	00:15:15
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	Impact Sciences
Description	
Location	San Francisco, CA
User Name	Douglas Kim

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	49.6 dB	Lafmn	1	36.7 dB
Lafmx	1	69.3 dB	Lapk	1	86.3 dB
Rtime	1	00:15:15	SEL	1	79.2 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

300 Block Judson Avenue (north side): Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
11/19/2020 10:07:59 AM	79.9	37.4	62	47.6
10:08:59 AM	80.3	44.2	68.1	53.8
10:09:59 AM	71.6	43.5	56.1	45.5
10:10:59 AM	67	43.9	55.5	47.4
10:11:59 AM	73.8	46.2	58.5	50.2
10:12:59 AM	64.3	44.6	52.8	46.7
10:13:59 AM	86.3	43.1	69.3	54.7
10:14:59 AM	74.6	43.4	56.2	46.2
10:15:59 AM	77.8	43.1	62.3	47.7
10:16:59 AM	78.1	43.3	66	51
10:17:59 AM	65.1	44.7	50.4	46.5
10:18:59 AM	74.2	43.4	57.5	46.4
10:19:59 AM	80.9	44.9	60.9	48.9
10:20:59 AM	75.9	41.9	56.2	46.6
10:21:59 AM	81.8	42.5	68.7	51.6

Session Report

11/30/2020

Information Panel

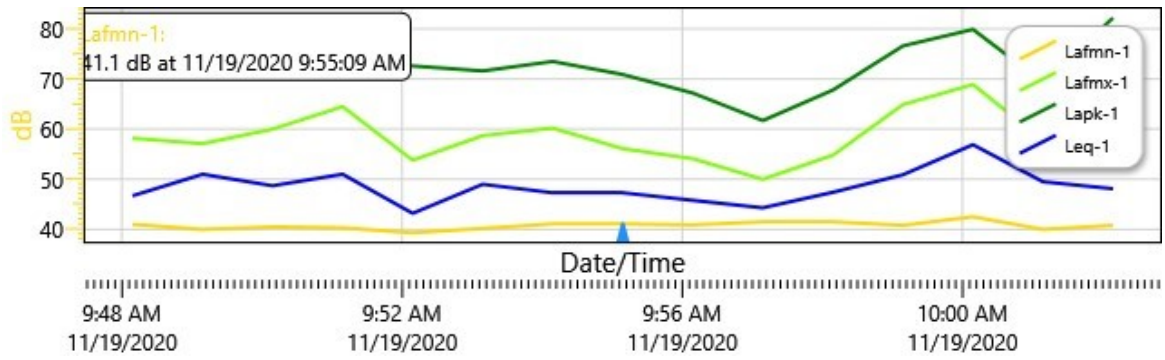
Name	Archbishop Riordan High School
Comments	
Start Time	11/19/2020 9:47:09 AM
Stop Time	11/19/2020 10:02:21 AM
Run Time	00:15:12
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	Impact Sciences
Description	
Location	San Francisco, CA
User Name	Douglas Kim

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	49.8 dB	Lafmx	1	68.9 dB
Lafmn	1	39.3 dB	Lapk	1	82.2 dB
Rtime	1	00:15:12	SEL	1	79.4 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

Archbishop Riordan High School: Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
11/19/2020 9:48:09 AM	71.7	41	58.2	46.7
9:49:09 AM	71.2	40	57.1	51
9:50:09 AM	72.5	40.5	60	48.7
9:51:09 AM	75.7	40.3	64.5	51
9:52:09 AM	72.6	39.3	53.8	43.2
9:53:09 AM	71.6	40.2	58.7	49
9:54:09 AM	73.5	41.1	60.2	47.3
9:55:09 AM	70.9	41.1	56.1	47.3
9:56:09 AM	67.2	40.9	54.1	45.8
9:57:09 AM	61.7	41.5	50	44.3
9:58:09 AM	67.8	41.5	54.8	47.4
9:59:09 AM	76.6	40.8	64.9	50.9
10:00:09 AM	79.9	42.5	68.9	56.9
10:01:09 AM	69.3	40	57.7	49.5
10:02:09 AM	82.2	40.8	54.4	48.1

Session Report

11/30/2020

Information Panel

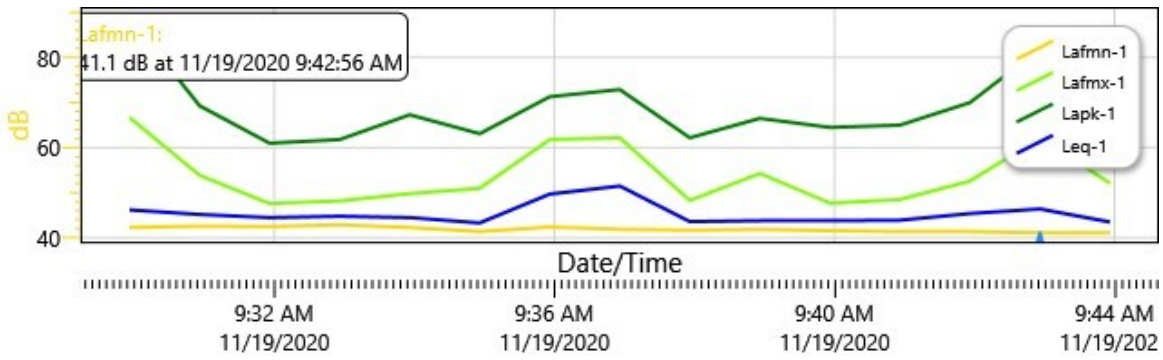
Name	1300 Block of Plymouth Avenue (south side)
Comments	Take along rear of Balboa Reservoir berm
Start Time	11/19/2020 9:28:56 AM
Stop Time	11/19/2020 9:44:18 AM
Run Time	00:15:22
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	Impact Sciences
Description	
Location	San Francisco, CA
User Name	Douglas Kim

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	46 dB	Lafmn	1	41.1 dB
Lafmx	1	66.7 dB	Lapk	1	88.8 dB
Rtime	1	00:15:22	SEL	1	75.7 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

1300 Block of Plymouth Avenue (south side): Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
11/19/2020 9:29:56 AM	88.8	42.3	66.7	46.2
9:30:56 AM	69.3	42.6	53.9	45.2
9:31:56 AM	61	42.5	47.6	44.5
9:32:56 AM	61.8	42.9	48.2	44.8
9:33:56 AM	67.3	42.3	49.8	44.5
9:34:56 AM	63.1	41.4	51	43.3
9:35:56 AM	71.3	42.4	61.8	49.7
9:36:56 AM	72.9	41.9	62.2	51.5
9:37:56 AM	62.2	41.7	48.3	43.6
9:38:56 AM	66.5	41.9	54.3	43.8
9:39:56 AM	64.5	41.6	47.7	43.8
9:40:56 AM	65	41.4	48.5	43.9
9:41:56 AM	70	41.4	52.6	45.4
9:42:56 AM	81.9	41.1	62.2	46.4
9:43:56 AM	72	41.1	52.1	43.5

Session Report

11/30/2020

Information Panel

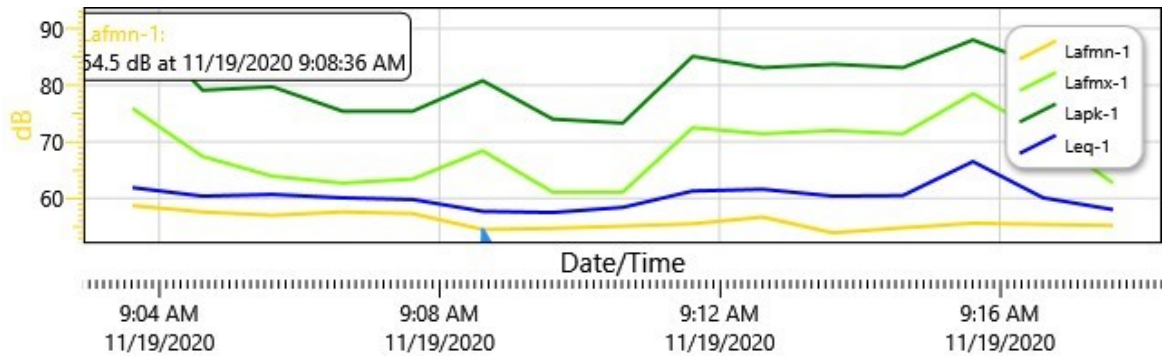
Name	1100 Block Ocean Avenue (north side)
Comments	
Start Time	11/19/2020 9:02:37 AM
Stop Time	11/19/2020 9:17:51 AM
Run Time	00:15:14
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	Impact Sciences
Description	
Location	San Francisco, CA
User Name	Douglas Kim

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	60.9 dB	Lafmn	1	53.9 dB
Lafmx	1	78.5 dB	Lapk	1	88 dB
SEL	1	90.5 dB	Rtime	1	00:15:14
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

1100 Block Ocean Avenue (north side): Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
11/19/2020 9:03:37 AM	91.9	58.7	75.9	61.9
9:04:37 AM	79.1	57.6	67.4	60.4
9:05:37 AM	79.7	57	63.9	60.7
9:06:37 AM	75.4	57.6	62.7	60.1
9:07:37 AM	75.4	57.3	63.4	59.8
9:08:37 AM	80.8	54.5	68.4	57.7
9:09:37 AM	74	54.7	61.1	57.5
9:10:37 AM	73.3	55.1	61.1	58.4
9:11:37 AM	85.1	55.5	72.5	61.3
9:12:37 AM	83.1	56.7	71.4	61.6
9:13:37 AM	83.7	53.9	72	60.4
9:14:37 AM	83.1	54.8	71.4	60.5
9:15:37 AM	88	55.6	78.5	66.5
9:16:37 AM	83.3	55.4	71.5	60.1
9:17:37 AM	83.5	55.2	62.7	58

Session Report

11/30/2020

Information Panel

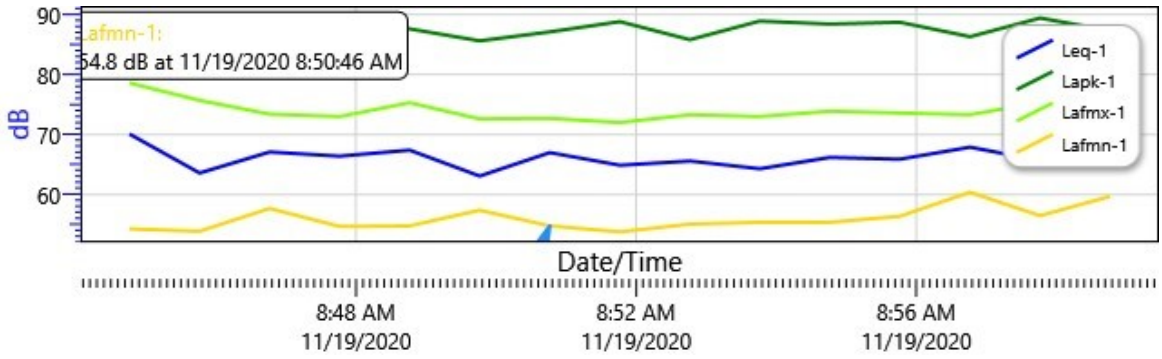
Name	850 Block Ocean Avenue (south side)
Comments	
Start Time	11/19/2020 8:43:46 AM
Stop Time	11/19/2020 8:59:09 AM
Run Time	00:15:23
Serial Number	SE40213991
Device Name	SE40213991
Model Type	Sound Examiner
Device Firmware Rev	R.11C
Company Name	Impact Sciences
Description	
Location	San Francisco, CA
User Name	Douglas Kim

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	66.6 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF

Logged Data Chart

850 Block Ocean Avenue (south side): Logged Data Chart



Logged Data Table

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1

Date/Time	Lapk-1	Lafmn-1	Lafmx-1	Leq-1
11/19/2020 8:44:46 AM	89.6	54.3	78.6	70.1
8:45:46 AM	87.7	53.9	75.7	63.6
8:46:46 AM	88.5	57.7	73.4	67.1
8:47:46 AM	88.4	54.7	73	66.4
8:48:46 AM	87.6	54.8	75.3	67.4
8:49:46 AM	85.6	57.4	72.6	63.1
8:50:46 AM	87.1	54.8	72.7	67
8:51:46 AM	88.8	53.8	72	64.9
8:52:46 AM	85.8	55.1	73.3	65.6
8:53:46 AM	88.9	55.4	73	64.3
8:54:46 AM	88.4	55.4	73.9	66.2
8:55:46 AM	88.7	56.4	73.6	65.9
8:56:46 AM	86.3	60.4	73.3	67.9
8:57:46 AM	89.4	56.5	75.4	65.7
8:58:46 AM	87.3	59.7	74.3	66.7

CONSTRUCTION NOISE ANALYSIS (PHASE 1)

Noise emissions of industry sources

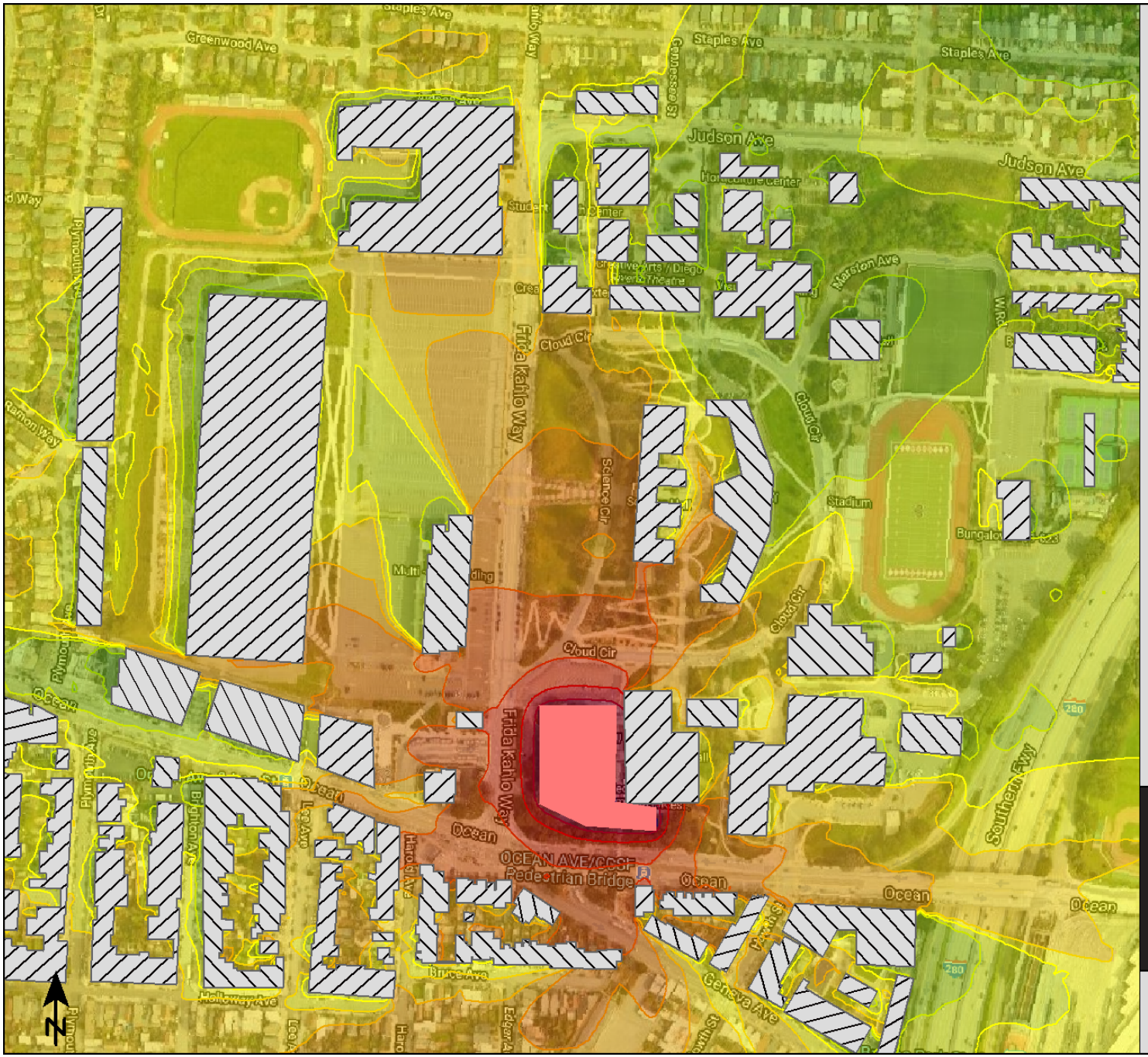
Source name	Size m/m²	Reference	Level Day dB(A)	Level Night dB(A)	Corrections Cwall dB	Corrections CI dB	Corrections CT dB
Student Success Center Construction Site1	6484 m²	Lw/unit	115.0	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X	Coordinates Y	Buildin side	Floor	Height abv.gro	Limit Day	Limit Night	Level w/o NP Day	Level w/o NP Night	Level w NP Day	Level w NP Night	Difference Day	Difference Night	Conflict Day	Conflict Night
		in meter				m	dB(A)		dB(A)		dB(A)		dB		dB	
1	800 Block of Ocean Ave	1101943	4189076.	North	GF	92.64	-	-	64.2	0.0	44.2	0.0	-20.0	0.0	-	-
2	800 Block of Plymouth A	1101899	4189302.	East	GF	90.91	-	-	44.7	0.0	38.5	0.0	-6.2	0.0	-	-
3	1100 Block of Ocean Av	1101916	4189203.	East	GF	92.52	-	-	34.9	0.0	38.8	0.0	3.8	0.0	-	-
4	1300 Block of Plymouth	1101901	4189597.	East	GF	98.56	-	-	41.2	0.0	45.0	0.0	3.8	0.0	-	-
5	Archibishop Riordan Hig	1101919	4189598.	South	GF	100.92	-	-	46.0	0.0	44.4	0.0	-1.6	0.0	-	-
6	Geneva Avenue Reside	1101934	4189073.	North e	GF	96.45	-	-	63.0	0.0	42.2	0.0	-20.8	0.0	-	-
7	Judson Avenue Residen	1101944	4189705.	South	GF	102.05	-	-	39.2	0.0	49.6	0.0	10.4	0.0	-	-
8	Lick Wilmerding High S	1101956	4189061.	North	GF	81.14	-	-	52.9	0.0	45.0	0.0	-7.8	0.0	-	-

Contribution levels of the receivers

Source name		Level w/o NP Day	Level w/o NP Night	Level w NP Day	Level w NP Night
		dB(A)		dB(A)	
800 Block of Ocean Avenue	GF	64.2	0.0	44.2	0.0
Student Success Center Construction Site		64.2	-	-	-
800 Block of Plymouth Avenue	GF	44.7	0.0	38.5	0.0
Student Success Center Construction Site		44.7	-	-	-
1100 Block of Ocean Avenue	GF	34.9	0.0	38.8	0.0
Student Success Center Construction Site		34.9	-	-	-
1300 Block of Plymouth Avenue	GF	41.2	0.0	45.0	0.0
Student Success Center Construction Site		41.2	-	-	-
Archibishop Riordan High School	GF	46.0	0.0	44.4	0.0
Student Success Center Construction Site		46.0	-	-	-
Geneva Avenue Residences	GF	63.0	0.0	42.2	0.0
Student Success Center Construction Site		63.0	-	-	-
Judson Avenue Residences	GF	39.2	0.0	49.6	0.0
Student Success Center Construction Site		39.2	-	-	-
Lick Wilmerding High School	GF	52.9	0.0	45.0	0.0
Student Success Center Construction Site		52.9	-	-	-



City College of San Francisco (Phase 1)

Signs and symbols

- Building
- Calculation area
- Construction Site

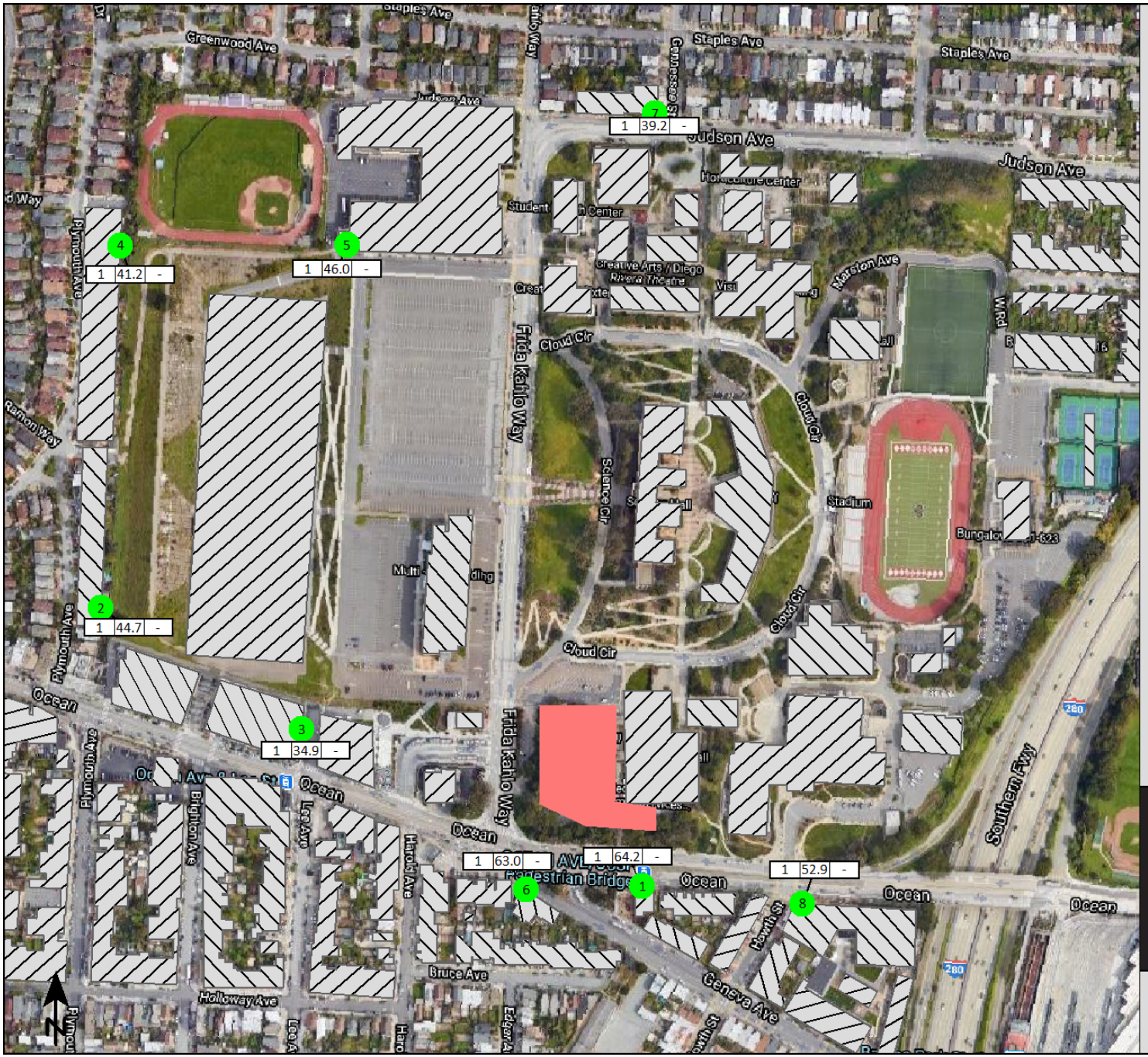
Levels in dB(A)

< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
80 - 85
>= 85

1 : 340

0 100 200 400 600 800 feet

IMPACT SCIENCES



City College of San Francisco (Phase 1)

Signs and symbols

- Building
- Sensitive Receptor
- Construction Site

Level tables

- Facade with conflict

1 : 340

0 100 200 400 600 800 feet

IMPACT SCIENCES

Construction Noise Impacts (without Mitigation)

Phase 1

Reference	15.24	meter
Sound Pressure Level	86.6	dBA

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
800 Block of Ocean Avenue	66.6	64.2	68.6	2.0	**No**
800 Block of Plymouth Avenue	46.0	44.7	48.4	2.4	**No**
1100 Block of Ocean Avenue	46.0	34.9	46.3	0.3	**No**

CONSTRUCTION NOISE ANALYSIS (PHASE 2)

Noise emissions of industry sources

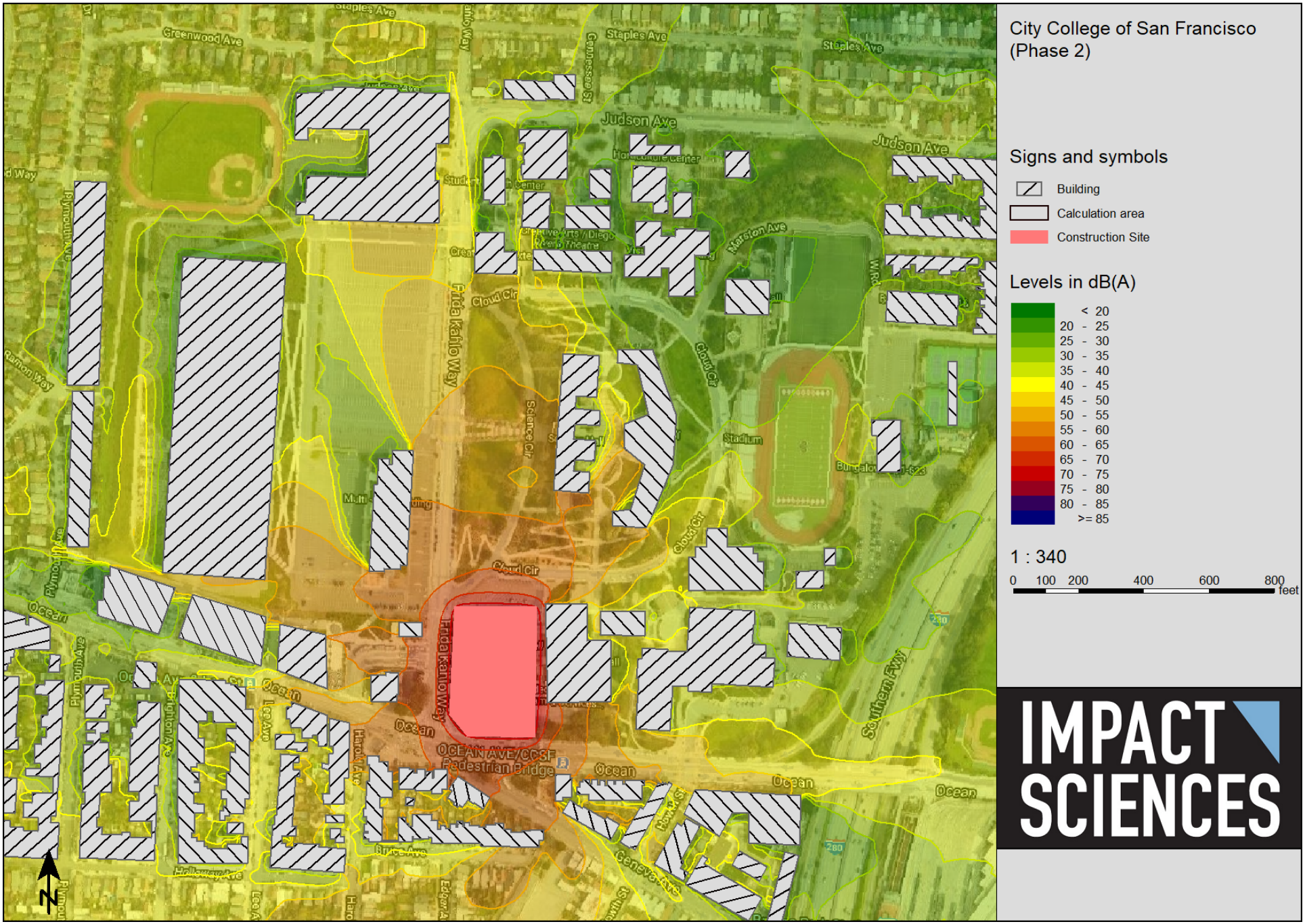
Source name	Size m/m²	Reference	Level Day dB(A)	Level Night dB(A)	Corrections Cwall dB	Corrections CI dB	Corrections CT dB
Student Success Center Construction Site	9471 m²	Lw/unit	110.0	-	-	-	-

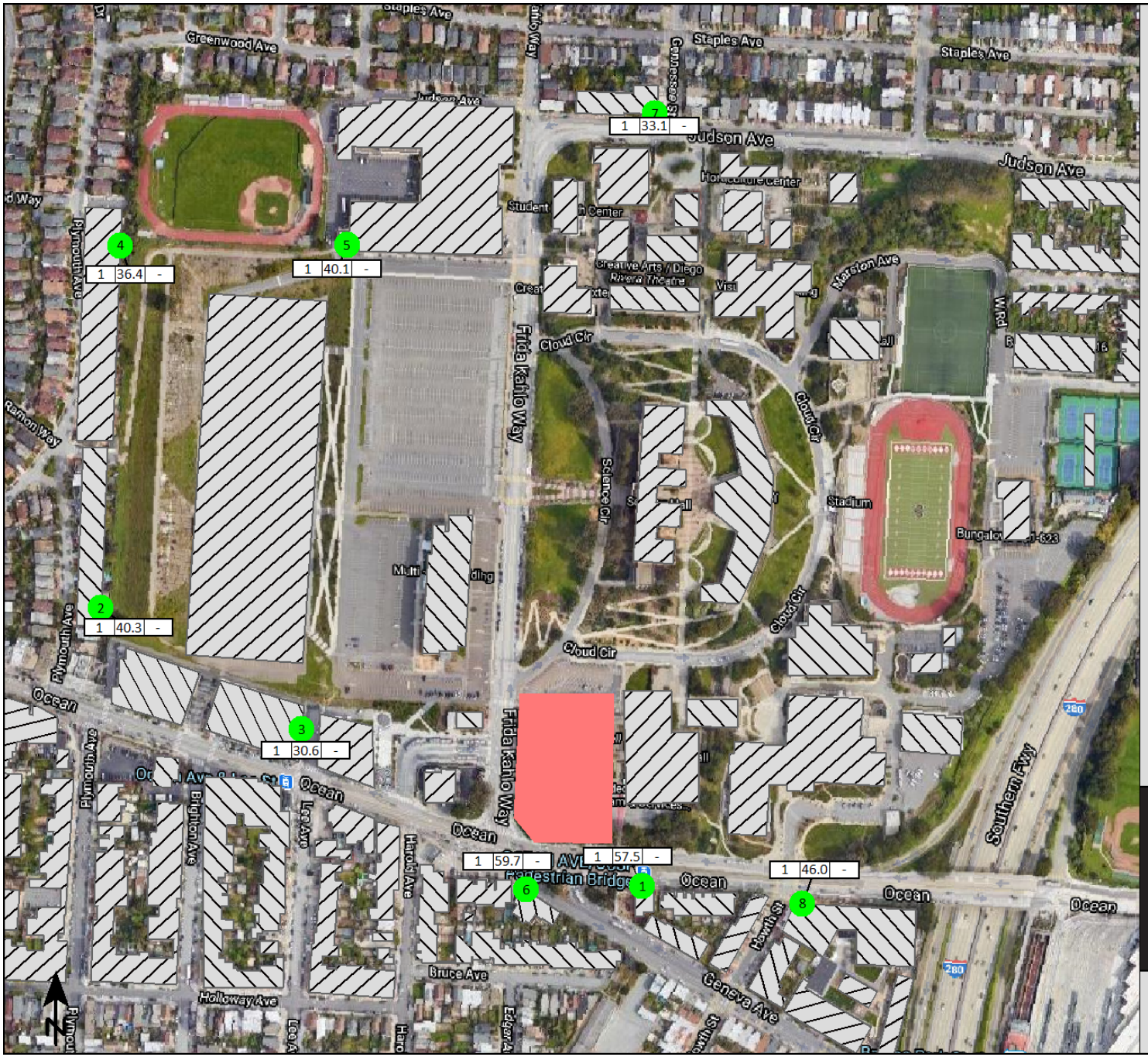
Receiver list

No.	Receiver name	Coordinates X	Coordinates Y	Buildin side	Floor	Height abv.gro	Limit Day	Limit Night	Level w/o NP Day	Level w/o NP Night	Level w NP Day	Level w NP Night	Difference Day	Difference Night	Conflict Day	Conflict Night
		in meter				m	dB(A)		dB(A)		dB(A)		dB		dB	
1	800 Block of Ocean Ave	1101943[illegible]	4189076.	North	GF	92.64	-	-	57.5	0.0	44.2	0.0	-13.3	0.0	-	-
2	800 Block of Plymouth A	1101899[illegible]	4189302.	East	GF	90.91	-	-	40.3	0.0	38.5	0.0	-1.8	0.0	-	-
3	1100 Block of Ocean Av	1101916[illegible]	4189203.	East	GF	92.52	-	-	30.6	0.0	38.8	0.0	8.1	0.0	-	-
4	1300 Block of Plymouth	1101901[illegible]	4189597.	East	GF	98.56	-	-	36.4	0.0	45.0	0.0	8.6	0.0	-	-
5	Archibishop Riordan Hig	1101919[illegible]	4189598.	South	GF	100.92	-	-	40.1	0.0	44.4	0.0	4.3	0.0	-	-
6	Geneva Avenue Reside	1101934[illegible]	4189073.	North e	GF	96.45	-	-	59.7	0.0	42.2	0.0	-17.5	0.0	-	-
7	Judson Avenue Residen	1101944[illegible]	4189705.	South	GF	102.05	-	-	33.1	0.0	49.6	0.0	16.4	0.0	-	-
8	Lick Wilmerding High S	1101956[illegible]	4189061.	North	GF	81.14	-	-	46.0	0.0	45.0	0.0	-1.0	0.0	-	-

Contribution levels of the receivers

Source name		Level w/o NP Day	Level w/o NP Night	Level w NP Day	Level w NP Night
		dB(A)		dB(A)	
800 Block of Ocean Avenue	GF	57.5	0.0	44.2	0.0
Student Success Center Construction Site		57.5	-	-	-
800 Block of Plymouth Avenue	GF	40.3	0.0	38.5	0.0
Student Success Center Construction Site		40.3	-	-	-
1100 Block of Ocean Avenue	GF	30.6	0.0	38.8	0.0
Student Success Center Construction Site		30.6	-	-	-
1300 Block of Plymouth Avenue	GF	36.4	0.0	45.0	0.0
Student Success Center Construction Site		36.4	-	-	-
Archibishop Riordan High School	GF	40.1	0.0	44.4	0.0
Student Success Center Construction Site		40.1	-	-	-
Geneva Avenue Residences	GF	59.7	0.0	42.2	0.0
Student Success Center Construction Site		59.7	-	-	-
Judson Avenue Residences	GF	33.1	0.0	49.6	0.0
Student Success Center Construction Site		33.1	-	-	-
Lick Wilmerding High School	GF	46.0	0.0	45.0	0.0
Student Success Center Construction Site		46.0	-	-	-


City College of San Francisco
(Phase 2)
Signs and symbols
Building
Calculation area
Construction Site
Levels in dB(A)
< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
80 - 85
>= 85
1 : 340
0 100 200 400 600 800
feet
IMPACT SCIENCES
Judson Ave
Staples Ave
Frida Kahlo Way
Cloud Cir
Science Cir
Stadium
Ocean
OCEAN AVE/CCSF Pedestrian Bridge
Southern Fwy
Marston Ave
Plymouth Ave
Ramon Way
Lee Ave
Harold Ave
Howard St
Geneva Ave
Greenwood Ave
Tennessee St
Judson Ave
Holloway Ave
Brighton Ave
Edgar Ave
Bruce Ave
Multi-Purpose Building
Creative Arts / Diego Rivera Theatre
Burgalow
280
230



City College of San Francisco (Phase 2)

Signs and symbols

- Building
- Sensitive Receptor
- Construction Site

Level tables

- Facade with conflict

1 : 340

0 100 200 400 600 800 feet

IMPACT SCIENCES

Construction Noise Impacts (without Mitigation

Phase 3

Reference	15.24	meter
Sound Pressure Level	86.6	dBA

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
800 Block of Ocean Avenue	66.6	44.0	66.6	0.0	**No**
800 Block of Plymouth Avenue	46.0	39.6	46.9	0.9	**No**
1100 Block of Ocean Avenue	46.0	39.3	46.8	0.8	**No**
1300 Block of Plymouth Avenue	46.0	45.7	48.9	2.9	**No**
Archbishop Riordan High School	49.8	44.7	51.0	1.2	**No**
Geneva Avenue residences	66.6	42.2	66.6	0.0	**No**
Judson Avenue residences	49.6	51.4	53.6	4.0	**No**
Lick Wilmderding High School	66.6	44.9	66.6	0.0	**No**

CONSTRUCTION NOISE ANALYSIS (PHASE 3)

Noise emissions of industry sources

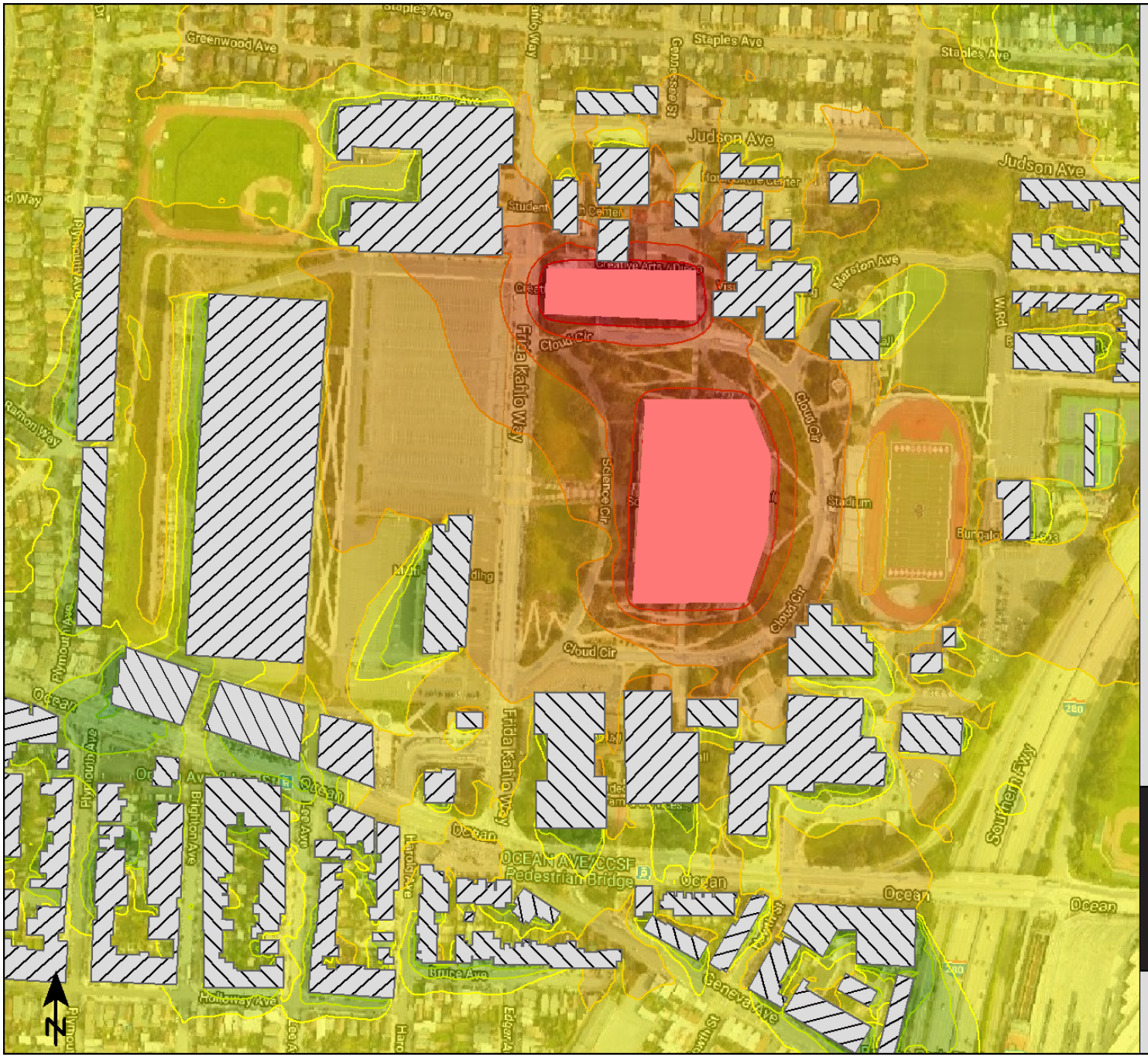
Source name	Size m/m²	Reference	Level Day dB(A)	Level Night dB(A)	Corrections Cwall dB	Corrections CI dB	Corrections CT dB
Creative Arts/Arts Extension Construction	4829 m²	Lw/unit	110.0	-	-	-	-
Science Hall/Cloud Hall Construction	16829 m²	Lw/unit	110.0	-	-	-	-

Noise emissions of industry sources

Source name	Size	Reference	Level		Corrections		
	m/m²		Day dB(A)	Night dB(A)	Cwall dB	CI dB	CT dB
Smith/Statler/Student Union Construction	7216 m²	Lw/unit	115.0	-	-	-	-
700 Bungalows Construction	2471 m²	Lw/unit	115.0	-	-	-	-
600 Bungalows Construction	2284 m²	Lw/unit	115.0	-	-	-	-
Batmale Hall Construction	2582 m²	Lw/unit	115.0	-	-	-	-

Contribution levels of the receivers

Source name		Level w/o NP Day	Level w/o NP Night	Level w NP Day	Level w NP Night
		dB(A)		dB(A)	
800 Block of Ocean Avenue	GF	44.0	0.0	44.2	0.0
Creative Arts/Arts Extension Constructio		31.3	-	31.6	-
Science Hall/Cloud Hall Construction		43.7	-	44.0	-
800 Block of Plymouth Avenue	GF	39.6	0.0	38.5	0.0
Creative Arts/Arts Extension Constructio		35.6	-	33.3	-
Science Hall/Cloud Hall Construction		37.4	-	37.0	-
1100 Block of Ocean Avenue	GF	39.3	0.0	38.8	0.0
Creative Arts/Arts Extension Constructio		39.0	-	38.5	-
Science Hall/Cloud Hall Construction		27.5	-	27.2	-
1300 Block of Plymouth Avenue	GF	45.7	0.0	45.0	0.0
Creative Arts/Arts Extension Constructio		44.1	-	43.1	-
Science Hall/Cloud Hall Construction		40.6	-	40.4	-
Archibishop Riordan High School	GF	44.7	0.0	44.4	0.0
Creative Arts/Arts Extension Constructio		37.6	-	36.6	-
Science Hall/Cloud Hall Construction		43.8	-	43.6	-
Geneva Avenue Residences	GF	42.2	0.0	42.2	0.0
Creative Arts/Arts Extension Constructio		35.9	-	35.8	-
Science Hall/Cloud Hall Construction		41.0	-	41.1	-
Judson Avenue Residences	GF	51.4	0.0	49.6	0.0
Creative Arts/Arts Extension Constructio		50.0	-	47.1	-
Science Hall/Cloud Hall Construction		46.1	-	45.9	-
Lick Wilmerding High School	GF	44.9	0.0	45.0	0.0
Creative Arts/Arts Extension Constructio		30.1	-	29.7	-
Science Hall/Cloud Hall Construction		44.8	-	44.9	-



City College of San Francisco (Phase 3)

Signs and symbols

- Building
- Calculation area
- Construction Site

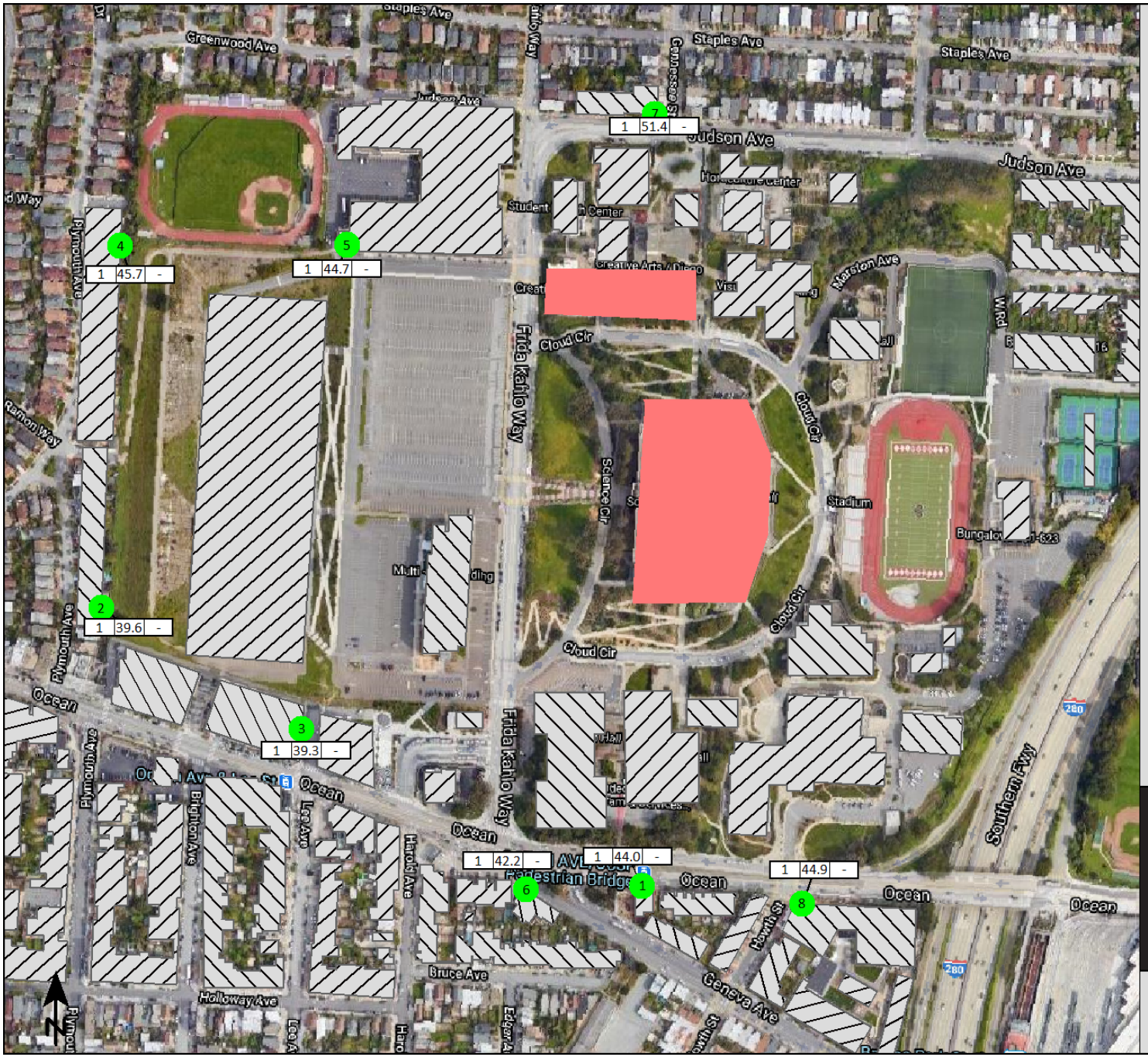
Levels in dB(A)

< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
80 - 85
>= 85

1 : 340

0 100 200 400 600 800 feet

IMPACT SCIENCES



City College of San Francisco (Phase 3)

Signs and symbols

- Building
- Sensitive Receptor
- Construction Site

Level tables

- Facade with conflict

1 : 340

0 100 200 400 600 800 feet

IMPACT SCIENCES

Construction Noise Impacts (without Mitigation

Phase 4

Reference	15.24	meter
Sound Pressure Level	86.6	dBA

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
800 Block of Ocean Avenue	66.6	64.9	68.8	2.2	**No**
800 Block of Plymouth Avenue	46.0	38.9	46.8	0.8	**No**
1100 Block of Ocean Avenue	46.0	32.0	46.2	0.2	**No**
1300 Block of Plymouth Avenue	46.0	42.4	47.6	1.6	**No**
Archbishop Riordan High School	49.8	46.8	51.6	1.8	**No**
Geneva Avenue residences	66.6	55.5	66.9	0.3	**No**
Judson Avenue residences	49.6	39.7	50.0	0.4	**No**
Lick Wilmderding High School	66.6	59.5	67.4	0.8	**No**

CONSTRUCTION NOISE ANALYSIS (PHASE 4)

Noise emissions of industry sources

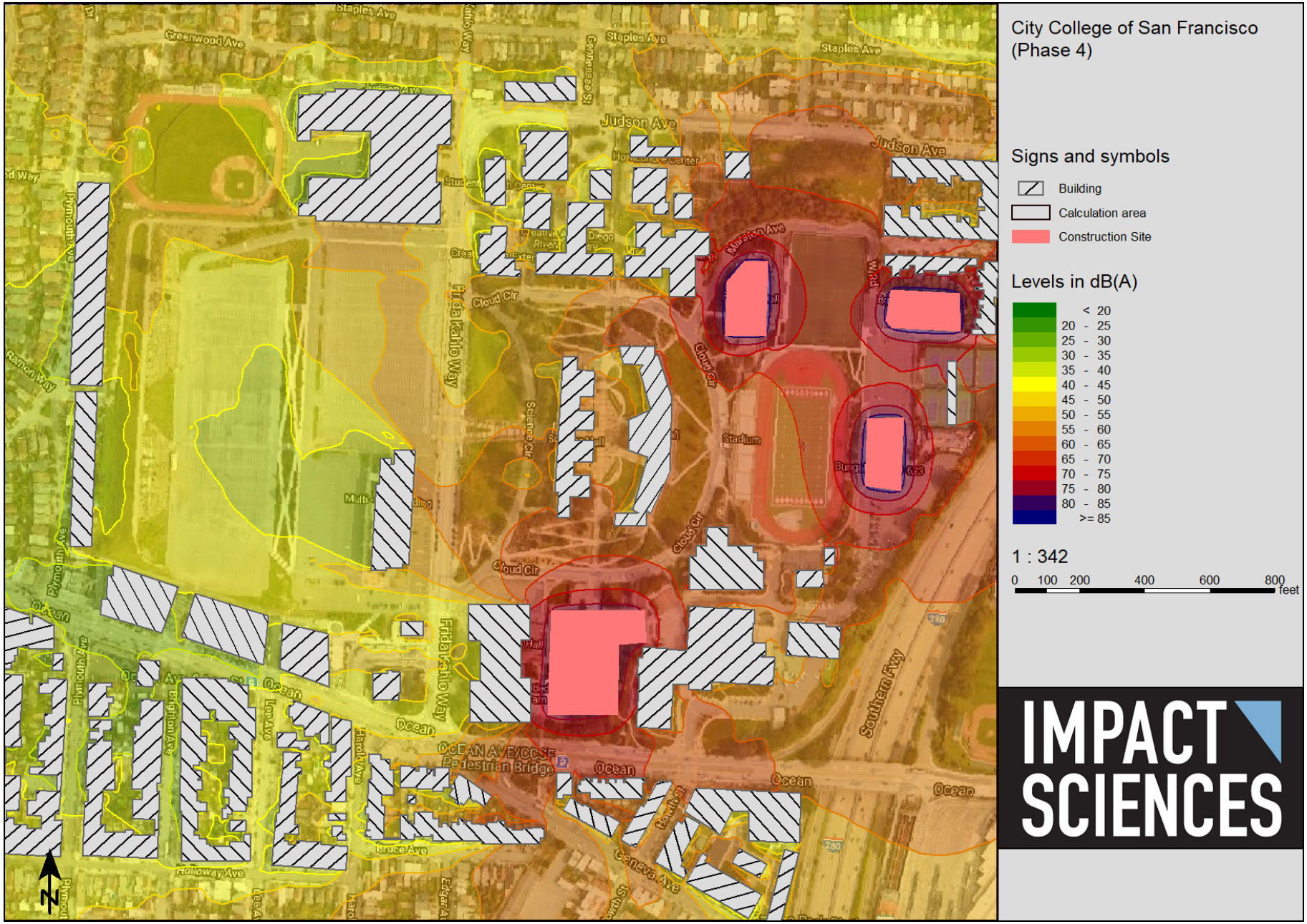
Source name	Size	Reference	Level		Corrections		
	m/m²		Day dB(A)	Night dB(A)	Cwall dB	CI dB	CT dB
Smith/Statler/Student Union Construction	7216 m²	Lw/unit	115.0	-	-	-	-
700 Bungalows Construction	2471 m²	Lw/unit	115.0	-	-	-	-
600 Bungalows Construction	2284 m²	Lw/unit	115.0	-	-	-	-
Batmale Hall Construction	2582 m²	Lw/unit	115.0	-	-	-	-

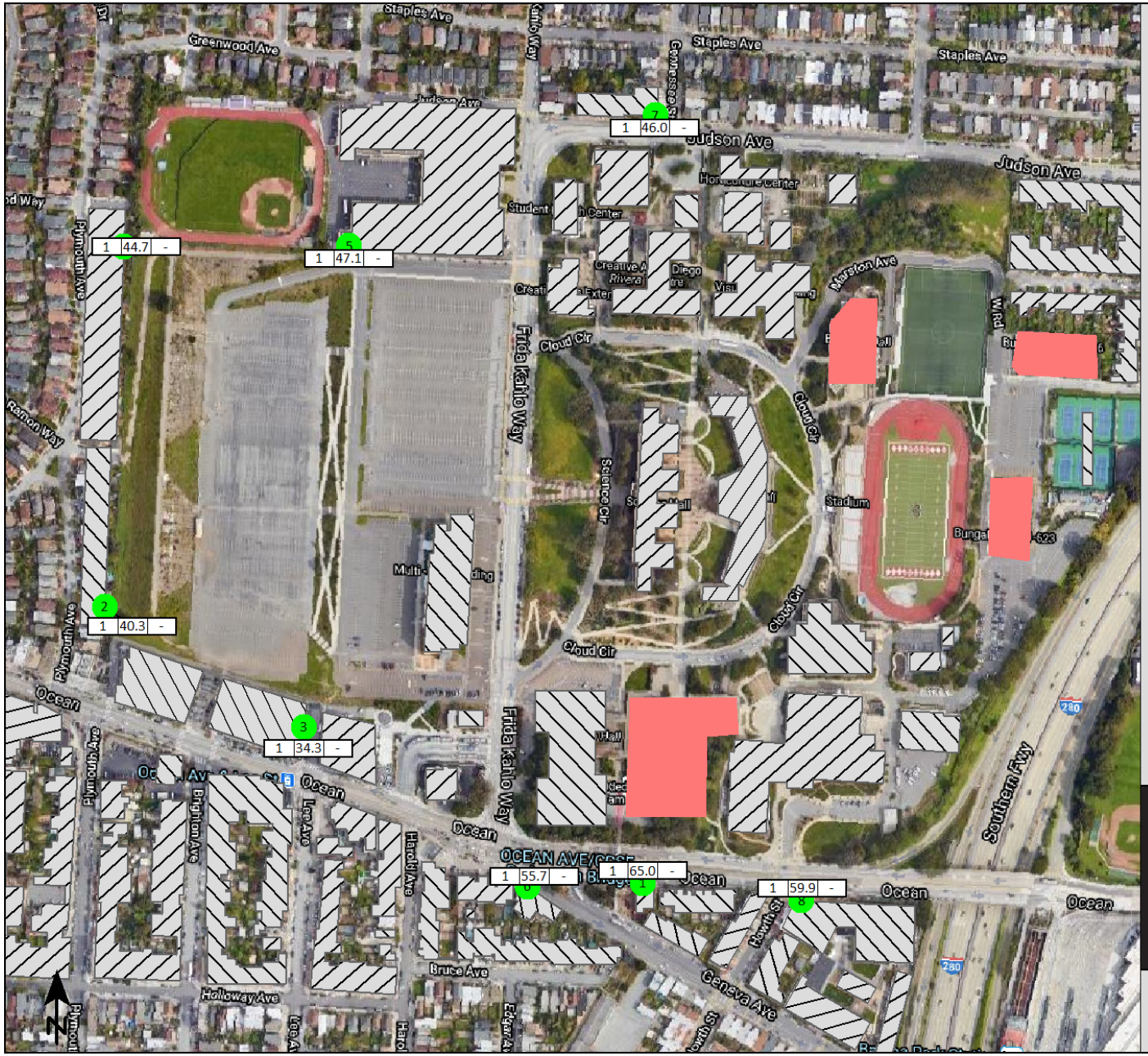
Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd m	Limit Day dB(A)	Limit Night dB(A)	Level w/o NP Day dB(A)	Level w/o NP Night dB(A)	Level w NP Day dB(A)	Level w NP Night dB(A)	Difference Day dB	Difference Night dB	Conflict Day dB	Conflict Night dB
1	800 Block of Ocean Ave	1101943	4189076.	North	GF	92.64	-	-	65.0	0.0	44.8	0.0	-20.2	0.0	-	-
2	800 Block of Plymouth A	1101899	4189302.	East	GF	90.91	-	-	40.3	0.0	32.6	0.0	-7.7	0.0	-	-
3	1100 Block of Ocean Av	1101916	4189203.	East	GF	92.52	-	-	34.3	0.0	21.6	0.0	-12.7	0.0	-	-
4	1300 Block of Plymouth	1101901	4189597.	East	GF	98.56	-	-	44.7	0.0	0.0	0.0	-44.7	0.0	-	-
5	Archibishop Riordan Hig	1101919	4189598.	South	GF	100.92	-	-	47.1	0.0	32.2	0.0	-14.9	0.0	-	-
6	Geneva Avenue Reside	1101934	4189073.	North e	GF	96.45	-	-	55.7	0.0	48.0	0.0	-7.7	0.0	-	-
7	Judson Avenue Reside	1101944	4189705.	South	GF	102.05	-	-	46.0	0.0	0.0	0.0	-46.0	0.0	-	-
8	Lick Wilmerding High S	1101956	4189061.	North	GF	81.14	-	-	59.9	0.0	0.0	0.0	-59.9	0.0	-	-

Contribution levels of the receivers

Source name		Level w/o NP Day	Level w/o NP Night	Level w NP Day	Level w NP Night
		dB(A)		dB(A)	
800 Block of Ocean Avenue	GF	65.0	0.0	44.8	0.0
600 Bungalows Construction		45.3	-	-	-
700 Bungalows Construction		45.8	-	-	-
Batmale Hall Construction		40.5	-	-	-
Smith/Statler/Student Union Construction		64.9	-	-	-
800 Block of Plymouth Avenue	GF	40.3	0.0	32.6	0.0
600 Bungalows Construction		30.2	-	-	-
700 Bungalows Construction		31.4	-	-	-
Batmale Hall Construction		27.8	-	-	-
Smith/Statler/Student Union Construction		38.9	-	-	-
1100 Block of Ocean Avenue	GF	34.3	0.0	21.6	0.0
600 Bungalows Construction		25.3	-	-	-
700 Bungalows Construction		24.0	-	-	-
Batmale Hall Construction		27.3	-	-	-
Smith/Statler/Student Union Construction		32.0	-	-	-
1300 Block of Plymouth Avenue	GF	44.7	0.0	0.0	0.0
600 Bungalows Construction		32.8	-	-	-
700 Bungalows Construction		36.4	-	-	-
Batmale Hall Construction		37.5	-	-	-
Smith/Statler/Student Union Construction		42.4	-	-	-
Archibishop Riordan High School	GF	47.1	0.0	32.2	0.0
600 Bungalows Construction		29.0	-	-	-
700 Bungalows Construction		30.0	-	-	-
Batmale Hall Construction		32.5	-	-	-
Smith/Statler/Student Union Construction		46.8	-	-	-
Geneva Avenue Residences	GF	55.7	0.0	48.0	0.0
600 Bungalows Construction		39.2	-	-	-
700 Bungalows Construction		35.7	-	-	-
Batmale Hall Construction		33.1	-	-	-
Smith/Statler/Student Union Construction		55.5	-	-	-
Judson Avenue Residences	GF	46.0	0.0	0.0	0.0
600 Bungalows Construction		39.7	-	-	-
700 Bungalows Construction		40.3	-	-	-
Batmale Hall Construction		40.3	-	-	-
Smith/Statler/Student Union Construction		39.7	-	-	-
Lick Wilmerding High School	GF	59.9	0.0	0.0	0.0
600 Bungalows Construction		43.8	-	-	-
700 Bungalows Construction		45.7	-	-	-
Batmale Hall Construction		42.7	-	-	-
Smith/Statler/Student Union Construction		59.5	-	-	-


City College of San Francisco
(Phase 4)
Signs and symbols
Building
Calculation area
Construction Site
Levels in dB(A)
< 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
80 - 85
>= 85
1 : 342
0 100 200 400 600 800
Feet
IMPACT SCIENCES
Staples Ave
Greenwood Ave
Judson Ave
Frida Kahlo Way
Cloud Cir
Science Cir
Stadium
Plymouth Ave
Ramon Way
Ocean
Ocean Ave
Brighton Ave
Lee Ave
Holloway Ave
Bruce Ave
Geneva Ave
Southern Fwy
OCEAN AVE/CCSF Pedestrian Bridge
N



City College of San Francisco (Phase 4)

Signs and symbols

- Building
- Sensitive Receptor
- Construction Site

Level tables

- Facade with conflict

1 : 342

0 100 200 400 600 800 Feet

IMPACT SCIENCES

Construction Noise Impacts (without Mitigation

Phase 4

Reference	15.24	meter
Sound Pressure Level	86.6	dBA

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
800 Block of Ocean Avenue	66.6	64.9	68.8	2.2	**No**
800 Block of Plymouth Avenue	46.0	38.9	46.8	0.8	**No**
1100 Block of Ocean Avenue	46.0	32.0	46.2	0.2	**No**
1300 Block of Plymouth Avenue	46.0	42.4	47.6	1.6	**No**
Archbishop Riordan High School	49.8	46.8	51.6	1.8	**No**
Geneva Avenue residences	66.6	55.5	66.9	0.3	**No**
Judson Avenue residences	49.6	39.7	50.0	0.4	**No**
Lick Wilmderding High School	66.6	59.5	67.4	0.8	**No**

APPENDIX C

Historical Resources Evaluation

City College of San Francisco Ocean Campus (CCSF)

Historic Resource Evaluation

Prepared for
The City College of San Francisco District

Prepared by
Garavaglia Architecture, Inc.
September 14, 2020

Innovating Tradition

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Chapter 1

INTRODUCTION

PROJECT OVERVIEW

Garavaglia Architecture contracted with Impact Sciences, Inc. to prepare a Historic Resource Evaluation (HRE) for the buildings on the City College of San Francisco Ocean Campus (Main Campus) at 50 Frida Kahlo Way, as well as evaluate the potential for the campus to be a historic district. The City College of San Francisco (CCSF) District requested this report in connection with their updated Facilities Master Plan (FMP). This report considers buildings built in 1985 or earlier, buildings that would be 45 years of age in 2030, the timeframe for the updated FMP. The 2004 CCSF FMP EIR evaluated the Science Hall (historically called "Science" or "the Science building"), Cloud Hall, the north and south gymnasiums (no longer extant), Smith Hall, the California Bookstore, and the Childcare Center (no longer extant) for eligibility for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). The Science building was determined eligible under criteria A/1 and C/3, and Cloud Hall was found eligible under criterion A/1. The EIR also determined that Smith Hall was not eligible because it had lost integrity due to several additions, additions that have now or will reach 45 years of age by 2030. The California Bookstore, the gymnasiums, and the Children's Center were found not eligible because they did not meet the necessary level of significance.

Several campus buildings have reached 45 years of age or will reach 45 years by 2030. They include the following:

- Conlan Hall (1968)
- Smith Hall's Statler Wing (1963)
- Extended Opportunity Program and Services (EOPS) building (1970)
- Modular buildings or "Bungalows" 201-208 (1969)
- Creative Arts building (1961)
- Visual Arts building (1970)
- Creative Arts Extension (1972)
- Student Union (1970)

- Batmale Hall (1978)

Of these buildings, the updated FMP proposes demolition of the following:

- Conlan Hall
- Smith Hall and Statler Wing
- Original Diego Rivera Theatre (attached to the Creative Arts building)
- EOPS
- Modular Buildings 201-208

The updated FMP proposes mothballing the following two buildings:

- Creative Arts building
- Visual Arts building

And it proposes to remodel the following buildings:

- Creative Arts Extension
- Cloud Hall
- Science
- Student Union
- Batmale Hall

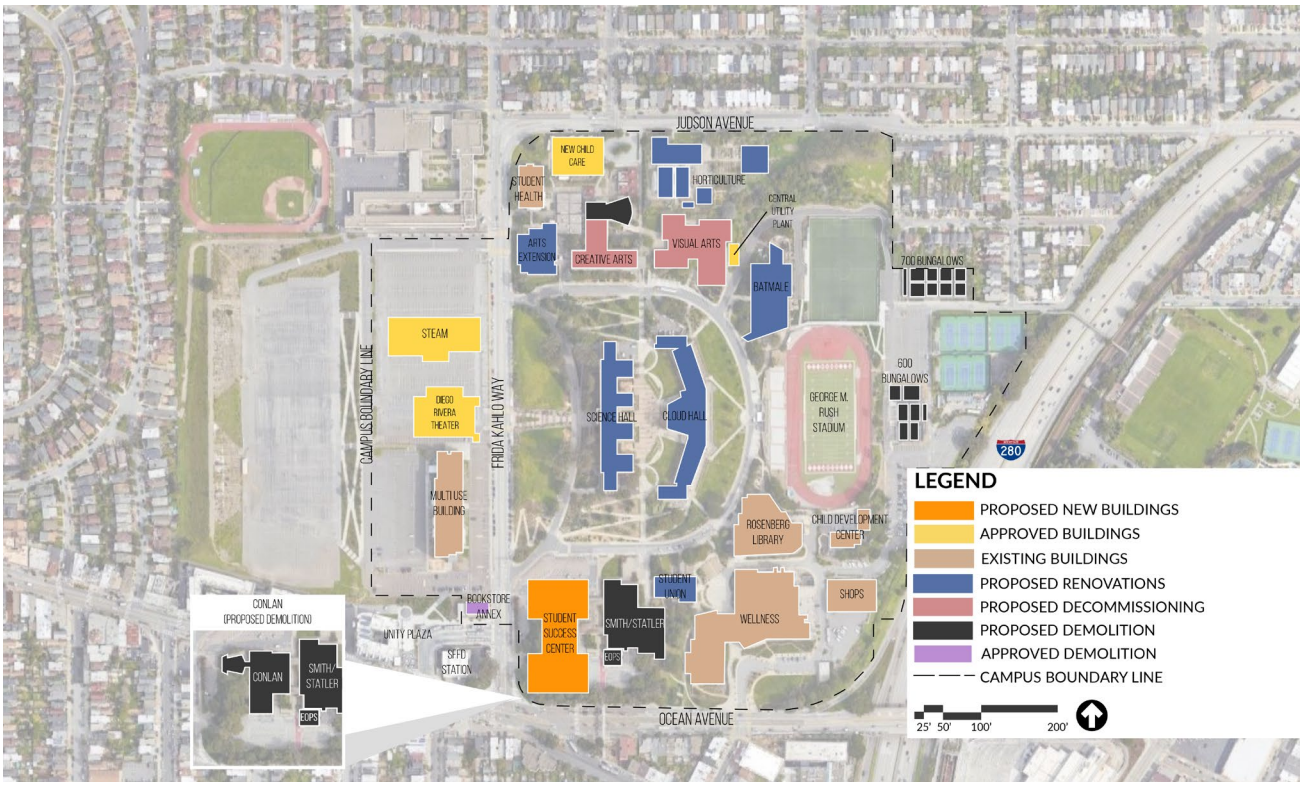

Figure 1. Site Plan for 2030 Facilities Master Plan

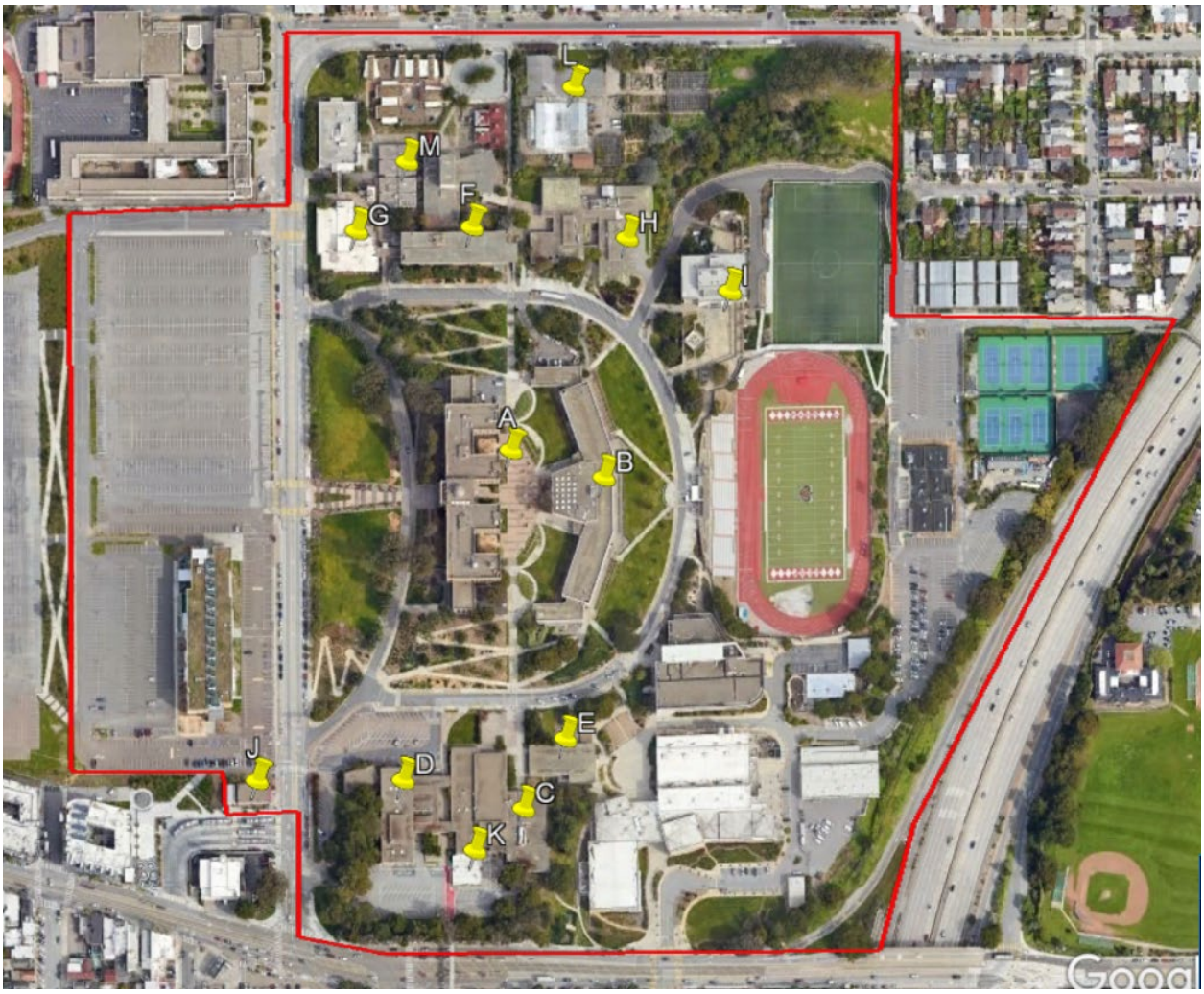

Figure 2. Aerial view of CCSF outlined in red with buildings identified (Google Maps, amended by author). Satellite photograph date is 2018.

A. Science building
B. Cloud Hall
C. Smith Hall and Statler Wing
D. Conlan Hall
E. Student Union
F. Creative Arts (and original Diego Rivera Theatre)
G. Creative Arts Extension
H. Visual Arts
I. Batmale Hall
J. Bookstore
K. EOPS
L. Horticultural Center
M. Bungalows

This HRE addresses the subject property's individual buildings' eligibility for listing on the NRHP, as well as the CRHR. It also evaluates the Main Campus's or portion of the campus's eligibility for the NRHP and CRHR as a historic district. As an entity within the State of California Community Colleges system, CCSF is not subject to local regulations.

SUMMARY OF FINDINGS

The CCSF Main Campus was evaluated for its potential to be eligible as a historic district for the NRHP and/or the CRHR. It was determined not to be a historic district in its entirety. However, within the physical campus boundaries there are two historic districts, one within the other. The smaller district, "the historic-core district" is a portion of the original Main Campus. This first-to-be-developed historic core on College Hill was found to be eligible for the NRHP and CRHR under criteria A/1 and C/3 for its association with the early junior college movement in the greater San Francisco Bay Area, and as the work of a master and for embodying the distinctive character of a place of higher education, respectively. The overall integrity is high under all seven aspects of integrity. The boundary of the historic district is Cloud Circle on the north, east and south side of College Hill, and to the west, Phelan Avenue/Frida Kahlo Way (see Figure 13). The period of significance is 1940-1954.

Additionally, the Science building, central to the historic-core district, has been determined to be individually eligible under both criteria for the same reasons. The building retains a significant amount of integrity with respect to all seven aspects. Its boundary, within the boundary of the historic-core district, is the footprint of the building.

The second district, the "Modern architecture district" includes the historic-core district and the Timothy, Milton and John Pflueger architect-designed buildings constructed between 1940 and 1978, eligible as locally significant. These include Smith Hall and Statler Wing, Creative Arts, Conlan Hall, Student Union, Batmale Hall, Visual Arts, and Creative Arts Extension (see Figure 15). Several other buildings that will be 45 years of age by 2030 were evaluated for their potential to be eligible for the NRHP and/or CRHR and determined not to be eligible under any criteria, individually or as contributors to the district. These include the Horticultural department complex, the EOPS building, and several temporary buildings or "bungalows". Much of the eastern and northern areas of the campus is of modern construction and not included within the district boundary. The Multi-use Building and the West Campus, west of Phelan Avenue/Frida Kahlo Way is also outside of the district.

METHODOLOGY

Garavaglia Architecture, Inc. staff conducted a site visit and survey of the property on February 2, 2020, February 11, 2020, and April 11, 2020. During these visits, staff documented the buildings' configurations and architectural elements with photographs and field notes.

Garavaglia Architecture Inc. also conducted additional archival research on the subject property. Due to the Covid-19 pandemic, staff could not conduct any in-person research since March 2020. Subsequently, staff had no option but to limit research to materials available online or at hand. Staff consulted the following repositories/collections to complete the research process (see References section for complete list of resources).

- 2004 CCSF Master Plan EIR

- The Campus History Series: City College of San Francisco (un-referenced book)
- CCSF Library and Archives
- CCSF Library and Archives Virtual Campus Library
- CCSF (virtual) Art Tour
- San Francisco Public Library History Center online catalog and online collection
    - San Francisco Historical Photograph Collection
    - Voter Pamphlet and Propositions
- Internet Archive – archive.org
- Newspapers.com
- Google Scholar – scholar.google.com

The writing of the Junior Colleges in California context relied heavily on a 1964 well-referenced report titled: *History of the Junior College Movement in California, Bureau of Junior College Education Release No. 20, revised*. All information not directly referenced in this context was drawn from this document; other materials are referenced in the context. Primary resource for the history of CCSF context was the archived student newspaper, The Guardsman, and the book, *The Campus History Series: City College of San Francisco*. The book includes no references. Dr. Austin White, a former history professor at CCSF was the primary author. His files, notes, and possibly references are in CCSFs archives but were not accessible. As with the Junior College context, all information not referenced in the context was taken from Dr. White's book. All other references are included in that context. The Historic Context Statement for San Francisco's Modern Architecture and Landscape Design, 1935-1970, prepared by the city of San Francisco's Planning Department was used in the analysis of the subject buildings' styles and assessment of local significance.

Chapter 2

RESOURCES DESCRIPTIONS

OVERALL CAMPUS

The Main Campus is a concentration of sites, buildings, structures, and objects. Consequently, it has the potential to be a NRHP and CRHR historic district or designed landscape, in part or in its entirety. Features within a historic district are the physical evidence of past uses, events, and associations. They may reflect a variety of activities occurring at one time, or evolving functions in different periods of time. All may or may not be historic or contributing to the significance for which a district meets the eligibility criteria. Larger and more prominent characteristics require the greatest documentation; those less prominent help define a district's setting and character. The NRHP recommends historians consider the following components when documenting potential historic districts:[1]

- Land Uses and Activities
- Patterns of Spatial Organization
- Response to the Natural Environment
- Views and Vistas
- Circulation
- Boundary Demarcations
- Vegetation
- Small-scale Elements
- Structures
- Objects
- Clusters
- Buildings

[1] NRHP Bulletin 18, How to Evaluate and Nominate Designed Historic Landscapes

CCSF's Ocean Campus is the main City College campus and accommodates about 60% of the City College District's credit and non-credit instruction as well as approximately 60% of the District's square feet of facilities. It also serves as the District's administration headquarters, including the Chancellor's Office, Academic Affairs, Student Development and Institutional Affairs.[2] CCSF offers both academic and vocational programs, including programs in arts, media and entertainment; business, management, and entrepreneurship; communication and languages; education and child development; health and safety; science, technology, engineering and mathematics; society, culture, and social justice; and in trades in areas such as construction, mechanics and maintenance, culinary arts, and ornamental horticulture. City-wide approximately 60,000 students are enrolled.[3]

The Main Campus boundary is irregularly shaped. It is comprised of an approximately 55-acre rectangle, plus an approximately 6-acre triangle-shaped area jutting out like a fin on the eastern side of the rectangle, and the rectangle-shaped West Campus across Phelan Avenue/Frida Kahlo Way, which is about 13 acres (see Figure 2). The predominant features overall are the several large classroom and administration buildings; library, study, recreational/social facilities; and student services buildings. The campus gradually developed since the completion of its first and physically central building, the Science building in 1940 and has expanded since to include more than twelve large buildings or centers, and sports and recreation facilities, along with several smaller buildings housing support and infrastructure services and classrooms.

Central to the Main Campus - historically, physically and topographically - is College Hill. The hill, with the Science building and Cloud Hall atop it, is the predominant feature of the campus. The rest of the campus surrounds College Hill on three sides; the new Multi-Use building on the West Campus is geographically disconnected from the concentrated campus to the east of Phelan Avenue/Frida Kahlo Way. Buildings clustered below College Hill are generally organized by function. However administrative offices are found throughout campus and the need for space often dictates use. North of College Hill are buildings associated with the creative arts, including the Creative Arts building, Creative Arts Extension, Visual Arts building, and the Ornamental Horticulture facilities. East of College Hill are the outdoor athletic facilities – a soccer pitch, tennis courts, and track and field/football stadium. Batmale Hall is visually and topographically separate from the arts buildings and the athletic facilities. Student-services associated buildings, such as the library, Wellness Center and Student Union are clustered to the southeast of College Hill. Smith Hall and Statler Wing, primarily classrooms and kitchens for culinary instruction, and Conlan Hall are south of College Hill. The buildings are connected by paths, streets, bridges, ramps, stairs and plazas that are used for circulation by foot, bicycle, and automobile, and for socializing, studying and time between classes. While this is an urban campus, the grounds are well landscaped with trees, bushes, hedges, low plants and open green space.

[2] CCSF updated Facilities Master Plan, 2-11
[3] City College of San Francisco, "History of City College San Francisco"

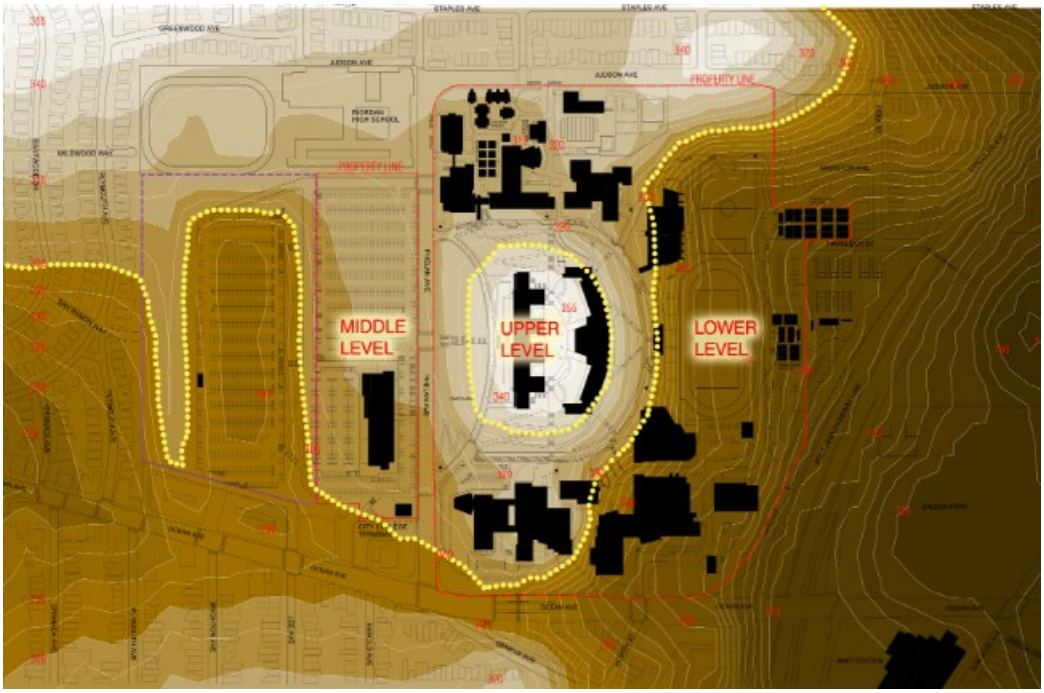

Figure 3. Three levels or planes of the main campus. (updated FMP)

The elevation of the campus varies from 185 to 355 feet above sea level, in generally three levels or planes.[4] The upper level includes College Hill, the highest peak on campus and the origin of campus development. In response to the natural topography, the original campus plan, designed by master architect Timothy Pflueger, sited the central, predominant, and first building, the Science building, on this highest point in the center-west of the property. The Science building remains the building on the campus's highest elevation; Cloud Hall, also built on College Hill, is east of and slightly lower in elevation than the Science building.

These two large north-south oriented buildings frame a large plaza; the summit is the central circulation point for the campus. The hill is further defined by Cloud Circle, a horseshoe-shaped roadway that surrounds the hill on the north, east and south side; it descends on the west side of College Hill where it intersects with Phelan Avenue/Frida Kahlo Way in two symmetrical locations. A second arching road, Science Circle, curves up the hill, in front of the Science building and descends to join both intersections with Phelan Avenue/Frida Kahlo Way and Cloud Circle. The central predominance of the hill is further emphasized by a broad staircase leading from Phelan Avenue/Frida Kahlo Way to the central portico of the Science building.

The middle level includes the buildings that are adjacent to and accessible from Phelan Avenue/Frida Kahlo Way, Judson Avenue, and Ocean Avenue – buildings to the north and south of College Hill. Many of the building clusters discussed previously are joined by exterior stairs,

[4] CCSF updated Facilities Master Plan. 2-15

ramps, and bridges and are therefore accessible from these streets even if they are not immediately adjacent. For example, stairs from Phelan Avenue/Frida Kahlo Way lead to the Creative Arts Extension's roof plaza which is connected by a bridge to the Creative Arts building to the east. While not accessible from these exterior roads, Batmale Hall and the Library would also be considered as on the middle level or plane of the campus.

The lower level includes the less permanent facilities that are in the more outlying areas of campus. These include the athletic fields, tennis courts, stadium and several more recent modular buildings or "bungalows".

Urban college campuses are usually inwardly focused, physically insular properties; buildings, plazas, and circulation systems are designed to interrelate with each other rather than to focus on views or vistas beyond the campus boundary. Most of the larger buildings do have views due to their height and the site's topography, and the designs are responsive to the views. But their primary façades are oriented toward the campus. Cloud Hall's primary façade faces the Science building, Batmale Hall's faces the library, across the stadium seating. Likewise, the majority of the other larger buildings face Cloud Circle, the primary internal campus road.

One significant exception is the Science building. Timothy Pflueger designed this most iconic building on campus to be seen from outside of campus, atop the central and highest point of the property. The building is classical in form and its central portico looks west and away from the campus toward the Pacific Ocean. All other buildings are below or behind it. Viewing the original, classically formal campus plan, it appears that Pflueger's intent was to design all buildings to look inward toward the main building, and that this central predominant building was to convey outwardly that it represented a place of higher learning. The original parcel for the campus was 'L'-shaped. Research found that the School Board, upon Pflueger's request, acquired additional property to make it symmetrical to accommodate such a classically designed grouping of buildings. It is likely that the intent was primarily to draw people to the building atop the hill; the view of the Pacific Ocean may have been secondary, but nevertheless important.

As previously mentioned, Cloud Circle is the primary road within the Main Campus and was part of the original design. It is a one-way counterclockwise drive that is the dividing line that separates the upper-level from the mid-level plane of the campus; it enters and exits at two locations on Phelan Avenue/Frida Kahlo Way. It circles College Hill and separates the Science building and Cloud Hall and their common plaza from the rest of the campus. Science Drive is within the area that Cloud Circle surrounds. It was also part of the original design. Both roads accommodate cars, bicycles, and pedestrians. Marston Avenue first appears on the 1960 Master Plan. It is now a fire lane roadway that enters Cloud Circle on the northeast. The road travels on a lower grade than the land to its north as it heads east between Batmale Hall and Visual Arts, loops around the soccer pitch and exits at Havelock Street between the tennis courts and the 700's bungalows. It also leads to a parking lot south of the 700's bungalows; additional roads on the eastern side of the lower campus connect several parking lots – large and small - and finally exits the campus on Ocean Avenue at the Wellness Center. There are two additional parking lots that are accessed by Cloud Circle, one north of Conlan Hall and one south of Conlan Hall/Smith Hall.

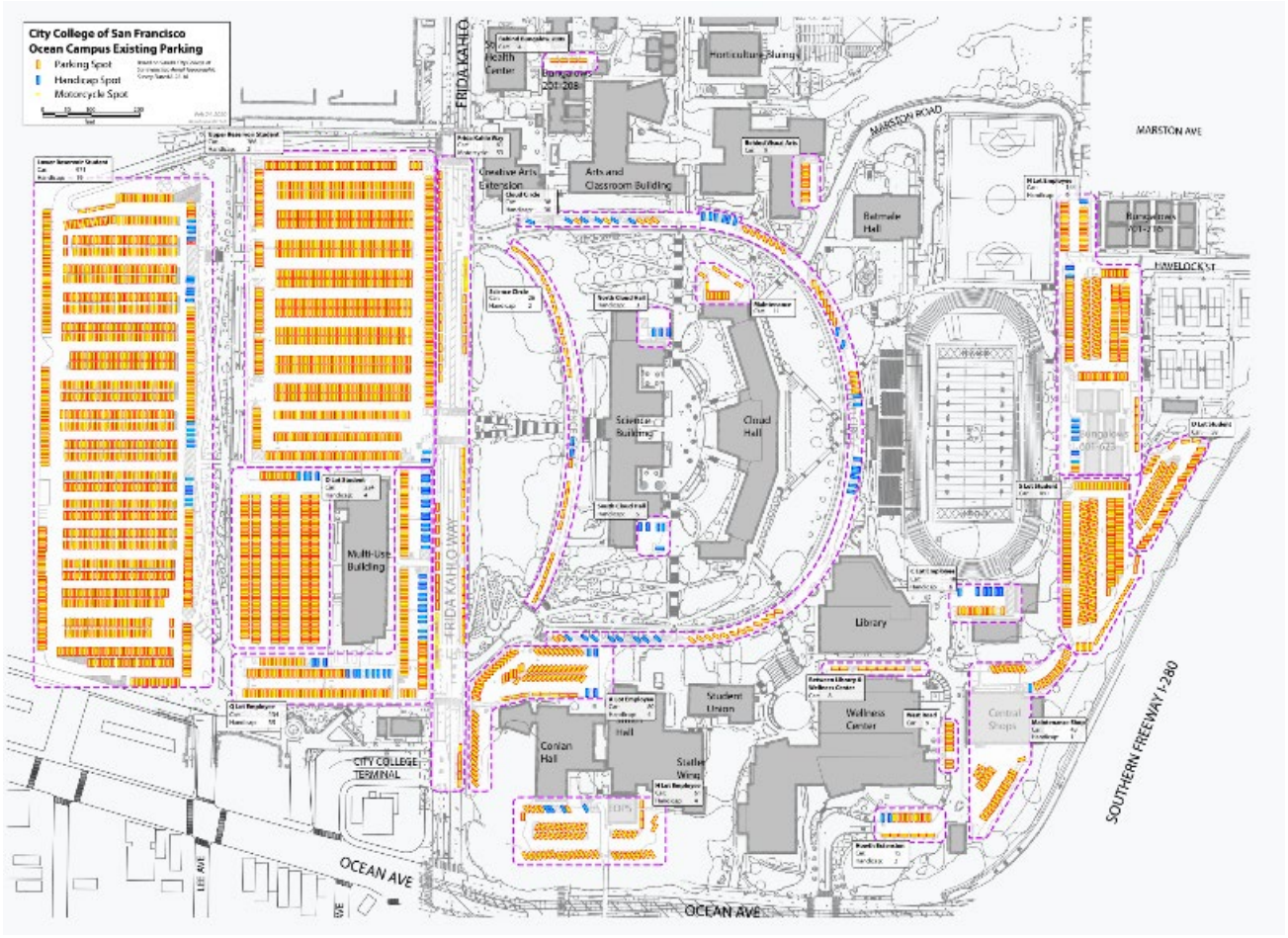

Figure 4. Roads and parking lots. (updated FMP)

The north-south pathway that ascends College Hill and crosses the plaza is the main pedestrian connection for the campus. On College Hill, within Cloud Circle are several paved pathways and stairs, symmetrical on the north and south sides of the buildings and behind Cloud Hall, all leading to Cloud Circle. A grand staircase, part of a late 1960s landscaping project, descends College Hill from the Science building portico to Phelan Avenue/Frida Kahlo Way. It replaced the original sloping ramp. Switch-backs flank the north and south elevations of the Science building, between the plaza and Cloud Circle. An additional switch-back connects Science Drive to Phelan Avenue/Frida Kahlo Way. Paths and stairs form a 'V' and lead pedestrians from the rear of Cloud Hall east toward the stadium; other paths and stairs on the hill lead pedestrians off of the hill in the northeast and southeast corners. Most of this system of paths was completed after 2005.

Stairs, ramps, bridges and paths provide connections between buildings and between the three campus levels or planes. The siting and organization of the buildings has resulted in routes that are generally indirect. Many feed into small plazas and open areas throughout campus. These

community areas include rooftop plazas, open spaces, and more intimate outdoor areas. Most were developed in conjunction with the design and construction of the campus buildings and are described in greater detail in the descriptions of the individual buildings, which follows this discussion.

The campus is well landscaped and can be described as park-like, particularly on College Hill, with its expansive lawns, multiple trees, and groomed plots of flowers and shrubs. These gardens are interspersed with and compliment the walkways and stairways. Trees separate the campus from I-280 and Ocean Avenue; the northeast corner is an informal open space with lawns, trees and shrubs.

Figure 5. Landscaping. (updated FMP)

Public art can be found throughout campus, outside on plazas and pedestrian areas and in the interior common areas of buildings. Art was incorporated into the campus design from its inception by architect Timothy Pflueger and several important pieces were introduced to the campus within the first few years of its existence. Since that time art pieces have continued to be integrated throughout the campus. In addition to the permanent art, there are at least four galleries with changing exhibitions. The CCSF Works of Art Committee offers a "virtual tour" of the art, found at https://ccsfgis.maps.arcgis.com/apps/MapTour/index.html?appid=31807503816d4cc781132f6b82ffdc80.

Table 1. Art on the Main Campus[5]

ARTIST	TITLE OF PIECE	MEDIUM	YEAR	LOCATION
Herman Volz	Organic and Inorganic Science	Mosaic	1940	Two pieces. One installed in north portico and one in south portico
Frederick Olmsted	Thomas Alva Edison and Leonardo da Vinci	Stone sculptures	1940	In plaza between the Science building and Cloud Hall
Frederick Olmsted	Theory and Science	Murals	1941	Inside entrance to Science building
Diego Rivera	Pan American Unity	Mural	1940; installed 1961	Diego Rivera Theatre. Painted in 1940; installed in 1961
Dudley Carter	Bighorn Mountain Ram	Redwood sculpture	1940	Lobby of Conlan Hall
Sargent Johnson	Unknown; male and female athletes	3 Concrete bas reliefs	1940	In storage
Beniamino Bufano	St. Francis of the Guns	Bronze and gunmetal sculpture	1969; installed 1976	Foot of grand steps to the Science building
Various	The Story of Time and Life	Multi-media	unknown	
August Tiesselinck	Thus passes the glory of the world	Copper sundial	unknown	Plaza on College Hill
Designed by Diana Won	Project SURVIVE Tree	Painting	unknown	On exterior wall of Cloud Hall; facing plaza

[5] CCSF Art Tour, an online "virtual" tour of the campus art.

Student collaboration	Cloud Hall Reading Garden	Metal sculpture	unknown	College Hill plaza
G. Billie Quijano	Hijas de Los Nopales	Mixed media	2015	Interior of Cloud Hall
William Wareham	Wyoming Coup	Steel sculpture	1969	Northwest corner below College Hill
Aristides Demetrios	Sentinels	Bronze sculpture	1973	Plaza outside of and between Conlan and Smith Halls
Dudley Carter	The Beast	Wood carving	1986	Inside Conlan Hall
Student project	Song of the Spirit	Mural	1999	North entrance to Student Union
Miguel Covarrubias (reproductions)	Pageant of the Pacific	6 Lithographs	Unknown; original 1940	Inside Louise and Claude Rosenberg Library
Ken Roberts	Atrium Benches	Metal	1995	Library atrium
Jacques Overhoff	Sculpture Deck	Concrete, plaster, wire with mosaic	1979	Batmale Hall roof plaza
Jacques Overhoff	Bicentennial Wings	Concrete sculpture	1979?	Batmale Hall at Cloud Circle
Alan Brooks and students	Faces	Plaster of Paris molds	1974-79	Batmale Hall
Jacques Overhoff/students	Uptight	Painted concrete sculpture	Unknown; ongoing student work	Front of Visual Arts
Ralph Stackpole (replica)	Pacifica	Concrete sculpture	Unknown; original 1940	Creative Arts building plaza
Ignacio Perez Solano	El Rey, San Lorenzo #1	Volcanic tuff sculpture	2004	Creative Arts building plaza
Peter VandenBerge	Jungle Scene	Ceramic mural	1972; installed 2008	Orfalea Family Center
Sansei Faculty	Honoring Japanese-American Students of WWII	Painting	2011	Multi-Use building

BUILDINGS

The following are descriptions of all buildings on the Main Campus constructed between 1940 and 1978. Two buildings, the Science building and Cloud Hall have already been determined to be eligible for the NRHP and the CRHR.[6] The California Bookstore has already been found as not eligible. Smith Hall was also determined not eligible because of large additions that, at the time, were not 45-years of age. The additions either have already reached 45 years of age or will be by 2030. Consequently, the building and its additions as a whole has been evaluated in this report. This HRE includes descriptions of these previously evaluated buildings, eligible or not, because they were considered for their potential to be contributors to a historic district.

Table 2. Buildings evaluated in this historic resources evaluation.[7]

BUILDING NAME	YEAR COMPLETED
Science building	1940
California Bookstore	1949
Cloud Hall	1954
Smith Hall and Cafeteria	1955
Creative Arts and Diego Rivera Theatre	1961
Statler Wing	1963 and 1973
Ornamental Horticulture and Floristry • Classroom building • Greenhouses 1-2-3 • Greenhouse 4 • Lath House small • Lath House large	1964-1965
Conlan Hall (Educational Services/College Bookstore)	1968
Bungalows 201-208	1969
Bungalow 400 (EOPS)	1970
Student Union	1970
Visual Arts	1970
Creative Arts Extension	1972
Batmale Hall (Social Science Classroom and Laboratory Building)	1978

[6] 2004 FMP EIR
[7] Ibid.

Science Building (1940)

Figure 6. West and principal façade of the Science building (2020).

The Science building is a large three-story plus basement building that sits atop a knoll facing west toward Phelan Avenue/Frida Kahlo Way; the Pacific Ocean can be seen on clear days from the central portico. A circular drive, Science Circle is in front of the building, providing two points of access from Phelan Avenue/Frida Kahlo Way. The hill is landscaped, and a broad stairway leads from the main portico to Phelan Avenue/Frida Kahlo Way. Beniamino Bufano's sculpture *St. Francis of the Guns* stands at the base of the hill, below the central portico, placed there in 1976. To its east sits Cloud Hall; the two buildings share a plaza. South and down the hill is Conlan Hall and to the north is the Creative Arts building. Architect Timothy Pflueger designed this first

campus building; he also designed the initial campus plan. San Francisco Unified School Board adopted the plan but only partially implemented it as designed.

The building's approximately 42,000 square-foot footprint is a long rectangle parallel to and above Phelan Avenue/Frida Kahlo Way; four shorter wings on the rear façade extend eastward, resulting in three square recessed bays. Lower, two-story wings are located on the north and south ends of the building. The building's roof is primarily flat, with the exception of a domed planetarium, and a smaller, prefabricated observatory that was added in 1978. The foundation and walls of the building are reinforced concrete. Ceramic tile veneer laid in a stacked arrangement with every fifth row laid in a stretcher pattern sheaths the reinforced concrete walls. Several window types are present, but the majority are six-light windows with operable awning sashes in the lower and upper lights. The muntins and mullions are wood.

The principal façade (west elevation) is symmetrical. A central projecting portico, supported by simple square columns, marks the center of the building. Along a simplified entablature the words "The Truth Shall Make You Free" are written in raised letters. Behind the portico are three vertical bands of windows above three doors and transoms. Directly above the portico, there is a flat-roofed attic with five small windows placed so that they match the spaces between the portico columns. The domed planetarium sits atop the attic and is sheathed in thin metal strips.

On either side of the portico there are fourteen bays of six-light windows. Recessed vertical bands of divided-light windows flank each end of the building. These windows are divided at the first and second floor levels by small, recessed balconets. The north and south wings step back from the main building. There are no windows on the first and second floors, but there are simple concrete colonnades at the foundation level. The south end of the south wing is open at the foundation level creating a porte-cochère.

The east elevation of the building is also symmetrical; four almost evenly spaced wings project from the main block. Nine-light windows wrap the corners of the wings. The eastern faces of the inner two wings are plain. Two vertical bands of glass bricks, which run from the first floor to the third, divide the wall planes of the outer wings. At the base of the bands, entrances are sheltered by simple post-and-lintel concrete porches with gently pitched shed roofs. The attic is visible above the center of the building. Along the inside faces of the wings, on each floor, there is a nine-light window (part of the corner window) and five of the six-light windows also found on the front façade. Between the two center wings there is a three-story projecting bay. The bays are composed of glazing supported by thin metal frames. The muntins and spandrels appear to be copper. On either side of the bays, on each floor, there are smaller windows as well as six-light windows. Planter boxes flank the walkway to this entrance. At the base of the two center wings are concrete edged planters. In the plaza behind the building are two stone sculptures by Frederick Olmsted, one a bust of of Leonardo da Vinci and the other a bust of Thomas Edison.

The north elevation of the main building is divided into twelve bays of openings. Each floor of each bay is fitted with a window, with the exception of the seventh through eleventh bays of the first and second floors, where the wings are attached. The openings are fitted with six-light

windows, except those on the eastern ends of the building, which wrap around the corner. The north face of the north wing has a plain entablature supported by two square columns and solid end walls. The portico is two stories in height. Behind the portico, at the first-floor level, there is a door and transom flanked by windows. The surrounding wall is covered by one of two mosaics by artist Herman Volz titled *Interaction of Science* and *Interaction of Mechanism.* The south elevation is a mirror image of the north and shelters the second Volz mosaic. Architect Timothy Pflueger designed the building to display the mosaics. Two other murals, *Theory and Science*, painted by artist Frederick Olmsted can be found inside the main entrance to the building.

Although the building is relatively unornamented and has plain massing typical of Works Progress Administration (WPA) -era buildings, the symmetrical façade, porticos, attic, and central dome form a classical composition. The corner windows, geometric shapes, and use of murals are typical of architect Timothy Pflueger's other designs.

California Bookstore (1949)

Figure 7. East and principal façade of the California Bookstore (2020).

The California Bookstore was evaluated in the 2004 FMP EIR and found not individually eligible for the NRHP and CRHR. The description is included here because the campus as a whole is being evaluated for its potential to be a historic district and, while not individually eligible, it has the potential to be a contributor.

The bookstore is a small one-story building with a roughly rectangular footprint and a flat roof. It is located west of the main campus, on the west side of Phelan Avenue/Frida Kahlo Way. Its primary elevation faces Phelan Avenue/Frida Kahlo Way. Its north elevation faces a parking lot and the Multi-Use building. The architect is unknown.

The east façade is a typical storefront composed of large banks of windows angle inward at two separate doorways. The walls are covered with stucco with brick veneer on the front (east)

façade. The windows are composed of narrow divided lights. Above the windows and doorways, separated by a lintel, there is a row of divided-light clerestory windows. A modern canvas awning stretches across the front façade. Scalloped trim lines the otherwise unornamented cornice of the east elevation and wraps around to the north elevation. The south elevation has no openings. The north elevation has a single ribbon of seven horizontally divided fixed windows. The rear elevation contains some window openings however most are blocked from view by a low metal-roofed shed. A narrow breezeway separates the original building from the shed.

Cloud Hall (1954)

Figure 8. West and principal façade of the Cloud Hall, northern wing (2020).

Figure 9. East elevation of Cloud Hall (2020).

Cloud Hall is a large building with a symmetrical but unusual footprint composed of a shallow "C"-shaped main building, smaller perpendicular wings on the north and south ends, and a large projecting auditorium block in the center of the west elevation. Architect Milton Pflueger designed the building, which was completed in 1954. It is the second major building built on campus. Milton was the younger brother of Timothy Pflueger; Milton took over the architectural firm upon Timothy's death in 1946. The two smaller perpendicular wings are reminiscent in plan of two buildings that were part of Timothy's original plan; the central auditorium is not.

To the west of the subject building is the Science building. The two buildings share a brick, concrete and landscaped plaza. East of Cloud Hall is the stadium, at the bottom of the hill; the hill is planted in grass and has concrete pathways and stairways descending toward Cloud Circle. North is the Visual Arts building and south is the Student Union building.

Cloud Hall is three stories, but because of its location on a hillside, two stories are visible on the west side, while all three are above ground on the east side. All sections of the roof are flat. The north and south perpendicular wings step down one story. The walls of the structure are covered with stucco and panels with a pebbledash finish. The windows are arranged in bands of 30 three-light windows divided by metal muntins and mullions. The lower two lights of every other window are awning sash.

The west elevation is symmetrical. In the center there is a large projecting auditorium block, which is covered in stucco and is taller than the rest of the building. On either side of the auditorium block, on the main building, there are entrances composed of two pairs of doors with transoms overhead. The metal doors have three square, evenly spaced glazed sections. A flat-roofed porch, supported by three square columns and the walls of the projecting auditorium block, covers the entrances. On either side of the auditorium block and porches, are bands of 30 three-light windows.

The north and south wings are lower than the main block of the building, and small square windows are located along the inner faces of the wings. The outer elevations of the wings have bands of windows similar to those on the front façade. Each wing has an entrance on the west elevation made up of two metal doors and two vertical floor-to-ceiling parallel fixed lights.

In contrast to the west façade, which is broken by the auditorium block, porches, and projecting wings, the east elevation is relatively simple and dominated by massive bands of windows on each of the three floors. The window bands span from one end of the building to the other. The form of the building, a shallow "C" shape creates a three-part elevation. The central section has bands of 42 windows on each floor, and the outer sections have 36 windows on each floor. Beneath each band of windows are strips of pebbledash-finish panels. The horizontal emphasis created by the bands of windows, panels, and stucco cornice is broken only by entrances located on the first floors of the outer sections. The entrances are over-scaled and are composed of a pair of doors surrounded by sidelights and large divided-light transoms. The entrance is framed by cement coping. A horizontal band of coping also outlines the top of the third-floor windows and runs vertically along the sides of the windows and pebbledash panels. On the north and south

ends of the main block of the building, there is a pair of doors. Above, there are two columns of nine small square openings. Overall, the building has a strong horizontal emphasis in keeping with International architectural style. A square motif is repeated in some windows, door glazing, and vents.

Smith Hall / Cafeteria (1955)

Figure 10. Smith Hall and the Statler Wing. Facing south. Image courtesy GoogleEarth Pro streetview.

Figure 11. Smith Hall and the Statler Wing. In between the subject building and Conlan Hall. Facing north. 2020.

Figure 12. Smith Hall. Northeast corner. 2020.

Much of the exterior of the original Mid-Century Modern Smith Hall has been obscured by additions: The College Bookstore and Conlan Hall on the west, EOPS building on the south, and the Statler Wing on the south and east elevations. It is a single-story building with a concrete structural frame, designed by architect Milton Pflueger. The north elevation (principal façade) is the only elevation of Smith Hall that is entirely visible. It faces a plaza that it shares with the Statler Wing; to its north is Cloud Circle and, up a landscaped hill, the Science building.

The flat-roofed one story building has an asymmetrical front façade and is divided into two sections: a taller rectangular section that is partially surrounded by a lower section on the east elevation and fully surrounded by the lower section on the west and south elevation. The taller section's primary façade is a block covered in aggregate stone pierced with three staggered rows of occasional glass block; the lower portion of this elevation is composed primarily of glazing stacked three high and seven across separated by metal muntins, and a smaller panel repeating the solid and glass-block façade of the taller section. This lower section's roofline cantilevers further north than the taller section, forming a lateral recessed area with a glass and metal door in the east-facing

projection. It is covered with an overhang that continues the lower section's roofline and is supported by a square column.

The portions of the building's east and west façade that are still visible mainly consist of bays contained within the concrete structural frame, each consisting of a low concrete wall with large metal-framed windows recessed within the bays. Two large metal-framed glass doors with glass sidelights and transoms are set into two of the recessed bays. It is connected to Conlan Hall by means of two concrete porticos supported by square columns.

The rear elevation is almost entirely covered by the EOPS building and a kitchen access and delivery bay that was added in 1973. The roof is flat throughout with a metal (copper) fascia. There are clerestory windows in the taller block where the roofline heights differ.

Statler Wing (1963, 1973)

The Statler wing has an approximately 12,000 square-foot footprint. The concrete flat-roofed building was built as an extension of Smith Hall to provide additional kitchen, classroom, library, and office space. Milton Pflueger's firm designed both additions. The architectural style is overall functional Late Modernist. The Statler Wing is connected to Smith Hall's eastern elevation; a later 1973 addition is also attached to a portion of Smith Hall's southern elevation.

The south elevation is separated from Ocean Avenue by trees and a parking lot. Conlan Hall is sited to its west, the Student Union building is opposite its northeast corner, and the recently built Community Health and Wellness Center is to the east of the Smith Hall/Statler Wing complex, separated by grass and trees on a downhill slope.

The north (primary) elevation entrance spans a portion of Smith Hall. There are two sets of metal framed glass doors, sidelights and transoms shared by the two buildings; the eastern portion of the primary façade is solid stuccoed concrete. It appears to be a single story from this vantage point; a lower story is sub-grade. An exterior stairway leads east, down to the east side of the building, where both levels are visible.

The building's concrete structural elements are used to form bays on the east elevation and a portion of the south elevation. The bays contain pre-cast or tilt-up concrete walls; large windows with metal frames are set in the upper portions of the bays, intersected by panels and separated from the windows by a spandril of exposed aggregate corresponding to the plane of the upper floor. At the southeast corner the structural elements of the corner-bays form buttresses that cantilever out at the corner. There are several large metal-framed glass doors with sidelights and transoms on the east and south elevations. The south section of the building is the later addition; the elevation steps back three times as it approaches the EOPS building to its west and includes a service or delivery bay. The west elevation is attached to Smith Hall.

Extended Opportunity Program and Services EOPS (1970)

Figure 13. South elevation of the EOPS building (2020).

This is a precast or tilt-up concrete single story approximately 3,600 square-foot building, clad with lightly textured painted stucco. The walls have slab joints. There are identical metal awnings above the doors at the front/west elevation; a concrete fascia band is on the three visible elevations of the building. The building's fenestration is regularly distributed, consisting of aluminum framed, single slider windows. The front elevation has a recessed entry accessible from a wide ADA-compliant concrete walkway. The building's roof is flat.

The architect is unknown. The building is sited south of and abuts Smith Hall and faces a parking lot that is separated from Ocean Avenue by a thicket of trees and shrubs.

Conlan Hall (1968)

Figure 14. Conlan Hall. Primary façade. Facing north. 2020.

Figure 15. Conlan Hall Auditorium. Northwest corner (2020).

Conlan Hall is a one and two-story Late Modernist building designed with elements of the Brutalist style and Neo-Formalism, along with some characteristics of the Second Bay Tradition. The 30,000 square-foot building is generally T-shaped and has three separate volumes – the single-story bookstore on the east, the two-story administration building in the center and, on the west side, the 250-seat auditorium that follows the hillside as it descends toward Phelan Avenue/Frida Kahlo Way. Milton Pflueger's architectural firm designed the building.

North of the building is a parking lot and, further up the hill, the Science building. East is Smith Hall, and south is a parking lot that is separated from Ocean Avenue by trees and shrubs. Except for the west elevation of the auditorium, most of the building's west elevation is separated from Phelan Avenue/Frida Kahlo Way by trees and shrubs.

The primary façade (north) is two stories and features a large front overhang supported by six plain square concrete columns. The horizontal and vertical concrete support system is exposed, and the tails of the horizontal beams extend beyond the roof line. The treatment of the eaves is repeated throughout the whole roof's overhang and harbors. The separation between the first and second floor is articulated by a flat horizontal concrete plane that continues east, becoming the fascia of the roof of the single-story portion of the building. According to architect John Plueger "an arcade that recalls the portico at each end of the Science building up the hill [from Conlan and Smith Halls] ran along the front of the complex facing the Science building. The arcade would connect to Smith Hall, where we later added a large dining hall and classrooms and then a Student Union on the circular drive."[8] The entrance is recessed and the exposed structural system forms five bays.

The building has a flat roof punctuated by vertical mansards with clerestory openings. It has concrete trellis-like overhangs that extend horizontally southward into harbors that connect to the eastern side of Smith Hall. Conlan Hall's front two-story elevation is glazed from floor to ceiling comprised of three double doors, windows, sidelights and transoms set in between the concrete structural columns and regularly spaced throughout the asymmetric façade. In the north, east, and south elevations, structural columns separate bays that are each composed of two windows placed symmetrically in each bay of each floor. They are separated transversally by the concrete fascia of the floor plane and arranged in an alternating regular pattern consisting of a bay with two windows on either side of the vertical columns. The windows are separated by two to three inset like-sized concrete panels. Volumes are emphasized and functional areas are easily recognized from the building's exterior. An irregularly shaped wing is connected to the building's west elevation. It has no windows; the shape expresses its use as an auditorium.

The building received an award from the Precast Concrete Association. According to John Pflueger, their firm was a leader in the technology in partnership with their structural engineer Isadore Thompson. It was an economical means by which they could achieve long spans with a high degree of control.[9]

[8] Pflueger, John. *Quest for Relevance.* Unpublished memoir. 9/15/2016
[9] John Pflueger, email message to author, 4/20/2020

Student Union (1970)

Figure 16. Student Union east elevation. 2020.

Figure 17. Student Union north elevation, main entrance with murals (2020).

The Student Union building is a three-story building, with a structural frame of heavy concrete, covered with lightly textured stucco and painted. Its design is Late Modernist with some Regional and Brutalist influences. Milton Pflueger's architectural firm designed the building. Smith Hall/Statler Wing is sited to its south and west; a circular plaza and amphitheater separate the subject building from the Community Health and Wellness Center to the east. North is Cloud Circle, a landscaped hillside and Cloud Hall.

The building has large glass openings (doors and windows) on most elevations of the second floor and throughout the third floor that give the impression of floating planes on the north, east and south elevations. It is asymmetrical in design and floor plan, and is generally 'L' shaped. Its flat roof projects out over a third-floor balcony that wraps around three elevations and extends out over the second floor; the balcony railing is wood. The top floor of the primary, north façade is connected to Cloud Circle by a wide, long bridge with wood railings consistent with those found on the balcony, and features a colorful mural, *Song of the Spirit,* a student-designed project painted in 1999. There are three sets of double metal-framed doors surrounded by fixed glazed panels and transoms; the mural is on flat concrete surfaces that separate the doors. Below the bridge the second story opens onto a concrete plaza with round tables with four attached seats. The façade is divided into five bays separated by vertical concrete structural members; the horizontal wide concrete lintel separating the two floors is slightly recessed and is essentially on the same plane as the fenestration. There are three sets of double metal-framed glass doors in every other bay, surrounded by fixed glazed panels and transoms. A curving ramp descends northeast away from the building, above an amphitheater.

The west elevation's is limited to the top floor of the building; the first and second stories are below grade. The single entrance opens onto a plaza shared by Smith Hall and the Statler wing. The wide roof facia cantilevers out, protecting the central protruding door bay. The recessed wall on either side of this entrance contains two side lights.

The south elevation is partially subgrade. The upper floor is visible; the lower floor is gradually exposed west to east. The west side is stepped back; fenestration on both floors is comparatively minimal, separated by stuccoed concrete wall. Half of the first floor 'L' projection is clad in concrete; as it reaches the southeast corner, three bays of metal-framed glazed fixed windows are visible. The 'L' on the third floor is floor to ceiling glass fronted by the wrap-around balcony.

The east elevation is asymmetrical. An attached elevator shaft tower divides the façade into two unequal sections. The southern, wider section has two bays of three levels. A wide lintel separates the first and second floor; the projecting balcony separates the second and third floors. The roofline cantilevers out over the protruding balcony. The balcony continues on the north portion of the east elevation. The northeast ground-floor corner is clad in stuccoed concrete and its planes are even with the roofline. It opens out into a circular plaza and amphitheater shared with the Community Health and Wellness Center. All three stories of the east elevation are visible.

The building is generally functional with a strong connection of interior and exterior spaces. There is also a strong emphasis on massing, broken by the ribbon of large glass windows and doors of the

second story. The building has wood finishes in the form of wood railings on balconies and the exterior bridge, and an indoor, central, sculptural wood staircase with metal balusters over concrete stairs, located at the intersection between the hallway and the dining area.

Ornamental Horticulture and Floristry Department Buildings (1964-65)

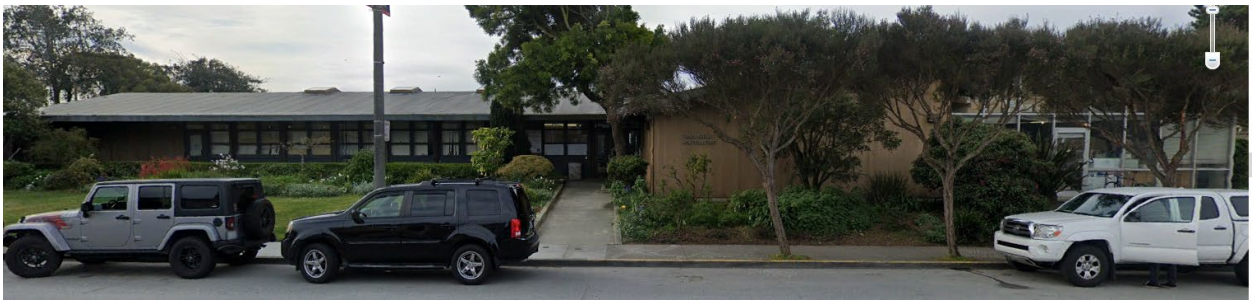

Figure 18. Ornamental Horticulture Center. Image courtesy of GoogleEarth Streetview. Imagery dated March 26, 2018.

The department's building, structures, and raised beds and planting areas cover approximately 2.25 acres. The horticultural facilities were moved to the northern part of the campus, along Judson Avenue in 1964-1965; the construction of Interstate 280 forced the move. The group of buildings and structures are east of the Orfalea Family Center constructed in 2008, and some bungalows, and north of the Visual Arts building. East of the facility is an area informally landscaped with trees, shrubs and grass. The current facilities include an approximately 11,000 square-foot single-story Ranch-style building; a block of three large approximately 3,300 square-foot attached greenhouses and a smaller, separate approximately 1,000 square-foot greenhouse; two lath 'houses' partially shield plants and raised beds, one is approximately 7,600 square feet and the other approximately 4,000 square feet; a small shed; several raised beds and hydroponic gardens; bays of landscaping materials; and parking. A designed garden separates the large lath house and hydroponic plantings from Judson Avenue to the north. A chain-link fence surrounds the facility.

The Ranch style building was designed by Alex Woolworth, former horticulture student at CCSF. He was a Caltrans structural engineer when he designed the building. The L-shaped building has a low-pitched cross gabled roof with broad boxed eaves. The roofing material is rolled asphalt. There are three low monitors or skylights on the east-west portion of the building. The siding is unpainted vertical wood board. The east-west side-gabled wing faces Judson Avenue. There are six contiguous bays of two one-over-one single-hung windows, each with a transom. The eastern-most bay contains a window and a partially glazed door. Another bay of windows and the primary entrance is in the corner where the two masses join. The east half of the front-gabled façade is solid wood with raised letters, 'ORNAMENTAL HORTICULTURE'; the west half is floor to roof fixed large lights that wrap around the northwest corner. A lawn, hedge and a variety of low shrubs and flowers are planted in front of the building. The southern elevation of the side-gabled section has a similar window pattern as the north, primary façade. There are no openings on the east facing façade.

Creative Arts Building and original Diego Rivera Theatre (1961)

Figure 19. Creative Arts. Photograph facing north (2020).

Figure 20. Creative Arts courtyard between classroom building and original Diego Rivera Theatre. Photograph facing southwest. 2020.

Figure 21. The original Diego Rivera Theatre.

The Creative Arts building, designed by architect Milton Pflueger, is a large three-story reinforced concrete rectangular International style building sited north of the Science building, with a single-story wing off the north elevation making a "T". The north end of the wing houses the Diego Rivera Theatre and the Diego Rivera mural *Pan American Unity*. The theater juts out of the east elevation of the single-story wing like an ax head. The exterior forms reflect the functional areas of the theater – the wedge-shaped auditorium and the taller roof structure atop the wing that houses a set-changing crane system over the stage. The building is north of the Science building, east of the Creative Arts Extension, south of the Orfalea Family Center, and west of the Visual Arts building.

The main three-story flat-roofed building is a long rectangle, oriented east-west. The main entrance is on the narrow east end of the building. A pair of walkways connect the building to Cloud Circle; one descends to the first floor, the second rises to a second story bridge. The roof cantilevers east over the walkways and is supported by a full-width ground-to-roof solid panel of greenish

aggregate concrete standing between and parallel to the two walkways. The façade of the building is stuccoed concrete of a contrasting color. Metal-framed glass doors to the first and second floors are stacked in a central bay. A single bay of three stacked vertical two light windows placed on each of the three floors face east on the southeast corner of the building.

The eastern end of the south elevation is clad in a block of 30 concrete aggregate rectangular panels that are the same material and color as the panel supporting the cantilevered roof. The balance of the elevation has three long ribbons of windows characteristic of the International style. The top two ribbons are a series of three stacked windows separated by metal muntins and mullions. The ground floor windows are a ribbon of single windows each separated by metal mullions. Two ribbons of two-window width pre-cast concrete panels separate the window ribbons. The window ribbons stop short of the west end of the building. The west elevation also opens on the ground floor and the second story. A bridge connects the second story entrance to Cloud Circle; stairs lead to the ground floor. The bridge also connects the Creative Arts building to the adjacent Creative Arts Extension, built in 1972. The west elevation is clad in stuccoed concrete. The north elevation mirrors the south elevation except for the aggregate panels. The bottom ribbon of windows is interrupted where the lower north-south oriented wing is attached.

The low wing is windowless; a double door with small lights pierces the royal blue painted stucco east elevation. The east façade of the theater is clad in solid aggregate panels that are composed in a shallow "V"; the roofline, also a shallow "V" is extended further east and shelters the wall. The roof is canted and cantilevers out over both the north and south elevations of the theater, supported by narrow rectangular columns. The recessed north and south openings to the theater are filled with floor-to-ceiling fixed windows and a pair of double glass and metal doors. The sides of the theater are a series of simple filled bays clad in stuccoed concrete. A block of 24 glass blocks are high up the north facing recessed wall. A tall block sits on the roof over the stage to accommodate a set-changing system.

The original design of the lobby of the theater was altered to accommodate the 72'x22' mural, which is on the north curved wall of the theater's lobby. There is a small plaza between the south elevation of the theater and the north elevation of the larger building. In the plaza are two sculptures. One is *El Rey*, a replica of an Olmec head from San Lorenzo in the state of Veracruz. Mexico; the other is *Pacifica*, an eight-foot concrete replica of sculptor Ralph Stackpole's much larger piece from the 1940 Golden Gate International Exposition.

Visual Arts (1970)

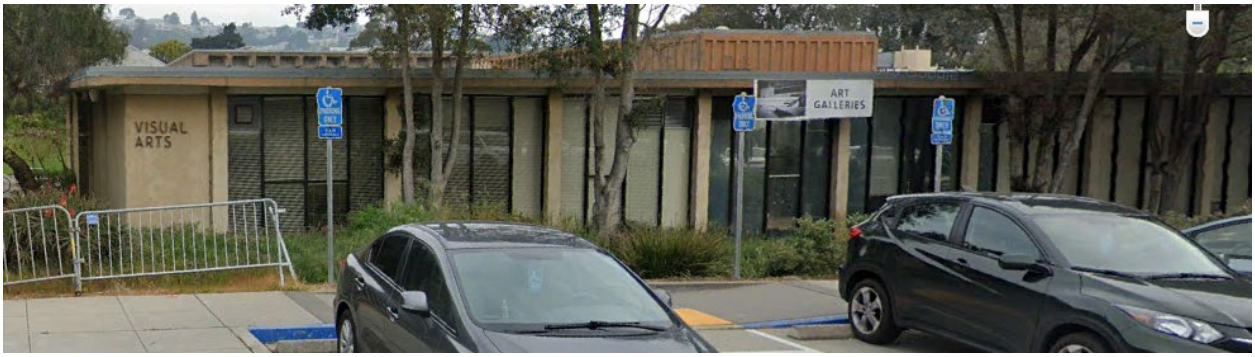

Figure 22. Visual Arts. South elevation. Image courtesy GoogleEarth Pro streetscape. Imagery dated March 26, 2018.

Figure 23. Visual Arts. South elevation. Courtyard entrance (2020).

Figure 24. Visual Arts. West elevation. 2020.

Milton Pflueger's architectural firm designed the 36,000 square foot single-story building in the International style, with Regionalist influences. It was completed in 1970. The exterior is precast concrete. It is irregularly shaped, with many of the classrooms and labs grouped around inner courts. Its massing is divided into two general units that together are reminiscent of a pinwheel; one is vaguely 'C' shaped and the other is 'T' shaped. The southern elevation of the 'T' extends several feet south of the southern elevation of the 'C'. The elevations of its roof planes vary, but all are flat. It is sited north of Cloud Circle, west of Batmale Hall, north of Cloud Hall, east of the Creative Arts building, and south of the Horticulture Center.

There are two primary entrances. The center courtyard is accessed by concrete stairs and a concrete path from Cloud Circle. The entrance to the west elevation is accessed by a sloping concrete ramp between the Creative Arts building and the subject building. The 'C' portion shares a plaza with the Creative Arts building. The two masses are connected in two locations. One is a partially glazed east-west breezeway, the other connection to the north is fully structural.

The south elevation of the 'C' portion is long and low. The façade is a series of eight glazed bays separated by concrete pilasters that also visually support the roof's shallow overhang. The glazing in each bay consists of four narrow vertical floor-to-ceiling windows separated by metal muntins. Some of the vertical panes are horizontally bisected by metal muntins. The west and east ends of the elevation are flat painted stucco; 'VISUAL ARTS' in raised letters is fixed to the west end. The west elevation of this portion of the 'C' is divided into five bays. Four of the bays are flat stuccoed concrete panels; the center bay holds a pair of metal-framed glass doors. This short elevation ends in the courtyard. The courtyard-facing north elevation also has flat concrete panels with two sets of centered double metal-framed doors with floor-to-ceiling sidelights and transoms. The west-facing portion of the 'C' is fully glazed with a combination of two sets of double metal-framed doors flanked by sidelights and topped by transoms. The entrance is recessed with two square pilasters that divide the glazed units. The south facing portion is stepped back and has no glazing. The roof extends over the stepped back section, creating an exterior shelter supported by a single square column. The flat roof is punctuated by a vertical mansard with some clerestory windows. The north portion of the 'C' has a taller roofline with a wider facia. The walls are clad with pre-cast concrete panels with visible joints. The rear, north facing elevation has no glazing; two solid metal doors are the only openings.

The north facing portion of the 'T' is where the two masses are joined. It appears that what was originally intended to be a courtyard contains a prefabricated metal shed. Several glazed bays look out onto the former gathering space. Two mansards with some clerestory windows sit atop the flat roof. One spans the east-west portion of the 'T' and the second spans the north-south portion. The east elevation of the east-west 'T' consists of six stuccoed concrete panels separated by shallow pilasters that also visually support the moderately extended roofline. The eastern facing elevation of the north-south portion of the 'T' appears to be a side entrance with parking and eight similar filled bays. Four flank each side of a set of three fenestrated bays; two of the three are glazed with four horizontal floor-to-ceiling windows separated by metal muntins and the third is recessed with double solid metal doors. The south-facing elevation of the 'T' is also windowless.

The central courtyard is intimate, with two concrete planters and some concrete benches. In addition to the partially glazed breezeway, there is a square-column-supported breezeway on the east and north sides of the courtyard. The wall on the west side of the courtyard is fully glazed above the planter that stretches its length. There are four glazed bays with four windows in each, separated by metal muntins.

Creative Arts Extension (1972)

Figure 25. Creative Arts Extension, south façade (2020).

Figure 26. Creative Arts Extension, roof plaza. Facing south (2020).

Figure 27. Plaza between Creative Arts Extension and Creative Arts building. Facing south (2020).

The two-level 31,500 square foot Creative Arts Extension was designed by architect Milton Pflueger's firm. John Pflueger led the design; it was completed in 1972. It is sited to the west of and adjacent to the Creative Arts building designed by the same architectural firm ten years earlier, prior to John joining the firm. Ramps connect the two buildings. The design is Late Modern with some Regionalist and Brutalist influences. It is irregularly shaped; the top story is generally 'L' shaped and the lower level is essentially rectangular with some recesses. The superstructure is made of reinforced precast concrete panels. It has several outdoor spaces, including a roof deck plaza and main entrance court. The roof planes vary in elevation; all are flat.

The west elevation faces Phelan Avenue/Frida Kahlo Way. Eight bays of windows are recessed within concrete frames; two rows of windows express the two stories. The concrete bays surrounding the upper floor windows extend out to appear to support the extended roofline and thick facia made up of concrete panels. The extended panels that separate the windows are canted at the bottom to meet the sloped concrete window ledges. Below the ledges are flat concrete panels. The lower floor windows are recessed below these panels and partially obscured from view by a thick hedge. Each window consists of a large central light flanked by one-over-one narrower lights;

the bottom light is smaller than the top light. South of the window grouping the wall steps back and is clad in flat pre-cast concrete panels. Exterior stairs at the northwest corner provide pedestrian access to the building from Phelan Avenue/Frida Kahlo Way; one set leads down to the first floor entrance on the north side of the building, the other leads up to the second-floor entrance and the large concrete roof terrace. The terrace is enclosed with heavy concrete-panel rails.

The south elevation facing Cloud Circle repeats the bay and window treatment. The southwest corner is stepped back, but instead of flat concrete panels, it holds two bays of windows. Eight window bays identical to those on the west elevation complete the south-facing elevation, which is partially below grade. A bridge with heavy concrete rails on the southeast corner leads pedestrians from Cloud Circle to a second story entrance on the east facing façade; an adjacent stairway leads pedestrians down to the first-floor entrance. These circulation structures are shared with the Creative Arts building. There is a Brutalist textured concrete elevator shaft between the two buildings, connected to the bridge.

The north elevation faces the Student Health Center. The second floor is connected to it by a bridge with heavy concrete-panel rails; the first floor opens onto a concrete plaza. The elevation is windowless, but contains several double doors painted royal blue. Windows on the second floor's north facing 'L' look out onto the roof plaza. The design of these four bays is consistent with the upper floor window bays on the west and south elevations.

The east elevation holds the main entrance to the building. The roof cantilevers out at the second story entrance; the bridge between the Extension and the Creative Arts building provides a cover to the first-floor entrance. The fenestration on the single-story east facing façade is also consistent with the south façade's upper story window bays. However instead of two bays slightly stepped back, eight bays are stepped back from the two that are adjacent to the main entrance.

The building integrated energy conservation into the basic design. The south and west classroom exterior walls were designed with vertical and horizontal shading.[10] There are trees south and north of the building; the south, east and west elevations are flanked by low bushes and hedges. The planting along the east façade is in concrete coarsely textured planters reminiscent of Brutalist rough vertical scoring. The rectangular center of the concrete plaza is slightly sunken in a series of descending steps; the lowest point is concrete with larger aggregate river rock.

The building received an annual award for design excellence from the San Francisco Chapter of the AIA.[11]

[10] Pflueger, Milton T., *Time and Tim Remembered*, 59-60
[11] John Pflueger, email communication with author, 4/20/2020

Bungalows (1969)

There is a set of temporary buildings in the northwest corner of the campus, between the arts buildings and the Orfalea Family Center. It is identified as bungalows 201-208, placed on site in 1969.

Bungalows 201-208 are larger, about 1,200 square feet each, rectangular with flat roofs. They are clustered in a group of two rows of three, placed back-to-back, making a larger rectangle just west of the Diego Rivera Theater. Openings are on the front elevations only. The roofs extend out over the front elevation of each building.

Batmale Hall (1978)

Figure 28. Batmale Hall, primary façade, main entrance from the roof plaza. Facing north (2020).

Figure 29. Batmale Hall, south wing bents. Facing northwest (2020).

Completed in 1978, Batmale Hall was the last building on the campus to be designed by the Pflueger firm. This large building is seven stories tall, with the bottom four a terraced base that steps back into the hillside. Its design is a blend of Late Modern and Brutalist, with its heavy concrete massing, repeated deeply recessed windows, and dominating geometrics. The primary façade of the main volume has some Neo-Formalist characteristics with its projecting massive central portico flanked by solid concrete vertical spans that read as columns, the rooftop stepped cornice, and its overall symmetry. There is also some Japanese influence at the roofline of this central, tallest section of the building. This north-south oriented building consists of three main volumes. The central volume is seven stories tall. The southern volume is three stories in height, each stepping back at the eastern elevation. The northern volume is two stories, also stepped back on the eastern façade. The north and south volumes each has a roof terrace. The overall shape is a trapezoid. The eastern façade faces the soccer pitch, the southern elevation is north of the stadium bleachers, the west elevation faces the corner of Cloud Circle and Marston Avenue. Marston Avenue winds around north of the subject building.

The north volume is the smallest, both in footprint and height. The west-facing portion of this volume is fully below grade. It has a ground-level secondary entrance on the east side leading to a concrete sidewalk covered by a second-story balcony. The façade is broken up into two bays that are articulated by massive bents that jut out of the building. Each bay is fully glazed floor-to-ceiling; the windows are fixed large vertical lights separated by metal muntins. A horizontal metal mullion runs the width of the bay, separating the lower bottom of the windows from the taller lights above. The second story balcony has similar fenestration and is not covered except by the horizontal members of the bents. The balcony rails are wooden boards. The roof terrace is accessed from Marston Avenue. Some of the buildings' mechanical systems are on the terrace, shielded from view by trees and shrubs. To the north of this volume is a curved ground-level and partially sub-grade terrace with trees and shrubbery separating it from Marston Avenue.

The central volume is seven stories. On the east-facing elevation the first and second floor façades are recessed below the third through seventh floor façades. A ground-floor concrete north-south breezeway connects the central volume to the two smaller north and south wings. The second-floor balconies are recessed and only partially extend over the breezeway. Four massive concrete piers articulate the three bays; the central bay is wider than the adjacent bays. The piers are fully exposed at the first and second floor and the breezeway is between the piers and building façade; the upper floors extend out to meet the piers. Horizontal joints extend out between the first and second floor and are attached to the piers. A second-floor balcony is recessed, with a wooden rail attached to the thick concrete horizontal girder that separates the two floors. Fenestration is identical on floors three through seven. Within each bay the façade is fully glazed and slightly recessed between the heavy concrete horizontal and vertical structural system. Each floor has shallow balconets with horizontal wooden rails attached to metal balusters embedded in the concrete. The two east facing corners of the central volume are notched back, with the corners of the roof covering the notches.

Only floors three through seven are exposed on the northern elevation. There are four bays of balconets with floor to ceiling fenestration recessed behind the balconets, in keeping with the design of the east-facing elevation. Also, as with the eastern elevation, the concrete structural system is exposed. The bays are separated by a centrally placed solid concrete-faced elevator shaft. Floors four through seven are exposed on the west-facing elevation; floors one through three are below grade. The design mirrors that of the same floors on the east facing elevation. Trees and shrubs partially obscure floors four and five, filling the space between Marston Avenue and the building.

The southern elevation is the building's primary façade. It opens out to the roof plaza of the three-story southern volume. The entrance is accessed by two east-west ramps, one from Cloud Circle and one from Marston Avenue onto the roof plaza. A stairway from Marston Avenue next to the ramp leads to lower, subgrade floors. The elevation is articulated by three bays; the central bay is a projecting portico. The central bay is flanked by column-like wider expanses of concrete, making the recessed balconies on each floor appear deeper. The separation between floors is indicated by horizontally scored concrete or prefabricated panels. A stepped back cornice sits atop the roof above the central bay. The rest of the roof is flat.

The fenestration on each floor, behind each balcony, is consistent on each of the volume's façades. A flat rectangular horizontal concrete awning protects the central entrance. Raised letters on it say 'BATMALE HALL.' The main entry is a series of three glazed double-doors flanked by side lights and topped with transoms. The upper four floors are exposed within the south-facing west-side bay; some of the lower levels the east-side bay are exposed where the east façade of the southern volume steps back.

The first two stories of the three-story southern volume's east elevation are similar to those of the north volume's east façade. But instead of two bays there are four. At the end of the breezeway a stairway leads to the roof plaza. The third floor is also stepped back and forms a fully open and exposed balcony below the rooftop plaza. A narrow ribbon of windows extends across the third-floor façade. The balcony wraps around the southern façade, as does the second-floor balcony. The second-floor balcony leads to a larger plaza with a planted area and mechanical equipment.

The southern volume is topped with a large trapezoidal concrete roof plaza surrounded by wooden railings. The eastern edge of the plaza ends at the eastern edge of the seven-story volume's portico, where it drops down one level to the secondary plaza. The west half of the larger roof plaza includes concrete planters, with a square sculpture deck in the center. The piece by artist Jacques Overhoff was commissioned and designed for the building. Its sloping forms were made with wire and plaster mesh forms sprayed with concrete. Some are faced with red and blue mosaic. Batmale Hall received an award from the San Francisco Art Commission for combining art and architecture.

Buildings that will not be 45 years of age in 2030

These buildings are not described or evaluated in this HRE.

Table 3. Buildings not evaluated in this historic resources evaluation.[12]

BUILDING NAME	YEAR COMPLETED
Stadium Building	c. 1990
Louise and Claude Rosenberg Jr., Library Learning Resource Center	1995
Bungalows 700-716 (east of soccer pitch)	2010
Central Shop Facility	2001
Multi-Use Building West Campus	2010
Student Health Building	2006
Orfalea Family Center	2008
Health and Wellness Center	2008
Pressbox/Concession	1996
Recycling Center	2000
Misc. Bungalows	1998-2019

[12] NETRonline.

Chapter 3

HISTORICAL BACKGROUND/CONTEXT

HISTORY OF CITY COLLEGE OF SAN FRANCISCO

The city of San Francisco purchased 100 acres from landowner John Horner in 1854[13] to construct the San Francisco Industrial School that opened in May 1859. It was the first institution for "neglected and delinquent youths" constructed in California under the Industrial School Act passed by the California Legislature in 1858. The intent of the Act was to provide "the detention, management, reformation, education, and maintenance of such children…" and was modeled after penitentiaries.[14] The city of San Francisco constructed the House of Correction or Ingleside Prison, a prison for adult men co-located with the Industrial School, between 1874 and 1876. A fence separated the two institutions.[15] Despite the frequent public outcry against harsh and inhumane conditions, the Industrial School remained in operation for 33 years. It was ordered closed in 1892 and the students were transferred to reformatories in Ione and Whittier.[16] The building became a women's prison that year.[17] Despite the women's

[13] San Francisco Sheriff's Department History Online.
[14] Macallair, Daniel, The San Francisco Industrial School and Origins of Juvenile Justice in California: A Glance at the Great Reformation.
[15] San Francisco Sheriff's Department History Online.
[16] Macallair, Daniel, The San Francisco Industrial School and Origins of Juvenile Justice in California: A Glance at the Great Reformation.
[17] San Francisco Sheriff's Department History Online.

prison being severely damaged during the 1906 earthquake, the prisons remained in operation until 1934.[18]

The San Francisco Board of Education authorized the creation of San Francisco Junior College (the original name of the City College of San Francisco) as part of the San Francisco Unified School District on February 15, 1935. Dr. Archibald Jeter Cloud was the first president of the college, which officially opened on August 26, 1935. It was the 63rd junior college established in California and the fifth in the greater Bay Area. The college was intended to provide students with an option other than attending a four-year university or accepting a low-skill vocation that required no training or education beyond high school. The college offered typical academic courses with transferable credits and semi-professional classes for students intending to stop their formal education and seek employment after a two-year degree. To meet immediate needs, the college temporarily held classes in fourteen locations throughout the city, including the University of California Extension Building and Galileo High School. The school began with sixty-five faculty members. Most had master's degrees, and eighteen held doctorate degrees; four were women. Dr. Cloud sent letters to all San Francisco and East Bay high school graduates informing them of the new school; the 1935 student body numbered 1,483. They came from 21 counties in California, fourteen states, and the Philippines, China, and Greece. [19]

To put the establishment of San Francisco Junior College in context with the trend in the greater Bay Area, school districts that offered junior college curricula before San Francisco included Santa Rosa (established 1918), San Jose (established 1921), San Mateo County (established 1922), and Marin County (established 1926). Santa Rosa Junior College constructed its campus in 1930 and has expanded it over the years; the current San Jose campus moved to its present location in 1953; the College of San Mateo initiated the construction of its current campus in 1963; and the Kentfield campus, one of two College of Marin campuses, is sited in its original location, however it doesn't appear that any original buildings are extant. There are now 25 community colleges in the greater Bay Area.[20]

As enrollment grew at San Francisco Junior College the School Board began looking for property on which to build a centralized campus. They initially considered 22 locations. They reduced the list to two locations: Ingleside (Ocean Avenue) and property on Quintara Street. One requirement was that the city already owned the selected property due to limited funding. The student body held an informal vote and Ingleside was their preference, which may have influenced the selection. The board selected the Ingleside site in February 1936, with the anticipation that they would quickly build the first campus buildings and students would begin attending classes there in the Spring of 1937. The School Board's initial plan was for the campus buildings to be single story, stucco with Spanish-style red tile roofs. Each would contain fourteen classrooms and the five or six buildings would be sited around a main quad and connected by covered archways.[21]

[18] San Francisco Sheriff's Department History Online.
[19] The Guardsman, October 25, 1935
[20] California Community Colleges, "About California Community Colleges."
[21] The Guardsman, February 19, 1936

The city held a groundbreaking ceremony on April 25, 1937, with Mayor Angelo Rossi turning the first soil. Speakers included College President Cloud, San Francisco School Board President C. Harold Caulfield, Superintendent of Schools Joseph P. Nourse, and architect Timothy Pflueger. According to the Guardian, the student newspaper, the ceremony heralded an anticipated occupancy in Spring of 1938.[22] Mayor Rossi said 38 counties in California had junior colleges and it was high time that San Francisco had a campus with "beautiful buildings on a magnificent site".[23] With Pflueger now planning the campus, the original design plans apparently were abandoned. Pflueger stated that he would pattern the Science building, which would be the first building to be constructed, after the U.C. Berkeley Life Sciences building, designed by George W. Kelham and completed in 1930.[24] The administration invited instructors to review the plans and offer suggestions.

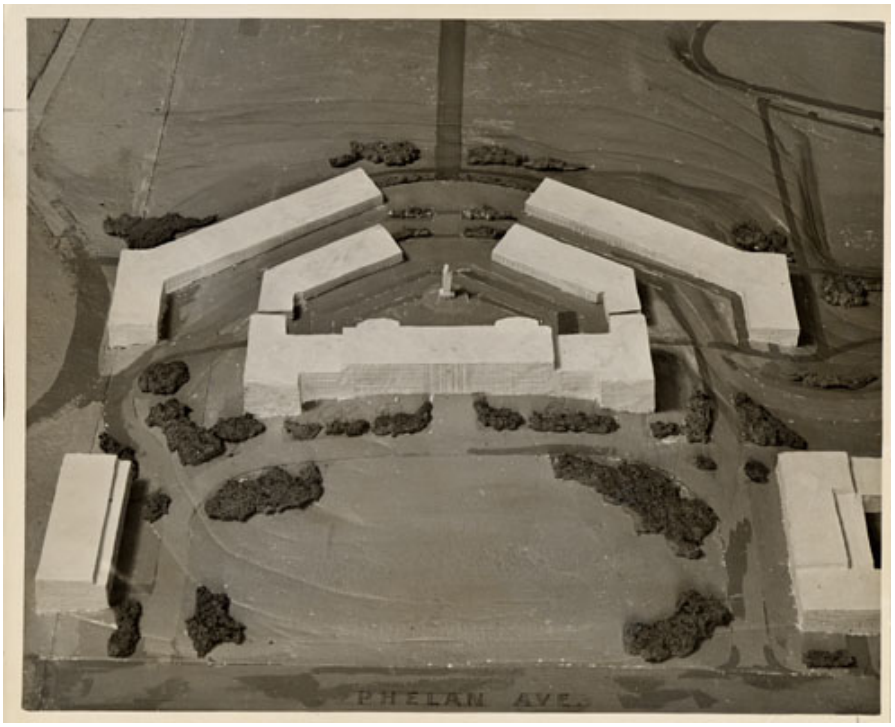

Figure 30. Timothy Pflueger's clay model of the original site plan. 1937. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

The School Board accepted Pflueger's design in full, which was comprised of several buildings, including a library, a student union building, an administrative office building, and an auditorium. The intent was to initially construct one building; the others would follow in order. While the site was cleared for construction in 1937, there were delays and it was then

[22] The Guardsman, April 21, 1937
[23] The Guardsman, April 28, 1937
[24] The Guardsman, September 9, 1937

anticipated that Pflueger and his eight assistants would not complete the plans before March 1938 and that the building would be finished by Spring of 1939. The 33-acre site was L-shaped. Pflueger's design required a rectangular site. The city's Recreation Commission turned over 25 acres, bringing the now rectangular site's size to about 58 acres.[25] Pflueger completed the design of the Science building early, in October 1937; the design of the student union building was to follow. The School Board anticipated construction would cost $1,250,000[26]. By August 1938 the School Board had put aside funds in the amount of $900,000.[27]

The School Board planned to supplement the funds by issuing voter-approved bonds for the whole school district in the amount of $2.8 million in 1938; a portion would go to the college campus construction. The School Board applied for additional funds from the Public Works Administration program (PWA) under the Emergency Relief Act of 1935. Under this act the PWA program could fund 45% of the construction of public institutional buildings provided the project proponent had 55% of the project's costs covered.[28] The bond passed and the PWA granted the money; the share going to the campus would cover the cost for the construction of the Science building and two gymnasiums.[29] The Board would need more funds to fully construct Pflueger's integrated plan.

The foundation for the first campus building, the Science building, was laid by Sibley Construction Company in the spring of 1938.[30] After several delays, the School Board finally awarded the construction contract to Clinton Construction Company in the spring of 1939, with the expectation that it would take 300 days to build.[31] The building "would be built with Indiana limestone with the front inlaid with ceramic tile and would be strictly modern in every way."[32] A May 10, 1939 Guardsman article anticipated that construction of the two gyms, sited on the lower east edge of the campus property, built 200' apart to accommodate a swimming pool, would begin in summer 1939. Roadways, paths and lawns, similar to those found on the Berkeley campus, would also be completed during the second half of 1939. The Science building and two other buildings, the Women's and Men's Gymnasiums, were completed in late 1940; students were able to begin using the buildings in January 1941.[33] A 1940 aerial photograph shows that the current alignment of Cloud Circle and Science Circle were part of Pflueger's original design.[34]

[25] The Guardsman, January 12, 1938
[26] The Guardsman, April 21, 1937
[27] The Guardsman, August 24, 1938
[28] Bond Properties and Charter Amendment to be Voted on at Special Municipal Election to be Held September 27, 1938.
[29] The Guardsman, October 5, 1938
[30] The Guardsman, April 27, 1938
[31] The Guardsman, May 5, 1939
[32] The Guardsman, October 26, 1938
[33] The Guardsman, January 3, 1942
[34] San Francisco Public Library, "San Francisco Historical Photograph Collection"

Figure 31. Aerial photograph of the newly completed Science building. 1940. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

Figure 32. West elevation and primary façade of the new Science building. 1940. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

Figure 33. East elevation of the Science building. 1940. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

Concurrent with planning the campus, Timothy Pflueger designed the Palace of Fine Arts building for the 1940 Golden Gate International Exposition on Treasure Island. He was also the Vice Chairman of the exposition's Fine Arts Committee and General Director of the exhibit. The exhibit included "Arts in Action" in addition to displays of finished artwork. Arts in Action provided visitors "the opportunity of studying at close range the various processes demonstrated here" mostly by artists volunteering their time. Three of the artists were employed by the Depression-era Federal Art Project (FAP) of the Works Progress Administration (WPA).[35]

The San Francisco Board of Education sponsored the three WPA artists who participated in Arts in Action; their pieces would eventually be moved to the campus. The exposition's Fine Arts budget bore the cost.[36] The artists included muralist Diego Rivera, sculptor/painter Frederick Olmsted, and mosaic artist Hermann Volz. Sculptor Dudley Carter was not identified in the exhibit's program as sponsored by the WPA, however his work also went to San Francisco City College.

Pflueger designed the college library so that Rivera's *Pan American Unity* mural would be the centerpiece of the main reading room. The mural would be 3,850 square feet when finished and cover the entire east, west, and south wall; the north wall would be glass and the mural would be visible from outside. Rivera only painted a portion of the mural at the exposition; originally 44' 3" x 22' 1.5", Rivera requested the wall space be expanded to accommodate a 73' 9"-wide painting.[37] He agreed to paint the rest of the mural in the library once the building was completed.[38] He painted the exposition panels on specially designed metal frames no larger than 14' 9" square so that they could be moved across the Bay Bridge.[39]

[35] Art: Official Catalog. Golden Gate International Exposition, San Francisco.
[36] Diego Rivera Mural Project. "Archives, Timothy Pflueger Papers."
[37] Puccinelli, Dorothy. *Diego Rivera: The Story of His Mural at the 1940 Golden Gate International Exposition.*
[38] Diego Rivera Mural Project. "Archives, Timothy Pflueger Papers."
[39] Puccinelli, Dorothy. Diego Rivera: *The Story of His Mural at the 1940 Golden Gate International Exposition.*

Figure 34. Diego Rivera painting his mural *Pan Pacific Unity* at the Golden Gate International Exposition, Arts in Action exhibit. 1940. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

Olmsted's work, a sculpture of the head of Leonardo da Vinci, would be placed outside of the east façade of the Science building. Volz's two 42' x 55' mosaics, the *Interaction of Science* and the *Interaction of Mechanism* would be placed on the building's north and south porticos' recessed exterior walls. Carter's nine-foot tall axe-carved redwood *Big Horn Mountain Ram* was initially planned to be installed in the caféteria but Cloud and Pflueger felt that, since the ram was the college mascot, it would be more suitable to be placed in the men's gym. It currently stands in Conlan Hall.

Unassociated with the Arts in Action program, Pflueger arranged for Frederick Olmstead to paint two murals in the lobby of the Science building in 1941, and to carve the Thomas Edison piece on site, behind the building.[40] Pflueger also arranged for Sargent Johnson to make three large concrete bas reliefs depicting athletes; the panels were placed above the primary entrances to the two gyms.[41] The School Board had Rivera's mural panels transported to the college

[40] The Guardsman, September 13, 1940. Olmsted was misidentified as Fred Homster.
[41] White, Austin. *Seventy Years of Making Dreams into Reality, City College of San Francisco: A Short History.*

campus and placed in a shed built against the men's gym in 1942, where they remained for almost twenty years.[42]

Pflueger designed the Science building to accommodate an anticipated enrollment of 2,500 students, but by the time it was completed, approximately 3,200 were enrolled. In addition to offering and expanding university transfer courses, the college's vocational programs accounted for approximately 25% of classes offered. Vocational programs included civil service, criminology, fire science, flight training, floriculture (gardening and plant propagation), and hotel and restaurant.[43] With this initial surge in enrollment, the School Board planned to further develop the campus. But the U.S. entry into World War II abruptly put expansion plans on hold. Nationwide, construction materials were dedicated to the war effort and enrollment declined significantly with the departure of students for the armed forces or to work in the defense industry. Staff left to serve in the military or work for the federal government. The college adjusted the vocational programs to better serve the war effort. The floriculture department planted three large victory gardens and propagated plants for use as camouflage, and the hotel and restaurant department trained cooks and bakers to serve on merchant marine ships.

With the end of WWII and the passage of the June 1944 Servicemen's Readjustment Act [44], otherwise known as the GI Bill, the college's enrollment surged and the facilities proved even more inadequate to accommodate the demand. Housing for veterans returning to San Francisco was scarce, including for those who wanted to attend the college. The student population at the college soon exceeded 5,500 students. To meet the growing enrollment, the college scheduled classes from 8:00 AM to 10:00 PM. In 1946, the college secured a lease for the temporary buildings and grounds of the United States Navy WAVES (women accepted for volunteer emergency service) Separation Center located directly across Phelan Avenue. The administration called the temporary buildings the West Campus, and opened it in the fall semester of 1946. They transformed the fourteen former naval buildings into college classrooms, laboratories, an auditorium, a cafeteria, dormitories, and faculty offices. One building housed 50 married couples.

As all of California's junior colleges, the college required no tuition fees or laboratory fees, and provided housing if requested. President Cloud negotiated with the Federal Housing Authority to erect several Quonset huts, each housing two student apartments. San Francisco Mayor Roger Lapham dedicated Hurley Village on October 3, 1946. Named in honor of Major John Hurley, the only college faculty member killed in the war, Hurley Village was built to house married veteran students and their families along the north edge of the main campus. The FHA continued to develop Hurley Village and erected 217 housing units there by 1948.[45]

[42] Russell, Ron. "Secret Rivera."
[43] White, Austin. *Seventy Years of Making Dreams into Reality, City College of San Francisco: A Short History.*
[44] www.history.com
[45] The Guardsman, January 17, 1951

Figure 35. Dedication of Hurley Village. 1946. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

San Francisco Junior College changed its name to City College of San Francisco (CCSF) in February 1948. Much of the student body consisted of older students who were veterans or had worked in the defense industry during the war. Their feeling was "Junior" did not accurately describe them and the adolescent inference denigrated the quality of the classes offered. Despite the continued increase in post-war enrollment, CCSF constructed no new permanent buildings until 1949, the year they built the California Bookstore on the west side of Phelan Avenue/Frida Khalo Way, and the Children's Center in the northwest corner of the campus; they would not construct a new permanent classroom building until 1954. President Cloud retired on June 30, 1949. Louis Conlan, who, with a J.D and Ed.D, had started at CCSF as a teacher and athletic coach in 1935, became the second school president.

Figure 36. Students changing the name of the school. 1948. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

CCSF's lease of the West Campus and its temporary buildings was a ten-year non-renewable contract that would expire in 1956 and the San Francisco Public Utilities Commission (PUC), the titleholder to the land, would reclaim the site. The anticipated loss of these building meant that the school administration needed to start planning additional facilities on the main campus. A bond passed in 1948 that included $2.5 million for construction on the campus. The San Francisco Board of Education prepared a report titled, *City College Buildings Needs* in 1950. They determined that the original campus design that included a two-story classroom building behind the Science building and Pflueger's library would not adequately accommodate the number of students enrolled. The Board apparently drafted a plan addressing how the campus would eventually be built-out to accommodate the future needs of the students [46].

Timothy Pflueger suddenly passed away in 1946 and his younger brother Milton took over the firm and designed the first permanent classroom building since the completion of the Science building in 1940. Abandoning Pflueger's campus plan, the Board approved Conlan's proposal that they construct a three-story combination library and classroom building behind the Science

[46] The "program" is mentioned in a Guardsman, May 7, 1969. A copy of the School Board's report is in the History Center of the San Francisco Library archives, which is not currently accessible.

building and allocated $1.7 million. They also approved preliminary plans for a fine arts building. The college would start that building with an allocation of $500,000 and build it in stages; they estimated that that building, once completed, would cost $1.3 million. Conlan told the Board that he anticipated enrollment to top 11,000 students by 1965 and that the college would need an additional $2.2 million to complete the program. The firm's approach to the design of the CCSF buildings followed Dr. Conlan's direction to abandon Timothy's original campus plan. They recognized that, because the campus would be built out gradually, over decades based on changing needs that they would "…design in the contemporary using the best technology and change materials and methods of construction as best fit, but when so doing, let there be not a clash but a compatibility between new and old."[47]

The college began construction on Cloud Hall in 1952, a building that greatly increased the school's capacity. The Board named it in honor of Dr. Archibald Cloud. By then the estimated cost rose to $2.2 million. The three construction firms involved were Cahill Construction Co., Herman Lauror Co., and Emil J. Webber & Co. Once built, the college would abandon the West Campus, where the PUC planned to construct two reservoirs.[48]

Figure 37. The new Cloud Hall, view from the northeast; the Science building sits to the west, higher up College Hill. 1954. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

[47] Pflueger, *Time and Tim Remembered,* 59
[48] The Guardsman, October 1, 1952.

Cloud Hall was now the largest building on campus. The college moved the library and several other functions previously housed in the Science building into the new building. Dedicated in April 1954, Cloud Hall housed a library, classrooms, offices, and laboratories. It "represents the ultimate in modern design, boasts of sound-proofed rooms, restful color scheme, unique lighting and a library capable of seating 700 people." In addition to the 54 faculty and administrative offices, it held 57 classrooms and the business, law enforcement, and engineering departments. Following the opening of the building, the college developed a courtyard between the buildings with benches and curving pathways.[49]

Milton Pflueger's firm designed the first Student Union building in 1954 to house the caféteria, a fountain, the Hotel and Restaurant School, and a student bookstore. The School Board awarded the construction contract to Ira H. Larsen and Co., with a winning bid of $685,478. [50] The contractor broke ground in April 1954; the one- and two-story building was ready for the 1955 fall semester. Before the contractor completed the building, the college had begun developing plans for an annex to the west of the new building to add classrooms, several small rooms for group meetings, a large room for college conventions and student government offices. The architect revised the plans to accommodate the addition.[51] The Board financed it and other campus expansion projects with a bond issue on the November 1955 ballot.[52] A year after the Student Union was opened, the college renamed it Smith Hall in honor of George D. Smith, the late chairman of the Hotel and Restaurant Department Advisory Committee and former president and general manager of the Mark Hopkins Hotel.[53]

Almost immediately upon opening, the caféteria in Smith Hall proved inadequate. The college placed two temporary buildings adjacent to the new building to relieve the congestion in early 1961.[54] The Statler Foundation granted $100,000 to the planning of a new wing, the Statler Wing. Hotels and restaurants supplied another $50,000 toward the effort and the State supplied another $200,000 toward the cost of the addition.[55] The design included a new lecture and demonstration room, a demonstration kitchen on the second floor, and an informal study area on the ground level. It was as large as the existing caféteria and attached to the eastern façade of Smith Hall.[56] The Statler Wing was completed in 1963 and also housed the Alice Statler Library, the Evening Division Office, and the Financial Aid Office.

Milton Pflueger's firm designed the Arts-Classroom building (Creative Arts); construction started north of Science Hall in 1959 in the space that had been occupied by Hurley Village. The Board of Education met in 1958 and voted to include the Rivera mural in the Arts-Classroom

[49] The Guardsman, April 24, 1954.
[50]The Guardsman, April 21, 1954.
[51] The Guardsman, March 16, 1955.
[52] The Guardsman, April 21, 1954.
[53] The Guardsman, May 2, 1956.
[54] The Guardsman, January 11, 1961.
[55] The Guardsman, January 11, 1961 article estimates the cost to be $805,000; October 7, 1964 article states the building cost $400,000.
[56] The Guardsman, February 6, 1961.

building. Addressing controversy over the deceased Diego Rivera's character and politics, a former Board president stated that American art galleries would be virtually empty if they we were to judge artwork by the artists' moral or political standards. Milton Pflueger modified the design of the building's theater lobby to accommodate the 22' x 74' mural.[57] Classrooms opened in the building in 1962. It housed classrooms, faculty offices, broadcasting facilities, and the college theater. The new theater had a state-of-the-art Izenour winch system for changing sets.[58] The mural was finally on display.

The PUC began the construction of two large water reservoirs on the former West Campus in 1957. After three years the project stalled; the PUC had excavated and paved the reservoirs with asphalt, but they had insufficient funds to complete the project. They never finished or filled the reservoirs and by 1963 students and faculty used the basins as parking lots. Significant changes were also taking place east of the Main Campus. Construction of Interstate 280 began in the early 1960s. The California Division of Highways (later Caltrans) built the freeway below grade level and required the demolition of large numbers of residential and commercial buildings in its path. The introduction of the freeway significantly changed the character of the area and isolated the campus from Balboa Park until a bridge was constructed. The freeway provided students with easy transportation to the campus. Soon thereafter, Bay Area Rapid Transit (BART) completed tracks to the Balboa Park Station in 1972; paralleling the freeway and a station near Ocean Avenue, BART provided students with another transit option.

Figure 38. What was to be a reservoir became student parking; the Science is building atop the hill to the east. 1963. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

[57] The Guardsman, March 1, 1961.
[58] Ibid.

Within the campus boundaries, construction of the freeway required that the Horticulture building and associated gardens be relocated.[59] The Board of Education allotted $413,000 to the construction of a new Horticulture Center, made up of State-provided $322,000 and $91,000 from a 1956 local bond issue.[60] They selected a site on the north side of campus along Judson Avenue for a new Ranch-style building, four greenhouses, a flower shop, and two lath houses. Alex Woolworth, a former CCSF horticulture student and a Caltrans structural engineer designed the new center.[61] Student Tad Nakazawa designed a Japanese-themed garden in front of the center.[62] The students were able to move into the center in early Spring 1964, mid-construction of all current structures that were completed the following year.

San Francisco's general election on November 3, 1964 included Proposition B, a district-wide school bond in the amount of $31,465,000. The voter-approved bond was for the acquisition, construction and completion of new schools and improvements to existing schools. The argument for the bond stated that, "an additional building is in keeping with the policy to add facilities to the one college campus as the enrollment increases. The present enrollment of over 8,000 students will reach beyond 10,000 within three years."[63] In addition to this bond money, the college had access to $200,000 to $400,000 from State Proposition 2 and another $400,000 left over from 1963's Proposition 1A. The college planned to use the money to construct an educational services facility building and a visual arts building, as well as to improve the lighting and acoustics in the Science building and make overall improvements to the campus's landscaping.[64]

Milton Pflueger's firm designed the Educational Services Facility building west of and connected to Smith Hall by a partially covered breezeway. The structural engineer was Isadore Thompson.[65] The college needed the building to "relieve congestion in office areas and provide for expansion."[66] Contractor Carl Ohlson and Company broke ground in 1966 and completed it in 1968. The School Board named it in honor of Dr. Louis G. Conlan, an original member of the faculty, second president of the college, first president/superintendent of the San Francisco Community College District, and a member of the first San Francisco Community College District Board of Governors. The building included the office of the CCSF President, the Registrar's Office, the Coordinator of Student Welfare's office, the Director of Student Activities office and other administrative services, a bookstore twice as large as the bookstore it replaced, and a 250-seat lecture hall to accommodate classes, tests, and other events.

[59] The Guardsman, April 4, 1962
[60] The Guardsman, November 21, 1962.
[61] The Guardsman, October 31, 1962.
[62] The Guardsman, May 8, 1963.
[63] City and County Propositions to be voted on at the General Election Tuesday, November 3, 1964.
[64] The Guardsman, March 2, 1965.
[65] John Pflueger, email message to author. May 4, 2020.
[66] The Guardsman, September 18, 1968.

The college used some of the funds to redesign the landscaping throughout the Main Campus. Landscape architect Anthony M. Guzzardo and Associates, who also designed the park and granite paving at the base of the Transamerica Building in 1972, prepared the design.[67] [68] The firm began reshaping College Hill and a section of the southwest grounds in fall 1967. They installed extensive lighting and sprinkler systems, graded and terraced parts of the hill, and planted shrubs, flowers, and olive trees on the circle's periphery. Years of students treading across the lawns had left well-worn paths; Guzzardo designed and installed paved walkways providing the students routes to the parking lot and a public transportation station at the bottom of the hill. They replaced the central walkway up the hill with steps.[69]

Milton Pflueger's firm completed the design for the Visual Arts building in 1968. The architect had presented preliminary plans for the building to the school in 1965 when he presented the plans for Conlan Hall. The firm estimated that the 34,000 square foot building would cost $1.2 million, including equipment. The 1964 school bond and a state grant paid for the building. The site selected for the building was a hilly area east of the Arts-Classroom building. The new building housed the Advertising Art and Design, the Printing Technology, and the Photography Departments, exhibit spaces and two lecture halls. It was completed in the spring of 1970.

Milton Pflueger presented preliminary drawings for a new Student Union building to faculty and students on April 23, 1968. The college funded the project with a $550,000 loan from the United States Department of Housing and Urban Development.[70] Construction started east of Smith Hall in 1969 and was completed in 1970. It provided offices for the Associated Students, the Student Council Chamber, an auditorium, lounges, a café, and recreational space. Concurrent with construction of the Visual Arts building and the Student Union, the college continued to erect temporary bungalows throughout campus to address the shortage of classrooms and office space. The college brought in 17 new bungalows, designed by architect Robert K. Wong, in 1970, adding to the 28 already standing.[71]

A state law passed in 1965 required that all cities with school districts that operated junior or city colleges establish a separate independent college district by July 1, 1970. The city formed the San Francisco Community Colleges District (District) and Dr. Conlan served as the Chancellor until September 1, 1970 when he retired; Dr. Batmale succeeded him. The new District included the main campus as well as all the staff, programs, and buildings of the Adult and Occupational Division of the San Francisco Unified School District. The new District established two separate divisions in 1974: the Ocean Avenue Campus, also referred to as the Main Campus, where for-credit classes were offered and the eight neighborhood centers that offered the non-credit classes of the Adult and Occupational Division.

[67] Pacific Coast Architecture Database.
[68] The Guardsman, October 25, 1967.
[69] ibid
[70] The Guardsman, May 1, 1968.
[71] The Guardsman, May 7, 1969.

The college received $1.5 million from a State bond issued in 1968 for campus projects during the 1969-1970 school year. This funded an expansion of the Main Campus's electrical infrastructure and an extension to the Arts-Classroom building, dubbed the Creative Arts Extension.[72] Milton Pflueger's firm designed the extension to be located west of the original building and to house a broadcasting and music facility and much-needed classrooms. Engstrom and Norse were awarded the construction contract. Construction began in November 1970, six months after Dr. Conlan announced his retirement. Dr. Louis F. Batmale became the next college president in October 1970.[73] That same year the Horticultural Department students undertook landscaping activities on the campus. They planted the area near the Horticultural building near Judson Street, the soft borders near Smith Hall, and established an herb garden next to Conlan Hall. The students designed and installed brick and concrete paths, benches, fences, and borders.[74] Construction of the Creative Arts Extension continued into 1971 and was completed in 1972.

In 1970 the District released a 10-year master plan for the Main Campus to accommodate an ultimate daytime enrollment of 20,000 students and the addition of the adult education program. The master plan emphasized improving pedestrian movement and converting existing roadways into pedestrian malls, with plazas, courts, fountains, and an amphitheater.[75] The plan included the tentative construction of new buildings and renovation of the older ones. It also included plans to expand the electrical infrastructure of the overall campus to accommodate the newly constructed buildings. Dr. Buttimer, Assistant Superintendent of the District, stated that the Science building was to be remodeled to finally live up to its name and accommodate science-only classes and laboratories. The plan also called for the expansion and remodel of Smith Hall's Statler Library, and hotel and restaurant laboratories and kitchens. The 10-year plan also included the construction of "Cloud Hall East" and a second building that would provide additional classrooms, offices, and a student lounge. The administration estimated the cost to achieve the overall plan would be approximately $24 million; the college anticipated funding from a future local bond issue, and federal, State and industrial sources.[76] The city and county of San Francisco held a general election on November 6, 1973. It included Proposition A, Public School Building Improvements Bond, $37,826,000.[77] Almost 65% of the city voters approved the bond.[78]

[72] The Guardsman, October 2, 1968.
[73] The Guardsman, October 5, 1970.
[74] The Guardsman, March 18, 1970.
[75] City College of San Francisco Part II.
[76] The Guardsman, March 11, 1971.
[77] San Francisco Voter Pamphlets and Propositions.
[78] Cook, "School Quake Bonds Win Big."

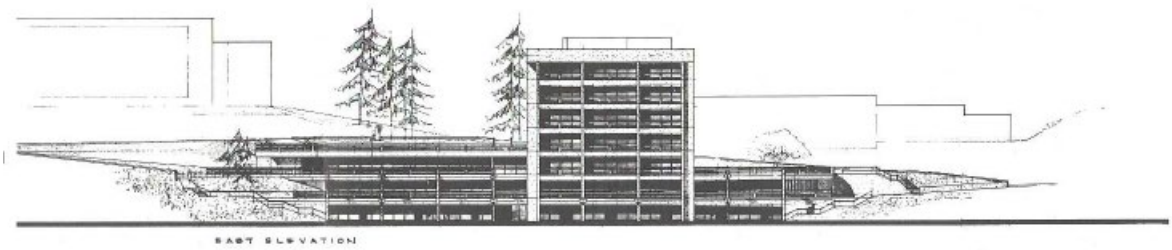

Figure 39. Milton T. Pflueger, AIA & Associates east elevation drawing of what would be Batmale Hall. c1974. Courtesy of John Pflueger.

Milton T. Pflueger, AIA & Associates proposed a five story, approximately 100,000 square foot $7.86 million building that would house classrooms, labs, and faculty offices. His design included multiple patios and terraces on different levels, with two of the five floors built below the present grade.[79] Pflueger's plans expanded and construction of the now seven-story Social Sciences Classroom and Laboratory Building, with three floors below Cloud Circle, began on October 7, 1974. The contractor was Pacific Builders and Engineers.[80] The College Board of Governors met on January 17, 1978 and named the building Louis F. Batmale Hall in honor of former Chancellor Batmale.[81] Construction was completed in spring 1978 and it was occupied by students in the fall semester. Students and faculty were disappointed; they found the building to be poorly ventilated, disliked the windowless classrooms, and found the pedestrian circulation systems - stairs and elevators - to be insufficient.

Arnst Brothers Construction Co. began the $1.263 remodeling of the Science building in June 1973. The 1970 plan called for all science facilities to be updated and all non-science related facilities to be removed. The Astronomy Department purchased a Celestron telescope in 1975. They installed a prefabricated dome observatory on the roof of the building in 1978, putting an end to the need for students to reassemble then dismantle the telescope every time they used it. The new dome joined an already existing dome housing a small planetarium.[82]

The 1970s were significant years for the expansion of the Main Campus's public art collection. The San Francisco Arts commission commissioned sculptor Armand J. Trehan's *Worldscape III* and William Wareham's *Wyoming Coup* in 1972, the first new works introduced onto the campus since Diego Rivera's mural was finally installed. Wareham was the first Artist-in-Residence of SF Recycling and Disposal, Inc.; he used recycled steel as his primary material. The City College Works of Art Committee acquired Peter Vanderberge's untitled clay mural originally created

[79] The Guardsman, November 1971. Date was removed.
[80] The Guardsman, October 25, 1974.
[81] The Guardsman, March 8, 1978.
[82] The Guardsman, October 25, 1978.

for the Diamond Heights playground.[83] [84] Emmy Lou Packard, Diego Rivera's chief assistant for painting the *Pan American Unity* mural at the Golden Gate International Exposition, restored the mural in 1973.[85] The city of San Francisco purchased *The Sentinals*, a bronze sculpture by Aristides Demetrios, for CCSF in 1973. The Works of Art Committee approved a 30'x30' deck sculpture by Jacques Overhoff and a bas relief for Batmale Hall in 1974.[86] Three years later Beniamino Bufano's St. Francis of the Guns, commissioned by Mayor Joseph Alioto and originally destined for the Civic Center Plaza, finally found a home in front of the Science building. Bufano cast his 14-foot sculpture of bronze and about 2000 melted down guns; he created it in memory of Abraham Lincoln, Martin Luther King, Jr., John F. Kennedy, and Robert F. Kennedy.[87]

With the passage of California's Proposition 13, investments in schools statewide was greatly reduced over the next several years. Although a new library was planned for 1979, the Louise and Claude Rosenberg Jr. Library was not completed until 1995.

The campus athletic facilities originally consisted of a men's and a woman's gymnasium built when the original campus was first established in 1940. They were not sited per Pflueger's original plan but moved to the eastern boundary of the property to save money in the grading of the site. A track and field facility with a football field was built in 1960 and was replaced with a stadium in the 1990s. Eight tennis courts were constructed in 1974 east of the gyms. The two gyms were demolished in 2008; the Works of Arts Committee saved Carter's bas reliefs and, for good measure, made casts of them. They intend to put the reliefs on the new Fitness Center; the art is still in storage. A soccer pitch replaced a group of temporary bungalows in 2012.

The campus continued to grow in the 2000s with the addition of the Orfalea Family Center and a Student Health Center in the northwest corner of the campus, and the Community Health and Wellness Center/Fitness Center in the southeast corner. The Multi-Use building, the first building constructed in the West Campus, was built in 2009.

[83] The Guardsman, September 28, 1972.
[84] The Guardsman, November 9, 1972.
[85] The Guardsman, March 29, 1973.
[86] The Guardsman, May 9, 1974.
[87] The Guardsman, May 4, 1977.

ARCHITECTS

Timothy Pflueger

Born to German immigrant parents in 1892, Timothy Pflueger was raised in the San Francisco's Mission District. Although Pflueger never received formal education past high school, at fifteen he found work in the offices of a local architect. At thirty he became a partner in the firm of J.R. Miller. Pflueger's work was located primarily in San Francisco and the Bay Area. In addition to office buildings, Pflueger was known for his theater designs and schools. One of his earliest projects with Miller was the monumental task of designing the Pacific Telephone and Telegraph Company building, the biggest corporate headquarters in the West (1925). The building was unique in its vertical emphasis and corner windows. Other early works included: the Castro Theatre (1921), Roosevelt Junior High School (1924), the Alhambra Theatre (1928), Medical and Dental Building (1929), the Paramount Theatre (1931), the remodel of the New Mission Theatre façade and lobby (1932), George Washington High School (1932), Bal Tabarin Night Club (1933), The Circus (*Le Cirque*) Lounge of the Fairmont Hotel (1934), and the El Rey Theatre (1936).

In addition to his building designs, Pflueger served on several prestigious committees; he was appointed Chairman of the Board of Consulting Architects on the San Francisco-Oakland Bay Bridge project. He was also one of a five-member board of architects who designed the Golden Gate International Exposition of 1940. His later works included the Transbay Transit Terminal (1939), the Top of the Mark at the Mark Hopkins Hotel (1939), the Patent Leather Lounge (Orchid Room) at the St. Francis Hotel (1939), City College Campus' Science building (1940), Union Square Plaza and Garage (1942), and the I. Magnin store on Union Square (1946).

Although Pflueger did not use the term himself, his buildings have been described as Art Deco or Art Moderne. Vertical emphasis, geometric patterns, and Mayan themes were often employed in his work. He frequently used corner windows to express the thin skin and steel structure of his buildings. Pflueger was also well known for his interior designs, which utilized many of the geometric forms of his exteriors and added colorful murals and rich materials. Although Timothy Pflueger died in 1946, his firm continued under the direction of his brother Milton Pflueger and, later, nephew John Pflueger.

Milton and John Pflueger

Upon Timothy Pflueger's death Milton Pflueger, Timothy's younger brother, took on management of the firm which continued to design and build projects primarily throughout the greater San Francisco Bay Area. Milton's son John joined the firm in 1961 and received his architecture license in 1965. The firm's focus remained on designing large academic, civic, corporate, commercial, and institutional buildings. Academic institutions included nine of this HRE's subject buildings, built between 1954 and 1978; the University of San Francisco Master Plan, including the design of several campus buildings between 1948 and 1983; several University of California, Berkeley and San Francisco campus buildings; and additional buildings for the Stanford campus.[88] In the 1960s the firm established a variety of joint ventures

[88] Pflueger, *Time and Tim Remembered,* 59.

with larger engineering firms and designed and built several military hospitals. When the U.S. Department of Defense awarded them a contract to design and build the Walter Reed Hospital in Washington D.C. in 1968, Milton's attention turned to the hospitals and John managed most other projects, including those for academic institutions. [89]

In 1976 the firm officially became Pflueger Architects. In the 1970s John directed the firm to focus on energy conservation; they designed buildings with alternative, active and passive, and other renewable systems as much as possible before resorting to non-renewable sources. The firm received energy efficiency awards for the Clark Library at San Jose State University and the California Farm Bureau Federation Headquarters in Sacramento. Between 1947 and 1983 this prolific medium-sized firm undertook almost 200 projects, from large hospitals, federal buildings, academic institutions, civic buildings, corporate and retail buildings, and master plans, to animal shelters, interiors, and additions.[90] Milton gradually reduced his role over the years and retired in 1976. John continued to work with the institutional clients into the 1980s. He left San Francisco and relocated to Marin County where he changed his focus to designing self-sufficient villages and wellness resorts in several western states, as well as Mexico, Guatemala, and Gambia. After moving to Sonoma in 1994 he turned to historic rehabilitation projects, winery and hospitality designs, and custom homes and private estate master planning.[91]

PUBLIC ARTWORK ON COLLEGE CAMPUSES

Historically, cities, towns, and institutions created and displayed public art to record a place's history, establish recognition of territory, and build a sense of community. Most commonly the artwork depicted the leaders or heroes of the community. It wasn't until the Great Depression that the United States supported the idea that using public funds to for art was legitimate. Franklin Roosevelt's Federal Art Project was part of the WPA.[92] Artists were hired nationwide as part of this program that ran between 1934 and 1943; over the years they produced 2,500 murals, 18,000 sculptures, 108,000 paintings, and countless ephemera.[93] This program affirmed the importance of art in a democratic society, was responsible for a significant collection of public art, supported artists who may not have been able to continue their careers, and laid the groundwork for future federal, state, and local arts funding. This largest art program ever undertaken by the federal government democratized art and culture through a populist approach with its encouragement of experimentation, and public art demonstrations, classes and lectures. It also influenced the subjects of public art. The muralists especially embraced the more populist approach and painted common people, average workers performing their trades, and people of different ethnicities and cultures.[94]

[89] John Pflueger, email communication with author. April 20, 2020.
[90] Pflueger, *Time and Tim Remembered,* 59.
[91] Pflueger, "John Pflueger Architect."
[92] Johnston. "Revealing Historic Significance through Campus Public Art."
[93] O'Connor, "Art for the Millions."
[94] Knight, Public Art: Theory, Practice, and Populism.

The program ended in 1943. The federal government first established an "arts in architecture" program, implemented by the General Services Administration, in 1963. They suspended it in 1966 and the Nixon administration resurrected it in 1972. The program required that up to one-half of one percent of total construction costs for new federal buildings be set aside to purchase contemporary work by American artists. The original 1963 program became the model for state and municipal agencies to establish similar art-in-architecture programs. Baltimore was the first to adopt a municipal art program in 1964; San Francisco followed in 1967. [95] The San Francisco city ordinance requires that before proposing a bond issue for any building or above-ground structure, a 2% set-aside of the estimated cost of constructing a proposed public building be allocated to enrich the project with artwork. The Arts Commission supervises and controls the expenditures of such funds.[96] An Arizona State University study contacted 32 West Coast universities. Of these schools, 31 responded as having active public arts programs. Additionally, the study contacted several state arts agencies and found that most have "percent for art" programs.[97]

Ordinances are not the only means by which a public college campus acquire art. Art committees that oversee public art on school campuses are generally volunteer groups.[98] While the acquisition practices vary and there is no uniform standard, most higher learning institutions have art committees that promote and oversee the acquisition of art on campus. The City College of San Francisco's Works of Arts Committee, comprised of staff, administrators, and students is one such entity.[99] Nationwide, universities have collected a significant amount of public art. A survey of almost 96 campuses nationwide found that public art on campuses is widespread across colleges and universities throughout the U.S. Of the 96 public and private institutions surveyed, more than 88% have public art policies.[100]

ESTABLISHMENT OF CITY COLLEGES IN CALIFORNIA

California was the first state to pass a law establishing public city colleges or "junior colleges" as they were called in the legislation proposed by Senator Anthony Caminetti of Amador County in 1907. The law permitted high schools to offer post-high-school instruction.

The board of trustees of any city, district, union, joint union, or county high school may prescribe post graduate courses of study for the graduates of such high school, or other high schools, which courses of study shall approximate the studies prescribed in the first two years of university courses. The board of trustees of any city, district, union, joint union, or county high school wherein the postgraduate courses are taught may charge tuition for pupils living without the boundaries of the district wherein such courses are taught. (Political Code Section 1681, Statutes of California)

[95] Knight, Public Art: Theory, Practice, and Populism.
[96] SFAC, Sec. 3.19.
[97] Mankin, The Administration of Public Art on State University Campuses.
[98] Ibid.
[99] The Guardsman, November 9, 1972.
[100] Grenier, "An Analysis of Public Art on University Campuses: Policies, Procedures, and Best Practices."

The first high school to offer these curricula was Fresno High School in 1910. The high school offered a two-year program that included courses in math, English, Latin, modern languages, history, economics, and "technical work". Three part-time teachers taught the coursework to about fifteen students who were required by the law to be at least 21 years old. The classes were free to students living within the school district; students from outside of the district were charged $4 per month tuition. The first independent school to offer post-high school course work that was not a four-year college or university was Los Angeles Pacific College, under the authority of the Free Methodist Church, in 1911. Between 1911 and 1916 sixteen high school districts throughout California offered junior college curricula with varying success; many only offered the coursework for a few years. The communities that provided these educational opportunities included Long Beach, Bakersfield, Fullerton, Hollywood, Los Angeles, Santa Barbara, San Diego, Sacramento, Auburn, Santa Ana, Anaheim, San Luis Obispo, Ontario, and Pomona; some, such as Los Angeles offered these advanced courses in several district high schools.

Chaffey College of Agriculture in Ontario, established as part of the University of Southern California (USC) in 1883, separated from USC in 1906. In 1911 the Chaffey College campus became the first high school in the newly established Ontario-Uplands joint Chaffey High School District.[101] Five years later the district passed a resolution establishing its public junior college, the Chaffey College of Agriculture, the first junior college-only campus; Chaffey College was also the first community college to offer vocational curricula.

In 1915 the California State Attorney General ruled that state funding for high schools, which was determined by the number of students attending each school, would no longer include students taking the post-high school courses. Will C. Wood, the Commissioner of Secondary Schools, challenged this in his 1916 biennial report to the State Department of Education. Not only did he recommend the state count the students for funding, the report also proposed numerous measures to make the program more structured. The Legislators put many of the recommendations into law the following year.

When the Legislature met in 1917 there were sixteen high schools providing post-high-school level classes to 1,259 students; the high schools were still not receiving state funding for these students. Senator John Ballard of Los Angeles introduced a bill that would become Section 1750(b) of the Political Code that year. The bill introduced the term "junior college", replacing "post-high school" and now required the same level of state funding for those students as it did for high school students. The law required 60 credit hours for graduation and non-high school graduates under 21 years old could now attend. It also required that the Department of Education approve all courses before the state would approve funds for each junior college, and stated vocational courses in mechanical and industrial arts, household economy, agriculture, civic education, and commerce were suitable junior college courses. Junior colleges were also to offer academic courses that were transferable to four-year colleges and universities. Junior

[101] Blackstock, "San Bernardino and the Inland Empire."

colleges would offer all classes tuition free. One thing that didn't change was the two-system type of schools – the Department of Education still permitted the blended high school-junior college.

World War I initially resulted in a 30% reduction in junior college attendance; attendance quickly rebounded post war and school districts established four new colleges in 1918. The State Legislature enacted a law defining three types of junior colleges in 1921: coterminous with high schools; junior college districts of two or more contiguous high school districts; and county junior college districts that serve students living within the county but outside of the existing districts. 1927 Legislation expanded these types to allow districts to cover two or more cities or counties.

The 1920-enacted Federal Act 4936 promoted mining in lands in the public domain. The federal government returned all proceeds to the states. A California law enacted in 1921 required all the money go to the junior college fund. The 1921 law also allowed the junior colleges to enter into agreements with the University of California (UC) system to accredit the transferable junior college courses and the teachers that taught the courses. By 1928 the proceeds were no longer sufficient to fully fund California's junior colleges; the following year the state passed a law requiring the State Treasury to make up the difference up to a specified amount.

In 1927 there were 31 junior colleges in California. Sixteen were coterminous with high schools; six were part of the state college system (now California State University/CSU System) and nine were part of recently established junior college districts. The total enrollment was 6,301.

The Great Depression significantly affected the growth of higher education nationwide. The prosperous 1920s saw a widespread expansion of colleges and universities, both private and public. In 1929 capital investment in institutes of higher learning was approximately $43 million; in 1933 it dropped to about $6 million. One reason for the continued expenditures by public institutions was federal funds provided by the Public Works Act (PWA). Every state received grants for non-federal public-school building projects. Under the first PWA program the federal government grant was equal to 30% of the combined expenditure for labor and materials; the grant recipient had to come up with the other 70%. Under the Emergency Relief Act of 1935, the portion paid by the federal government was raised to 45%. By July 1936, the federal government had granted almost $59 million for the construction of public college buildings nationwide.[102]

The 1929 California Legislature responded to the devastated economy by requiring that the State Board of Education and the Department of Finance approve new junior college districts. Legislators repealed the requirement that the Department of Finance approve new junior college districts in 1931. They also lowered payments to the junior colleges and no longer required that the schools offer textbooks free of charge. And they revoked the ability for UCs to

[102] Committee Y of the American Association of University Professors. *Depression, Recovery, and Higher Education.*

accredit junior colleges and teachers; the State Board of Education would do all accreditations for the next 22 years. By 1936 there were 63 junior colleges in California. 42 were public and 21 were private; 23 of the public schools were coterminous with high schools. Nation-wide, in 1935, there were 519 junior colleges. The total enrollment was approximately 50,000. Two of California's urban public junior colleges were established in 1935: San Francisco and Stockton. In 1941 A.J. Cloud, then President of San Francisco Junior College, released the results of a state-wide survey of vocational and semi-professional curricula. It found that the most commonly offered classes were auto maintenance, drafting, pre-engineering, agriculture, and business.

World War II brought changes to junior colleges in California. In 1943 the Legislature passed laws so junior colleges could now offer summer school, provide pilot training out-of-state, accept out-of-state students, allow high school students to take courses, and defined a credit as three hours per week of instruction for sixteen weeks. The federal government would not exempt from draft or allow draft deferments of students enrolled in California's junior colleges because only the State Department of Education accredited the junior colleges and, consequently, the federal government did not consider them to be collegiate institutions. Communication from the State Department of Education and California's four-year colleges and universities temporarily resolved the issue. In 1944 California Junior College Federation appointed a committee to study the problem but did not resolve it.

The GI Bill; an increase in population; and the changing requirements of work-place skills that went beyond those achieved in high school stimulated a demand for more junior or community colleges after the end of WWII. The Legislature passed Assembly Bill 2273 in 1947, which required that a comprehensive survey of higher education in California be prepared. "A Report of a Survey of the Needs of California in Higher Education" was prepared by a committee under the charge of Professor Emeritus George Strayer of Columbia University. The report included the objectives and purposes of junior colleges, as defined by the California Junior College Association. The purposes included that junior colleges are to provide terminal education, general education, adult education, and lower division transfer courses that will qualify students for four-year institutions. During this period proponents of expanding two-year junior colleges into four-year institutions were gaining ground. One significant outcome of the Strayer Report was to point out the cost of expanding the facilities of the then existing 55 junior college campuses to accommodate the academic needs of four-year college students, and the resulting loss of providing terminal, remedial and general education to all people at a low cost. In 1947 the 55 junior colleges were educating 60,346 students in California. This amounted to 35% of all students enrolled in higher education.

In June 1950 the accreditation issue again became a problem because of the Korean War. The military draft boards again refused to recognize junior colleges as being collegiate institutions. Earlier that year the California Junior College Association and the State Department of Education had negotiated with the Western College Association, who agreed to take over accreditation. However, they did not start the process until 1953 and it was not until 1962 that the organization became the regional accrediting agency for California's junior colleges, four-year colleges, and high schools.

The California State Legislature continued to meet and pass laws affecting junior colleges throughout the 1950s, providing more structure to the system. The laws expanded educational programs, many of them vocational such as courses in real estate, nursing, food services, and air transportation-related skills; further defined governing boards and administrations; and addressed costs and tuition. During this decade California communities established only seven new junior colleges. The state's cost to support California's junior colleges had almost tripled in the seven years between 1946 and 1953 despite the modest growth of the system. When the Legislature met in 1953, they appropriated funds for a restudy on the needs for higher education in the state. The restudy, which also studied four-year institutions, defined the functions of junior colleges as providing occupational education, general education, lower-division college education, and guidance and community service. By 1955 public junior colleges were educating almost 60% of all freshmen and sophomores in both public and private higher-learning institutions in the state.

The restudy also recommended that the Legislature fund a Master Plan for Higher Education in California; the Master Plan was presented to the Legislature in 1960. The recommendations resulted in the expansion of Article IX of the California State Constitution identifying the three types of higher education as junior colleges, the state college system, and the UC system, and that junior colleges were to be locally governed by boards and generally supervised by the State Board of Education. Article IX stated that junior colleges could only offer lower division four-year college courses for standard transfer credits, vocational-technical courses, and general or liberal arts courses. Students successfully completing their coursework would receive Associate in Arts or Science degrees. The Master Plan also recommended that the junior college system, which would accept all high-school graduates, be expanded by 22 new campuses.

During the 1961 session, the Legislature enacted a law that provided junior colleges tax relief grants of $5 million to pay old bonds or construct new buildings on a matching basis of one (state) to four (district) parts. This funding was again offered in 1962. The Legislature also approved a bond to issue funds for a state building construction program to be placed on the November ballot; its passage included a first ever capital outlay vote for junior colleges, in the amount of $20 million.

California junior colleges, which were still under the supervision of the State Department of Education, continued to grow and more communities established new campuses. In 1967 Senate Bill 669 created the Board of Governors of the California Community Colleges and the State Chancellor's Office; the State Board of Education was no longer responsible for what were now called community colleges. Between 1969 and 1975 community college faculty and administrators continued to establish associations to advance community college education, including the Academic Senate for California Community Colleges, the California Junior College Faculty Association which became the Faculty Association of California Community Colleges, and the Association of California Community College Administrators.[103]

[103] California Community College History Project.

The California State Assembly and Senate also continued to legislate laws pertaining to funding, student programs and opportunities, and the organization of the college system. Newly established, the Extended Opportunity Programs and Services supports programs for socioeconomically disadvantaged students; the Rodda Act authorized collective bargaining units; Disabled Student Programs and Services provides educational opportunities for students with physical, psychological, and learning disabilities; and the Community College Reform Act established minimum funding for community colleges.[104]

Today there are 115 campuses state-wide educating 2.1 million students, transferring almost 80,000 students per year to CSUs and UCs. More than half CSU students and about 30% of UC students first attended California's community colleges, which is the largest system of higher learning in the nation. California community colleges' vocational classes provide the largest workforce training in the U.S. Community colleges began charging tuition fees of $5 per unit in 1984; today the tuition is $46 per unit.[105]

The Community College Chancellor is the Chief Executive Officer of the Board of Governors and oversees the system's executive office. There are nine divisions of the Chancellor's office. The Board of Governors sets policy and provides guidance for the 73 districts and 115 colleges that constitute the system. The Board selects the Chancellor and has legislatively granted authority to develop and implement policy. There is a Consultation Council made up of 18 representatives from institutional groups, labor unions, and students who meet monthly to review policy proposals.[106]

[104] California Community College History Project.
[105] California Community Colleges, "About California Community Colleges."
[106] Ibid

Chapter 4

EVALUATION FRAMEWORK AND FINDINGS

THE NATIONAL REGISTER CRITERIA FOR EVALUATION

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. It is administered by the National Parks Service (NPS) in conjunction with the State Historic Preservation Office (SHPO). The National Register includes listings of buildings, structures, sites, objects, and districts possessing historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local levels. The National Register criteria and associated definitions are outlined in the National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation. The following is quoted from National Register Bulletin 15:

Criteria
Generally, resources (structures, sites, buildings, districts, and objects) over 50 years of age can be listed in the National Register provided that they meet the evaluative criteria described below. Resources can be listed individually in the National Register or as contributors to an historic district. The National Register criteria are as follows:

A. Resources that are associated with events that have made a significant contribution to the broad patterns of history;

B. Resources that are associated with the lives of persons significant in our past;

C. Resources that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values,

or that represent a significant or distinguishable entity whose components may lack individual distinction; or

D. Resources that have yielded or may likely yield information important in prehistory or history.

THE CALIFORNIA REGISTER CRITERIA FOR EVALUATION

The California Register of Historical Resources (CRHR) is the official list of properties, structures, districts, and objects significant at the local, state, or national level. California Register properties must have significance under one of the four following criteria and must retain enough of their historic character or appearance to be recognizable as historical resources and convey the reasons for their significance (i.e. retain integrity). The California Register utilizes the same seven aspects of integrity as the National Register. Properties that are eligible for the National Register are automatically eligible for the California Register.

1. Associated with events that have made a significant contribution to broad patterns of local or regional history, or cultural heritage of California or the United States;

2. Associated with the lives of persons important to the local, California or national history

3. Embodies the distinctive characteristics of a design-type, period, region, or method of construction, or represents the work of a master, or possesses high artistic value; or

4. Yields important information about prehistory or history of the local area, California or the nation.

CRHR criteria are similar to National Register of Historic Places criteria, and are tied to CEQA, so any resource that meets the above criteria, and retains a sufficient level of historic integrity, is considered an historical resource under CEQA.

HISTORIC INTEGRITY

When evaluating a resource for the NHRP or CRHR, one must evaluate and clearly state the significance of that resource to American history, architecture, archaeology, engineering, or culture. A resource may be considered individually eligible for listing in the NRHP or CRHR if it meets one or more of the above listed criteria for significance and it possesses historic integrity. Historic properties must retain sufficient historic integrity to convey their significance. The following seven aspects define historic integrity:

- Location. The place where the historic property was constructed or the place where the historic event occurred.

- Design. The combination of elements that create the form, plan, space, structure, and style of a property.

- Setting. The physical environment of a historic property.

- Materials. 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. The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

- Feeling. A property's expression of the aesthetic or historic sense of a particular period of time.

- Association. The direct link between an important historic event or person and a historic property.

To retain historic integrity, a resource should possess several of the above-mentioned aspects. The retention of specific aspects of integrity is essential for a resource to convey its significance. Comparisons with similar properties should also be considered when evaluating integrity as it may be important in deciding what physical features are essential to reflect the significance of a historic context. If a property is determined to not be eligible or individual listing on the NRHP or CRHR, then it will not be evaluated for historic integrity.

EVALUATION FINDINGS

This section uses the historic contexts developed for this HRE to evaluate main campus for historic significance as a historic district, in part or in its entirety, and evaluate eleven buildings for their potential for individual eligibility.

To be potentially eligible for *individual* listing on the NRHP/CRHR, a building must usually be at least 50 years old, must have historic significance, and must retain its physical integrity. The CCSF Ocean Avenue campus or Main Campus was initially established with the completion of the Science building in 1940. By the year 2030, fourteen buildings on campus will be 45 years of age, having been built in or prior to 1985. The campus has continued to grow since 1985 with the construction of number of additional buildings, structures, objects and sites. The potential for any of these post-1985-built buildings to have exceptional significance was not assessed.

Evaluation of CCSF as a Historic District

A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. A district derives its importance from being a unified entity. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or be an arrangement of historically or functionally related properties. It must be significant as well as being an identifiable entity.

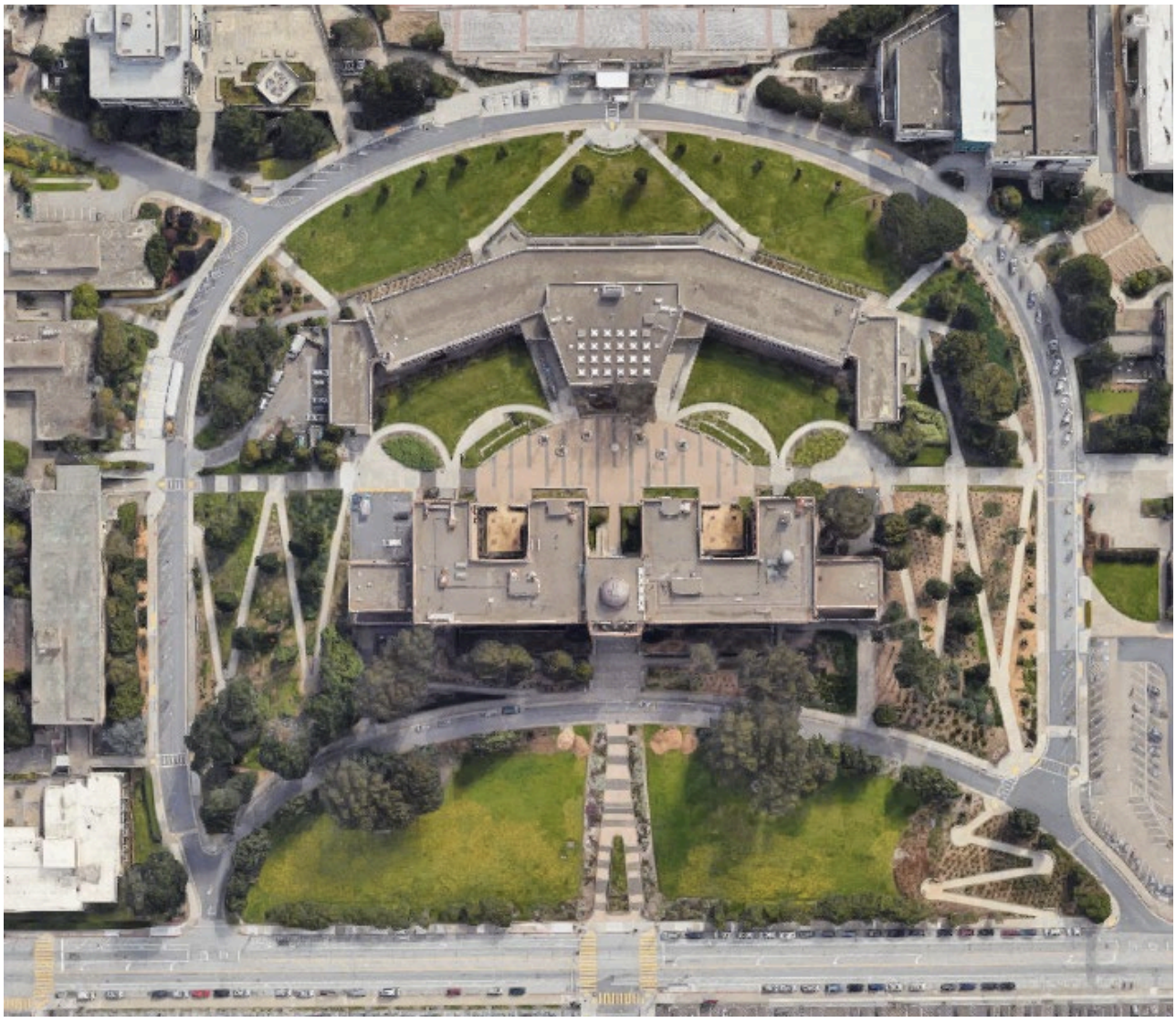

Figure 40. Aerial photograph of the eligible "historic-core district" within the greater campus. GoogleEarth Pro. Imagery dated March 26, 2018.

Figure 41. Historic aerial photograph of the historic core of the campus. 1959. Photo courtesy of the San Francisco Public Library's San Francisco Historical Photograph Collection (digital).

A. Science building
B. Cloud Hall
C. Smith Hall and Statler Wing
D. Conlan Hall
E. Student Union
F. Creative Arts and
Diego Rivera Theatre
G. Creative Arts Extension
H. Visual Arts

Figure 42. Aerial photograph of the eligible "Modern architecture district" within the greater campus. GoogleEarth Pro. Imagery dated March 26, 2018.

Criterion A/1: Events and Trends

A portion of the Main Campus, the "historic-core district" is significant on the local level as an eligible historic district under criterion A/1 as representative of the creation of the City College of San Francisco and the early junior college movement in the San Francisco Bay Area. Its period of significance under this criterion is 1940-1954 with the construction of the core campus on College Hill, which includes the first two permanent classroom buildings. The boundary of this district, within the greater campus, is Cloud Circle on the north, east, and south and Phelan Avenue/Frida Kahlo Way on the west. The district includes College Hill, Cloud Circle, Science

Drive, the Science building and Cloud Hall. All are contributors to the district; only the Science building is individually eligible.

Established in 1935, it was the fifth junior college in the greater San Francisco Bay Area. There are now 25 community colleges in the region. Its significance is limited to local significance because, as the 63rd junior or community college established in California, it was not part of the initial state-wide community college trend but followed it.

The School Board approved a master plan for a campus in 1937. Each building had a planned function that the Board thought would fulfill the needs of the school. CCSF was only the third junior college in the Bay Area to design and begin construction of a dedicated, purpose-designed campus, which first opened for instruction in 1940. World War II interrupted the school's continued growth. The first subsequent permanent classroom building, Cloud Hall, was completed in 1954, sited within the original planned core campus area. This building provided space for a library, additional classrooms and offices, fulfilling some of the needs identified in the original master plan. Following CCSF's example, nine purpose-built campuses in the Bay Area were planned and broke ground in the late 1950s; most were fully built out as planned by the late 1960s.[107] CCSF continued to expand in pace with other Bay Area campuses, but abandoned the original master plan.

The campus in its entirety is not eligible under criterion A/1, nor is the second identified historic district, the Modern architecture district. The buildings, structures, and objects that make up the campus is a concentration of resources that are related in that they were developed over the years as a college campus. However, being an identifiable entity only is not sufficient for the campus to be historically significant. The development of the campus, as with most educational institutions, developed over time rather than by plan in response to the needs of the students, changing educational objectives, funding constraints and other reasons. This is illustrated by the fact that CCSF periodically revises its Facilities Master Plan and has revised its plans beginning with 1950 San Francisco Board of Education prepared a report titled, *City College Buildings Needs* in 1950. This trend has been a common trend throughout the San Francisco Bay Area's several community colleges beginning in the 1950s.

Public Artwork on College Campuses Sub-context
A portion of the City College of San Francisco's Ocean Campus, the historic-core district, is significant on the local level as an eligible historic district under criterion A/1 as representative of the early use of public art and art-in-architecture in conjunction with the Federal Art Project, part of the Depression-era Works Progress Administration program. Its period of significance under this context is 1940-1941, when the works were commissioned and installed as part of the architectural design of the Science building. These works are within the focused boundary of this district described above.

[107] historicaerials.com

The Federal Art Project began a significant trend in establishing the importance of art in a democratic society, and the use of populist themes in public art. The San Francisco School Board commissioned several pieces by artists associated with the FAP in 1940, under the behest of architect Timothy Pflueger, to be housed in, on, or outside of buildings included in the campus master plan. The Science building has two grand mosaics by Herman Volz applied to the walls of the north and south porticos, two murals by Frederick Olmsted inside the main entrance, and two sculptures also by Frederick Olmsted on the plaza behind the building.

Other art commissioned or contemporary with the early campus, but not included within the historic district, include Diego Rivera's *Pan American Unity* mural, Sargent Johnson's concrete bas reliefs, and Dudley Carter's redwood sculpture. These pieces are either not located where they were initially intended or in storage.

The campus as a whole is not significant under A/1 with respect to public art. While the school has several significant pieces throughout campus, they are not a concentration of work that possesses a significantly historic association with the campus. Artwork not designed for a specific location are not generally eligible, regardless of their artistic significance. For example, Mayor Alioto commissioned the Bufano sculpture to honor three historically significant men who were assassinated and as a monument against gun violence. It was not commissioned for CCSF but was intended for another location, nor does it represent a theme that is directly associated with the college.

Batmale Hall does have a piece that was designed in conjunction with the design of Batmale Hall. The sculpture deck by artist Jacques Overhoff was commissioned and designed for the building, completed in 1978. Batmale Hall received an award from the San Francisco Art Commission for combining art and architecture. This single piece is not part of the concentration of art found in the historic-core district nor was it commissioned within this district's period of significance.

Criterion B/2: Individuals

City College of San Francisco's Ocean Campus is not significant on the local level as an eligible historic district under criterion B/2, for its association with a demonstrably important individual. Dr. Archibald Jeter Cloud is the individual who is credited with championing the establishment of a junior college in San Francisco. While he was its founder and first president, it was a broad effort that also included the San Francisco Board of Education, the city administration, other city agencies, and the State Board of Education. After it was established the push to identify, fund, and develop a purpose-designed central campus was joined by faculty, notably Dr. Louis Conlan who would become the second school president upon Dr. Cloud's retirement, and students. This was part of a Bay Area- and California-wide trend in the establishment of new purpose-built campuses and the expansion of existing campuses. Dr. Cloud's contributions were important to the early success of CCSF however he is not singularly responsible for the establishment of the college. Its success and growth represent the contribution of many.

Criterion C/3: Design
There are two historic districts within the campus boundaries that are eligible under criterion C/3.

The Historic-Core District
A portion of the City College of San Francisco's Ocean Campus is significant on the local level as an eligible historic district under criterion C/3 as the work of a master and for embodying the distinctive character of a place of higher education. The historic-core district's period of significance under this criterion is 1940-1954 with the completion of the construction of the core campus on College Hill, which includes the first two permanent classroom buildings on campus. The boundary of this district, within the greater campus, is Cloud Circle on the north, east, and south and Phelan Avenue/Frida Kahlo Way on the west.

Master architect Timothy Pflueger designed the original campus master plan, siting the first, central and grandest building on the highest point on the property, visible from afar and looking west toward the Pacific Ocean. The plan was classically symmetrical in design and the secondary or subordinate buildings were to surround and face inward toward the central building on three sides. An aerial photograph from 1940 shows that Pflueger's original siting of the first building, the hillside symmetry, road placement, and response to the natural environment was achieved. His design also included two buildings behind the central Science building that, together with the Science building would form a more intimate plaza space. The 1954-built Milton Pflueger-designed Cloud Hall is similar in footprint with the two buildings, except for the addition of a central auditorium that projects into the plaza and blocks the planned view east from the Science building toward the San Francisco Bay. It forms a shallow "C" with its ends generally lining up with the north and south wings of the Science building as Timothy Pflueger designed. This relationship fulfills the original objective of a plaza atop the hill. The overall shape of the plaza's paved area is consistent with that seen in the 1949 aerial photograph. Contributing resources include Cloud Hall, the Science building, the plaza, the landscaped area west of Science Drive, the overall planting pattern, the Volz and Olmsted artwork, Science Drive, and Cloud Circle; only the Science building is individually eligible. The paved walkways and stairways radiating from the two buildings are of modern design and do not contribute.

The Modern Architecture District
A second, larger portion of CCSF's Ocean Campus is significant on the local level as an eligible historic district under criterion C/3 as an intact concentration of Modern and Late Modern architecture designed by a single architectural firm, originally Timothy L. Pflueger, then Milton T. Pflueger, AIA & Associates. This larger district includes the smaller district. It is referred to as the "modern architecture district." The buildings include Conlan Hall, Smith Hall and Statler Wing, Student Union, Batmale Hall, Visual Arts, Creative Arts, the Creative Arts Extension, Science building, and Cloud Hall. Only the Science building is individually eligible; the rest are contributors. The district also includes the pedestrian circulation structures that interconnect the buildings that were part of the buildings' original designs.

Before Cloud Hall was completed the School Board and second college president Dr. Louis Conlan abandoned Timothy Pflueger's master plan, deeming it insufficient for meeting the school's anticipated future needs. As architect Milton Pflueger stated, the series of buildings constructed by his firm after Timothy's death were constructed in the contemporary and changed materials and methods of construction as best fit. His goal was "let there be not a clash but a compatibility between new and old."[108] This district has a significant concentration of Modern architecture styles, including "WPA" Modern, a style characterized by classical forms; Late Modern; Brutalism; and Neo-formalism. The district illustrates the progression of these styles between a period of significance of 1940-1978. The district is significant at the local level.

Criterion D/4: Information Potential

Under NRHP Criterion D, neither the smaller district's buildings or any built resources on the campus as a whole are likely to be significant as a source, or likely source, of important historical information, nor do they appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Table 4. Contributing/non-contributing buildings and other resources within the historic districts

	CORE HISTORIC	MODERN ARCHITECTURE
Science Building (also individually eligible)	Yes	Yes
Cloud Hall	Yes	Yes
College Hill Plaza	Yes	Yes
College Hill Landscaping	Yes	Yes
Cloud Circle	Yes	Yes
Science Circle	Yes	Yes
Plazas and Circulation Systems off College Hill	No	Yes
Smith Hall and Cafeteria	No	Yes
Creative Arts (and original Diego Rivera Theatre)	No	Yes
Statler Wing	No	Yes
Conlan Hall (Educational Services/College Bookstore)	No	Yes
Student Union	No	Yes

[108] Pflueger, *Time and Tim Remembered*

Visual Arts	No	Yes
Creative Arts Extension	No	Yes
Batmale Hall	No	Yes
EOPS Building	No	No

Previously Evaluated Buildings

Two buildings that were evaluated for the 2004 FMP EIR were found eligible for the NRHP and CRHR. The Science building (1940), designed by architect Timothy Pflueger and the first building to be constructed on the first purpose-built main campus, was found eligible under criterion A/1 for its association with the creation of CCSF and the junior college movement in the San Francisco Bay Area and, under criterion C/3, as the work of a master. The other building, Cloud Hall (1954) was found eligible under criterion A/1 for its association with the creation of CCSF and the junior college movement in the San Francisco Bay Area but not under any other criteria. The eligibility was at a local level of significance.

The passage of time, changing perceptions of significance or incomplete prior evaluations may require that past eligibility determinations be revisited. Research undertaken for the purposes of this HRE supports the prior significance determination for the Science building. However, research into the history of junior colleges in the greater Bay Area and in California does not support the previous criterion A/1 significance of Cloud Hall at a local level of significance. When CCSF was established in 1935 it was the fifth junior college in the Bay Area and the 63rd in California. Only two at the time, Santa Rosa Junior College and the College of Marin, had a dedicated, purpose-built campus. It does not appear that the Marin campus has any extant original buildings. The Ocean Avenue campus, which first opened in 1940, is representative of the early junior college movement in the Bay Area. However, by 1954, when Cloud Hall was completed, several more junior colleges had been established and had broken ground throughout the Bay Area. Its 1954 construction date puts it in a later, broader trend in junior college expansion. Therefore, it lacks a significant association with the trend.

The previous evaluation did not provide any statements supporting why the creation of CCSF was a significant historical event. Per NRHP Bulletin 15 guidelines, "mere association with historic events or trends is not enough, in and of itself, to qualify under criterion A; the property's specific association must be considered important as well. For example, a building historically in commercial use must be shown to have been significant in commercial history."[109] While the establishment of CCSF was important to the community and the school remains more than just a significant institute of higher learning for San Franciscans, that association is not adequate for it to be historically significant under NRHP or CRHR criteria. Consequently, the findings presented here have determined that Cloud Hall is not individually eligible under criterion A/1. However, it is a contributor to the historic district that includes the historic core of the campus.

[109] NPS, Bulletin 15

The previous evaluation didn't establish a period of significance for the Science building. This HRE puts the period of significance to 1940-1941, the period when the building was completed, including the addition of artwork created for the building by artists Herman Volz and Frederick Olmsted.

The California Bookstore, the 1949-constructed Childcare Center, and the Men's and Women's Gymnasiums were previously found not eligible. The gyms and Children's Center are no longer extant. The bookstore, west of the main campus, was found to be a typical storefront with no architectural distinction. That determination did not need to be reconsidered.

Smith Hall (1955) and Statler Wing (1963, 1973)

Criterion A/1: Event

Smith Hall, originally the first Student Union building, and the later Statler Wing addition are not eligible under criterion A/1. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of ten buildings designed by Timothy, Milton, or John Pflueger between 1940 and 1978. Smith Hall was completed in 1955 and the Statler Wing was added in 1963; a third, smaller addition was built in 1973. Smith Hall, the first permanent classroom building not constructed on College Hill, was purpose-built to house the Restaurant and Hotel Department kitchens, labs, classrooms a cafeteria, a fountain, and a bookstore. The administration identified almost immediately that the building did not adequately meet the department needs and started planning for an expansion. The Restaurant and Hotel program was an important one for CCSF. One of CCSF's original departments, it offered professional training curricula for students who wanted to enter the hospitality industry; the program was well established in the years prior to the construction of Smith Hall.

The growth and expansion of the campus during the 1960s was part of a common trend of city college establishment and expansion throughout the greater San Francisco Bay Area and California. Several purpose-built campuses in the Bay Area were planned and broke ground in the 1950s; most were fully built out as planned by the late 1960s. These include Santa Rosa Junior College, College of San Mateo, College of Marin (Kentfield campus), San Jose City College, Contra Costa College (San Pablo campus), Diablo Valley College (Pleasant Hill), Laney College (Oakland), Foothill (Los Altos Hills) and Chabot College (Hayward).[110]

Significant research on the history and the development of the campus from its inception to 1985 did not find that Smith Hall and the Statler Wing is associated with any specific events that have made a significant contribution to the local, state, or national history. While it is associated with the important culinary program, the program was well established prior to the introduction of this building complex on the main campus. Therefore, it is not eligible for the NRHP or the CRHR under criterion A/1.

Criterion B/2: Individuals

Smith Hall and the Statler Wing are not eligible under criterion B/2. Properties eligible under criterion B/2 are associated and representative of a person's productive life, reflecting the time period when he or she achieved significance. A year after the Student Union was opened, the college renamed it Smith Hall in honor of George D. Smith, the late chairman of the Hotel and Restaurant Department Advisory Committee and former president and general manager of the Mark Hopkins Hotel. The naming of the building "Smith Hall" was a posthumous tribute; the property does not best represent his contribution to the hotel and hospitality industry.

[110] historicaerials.com

Similarly, the Statler Wing was partially funded by the Statler Foundation, a non-profit organization for research work to benefit the hotel industry founded in 1934. The wing included the Alice Statler Library, named for the widow of Ellsworth M. Statler, once the owner of a chain of hotels that his heirs sold to Hilton in 1954. The Statler Foundation was established six years after his death in 1928.[111] The Statler Wing and the Alice Statler Library were named in honor of Ellsworth and Alice and are not associated with their productive lives or are representative of when Ellsworth built his hotel empire. Research has not found the building and its addition to be associated with any other person that made demonstrable contributions to history.

The significance of Milton and John Pflueger's association with the building, as master designers/architects, is considered under criterion C/3.

Criterion C/3: Design and Construction

Smith Hall and the Statler Wing are not individually eligible under Criterion C/3, however they contribute to the Modern architecture historic district. Much of the exterior of the original Mid-Century Modern Smith Hall has been obscured by additions: The College Bookstore and Conlan Hall on the west, EOPS building on the south, and the Statler Wing on the south and east elevations. The Statler Wing, added in 1963 and expanded in 1973, is overall functional Late Modernist style. This building complex has elements of Mid-Century Modern and Late Modernist styles, such as projecting eaves, cantilevered overhangs, flat roof forms, stucco siding, strong right angles and simple cubic forms, large steel-framed windows, and courtyard entryways. It references characteristics of the Mid-Century Modern and Late Modernist styles but is not a high-style example of any one style, which is why it is not considered individually eligible. The complex does represent the beginning of the Modern-style architecture-designed lower-level campus.

Milton and John Pflueger may be master architects based on their large body of work throughout the Bay Area and the nation. A full survey of their work required to establish them as master architects is beyond the scope of this HRE, but based on a cursory review, Smith Hall and the Statler Wing would not likely be a superior example of either architect's work.

Criterion D/4: Information Potential

Smith Hall and the Statler Wing complex does not appear to be eligible under Criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

[111] Los Angeles Times, Statler Hotel chain bought by Hilton.

Creative Arts (1961)

Criterion A/1: Event
The Creative Arts building, completed in 1961, is not eligible under criterion A/1. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of ten buildings designed by Timothy, Milton, or John Pflueger between 1940 and 1978. Completed in 1961, the Creative Arts building was built over twenty years after the initial campus plan was developed and the first building was constructed that established the core campus.

The growth and expansion of the campus during the 1960s was part of a common trend of city-college establishment and expansion throughout the greater San Francisco Bay Area and California. Several purpose-built campuses in the Bay Area were planned and broke ground in the 1950s; most were fully built out as planned by the late 1960s. These include Santa Rosa Junior College, College of San Mateo, College of Marin (Kentfield campus), San Jose City College, Contra Costa College (San Pablo campus), Diablo Valley College (Pleasant Hill), Laney College (Oakland), Foothill (Los Altos Hills) and Chabot College (Hayward).[112]

The Creative Arts building includes the Diego Rivera Theatre. Rivera's mural, *Pan American Unity,* is displayed in the theater's lobby. The mural, painted in 1940 and stored in crates on campus for almost twenty years, was commissioned to be placed in the yet-to-be constructed Timothy Pflueger-designed library reading room. The building was never built. This significant work's placement in the Creative Arts' Diego Rivera Theatre was an afterthought and the building's design was adjusted to display the piece. The mural is associated with the WPA's Federal Arts Program and the Golden Gate International Exposition's Art in Action exhibit. The Federal Art Project began a significant trend in establishing the importance of art in a democratic society, and the use of populist themes in public art. While this work is significant, its association with the theater building is not.

Significant research on the history and the development of the campus from its inception to 1985 did not find that the Creative Arts building is associated with any specific events or broader trends that have made a significant contribution to the local, state, or national history. Therefore, it is not eligible for the NRHP or the CRHR under criterion A/1.

Criterion B/2: Individuals
The Creative Arts building is not eligible under criterion B/2. Dr. Louis "Dutch" Conlan was college president between 1949 and 1970 and the subject building was planned, designed, and constructed during his tenure, along with several other permanent classroom, lab, administration, and student services buildings. The potential for Dr. Conlan to be an individual demonstrably important to CCSF, as president, his contribution was considered for the overall campus. The campus as a whole was determined not to be eligible. The evaluation determined

[112] historicaerials.com

that a portion of the original campus is eligible, but not under criterion B/2. The efforts to continue the development of the campus, including of the subject building, were shared by the San Francisco School Board, city agencies and the administration, and faculty. If the campus as a whole was found to be a significant historic resource, it would not be under B/2 because the establishment and growth of the campus is not attributable to an individual.

Diego Rivera, a significant twentieth-century artist, is not directly associated with the subject building. He passed away in 1957, the year prior to the School Board's decision to alter the Creative Arts building's theater lobby to house the piece.

Considerable research of the history of CCSF was undertaken for this HRE. No individuals whose activities could be demonstrably important to history have been found to be associated with this building. The significance of Milton and John Pflueger's association with the building, as master designers/architects, is considered under criterion C/3.

Criterion C/3: Design and Construction

The Creative Arts building and Diego Rivera Theatre is not individually eligible under criterion C/3, but is a contributor to the Modern architecture district. It is International style, with horizontal bands of windows, minimal applied ornamentation, cantilevered planes, flat roof, strong right angles and simple cubic forms; it is not a high-style interpretation and does not fully embody the distinctive characteristics of International style. The tall box that is above the stage is utilitarian with no International or any other architectural elements than can be attributed to any style. The theater references the Creative Arts building, especially with the cantilevered roof on its east elevation, supported by the aggregate concrete-paneled vertical plane. The ell connecting the building to the theater is a simple long and low rectangle with no openings and only physically connects the buildings. It's royal blue paint reduces the unification between the two larger masses.

The courtyard between the two contains two works of art. One is *El Rey*, a replica of an Olmec head from San Lorenzo in the state of Veracruz; the other is *Pacifica*, an eight-foot concrete replica of sculptor Ralph Stackpole's piece from the 1940 Golden Gate International Exposition. The significance of these pieces as artwork is not considered here; they are only associated with the subject building by their placement in the courtyard. Objects, such as public art, that are not designed for a specific location do not generally possess association with a specific place. Similarly, while Rivera's *Pan Pacific Unity* is an internationally significant work, it was created for a different location and only placed in the theater as an afterthought.

In short, the Creative Arts building and the Diego Rivera Theatre complex does not embody the distinctive characteristics of a specific type, period, region, or method of construction. Therefore, it is not individually eligible. Its International style contributes to the larger Modern architecture district.

Milton and John Pflueger may be master architects based on their large body of work throughout the Bay Area and the nation. A full survey of their work required to establish them as master architects is beyond the scope of this HRE, but based on a cursory review, Creative Arts would not likely be a superior example of either architect's work.

Criterion D/4: Information Potential

The Creative Arts building does not appear under criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to

yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Ornamental Horticulture and Floristry

Criterion A/1: Event

The complex of buildings, structures and landscape that make up the Ornamental Horticulture and Floristry department as a complex is not eligible under criterion A/1. Nor are any of its individual components. Located on the north side of the campus, it replaced the earlier facilities at the southeast corner of the campus in 1964-5 when the construction of I-280 forced its removal. The curricula were offered early in the college's history and was an important department for CCSF. One of CCSF's original departments, it offered professional training for students who wanted to enter the industry; the program was well established in the years prior to the construction of the current department facilities. The department was particularly important during WWII when they planted large victory gardens and grew plants for camouflage. The current department complex is not associated with these efforts. Therefore, it is not directly associated with events that have made a significant contribution to the broad patterns of history.

Criterion B/2: Individuals

The complex is not eligible under criterion B/2 because it has not been found to have been associated with the lives of persons significant to the past. Dr. Louis "Dutch" Conlan was college president between 1949 and 1970 and the subject complex was planned, designed, and constructed during his tenure, along with several other permanent classroom, lab, administration, and student services buildings. The potential for Dr. Conlan to be an individual demonstrably important to CCSF, as president, his contribution was considered for the overall campus. The campus as a whole was determined not to be eligible. The evaluation determined that a portion of the original campus is eligible, but not under criterion B/2. The efforts to continue the development of the campus, including of the subject complex, were shared by the San Francisco School Board, city agencies and the administration, and faculty, as well as Caltrans staff. If the campus as a whole was found to be a significant historic resource, it would not be under B/2 because the establishment and growth of the campus is not attributable to an individual.

Significant research on the history of the campus has not identified any individuals associated with the department to have made specific contributions to history.

Criterion C/3: Design and Construction

This complex of buildings, structures, objects, and landscaping is not eligible, either individually or as a contributor to either historic district under criterion C/3. It is generally utilitarian, consisting of the Ranch-style classroom building, greenhouses, lath houses, a shed,

several raised beds and gardens, bays of landscaping materials and some designed landscaping. The only designed built resource is the Ranch-style classroom building, with its horizontal lines, low-pitched cross-gable roof, natural wood siding, and overhanging eaves. However, it is a simple and unremarkable example of the architectural style, one that is more typically found in residential architecture. The landscaping has changed over the years, apparently ongoing efforts by students.

The architect of the building was Alex Woolworth, who had been a student of the horticulture department at one time and was a structural engineer with the California Bureau of Highways (later Caltrans) when he designed the building. Research has not revealed any other buildings built by Mr. Woolworth and he has not been found to be a master architect.

Criterion D/4: Information Potential

The Horticulture Department's complex does not appear to be eligible under criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Conlan Hall (1968)

Criterion A/1: Event

Conlan Hall, originally called the Educational Services Building, is not eligible under criterion A/1. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of ten buildings designed by Timothy, Milton, or John Pflueger between 1940 and 1978. Completed in 1968, Conlan Hall was built well after the initial campus plan was developed and the first few buildings were constructed that established the core campus. It was part of a common trend of expansion in response to the post WWII increased student enrollment. According to Dr. Harry R. Buttimer, Coordinator of Educational Management at the time Conlan Hall was completed, the Educational Services Building was built "to relieve congestion in office areas and provide for expansion."[113]

The growth and expansion of the campus during the 1960s was part of a common trend of city college establishment and expansion throughout the greater San Francisco Bay Area and California. Several purpose-built campuses in the Bay Area were planned and broke ground in the 1950s; most were fully built out as planned by the late 1960s. These include Santa Rosa Junior College, College of San Mateo, College of Marin (Kentfield campus), San Jose City College, Contra Costa College (San Pablo campus), Diablo Valley College (Pleasant Hill), Laney College (Oakland), Foothill (Los Altos Hills) and Chabot College (Hayward).[114]

[113] The Guardsman. September 18, 1968.
[114] historicaerials.com

Significant research on the history and the development of the campus from its inception to 1985 did not find that Conlan Hall is associated with any specific events or broader trends that have made a significant contribution to the local, state, or national history. Therefore, it is not eligible for the NRHP or the CRHR under criterion A/1.

Criterion B/2: Individuals

Conlan Hall is not eligible under criterion B/2. At the time Conlan Hall/Educational Services Building was completed in 1968 Dr. Louis "Dutch" Conlan had been College President since 1949.[115] Prior to his retirement in 1970 the Board honored his service by renaming the Educational Services Building Conlan Hall. Dr. Conlan, with a law degree from Hastings School of Law and a doctorate in education from UC Berkeley, joined the CCSF faculty in 1935 as part of the Physical Education Department. He was active in the school's drive to pass the 1938 bond issue to fund the new campus. The Science building was completed in 1940. During his tenure as the second CCSF president he successfully led efforts to continue to secure funds to further expand the campus. He initiated the construction of the first permanent post war new campus building, Cloud Hall, which opened its doors in 1954, then was quickly followed by Smith Hall in 1955. His continued efforts included the planning and construction, or at least ground-breaking, of seven additional large permanent buildings and broader campus development between 1961 and 1972.

The potential for Dr. Conlan to be an individual demonstrably important to CCSF, as president, was considered for the overall campus. The campus as a whole was determined not to be eligible. The evaluation determined that a portion of the original campus is eligible, but not under criterion B/2. The establishment and growth of the campus is not attributable to an individual.

Considerable research of the history of CCSF was undertaken for this HRE. No individuals whose activities could be demonstrably important to history have been found to be associated with this building. The significance of Milton and John Pflueger's association with the building, as master designers/architects, is considered under criterion C/3.

Criterion C/3: Design and Construction

Conlan Hall is not individually eligible under criterion C/3 but is a contributor to the Modern architecture historic district. It is overall Late Modern and has some elements of the Brutalist style; it is not a high-style interpretation and does not embody the distinctive characteristics of either style. Its Late Modern style is expressed by its horizontal orientation, hooded deep-set windows, concrete material, and the central portion of the building's north primary elevation's sculptural form with cantilevered eaves. Its design is primarily a composition of simple cubic shapes, and repeating geometric patterns with strong right angles, which is characteristic of the style. The roof is flat. Its Brutalist character is expressed by its composition of simple cubic shapes and repeating geometric patterns with strong right angles. However, it was not

[115] Pflueger, *Time and Tim Remembered.*

constructed of rough, unadorned board-formed concrete with visible imprints of the wood; rather the exterior is comprised of pre-cast concrete panels formed off site and assembled in place. Its form is not sufficiently massive to be an exceptional example of the style and, other than the primary façade of the two-story portion of the building, its openings are not deeply shadowed. Furthermore, while the use of pre-cast concrete can be characteristic of the style, the joinery is not exposed. This material has been used in the region beginning in the 1920s, and by 1968, it was a popular building material, and not representative of an innovative method of construction. John Pflueger stated that the firm received an award from the Pre-Cast Concrete Association; the nature of the award is unknown and efforts to reach the association have been unsuccessful.

Conlan Hall's design does make some references to the Second Bay Tradition, particularly the primary façade of the administration section of the building, with its large expanses of glass, overhanging eaves, and flat roof forms. However, the material, pre-cast concrete, is not characteristic of this style; redwood is most typically used. The auditorium, west of the primary entrance, follows the hillside as it descends toward Phelan Avenue/Frida Kahlo Way. According to the San Francisco Modern Architecture and Landscape Historic Context, "Second Bay Tradition buildings are often rooted in the landscape… or otherwise built into the earth". This wing of the building expresses its relationship with the landscape. Its Neo-Formalist characteristics include its strict symmetry, flat roofs, vertical lines, and columnar supports in the bookstore and administration portions of the building.

Conlan Hall does not embody the distinctive characteristics of a specific type, period, region, or method of construction, therefore it is not individually eligible. Generally Late Modern, it references characteristics of the Brutalist, Neo-Formalism, and Second Bay Tradition styles, but is not a high-style example of any one style. Its Late Modern style and references to other modern architectural styles contributes to the larger Modern architecture district.

Milton and John Pflueger may be master architects based on their large body of work throughout the Bay Area and the nation. A full survey of their work required to establish them as master architects is beyond the scope of this HRE, but based on a cursory review, Creative Arts would not likely be a superior example of either architect's work.

Criterion D/4: Information Potential

Conlan Hall does not appear to be eligible under criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Bungalows 201-208 (1969)

Criterion A/1: Event
This group of temporary buildings are not eligible under criterion A/1. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of eleven larger permanent buildings between 1940 and 1979 as well as the erection of a number of temporary buildings housing classrooms, offices, and other student services. Placed on the site in 1970, they were added after the initial campus plan was developed and the first few buildings were constructed that established the core campus. It was part of a common trend of expansion in response to the post WWII increased student enrollment. The growth and expansion of the campus during the 1960s and 70s was part of a common trend of city college establishment and expansion throughout the greater San Francisco Bay Area and California.

Significant research on the history and the development of the campus from its inception to 1985 did not find that these temporary buildings are associated with any specific events or broader trends that have made a significant contribution to the local, state, or national history. Therefore, they are not eligible for the NRHP or the CRHR under criterion A/1.

Criterion B/2: Individuals
These bungalows are not significant under criterion B/2 because they have not been found to be associated with a demonstrably important individual. The campus as a whole was determined not to be eligible under criterion B/2. Considerable research has been undertaken on the history of the Main campus and there has been nothing found that would link a person that has made significant contributions to history associated with this group of buildings that are minor, temporary components of the campus.

Criterion C/3: Design and Construction
These Bungalows are not significant under criterion C/3. They are simple, commonly found temporary buildings of no particular style. They do not embody distinctive characteristics of a type, period, or method of construction and lack individual distinction.

Criterion D/4: Information Potential
Bungalows 201-208 do not appear to be eligible under criterion D/4. They are unlikely to be significant as a source, or likely source, of important historical information, nor do they appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Student Union

Criterion A/1: Event

The Student Union building is not eligible under criterion A/1 for its association with events or trends important in history. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of ten buildings designed by Timothy, Milton, or John Pflueger between 1940 and 1978. Completed in 1970, the Student Union building was built thirty years after the initial campus plan was developed and the first building was constructed that established the core campus.

The growth and expansion of the campus during the 1960s and 1970s was part of a common trend of city college establishment and expansion throughout the greater San Francisco Bay Area and California. Several purpose-built campuses in the Bay Area were planned and broke ground in the 1950s; most were fully built out as planned by the late 1960s. These include Santa Rosa Junior College, College of San Mateo, College of Marin (Kentfield campus), San Jose City College, Contra Costa College (San Pablo campus), Diablo Valley College (Pleasant Hill), Laney College (Oakland), Foothill (Los Altos Hills) and Chabot College (Hayward).[116]

Criterion B/2: Individuals

The Student Union building is not eligible under criterion B/2. Dr. Louis "Dutch" Conlan was college president between 1949 and 1970 and the subject building was planned, designed, and constructed during his tenure, along with several other permanent classroom, lab, administration, and student services buildings. The potential for Dr. Conlan to be an individual demonstrably important to CCSF, as president, his contribution was considered for the overall campus. The campus as a whole was determined not to be eligible. The evaluation determined that a portion of the original campus is eligible, but not under criterion B/2. The efforts to continue the development of the campus, including of the subject building, were shared by the San Francisco School Board, city agencies and the administration, and faculty. If the campus as a whole was found to be a significant historic resource, it would not be under B/2 because the establishment and growth of the campus is not attributable to an individual.

Considerable research of the history of CCSF was undertaken for this HRE. No individuals whose activities could be demonstrably important to history have been found to be associated with this building. The significance of Milton and John Pflueger's association with the building, as master designers/architects, is considered under criterion C/3.

Criterion C/3: Design and Construction

The Student Union building is not individually eligible under Criterion C/3. It is a contributor to the Modern architecture historic district. While its design is Late Modernist, it is not a high-style interpretation and does not embody the distinctive characteristics of the type. Compared

[116] historiaclaerials.com

to most other campus buildings it does have some verticality, and somewhat appears to be floating with its continual floor to ceiling glass on each floor visible on the south and east elevations, and it has some gradation of components from light to heavier from the ground floor to the third floor, but it is not a full interpretation of the type. It also exhibits some Brutalist influences with the heavy vertical and horizontal massing, recessed top floor fenestration behind the concrete balcony, and asymmetry of design.

Student Union's design also makes some references to the Second Bay Tradition, particularly the north-facing main entry and west elevations. According to the San Francisco Modern Architecture and Landscape Historic Context, "Second Bay Tradition buildings are often rooted in the landscape… or otherwise built into the earth". These elevations and part of the southern elevation express its relationship with the landscape. The use of wood banisters and balustrades edging the bridge and balconies is also characteristic of this style.

Milton and John Pflueger may be master architects based on their large body of work throughout the Bay Area and the nation. A full survey of their work required to establish them as master architects is beyond the scope of this HRE, but based on a cursory review, Creative Arts would not likely be a superior example of either architect's work.

Criterion D/4: Information Potential

The Student Union does not appear to be eligible under criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Extended Opportunity Program and Services Building (1970)

Criterion A/1: Event

This simple pre-cast single-story concrete building is not eligible under criterion A/1. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of eleven larger permanent buildings between 1940 and 1979 as well as the erection of a number of temporary and minor buildings housing classrooms, offices, and other student services. Placed on the site in 1970, it was added after the initial campus plan was developed and the first few buildings were constructed that established the core campus. The growth and expansion of the campus during the 1960s and 70s was part of a common trend of city college expansion throughout the greater San Francisco Bay Area and California.

Significant research on the history and the development of the campus from its inception to 1985 did not find that this building is associated with any specific events or broader trends that have made a significant contribution to the local, state, or national history.

Criterion B/2: Individuals
This building is not significant under criterion B/2 because it has not been found to be associated with a demonstrably important individual. The campus as a whole was determined not to be eligible under criterion B/2. Considerable research has been undertaken on the history of the Main campus and there has been nothing found that would link a person that has made significant contributions to history associated with this building, which is a minor component of the campus.

Criterion C/3: Design and Construction
This building is not significant under criterion C/3. It is a simple, commonly found prefabricated building of no particular style. It does not embody distinctive characteristics of a type, period, or method of construction and lacks individual distinction.

Criterion D/4: Information Potential
This building is not eligible under criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Visual Arts

Criterion A/1: Event
The Visual Arts building, completed in 1970, is not eligible under criterion A/1. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of ten buildings designed by Timothy, Milton, or John Pflueger between 1940 and 1978. Completed in 1970, the Creative Arts building was built thirty years after the initial campus plan was developed and the first building was constructed that established the core campus.

The growth and expansion of the campus during the 1960s and 1970s was part of a common trend of city college establishment and expansion throughout the greater San Francisco Bay Area and California. Several purpose-built campuses in the Bay Area were planned and broke ground in the 1950s; most were fully built out as planned by the late 1960s. These include Santa Rosa Junior College, College of San Mateo, College of Marin (Kentfield campus), San Jose City College, Contra Costa College (San Pablo campus), Diablo Valley College (Pleasant Hill), Laney College (Oakland), Foothill (Los Altos Hills) and Chabot College (Hayward).[117]

[117] historicaerials.com

Significant research on the history and the development of the campus from its inception to 1985 did not find that the Visual Arts building is associated with any specific events or broader trends that have made a significant contribution to the local, state, or national history. Therefore, it is not eligible for the NRHP or the CRHR under criterion A/1.

Criterion B/2: Individuals

The Visual Arts building is not eligible under criterion B/2. Dr. Louis "Dutch" Conlan was college president between 1949 and 1970 and the subject building was planned, designed, and constructed during his tenure, along with several other permanent classroom, lab, administration, and student services buildings. The potential for Dr. Conlan to be an individual demonstrably important to CCSF, as president, his contribution was considered for the overall campus. The campus as a whole was determined not to be eligible. The evaluation determined that a portion of the original campus is eligible, but not under criterion B/2. The efforts to continue the development of the campus, including of the subject building, were shared by the San Francisco School Board, city agencies and the administration, and faculty. If the campus as a whole was found to be a significant historic resource, it would not be under B/2 because the establishment and growth of the campus is not attributable to an individual.

Considerable research of the history of CCSF was undertaken for this HRE. No individuals whose activities could be demonstrably important to history have been found to be associated with this building. The significance of Milton and John Pflueger's association with the building, as master designers/architects, is considered under criterion C/3.

Criterion C/3: Design and Construction

The Visual Arts building is not individually eligible under criterion C/3 but it is a contributor under C/3 to the Modern architecture historic district. It contains elements of Late Modern in its glazing and horizontal massing, use of concrete, and its multiple elevations opening into courtyards, and some areas without windows. The roof is flat but has multiple planes. The secondary elevations mostly express the building's functions rather than any true architectural style. While it does not embody distinctive or high-style characteristics of this style it contributes to the Modern architecture historic district because of its overall Late Modern design.

Milton and John Pflueger may be master architects based on their large body of work throughout the Bay Area and the nation. A full survey of their work required to establish them as master architects is beyond the scope of this HRE, but based on a cursory review, Visual Arts would not likely be a superior example of either architect's work.

Criterion D/4: Information Potential

Visual Arts does not appear to be eligible under criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground

resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Creative Arts Extension

Criterion A/1: Event

The Creative Arts Extension, completed in 1972, is not eligible under criterion A/1. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of ten buildings designed by Timothy, Milton, or John Pflueger between 1940 and 1978. Completed in 1972, the Creative Arts Extension was built over thirty years after the initial campus plan was developed and the first building was constructed that established the core campus.

The growth and expansion of the campus during the 1960s and 1970s was part of a common trend of city college establishment and expansion throughout the greater San Francisco Bay Area and California. Several purpose-built campuses in the Bay Area were planned and broke ground in the 1950s; most were fully built out as planned by the late 1960s. These include Santa Rosa Junior College, College of San Mateo, College of Marin (Kentfield campus), San Jose City College, Contra Costa College (San Pablo campus), Diablo Valley College (Pleasant Hill), Laney College (Oakland), Foothill (Los Altos Hills) and Chabot College (Hayward).[118]

Criterion B/2: Individuals

The Creative Arts Extension is not eligible under criterion B/2. Dr. Louis "Dutch" Conlan was college president between 1949 and 1970 and the subject building was planned and designed during his tenure, along with several other permanent classroom, lab, administration, and student services buildings. Harry Buttimer was college president when the building was constructed. The potential for Dr. Conlan to be individual demonstrably important to CCSF, as president, his contribution was considered for the overall campus. The campus as a whole was determined not to be eligible. The evaluation determined that a portion of the original campus is eligible, but not under criterion B/2. The efforts to continue the development of the campus, including of the subject building, were shared by the San Francisco School Board, city agencies and the administration, and faculty. If the campus as a whole was found to be a significant historic resource, it would not be under B/2 because the establishment and growth of the campus is not attributable to an individual. Dr. Buttimer was president between 1970 and 1974, during a period in which CCSF continued to expand. Research has not found that he has made any demonstrable contributions to history.

Considerable research of the history of CCSF was undertaken for this HRE. No individuals whose activities could be demonstrably important to history have been found to be associated

[118] historicaerials.com

with this building. The significance of Milton and John Pflueger's association with the building, as master designers/architects, is considered under criterion C/3.

Criterion C/3: Design and Construction

The Creative Arts Extension is not individually eligible under criterion C/3, but contributes to the Modern architecture historic district under this criterion. This two-level building is Late Modern with some Brutalist influences. Characteristic of Late Modern, it has the horizontal massing and hooded or deep-set windows, cantilevered eaves, flat roof, use of concrete material and no ornament. Some features, such as the concrete heavily textured planter boxes and the elevator shaft express Brutalist influences. However, is not a high-style interpretation and does not embody the distinctive characteristics of either type of architecture. While it isn't individually eligible, it does contribute to the Modern architecture historic district.

Milton T. Pflueger, AIA & Associates, Architects received an award from the American Institute of Architects, San Francisco branch, for excellence in design in 1974 for this building. Milton and John Pflueger may be master architects based on their large body of work throughout the Bay Area and the nation. A full survey of their work required to establish them as master architects is beyond the scope of this HRE. Without such a survey, despite the AIA award, it cannot be determined if this building is a superior example of either architect's work.

Criterion D/4: Information Potential

Creative Arts Extension does not appear to be eligible under criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Batmale Hall (1978)

Criterion A/1: Event

Batmale Hall, completed in 1978, is not eligible under criterion A/1. Originally called Cloud Hall East, it was designed in 1974 in response to the District's 1970 master plan to accommodate an ultimate daytime enrollment of 20,000 students. The Main campus was first occupied in 1940 and has continued to expand since, including the construction of ten buildings designed by Timothy, Milton, or John Pflueger between 1940 and 1978. Completed in 1978, the Batmale Hall, the Pflueger firm's final CCSF building, was built almost forty years after the initial campus plan was developed and the first building was constructed that established the core campus.

The growth and expansion of the campus during the 1960s and 1970s was part of a common trend of city college establishment and expansion throughout the greater San Francisco Bay Area and California. Several purpose-built campuses in the Bay Area were planned and broke

ground in the 1950s; most were fully built out as planned by the late 1960s. These include Santa Rosa Junior College, College of San Mateo, College of Marin (Kentfield campus), San Jose City College, Contra Costa College (San Pablo campus), Diablo Valley College (Pleasant Hill), Laney College (Oakland), Foothill (Los Altos Hills) and Chabot College (Hayward).[119] The trend continued and by 1980 at least nine more city colleges had been established and campuses built in the greater Bay Area.[120]

Criterion B/2: Individuals

The Batmale Hall is not eligible under criterion B/2. During the building's planning, design, and construction several different men served as president of CCSF. They included Louis F. Batmale, 1970, Harry Buttimer, 1970-1974, Harry Frustuck, interim 1974-1975, and Kenneth S. Washington, 1975-1982. This was during a period in which the campus continued to expand. Research has not found that any of these men have made demonstrable contributions to history. Had any of these individuals made specific contributions that were demonstrably important to history, given the shortness of each's tenure, this building would not likely be the property that would be associated with any of their contributions. Considerable research of the history of CCSF was undertaken for this HRE. No individuals whose activities could be demonstrably important to history have been found to be associated with this building.

Criterion C/3: Design and Construction

Batmale Hall is not individually eligible under criterion C/3, however it does contribute to the Modern architectural historic district under this criterion. The subject building is a blend of Late Modernist and Brutalist design with an element of Neo-formalism in its primary façade portico and some Japanese influence at the roofline of the central, tallest section of the building. Characteristic of the Brutalist style, the building is of massive form with heavy cubic shapes, recessed windows that read as voids, repeating geometric patterns, strong right angles, and precast concrete panels with exposed joinery. The cornice above the primary façade is textured with the rough, striated concrete typical of the style. The sculptural concept of the building's three volumes is characteristic of the Late Modern style. Examples of this include the bents extending outward on the east elevation's lower floors. With this blend of design styles, Batmale Hall does not embody a distinctive style of architecture, however it is a contributor to the Modern architecture historic district. At just 42 years of age, it should be reevaluated in 2028 for its potential to be individually eligible.

The sculpture deck by artist Jacques Overhoff was commissioned and designed for the building. The piece contributes to the building's modern character. Batmale Hall received an award from the San Francisco Art Commission for combining art and architecture.

Milton and John Pflueger may be master architects based on their large body of work throughout the Bay Area and the nation. A full survey of their work required to establish them

[119] historicaerials.com
[120] ibid

as master architects is beyond the scope of this HRE, but based on a cursory review, Visual Arts would not likely be a superior example of either architect's work.

Criterion D/4: Information Potential

Batmale Hall does not appear to be eligible under Criterion D/4. It is unlikely to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Archival research and physical investigation of the building complex focused on the above ground resources only. Therefore, no informed determination could be made regarding the property's potential for subsurface archaeological resources.

Chapter 5

HISTORIC INTEGRITY: HISTORIC CORE DISTRICT AND SCIENCE BUILDING

Integrity is the ability of a property to convey its significance. For a property to be eligible for any of the four NRHP or CRHR criteria it must also have retained its historic integrity. Integrity is the retained ability for the property to express its significance. Within the campus are two eligible historic districts. The historic-core district, the first developed portion of the Main campus, was found to be eligible for the NRHP and CRHR under criteria A/1 and C/3 for its association with the early junior college movement in the greater San Francisco Bay Area, and as the work of a master and for embodying the distinctive character of a place of higher education, respectively. Additionally, the Science building has been determined to be individually eligible under both criteria for the same reasons.

The second district, the "Modern architecture district" is eligible for the NRHP and CRHR under criteria C/3 as a concentration of modern architecture. It includes the historic-core district and the Timothy, Milton and John Pflueger architect-designed buildings constructed between 1940 and 1978, eligible as locally significant. These include Smith Hall and Statler Wing, Creative Arts, Conlan Hall, Student Union, Visual Arts, Batmale Hall, and Creative Arts Extension.

HISTORIC-CORE DISTRICT INTEGRITY

Location: The historic district retains its integrity of location. It, nor any of the contributors has been moved.

Design: The overall design of the core historic campus has been retained. It reflects Timothy Pflueger's concept of his original campus plan, particularly his spatial organization. Although the construction of most of his buildings did not come to fruition, his classically symmetrical horseshoe-shaped site design has retained overall integrity. The relationship between the site and its primary building, the Science building, sited centrally atop the hill has been retained. Additionally, the second building, Cloud Hall has some design elements that Timothy Pflueger had planned. Specifically, the original plan sited two subordinate angled rectangle buildings atop the hill, behind the Science building. The two buildings' angles are responsive to the northeast and southeast curve of the surrounding Cloud Circle, the Timothy Pflueger-designed main circulation element that defines the district boundary; the far ends of the buildings bend inward toward the north and south wings of the Science building. Cloud Hall's central auditorium reduces the integrity of the relationship between the Science building and Cloud Hall. While the two form a central plaza, as Timothy Pflueger planned, the placement of Cloud Hall's auditorium removes the west-facing openness of the design.

The original design's two main circulation features, Cloud Circle and Science Circle retain integrity of design, as does the broad lawn sloping west, downhill from the primary façade of the Science building. While the wide central path up the slope to the building's central portico has been replaced by a large modern staircase, the original form has been retained. When comparing a 1946 aerial photograph with a current one, some of the tree locations in front of the Science building are extant, however more mature.

Setting: The historic-core district maintains integrity of setting. Sited on College Hill, the central and tallest point of the campus, the setting is an important character-defining feature of the district. The elevation of the campus varies from 185 to 355 feet above sea level. And the central focus of the historic district, the Science building, is sited at the highest point. Outside the district lies the rest of the modern campus; the buildings are below and subordinate to those at the top of College Hill. The district is also the most park-like of any other area of the campus. It retains the open-space formalism designed by Timothy Pflueger.

Additionally, the view from the top of the district looks west and, when clear, the Pacific Ocean and the Farallon Islands are visible. This view has remained intact since the school first opened to students.

Materials: Overall the historic-core district retains its integrity of materials. The Science building and Cloud Hall retain their integrity of exterior materials. It does not appear that any significant alterations of either building's exterior have been made.

Vegetation is not stable, but changes as a result of maturation, pruning, replacement, and other impacts. A designed landscape does not need to exist today as it was originally designed and overall, much of the vegetation placement is generally consistent with that in the 1946 aerial photograph, within the period of significance. The introduction of several paved paths, stairways, and switch-backs reduce the district's integrity of materials. Cloud Circle and Science Circle, paved roadways, appear to have retained the typical materials seen in the historic aerial photograph. It is unknown if the surface materials and landscaping of the plaza are original, have been replace in kind through maintenance, or are modern, but the original layout, shape, and north-south access to it appear to have been retained.

Workmanship: The integrity of workmanship is primarily reflected in the Science building. In addition to it retaining the integrity of Timothy Pflueger's work, which illustrate the aesthetic principles of the period, the work of mosaic artist Herman Voltz within the porticos on the south- and north-facing wings of the building have retained integrity. Repairs in kind have been made to ensure the two works of art retain integrity. Also, on the plaza are two sculptures by Frederick Olmstead, sited there when the Science building was built. In the entrance of the Science building are two Frederick Olmsted murals painted upon the completion of the building that also retain integrity of workmanship.

Feeling: Much of the integrity of feeling is expressed by the siting of the Science building upon the top of the hill, expressing its status as a grand institute of higher learning, with broad lawns sloping down the hill. This main pedestrian entrance to the core campus draws a visitors' eyes up the hill to the central component of the campus. The district is bounded by the horseshoe-shaped Cloud Circle, which separates the district from the lower and more concentrated and confined modern campus, heightening the feeling of prominence of the historic core campus.

Association: The historic-core district retains its integrity of association. It was designed as the central, focal point of the campus and, as executed, despite not fulfilling Timothy Pflueger's original plan, clearly reflects the property an institute of higher learning as well as an early and significant junior college in the greater San Francisco Bay Area. The district is still central to and retains its relationship to the greater Main campus.

Historic Integrity Summary

The CCSF core historic campus retains all seven aspects of integrity. While Timothy Pflueger's original plan was not fulfilled, the core historic campus retains its integrity to its period of significance (1940-1954) as built. Primary changes have been the expansion of the pedestrian circulation system and landscaping that is a combination of maturation and additions over the eighty years since the campus opened.

SCIENCE BUILDING INTEGRITY

Location: The building retains its integrity of location. It has not been moved.

Design: The building retains its integrity of design, including the exterior mosaics and the interior entryway murals. Its exterior is virtually unaltered; a second, small dome was placed on the roof to house a telescope in the 1970s. Its interior classrooms and offices have been altered periodically over the years. As the original campus building, all classrooms, offices, labs, student services, and the library were housed in the building for fourteen years. As the campus grew, departments and services moved out and the interior was repurposed in response.

Setting: The building maintains integrity of setting. Sited on College Hill, the central and tallest point of the campus, the setting is an important character-defining feature of the building. The elevation of the campus varies from 185 to 355 feet above sea level. And the central focus of the historic district, the Science building, is sited at the highest point. It sits opposite Cloud Hall, which was built outside the building's period of significance (1940-1941). While large, the newer building is subordinate to the Science building and does not significantly reduce the integrity of the Science building's setting. Outside the district lies the rest of the modern campus; the buildings are below and subordinate to the Science building. The park-like setting retains the open-space formalism designed by Timothy Pflueger. Additionally, the view from the top of the district looks west and, when clear, the Pacific Ocean and the Farallon Islands are visible. This view has remained intact since the school first opened to students.

Materials: The Science building retains its integrity of exterior materials. Its interior classrooms and offices have been altered periodically over the years. As the original campus building, all classrooms, offices, labs, student services, and the library were housed in the building for fourteen years. As the campus grew, departments and services moved out and the interior was repurposed in response. Much of the original interior surface and infrastructure has been replaced.

Workmanship: The Science building retains its integrity of workmanship. In addition to it retaining the integrity of Timothy Pflueger's work, which illustrates the aesthetic principles of the period, the work of mosaic artist Herman Voltz within the porticos on the south- and north-facing wings of the building have retained integrity. Repairs in kind have been made to ensure the two works of art retain integrity. Also, on the plaza are two sculptures by Frederick Olmstead, sited there when the Science building was built. In the entrance of the Science building are two Frederick Olmsted murals painted upon the completion of the building that also retain integrity of workmanship.

Feeling: Much of the integrity of feeling is expressed by the siting of the Science building upon the top of the hill, expressing its status as a grand institute of higher learning, with broad lawns sloping down the hill. This main pedestrian entrance to the core campus draws a visitors' eyes up the hill to the main portico of this classically symmetrical central component of the campus.

Association: The Science building retains its integrity of association. It was designed and built as the central, focal point of the campus and, as executed, clearly reflects the property an institute of higher learning as well as an early and significant junior college in the greater San Francisco Bay Area. The building is still central to and retains its relationship to the greater Main campus.

Historic Integrity Summary

The Science building retains all seven aspects of integrity. Primary changes have been made to the interior and the setting, due to the addition of Cloud Hall, has been altered since the building's period of significance, however the Science building's primary façade is oriented westward. Cloud Hall is behind the Science building, to the east.

CHARACTER-DEFINING FEATURES

A portion of the original Main campus, the historic-core historic district, was found to be eligible for the NRHP and CRHR under criteria A/1 and C/3 for its association with the early junior college movement in the greater San Francisco Bay Area, and as the work of a master and for embodying the distinctive character of a place of higher education, respectively. Additionally, the Science building has been determined to be individually eligible under both criteria for the same reasons. As such, features of the district and the individual building have been identified that define the historic character of the properties. Assessment of various features is done according to a prioritized evaluation system. Once the character-defining features have been identified, each is assigned a priority rating to create a sense of the relative historical importance of these spaces and features. A rating scale of "Primary-Important-Contributing-Non-Contributing" is used. In general, this system allows for the analysis of a property as a whole to guide what types of work should be done, and where such work could be completed with the least damage to the historic integrity of the district or the individually eligible building.

The character-defining features of the historic-core district include:

Primary
- The Science building (see list of primary features below for this individually eligible building)
- Frederick Olmsted sculptures

Important
- Cloud Hall
- Landscaping: west lawn between the Science building and Phelan Avenue/Frida Kahlo Way
- Plaza between Cloud Hall and the Science building
- Cloud Circle
- Science Circle
- Views and vistas

Contributing
- Landscaping that was not part of the landscape/hardscape design of the modern pedestrian circulation systems

Non-Contributing
- Modern pedestrian circulation system

The character-defining features of Science building:

Primary
- Flat roof
- Ceramic tile veneer

- Six-light windows with awning sash in the upper and lower lights and wood muntins and mullions
- Symmetrical massing and fenestration
- Recessed vertical bands of windows and balconets at the north and south ends of the principal façade
- Porticos with simple concrete colonnades on the north and south elevations
- Simple block lettering on the architrave
- Corner windows on the east and west elevations
- Three-story projecting bays on the east elevation
- Vertical bands of glass bricks on the east wings
- Mosaics on the recessed walls of the north and south porticos
- Murals inside the main entrance

Important
- Spherical observatory
- Interior main entrance

Contributing
- View west toward Pacific Ocean

Non-Contributing
- Interior mechanicals
- Previously altered interior spaces

Chapter 6

HISTORIC INTEGRITY: MODERN ARCHITECTURE DISTRICT

MODERN ARCHITECTURE DISTRICT INTEGRITY:

The historic-core district is within and contributes to the Modern architecture district. The following integrity discussion focuses on the portion of this district that is outside of the historic-core district.

Location: The historic district retains its integrity of location. It, nor any of the contributors have been moved.

Design: The overall design of the Modern architecture district has been retained. It is a concentration of ten buildings representative of WPA Modern, Late Modern, Brutalism, International, Neo-formalism, and Second Bay Tradition styles, designed between 1940 and 1978. While some interiors have experienced alterations, the exteriors are largely intact. Designed and built as the need arose and funding was available, the buildings are a cohesive collection of buildings reflecting their contemporary design, and the use of current technology, materials and method of construction. Because they were built over several years, an important part of their design was the physical connections between buildings in the form of bridges, ramps, stairs, elevators, and shared open spaces and plazas. These circulation features and structures are also intact and have experienced little alteration. Much of Smith Hall is hidden by the addition of the Statler Wing. This occurred during the period of significance and the combined buildings therefore contribute to this historic district.

Setting: The Modern architecture district maintains integrity of setting. The district surrounds and includes College Hill, the central and tallest point of the campus. At a lower elevation, the rest of the district is subordinate to the two buildings atop the hill. These surrounding buildings are all oriented toward and accessed from Cloud Circle. Each building was originally built to connect to this primary campus roadway; this relationship is unchanged. Newer buildings and structures have been built on the campus, but in the outer areas of the campus, north of the Arts building and east and south of the district boundaries. Because the primary elevations of the lower plane buildings are oriented toward Cloud Circle, the later campus additions have not detracted from the historic setting of this historic district.

Materials: The contributors to this district retain integrity of exterior materials. Several buildings have had their interiors altered. There is little evidence, other than maintenance, that any contributors have experienced significant loss of exterior materials. Materials are especially important to Modern architecture because materials largely express the design of these buildings rather than ornamentation. Large-scale structural systems and their materials are often exposed; these appear to be unchanged. Smaller scale important materials that have been retained include those used in the glazing, such as copper or wood muntins, metal-framed doors, and glass block. Cladding and surface materials also appear to be largely unchanged. The concrete, metal and wood rails and surfaces that are found on the connecting walkways, ramps and bridges have been retained, as have the surface materials, benches and planters original to the open spaces and plazas of the Modern architecture district.

Workmanship: The workmanship has also retained integrity. While the condition of some of the buildings appear to have deteriorated over the years, the workmanship of the contributors to the Modern architecture historic district still illustrates the aesthetic principals of the period and reveal local technological practices and aesthetic principals.

Feeling: The Modern architecture historic district still expresses the aesthetic of post WWII Modern architecture, and therefore the integrity of feeling has been retained. The physical features taken together – the buildings, circulation systems, plazas and open spaces, and the relationship between buildings expresses the aesthetic sense and progression of design of this period of architectural design.

Association: The Modern architecture historic district retains its integrity of association. Its physical features are sufficiently intact to convey its historic character as a concentrated collection of post WWII Modern designed buildings constructed over of period of several years.

Historic Integrity Summary

The Modern architecture district retains all seven aspects of integrity. Some interiors have been altered over the years, however the exteriors retain integrity, as does the spatial relationship between the contributing building, structures, and circulation systems.

CHARACTER-DEFINING FEATURES

The Modern architecture district, a portion of the Main campus, was found to be eligible for the NRHP and CRHR under criteria C/3 embodying the distinctive character of a post WWII collection of Modern architecture. As such, features of the district have been identified that define the historic character of the properties. Assessment of various features is done according to a prioritized evaluation system. Once the character-defining features have been identified, each is assigned a priority rating to create a sense of the relative historical importance of these spaces and features. A rating scale of "Primary-Important-Contributing-Non-Contributing" is used. In general, this system allows for the analysis of a property as a whole to guide what types of work should be done, and where such work could be completed with the least damage to the historic integrity of the district or the contributing buildings.

The character-defining features of the district include:

Primary

- A concentration of intact post WWII Modern-designed buildings expressing a variety of styles and progression of modern architecture design.
- Spatial relationship between buildings
- Artwork designed as part of and contemporary with the building's design

Important

- Individual buildings
- Exterior structural materials that define the style or styles of the buildings
- Fenestration materials, shapes
- Patterns of fenestration or openings
- Plaza and open spaces

Contributing

- Artwork not original to the buildings

Non-Contributing

- Interior mechanicals
- Previously altered interior spaces
- Mechanical and interior systems
- EOPS building

Chapter 7

CONCLUSION

The Main campus was evaluated for its potential to be eligible as a historic district for the NRHP and/or the CRHR. It was determined not to be a historic district in its entirety. However, within the physical campus boundaries there are two historic districts, one within the other. The smaller district, "the historic-core district" is a portion of the original Main campus. This first-to-be-developed historic core on College Hill was found to be eligible for the NRHP and CRHR under criteria A/1 and C/3 for its association with the early junior college movement in the greater San Francisco Bay Area, and as the work of a master and for embodying the distinctive character of a place of higher education, respectively. The overall integrity is high under all seven aspects of integrity. The boundary of the historic district is Cloud Circle on the north, east and south side of College Hill, and to the west, Phelan Avenue/Frida Kahlo Way. The period of significance is 1940-1954. Additionally, the Science building has been determined to be individually eligible under both criteria for the same reasons. The building retains a significant amount of integrity with respect to all seven aspects. Its boundary, within the boundary of the historic-core district, is the footprint of the building.

The second district, the "Modern architecture district" includes the historic-core district and the Timothy, Milton and John Pflueger architect-designed buildings constructed between 1940 and 1978, eligible as locally significant. These include the Science building, Cloud Hall, Smith Hall and Statler Wing, Creative Arts, Conlan Hall, Student Union, Visual Arts, Batmale Hall and Creative Arts Extension. Several other buildings constructed in or prior to 1985 were evaluated for their potential to be eligible for the NRHP and/or CRHR and determined not to be eligible under any criteria, individually or as contributors to the district. These include the Horticultural department complex, the EOPS building, and several temporary buildings or "bungalows". Much of the eastern and northern areas of the campus is of modern construction and not included within the district boundary. The Multi-use Building and the West Campus, west of Phelan Avenue/Frida Kahlo Way is also outside of the district.

REFERENCES

Blackstock, Joe. "San Bernardino and the Inland Empire." The Sun. 12/22/2007. Accessed July 24, 2020. https://archive.vn/20120911120758/http://www.sbsun.com/search/ci_7782442

California Community Colleges. "About California Community Colleges." Accessed July 23, 2020. https://www.cccco.edu/About-Us/About-California-Community-Colleges

City and County of San Francisco. *Bond Properties and Charter Amendment to be Voted on at Special Municipal Election to be Held September 27, 1938.* Published under provisions of Section 183 of the Charter of City and County of San Francisco. Accessed July 17, 2020. https://webbie1.sfpl.org/multimedia/pdf/elections

City and County of San Francisco. *City and County Propositions to be voted on at the General Election Tuesday, November 3, 1964.* Published under provisions of Section 183 of the Charter of City and County of San Francisco. Accessed July 24, 2020. https://webbie1.sfpl.org/multimedia/pdf/elections

City College of San Francisco. 2019 Facilities Master Plan, Chapter 2: Existing Conditions (2004).

City College of San Francisco. "History of City College San Francisco." Accessed August 12, 2020. https://www.ccsf.edu/about-ccsf/history-city-college

City College of San Francisco. "CCSF Art Tour." Accessed August 13, 2020. https://ccsfgis.maps.arcgis.com/apps/MapTour/index.html?appid=31807503816d4cc781132f6b82ffdc80

City College of San Francisco. *The Guardsman*: Official Weekly Publication of the Associated Students of San Francisco Junior College. Various issues. Accessed July, August 2020. https://archive.org/search.php?query=guardsman&sin=&sort=date&page=2

City of Los Angeles, Department of City Planning. "Survey LA, Los Angeles Citywide Historic Context Statement: Architecture and Engineering/LA Modernism/Late Modern, 1966-1990."

2020. Accessed August 26. https://planning.lacity.org/odocument/de23aa2c-7d44-4f2d-a071-67354bbf9255/6.13_LateModern_1966-1990.pdf

Committee Y of the American Association of University Professors. *Depression, Recovery, and Higher Education.* McGraw Book Company, Inc. New York and London. 1937. Accessed June 2020. https://archive.org/search.php?query=%22depression%20recovery%20and%20higher%20education%22

Community College League of California. "The California Community College History Project." Accessed July 17, 2020. https://www.ccleague.org/search/history

Cook, Stephen. "School Quake Bonds Win Big." San Francisco Examiner. November 7, 1973. Accessed July 12, 2020. https://www.newspapers.com/image/460773628

Diego Rivera Mural Project. "Archives, Timothy Pflueger Papers." Accessed August 3, 2020. https://riveramural.org/timothy-pflueger-papers/

Golden Gate International Exposition. *Art Official Catalog: Palace of Fine Arts.* S.F. Bay Exposition Co. 1940. Accessed July 24, 2020. https://archive.org/search.php?query=Golden%20gate%20international%20exposition%20art

Grenier, Michael Robert, "An Analysis of Public Art on University Campuses: Policies, Procedures, and Best Practices." Dissertation. University of Minnesota Graduate School of Education. 2009.

Historic Aerials Online. Accessed July, August 2020. https://www.historicaerials.com/viewer

Johnston, Jonathan. "Revealing Historic Significance Through Campus Public Art." Master of Landscape Architecture Terminal Projects. Clemson University. 2017. Accessed July 2020. https://tigerprints.clemson.edu/mlatp/48/

Knight, Cher Krause Knight. *Public Art: Theory. Practice, and Populism*. Blackwell Publishing, Malden, MA. 2008.

Los Angeles Times. "Statler Hotel Chain Bought by Hilton." August 4, 1954. Accessed August 17, 2020. https://www.newspapers.com/image/385628266/?terms=%22ellsworth%20statler%22&match=1

Macallair, Daniel. "The San Francisco Industrial School and Origins of Juvenile Justice in California: A Glance at the Great Reformation." *U.C. Davis Journal of Juvenile Law & Policy*. Vol. 7:1.

Mankin, Lawrence D., PhD, The Administration of Public Art on State University Campuses, *The Journal of Arts Management, Law, and Society.* Arizona State University. 2002.

O'Connor, Francis V., editor. *Art for the Millions. Essays from the 1930s by Artists and Administrators of the WPA Federal Art Project.* New York Graphic Society, ltd. Greenwich, CT. 1973. Accessed June 2020. https://archive.org/details/artformillionses00ocon

Pacific Coast Architecture Database (PCAD), University of Washington. Accessed July 25, 2020. http://pcad.lib.washington.edu/person/6047/

Pflueger, John. "Quest for Relevance." Unpublished memoir. September 19, 2016.

Pflueger, John. "John Pflueger Architect." Accessed July 24, 2020. http://johnpfluegerarchitect.com/

Pflueger, Milton T. *City College of San Francisco Part II.* Milton T. Pflueger, AIA & Associates, Architects. Brochure, n.d.

Pflueger, Milton T. *Time and Tim Remembered*. San Francisco. Pflueger Architects. 1985.

Puccinelli, Dorothy. *Diego Rivera, the Story of His Mural at the 1940 Golden Gate International Exposition.* N.D. Accessed August 2, 2020. https://archive.org/details/csfcic_000020/mode/2up

Russell, Ron. "Secret Rivera." SF Weekly. December 17, 2003. https://www.sfweekly.com/news/secret-rivera/

San Francisco Arts Commission. "Sec. 3.19. Appropriation for Art Enrichment of Proposed Public Buildings, Aboveground Structures, Parks and Transportation Improvement Projects." Accessed August 10, 2020. https://www.sfartscommission.org/content/art-enrichment-ordinance

San Francisco Planning Department, "San Francisco Modern Architecture and Landscape Design, 1935-1970: Historic Context Statement." Prepared by Mary Brown. 2011.

San Francisco Public Library, "San Francisco Historical Photograph Collection." Accessed July, August 2020. https://sfpl.org/locations/main-library/sf-history-center/digital-collections

San Francisco Sheriff's Department History Online. Accessed July 17, 2020. http://sfsdhistory.com/eras/the-ingleside-jail-1876-1934

U.S. Department of the Interior, National Park Service, Cultural Resources staff. "How to Apply the National Register Criteria for Evaluation." *National Register Bulletin,* no. 15 (1990: revised for internet 1995).

U.S. Department of the Interior, National Park Service, Cultural Resources staff. "How to Evaluate and Nominate Designed Historic Landscapes." *National Register Bulletin,* no. 18 (1994).

White, Austin. White, Austin. "Seventy Years of Making Dreams into Reality, City College of San Francisco: A Short History." 2005.

APPENDIX D

Transportation Supporting Information

APPENDIX TR
CCSF 2019 FACILITIES MASTER PLAN EIR TRANSPORTATION ANALYSIS SUPPORTING INFORMATION

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TRIP GENERATION ASSUMPTIONS

Student Growth Projections and Enrollment Location

CCSF Student Headcount (Fall)

Fall	Ocean Campus [1] [2]	Other Centers [1] [2]	All Locations [1] [2] [3]
2010	33,050	30,696	63,746
2011	33,970	29,209	63,179
2012	30,217	27,816	58,033
2013	26,639	24,316	50,955
2014	23,601	23,444	47,045
2015	23,383	22,471	45,854
2016	21,099	15,354	36,453
2017	26,560	19,784	46,344
2018	27,059	16,573	43,632
2019	24,344	13,912	38,256
2020	28,974	17,889	46,863
2021	29,981	18,585	48,566
2022	31,024	19,309	50,333
2023	32,102	20,061	52,163
2024	33,219	20,842	54,061
2025	33,784	21,196	54,980
2026	34,358	21,557	55,915
2027	34,942	21,923	56,865
2028	35,536	22,296	57,832
2029	36,140	22,675	58,815
2030	36,754	23,060	59,814
Expected Growth			
2019-2030	12,410	9,148	21,558
	51.0%	65.8%	56.4%

[1] CCSF headcounts - Enrollment Staff Projections 11.15.19 (003).pdf; from IS DropBox

[2] California Community Colleges Chancellor's Office Management Information System Data Mart; Student Enrollment Status Summary Report (Nov. 2020)

[3] Project Description in NOP; September 2019

FTES Enrollment by Center/Location (Fall)

Fall	Airport	Ch/N.Beach	C. Center	Downtown	Evans	Ft Mason	J. Adams	Mission	Ocean	Southeast	Total
						Credit FTES					
2014	91.1	119.0	9.9	207.1	173.8	49.2	331.4	300.4	6,309.4	44.0	7,635.3
2015	88.8	118.4	2.8	184.4	132.9	66.3	289.3	300.5	5,824.7	43.4	7,051.5
2016	71.3	117.1	5.3	150.9	121.6	65.4	289.7	265.2	5,281.1	44.4	6,412.0
2017	73.5	127.6	6.2	194.3	184.5	67.2	277.3	333.7	5,872.0	31.1	7,167.4
						Non-Credit FTES					
2014	-	1,132.2	280.5	532.3	92.6	-	565.9	694.3	363.0	43.5	3,704.3
2015	-	1,064.9	167.5	469.9	85.5	7.0	503.0	670.7	307.7	26.8	3,303.0
2016	-	947.5	190.6	427.4	81.3	6.6	428.2	617.5	243.7	13.4	2,956.2
2017	-	859.7	174.3	415.8	57.5	10.1	396.1	636.9	345.7	2.8	2,898.9
						Total FTES					
2014	91.1	1,251.2	290.4	739.4	266.4	49.2	897.3	994.7	6,672.4	87.5	11,339.6
2015	88.8	1,183.3	170.3	654.3	218.4	73.3	792.3	971.2	6,132.4	70.2	10,354.5
2016	71.3	1,064.6	195.9	578.3	202.9	72.0	717.9	882.7	5,524.8	57.8	9,368.2
2017	73.5	987.3	180.5	610.1	242.0	77.3	673.4	970.6	6,217.7	33.9	10,066.3
						Percentage of Total FTES					
2014	0.8%	11.0%	2.6%	6.5%	2.3%	0.4%	7.9%	8.8%	58.8%	0.8%	100.0%
2015	0.9%	11.4%	1.6%	6.3%	2.1%	0.7%	7.7%	9.4%	59.2%	0.7%	100.0%
2016	0.8%	11.4%	2.1%	6.2%	2.2%	0.8%	7.7%	9.4%	59.0%	0.6%	100.0%
2017	0.7%	9.8%	1.8%	6.1%	2.4%	0.8%	6.7%	9.6%	61.8%	0.3%	100.0%
4-Year Avg.	0.8%	10.9%	2.0%	6.3%	2.3%	0.7%	7.5%	9.3%	59.7%	0.6%	100.0%
		11.0%	2.1%	6.3%	2.3%	0.7%	7.6%	9.4%	60.2%	0.6%	100.0%

Source: Enrollment Management Growth Plan (EMGP) 12.13.2018

Eliminate Airport and consolidate Ft. Mason with Civic Center
Does not include Online

Faculty/Staff Growth Projections and Work Location

CCSF Faculty/Staff Count

	Faculty/Staff Category [a]						
Fall	Admin. Staff	Faculty Full time	Faculty Part Time	Classified Staff	Total	[b] 11/2019	Project Desc. [c]
2008	52	764	1,188	893	2,897	2,897	2,897
2009	52	757	1,092	880	2,781	2,781	2,781
2010	43	793	1,030	831	2,697	2,697	2,697
2011	40	810	1,004	813	2,667	2,667	2,667
2012	42	754	895	766	2,457	2,457	2,457
2013	43	694	877	690	2,304	2,304	2,304
2014	44	637	885	684	2,250	2,250	2,250
2015	45	618	830	700	2,193	2,193	2,193
2016	53	546	880	699	2,178	2,178	2,178
2017	47	500	884	707	2,138	2,138	2,138
2018	56	520	868	700	2,144	2,144	2,144
2019	34	549	766	631	1,980	2,181	2,181
2020						2,219	
2021						2,258	
2022						2,297	
2023						2,337	
2024						2,378	
2025						2,398	
2026						2,418	
2027						2,439	
2028						2,459	
2029						2,480	
2030						2,501	
					Expected Growth	320	
					2019-2030	14.7%	

Sources:

[a] California Community Colleges Chancellor's Office DataMart:
https://datamart.cccco.edu/Faculty-Staff/Staff_Demo.aspx

[b] Staff Count Projections v.2.docx (from IS Dropbox)

[c] Project Description in NOP, September 2019

CCSF Faculty/Staff and their assigned locations
April 2018 - Faculty Staff

Location	Full-time		Part-time		Combined Weighted Average			[a]
Airport		1%		0%		1%	1%	
Chinatown/N.Beach		5%		17%		9%	7%	16.8%
Civic Center		2%		0%		1%	1%	6.4%
Downtown		9%		20%		12%	10%	24.0%
Evans		4%		8%		5%	4%	11.5%
Fort Mason		1%		4%		2%	1%	
John Adams		6%		4%		5%	4%	10.5%
Mission		9%		14%		11%	8%	20.4%
Ocean		86%		58%		77%	60%	
Southeast		1%		0%		1%	1%	1.3%
Online		5%		4%		5%	4%	9.1%
No. of responses	221	129%	97	129%	318	129%	100%	100%
Ocean		86.0%		58.0%		77.5%		
Other Centers		43.0%		71.0%		51.5%		
Total		129%		129%		129%		

Source: CCSF Educational Master Plan 2018-2025, p. 124 - June 2019 (Survey April 2018)

[a] Added Airport to Evans and consolidated Ft. Mason with Civic Center

Mode of Travel Split

CCSF Ocean Campus - Mode of Travel Split

Mode of Travel	Faculty/Staff		Students	
Drive alone	297	66.3%	473	29.7%
Drive w/ others / carpool	18	4.0%	102	6.4%
Uber, Lyft, Taxi	1	0.2%	122	7.7%
Muni bus	21	4.7%	306	19.2%
Muni rail	4	0.9%	70	4.4%
BART	64	14.3%	173	10.9%
Walk	15	3.3%	285	17.9%
Bicycle	9	2.0%	27	1.7%
BART and bicycle	7	1.6%	3	0.2%
Muni and bicycle	1	0.2%	10	0.6%
Other	11	2.5%	22	1.4%
Total Answers	448	100.0%	1,593	100.0%
Auto	297	66.3%	473	29.7%
Drive with others	18	4.0%	102	6.4%
TNC	1	0.2%	122	7.7%
Transit	89	19.9%	549	34.5%
Walk/Bike	32	7.1%	325	20.4%
Other	11	2.5%	22	1.4%
Total Answers	448	100.0%	1,593	100.0%

Source: CCSF faculty/staff and student transportation surveys, collected by Fehr & Peers in the Summer and Fall 2018.

Average vehicle occup.	*1.03*	*1.08*

Data is for Ocean site only; same source already used in 2004 EIR Addendum

Place of Residence

City College of San Francisco
Overall Headcount - Fall 2019

		Center Location												
	Residential Location	Airport	Chinatown N. Beach	Civic Center	Downtown	Evans	Fort Mason	John Adams	Mission	Ocean	Southeast	Online	All Centers	
94130	SF-Treasure Island	-	3	6	10	2	3	12	22	74	-	23	155	0.4%
94111	SF-North Beach/Financial District North	-	50	3	15	2	6	4	10	28	-	13	131	0.3%
94104	SF-Financial District South	-	8	2	2	-	1	2	7	17	-	7	46	0.1%
94133	SF-Russian Hill/North Beach	4	599	7	86	13	18	54	98	340	1	150	1,370	3.1%
94108	SF-Chinatown/Civic Center	-	349	8	56	5	10	29	38	203	-	79	777	1.8%
94102	SF-Hayes Valley/Civic Center/Tenderloin	5	82	131	131	19	20	84	201	489	2	199	1,363	3.1%
94109	SF-Pacific Heights/Western Addition/Nob Hill/Russian Hill	-	203	105	197	19	41	98	189	517	1	255	1,625	3.7%
94123	SF-Marina	-	15	4	29	2	16	31	50	76	1	33	257	0.6%
94115	SF-Pacific Heights/Cow Hollow/Western Addition	-	37	31	79	12	22	127	93	345	-	150	896	2.1%
94129	SF-Presidio	-	2	1	4	2	2	10	12	42	-	26	101	0.2%
94118	SF-Inner Richmond/Presidio Heights	4	82	20	74	19	20	179	108	492	-	214	1,212	2.8%
94121	SF-Outer Richmond/Seacliff	2	116	32	90	16	35	214	133	739	1	314	1,692	3.9%
94117	SF-Haight Ashbury/Cole Valley	2	26	11	79	18	37	130	129	376	2	130	940	2.2%
94122	SF-Sunset	3	119	38	163	35	36	271	187	1,085	5	456	2,398	5.5%
94116	SF-Sunset/Parkside/West of Twin Peaks	2	139	50	112	30	20	168	152	1,026	-	334	2,033	4.7%
94127	SF-Twin Peaks/Forest Hill/St Francis Wood/West Portal	-	13	10	43	6	4	32	78	396	-	115	697	1.6%
94131	SF-Twin Peaks/Diamond Heights/Noe Valley/Glen Park	-	12	11	43	17	15	69	156	410	3	128	864	2.0%
94114	SF-Castro/Upper Market/Noe Valley	-	27	11	68	19	20	59	186	317	1	105	813	1.9%
94132	SF-Lake Merced/Stonestowm	2	70	25	70	14	6	71	112	780	1	277	1,428	3.3%
94112	SF-Ocean View/Balboa Terrace/Ingleside/Outer Mission/Crocker Amazon/Excels	17	505	70	275	123	20	228	869	3,111	13	857	6,088	13.9%
94134	SF-Excelsior/Visitacion Valley/Sunnydale	8	395	46	116	71	11	101	368	1,334	27	399	2,876	6.6%
94124	SF-Bayview/Hunters Point	4	240	73	137	105	14	107	468	1,270	14	411	2,843	6.5%
94110	SF-Inner Mission/Bernal Heights	4	82	58	190	75	34	137	1,108	1,311	7	425	3,431	7.9%
94107	SF-Potrero Hill/Dogpatch/SoMa	-	44	14	82	19	18	33	141	321	4	108	784	1.8%
94158	SF-Mission Bay	-	21	4	35	2	2	8	35	102	-	36	245	0.6%
94103	SF-South of Market	1	61	61	137	24	16	58	228	522	2	174	1,284	2.9%
94105	SF-SoMa/South Beach												-	0.0%
94104	SF-Embaracdero South	-	24	7	40	5	3	11	18	101	1	56	266	0.6%
	North Bay	3	9	3	24	25	23	41	23	338	3	166	658	1.5%
	East Bay	12	93	54	189	114	15	104	255	1,167	4	613	2,620	6.0%
	San Mateo County	16	101	26	135	104	11	179	441	1,874	6	657	3,550	8.1%
	South Bay	-	9	-	9	4	3	15	7	92	1	58	198	0.5%
	Santa Cruz Co./Monterey Co.	-	2	-	2	1	-	2	1	14	-	12	34	0.1%
	Total All Locations	89	3,538	922	2,722	922	502	2,668	5,923	19,309	100	6,980	43,675	100.0%
		0.2%	8.1%	2.1%	6.2%	2.1%	1.1%	6.1%	13.6%	44.2%	0.2%	16.0%	100.0%	
	San Francisco	58	3,324	839	2,363	674	450	2,327	5,196	15,824	86	5,474	36,615	83.8%
	Peninsula	16	101	26	135	104	11	179	441	1,874	6	657	3,550	8.1%
	East Bay	12	93	54	189	114	15	104	255	1,167	4	613	2,620	6.0%
	South Bay	-	9	-	9	4	3	15	7	92	1	58	198	0.5%
	North Bay	3	9	3	24	25	23	41	23	338	3	166	658	1.5%
	Other	-	2	-	2	1	-	2	1	14	-	12	34	0.1%
	Total All Locations	89	3,538	922	2,722	922	502	2,668	5,923	19,309	100	6,980	43,675	100.0%
		0.2%	8.1%	2.1%	6.2%	2.1%	1.1%	6.1%	13.6%	44.2%	0.2%	16.0%	84.0%	

Source: https://archive.ccsf.edu/en/employee-services/research-planning-and-grants/Research/interactive-dashboards/centers-locations-demographics.html

City College of San Francisco
Overall Headcount - Fall 2019

	Residential Location	I-280 North / Ocean Av East	Ocean Av West	Foerster St North	Geneva Av South	San Jose Av East	Total Ocean
94130	SF-Treasure Island	74					74
94111	SF-North Beach/Financial District North	28					28
94104	SF-Financial District South	17					17
94133	SF-Russian Hill/North Beach	340					340
94108	SF-Chinatown/Civic Center	203					203
94102	SF-Hayes Valley/Civic Center/Tenderloin	489					489
94109	SF-Pacific Heights/Western Addition/Nob Hill/Russian Hill	517					517
94123	SF-Marina		76				76
94115	SF-Pacific Heights/Cow Hollow/Western Addition			345			345
94129	SF-Presidio		42				42
94118	SF-Inner Richmond/Presidio Heights		246	246			492
94121	SF-Outer Richmond/Seacliff		739				739
94117	SF-Haight Ashbury/Cole Valley			376			376
94122	SF-Sunset		1,085				1,085
94116	SF-Sunset/Parkside/West of Twin Peaks		1,026				1,026
94127	SF-Twin Peaks/Forest Hill/St Francis Wood/West Portal			396			396
94131	SF-Twin Peaks/Diamond Heights/Noe Valley/Glen Park		205			205	410
94114	SF-Castro/Upper Market/Noe Valley			317			317
94132	SF-Lake Merced/Stonestowm		780				780
94112	SF-Ocean View/Balboa Terrace/Ingleside/Outer Mission/Crocker Amazon/Excels	1,037	1,037		1,037		3,111
94134	SF-Excelsior/Visitacion Valley/Sunnydale				1,334		1,334
94124	SF-Bayview/Hunters Point	1,270					1,270
94110	SF-Inner Mission/Bernal Heights					1,311	1,311
94107	SF-Potrero Hill/Dogpatch/SoMa	321					321
94158	SF-Mission Bay	102					102
94103	SF-South of Market	522					522
94105	SF-SoMa/South Beach	-					-
94104	SF-Embaracdero South	101					101
	North Bay		338				338
	East Bay	1,167					1,167
	San Mateo County				1,874		1,874
	South Bay				92		92
	Santa Cruz Co./Monterey Co.				14		14
	Total All Locations	6,188	5,574	1,680	4,351	1,516	19,309
		32.0%	28.9%	8.7%	22.5%	7.9%	100.0%

City College of San Francisco
Ocean Campus Only

Residential Location		Faculty/Staff	
94130		-	0.0%
94111	SF-North Beach/Financial District North	2	0.4%
94104		-	0.0%
94133	SF-Russian Hill/North Beach	1	0.2%
94108	SF-Chinatown/Civic Center	3	0.7%
94102	SF-Hayes Valley/Civic Center/Tenderloin	3	0.7%
94109	SF-Pacific Heights/Western Addition/Nob Hill/Russian Hill	10	2.2%
94123	SF-Marina	1	0.2%
94115	SF-Pacific Heights/Cow Hollow/Western Addition	4	0.9%
94129		-	0.0%
94118	SF-Inner Richmond/Presidio Heights	8	1.8%
94121	SF-Outer Richmond/Seacliff	16	3.5%
94117	SF-Haight Ashbury/Cole Valley	8	1.8%
94122	SF-Sunset	21	4.7%
94116	SF-Sunset/Parkside/West of Twin Peaks	21	4.7%
94127	SF-Twin Peaks/Forest Hill/St Francis Wood/West Portal	14	3.1%
94131	SF-Twin Peaks/Diamond Heights/Noe Valley/Glen Park	11	2.4%
94114	SF-Castro/Upper Market/Noe Valley	5	1.1%
94132	SF-Lake Merced/Stonestowm	7	1.6%
94112	SF-Ocean View/Balboa Terrace/Ingleside/Outer Mission/Crocker Amazon/Excelsi	42	9.3%
94134	SF-Excelsior/Visitacion Valley/Sunnydale	19	4.2%
94124	SF-Bayview/Hunters Point	9	2.0%
94110	SF-Inner Mission/Bernal Heights	27	6.0%
94107	SF-Potrero Hill/Dogpatch/SoMa	7	1.6%
94158	SF-Mission Bay	2	0.4%
94103	SF-South of Market	4	0.9%
94105	SF-SoMa/South Beach	1	0.2%
94104		-	0.0%
	Subtotal San Francisco	246	54.5%
	North Bay	12	2.7%
	East Bay	95	21.1%
	Peninsula	82	18.2%
	South Bay	13	2.9%
	Central CA	1	0.2%
	Northern CA	1	0.2%
	Not reported	1	0.2%
	Subtotal outside San Francisco	205	45.5%
	Total All Locations	451	100.0%

Source: data collected by Fehr & Peers in the Summer and Fall 2018.

City College of San Francisco
Ocean Campus Only

	I-280 North / Ocean Av East	Ocean Av West	Foerster St North	Geneva Av South	San Jose Av East	Total
94130	-					-
94111	2					2
94104	-					-
94133	1					1
94108	3					3
94102	3					3
94109	10					10
94123		1				1
94115			4			4
94129		-				-
94118		4	4			8
94121		16				16
94117			8			8
94122		21				21
94116		21				21
94127			14			14
94131		6			6	11
94114			5			5
94132		7				7
94112	14	14		14		42
94134				19		19
94124	9					9
94110					27	27
94107	7					7
94158	2					2
94103	4					4
94105	1					1
94104	-					-
Subtotal SF	56	90	35	33	33	246
North Bay		12				12
East Bay	95					95
Peninsula				82		82
South Bay				13		13
Central CA		1				1
Northern CA		1				1
Not reported		1				1
Subtotal outside SF	95	15	-	95	-	205
Total All Locations	151	105	35	128	33	451
	33.5%	23.2%	7.8%	28.4%	7.2%	100.0%

Days of Attendance and Time of Arrival/Departure

Fall 2019 - Ocean Campus

Time Enrollment Starts/Ends	No. of Classes Start		No. of Classes End	
Early morning (before 8 AM)	674	7%	82	1%
Morning (8 AM to 11 AM)	3,753	41%	2,813	31%
Midday (11 AM to 2 PM)	2,667	29%	2,511	27%
Afternoon (2 PM to 5 PM)	871	9%	2,211	24%
Evening (5 PM to 8 PM)	1,209	13%	264	3%
Late evening (after 8 PM)	13	0%	1,307	14%
Total	9,188	100%	9,188	100%

Source: CCSF Fall 2019 enrollment data.

Time of Arrival/Departure	Arrival				Departure			
at Ocean Campus	Faculty/Staff		Students		Faculty/Staff		Students	
Early morning (before 8 AM)	112	25%	249	13%	4	1%	34	2%
Morning (8 AM to 11 AM)	275	61%	1,069	54%	2	0%	160	8%
Midday (11 AM to 2 PM)	33	7%	263	13%	21	5%	505	25%
Afternoon (2 PM to 5 PM)	20	4%	128	6%	188	42%	579	29%
Evening (5 PM to 8 PM)	8	2%	276	14%	178	40%	315	16%
Late evening (after 8 PM)	-	0%	7	0%	55	12%	399	20%
Total	448	100%	1,992	100%	448	100%	1,992	100%

Source: Data collected by Fehr & Peers in the Summer and Fall 2018.

Time when instruction occurs	Faculty/Staff		Students	
All Campuses	Full-time	Part-time	Credit	Non-credit
Morning (before noon)	79%	51%	80%	44%
Afternoon (noon to 4 PM)	78%	51%	67%	34%
Evening (after 4 PM)	47%	56%	38%	27%
Weekend	6%	13%	7%	38%
No. of responses	221	57	225	276

Source: CCSF Educational Master Plan 2018-2025, pp. 91,111,124 - June 2019 (Survey April 2018)

Multiple responses allowed

Summer & Fall 2018
Days when instruction occurs

at Ocean Campus	Faculty/Staff		Students	
Monday	431	84%	1,573	63%
Tuesday	444	87%	1,593	64%
Wednesday	450	88%	1,621	65%
Thursday	437	85%	1,548	62%
Friday	350	68%	970	39%
Saturday	42	8%	235	9%
Sunday	9	2%	11	0%
I do not regularly travel to Ocean	7	1%	235	9%
No. of responses	513		2,506	
Average Mon - Thu	441		1,584	
Friday	350		970	
Saturday / Sunday	26		123	
No. of responses	513		2,506	

Source: data collected by Fehr & Peers in the Summer and Fall 2018.

Multiple responses allowed

Yellow = Used in trip gen

Fall 2019 - Ocean Campus

Peak Hour Estimate based on Avg Mon-Th	Start	End	% Daily	Inbound	Outbound
6:30-7:30	6%	0%	3%	100%	0%
7-8	2%	1%	2%	71%	29%
7:30-8:30	9%	1%	5%	91%	9%
8-9	15%	4%	10%	77%	23%
3:30-4:30	1%	7%	4%	10%	90%
4-5	1%	6%	3%	11%	89%
4:30-5:30	1%	4%	3%	17%	83%
5-6	2%	2%	2%	49%	51%
5:30-6:30	12%	2%	7%	84%	16%
6-7	11%	2%	7%	84%	16%

Parking Locations at the Ocean Campus

CCSF Ocean Campus - Parking Location

Parking Location	Faculty/Staff		Students		All	
CCSF Ocean Campus parking lot	342	98.8%	727	76.6%	1,069	82.5%
Neighborhood around CCSF Ocean Campus	4	1.2%	222	23.4%	226	17.5%
Total Answers	346	100.0%	949	100.0%	1,295	100.0%

Source: CCSF faculty/staff and student transportation surveys, collected by Fehr & Peers in the Summer and Fall 2018.

Parking Location	Students, faculty, staff, and administrators		
CCSF Ocean Campus parking lot	277	70.3%	85.5%
Neighborhood around CCSF Ocean Campus	44	11.2%	13.6%
Balboa Park BART parking lot	3	0.8%	0.9%
Other BART parking lot	-	0.0%	
I got dropped off	23	5.8%	
Other	47	11.9%	
Total Answers	394	100.0%	100.0%

Source: CCSF faculty/staff and student transportation survey for FMP, May 2016

TRIP GENERATION AND DISTRIBUTION CALCULATIONS

CCSF 2019 FMP (Proposed Project)
TRIP GENERATION - OCEAN CAMPUS

Increase in Population 2019 to Buildout	CCSF	Ocean Campus Total Population		Ocean Campus Daily Population	
Students	21,558	58%	12,410	65%	8,067
Staff	320	80%	256	88%	225
Total	21,878		12,666		8,292

Person trip rate

Students	2.2	daily trips per person
Fac./Staff	2.2	daily trips per person

New Daily Person Trips 2019 to Buildout

	Students		Faculty/Staff		Total	
Auto	36.1%	6,406	70.3%	348	37.0%	6,754
Taxi/TNC	7.7%	1,360	0.2%	2	7.5%	1,362
Transit	34.5%	6,116	19.9%	98	34.1%	6,214
Walk/Bike	20.4%	3,620	7.1%	36	20.0%	3,656
Other	1.4%	246	2.5%	12	1.4%	258
Total	100.0%	17,748	100.0%	496	100.0%	18,244

New Daily Transit Trips 2019 to Buildout

	Students		Faculty/Staff		Total	
SF Muni	68.5%	4,189	28.1%	28	67.9%	4,217
BART	31.5%	1,927	71.9%	70	32.1%	1,997
Total	100.0%	6,116	100.0%	98	100.0%	6,214

	Students	Fac./Staff	
Average Vehicle Occupancy	1.08	1.03	*(from 2018 F&P TDM)*

TNC person trips = 2.0 vehicle trips per person

New Daily Vehicle Trips in 2019 to Buildout

	Students	Fac./Staff	Total
Auto	5,932	338	6,270
Taxi/TNC	2,720	4	2,724
Total	8,652	342	8,994

CCSF 2019 FMP (Proposed Project)
TRIP GENERATION - OCEAN CAMPUS

New Peak Hour Person Trips 2019 to Buildout

AM Peak Hour percentage of daily: 8.5%
PM Peak Hour percentage of daily: 7.5%

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
Auto	545	30	574	480	26	507
Taxi/TNC	116	0	116	102	0	102
Transit	520	8	528	459	7	466
Walk/Bike	308	3	311	272	3	274
Other	21	1	22	18	1	19
Total	1,509	42	1,551	1,331	37	1,368

New Peak Hour Transit Trips 2019 to Buildout

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
SF Muni	356	2	358	314	2	316
BART	164	6	170	145	5	150
Total	520	8	528	459	7	466
			8.5%			*7.5%*

New Peak Hour Vehicle Trips 2019 to Buildout

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
Auto	504	29	533	445	25	470
Taxi/TNC	231	0	232	204	0	204
Total	735	29	764	649	26	675

New Peak Hour Person, Transit and Vehicle Trips 2019 to Buildout

	AM Peak Hour	PM Peak Hour
Inbound	75%	40%
Outbound	25%	60%

	AM Peak Hour		PM Peak Hour	
	Pers. Trips	Vehicles	Pers. Trips	Vehicles
Inbound	1,163	573	547	270
Outbound	388	191	821	405
Total	1,551	764	1,368	675

	AM Peak Hour			PM Peak Hour		
	SF Muni	BART	All Transit	SF Muni	BART	All Transit
Inbound	269	127	396	127	60	186
Outbound	90	42	132	190	90	280
Total	358	170	528	316	150	466

	Students	Fac./Staff
Park on campus (F&P 2018)	*77%*	*99%*

New vehicles entering/exiting CCSF campus during peak hour

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
Inbound	465	22	486	219	10	229
Outbound	155	7	162	328	15	343
Total	619	29	648	547	25	572

CCSF 2019 FMP (Proposed Project)
TRIP DISTRIBUTION - OCEAN CAMPUS

Vehicle Trip Distribution by Population - AM Peak Hour

	Students		Faculty/Staff		Total	
I-280 North / Ocean Ave East	32.0%	236	33.5%	10	32.1%	245
Ocean Av West	28.9%	212	23.2%	7	28.7%	219
Foerster St North	8.7%	64	7.8%	2	8.7%	66
Geneva Av South	22.5%	166	28.4%	8	22.8%	174
San Jose Av East	7.9%	58	7.2%	2	7.8%	60
Total	100.0%	735	100.0%	29	100.0%	764

Vehicle Trip Distribution by Population - PM Peak Hour

	Students		Faculty/Staff		Total	
I-280 North / Ocean Ave East	32.0%	208	33.5%	9	32.1%	217
Ocean Av West	28.9%	187	23.2%	6	28.7%	193
Foerster St North	8.7%	56	7.8%	2	8.7%	58
Geneva Av South	22.5%	146	28.4%	7	22.8%	153
San Jose Av East	7.9%	51	7.2%	2	7.8%	53
Total	100.0%	649	100.0%	26	100.0%	675

Vehicle Inbound/Outbound Split

	AM Peak Hour		PM Peak Hour	
Directionalitty	%	Total	%	Total
Inbound	75%	573	40%	270
Outbound	25%	191	60%	405
Total	100%	764	100%	675

Vehicle Inbound/Outbound Distribution

	AM Peak Hour			PM Peak Hour		
	Inbound	Outbound	Total	Inbound	Outbound	Total
I-280 North / Ocean Ave East	184	61	245	87	130	217
Ocean Av West	164	55	219	77	116	193
Foerster St North	50	17	66	23	35	58
Geneva Av South	130	43	174	61	92	153
San Jose Av East	45	15	60	21	32	53
Total	573	191	764	270	405	675

2019 Facilities Master Plan – Other Centers

CCSF 2019 FMP
TRIP GENERATION - OTHER CENTERS

Increase in Population 2019 to Buildout	CCSF	All Centers Total Population		All Centers Daily Population [a]	
Students	21,558	42%	9,148	65%	5,946
Staff	320	55%	176	88%	155
Total	21,878		9,324		6,101

[a] Based on data from Ocean Campus

Person trip rate

Students	2.2	daily trips per person
Fac./Staff	2.2	daily trips per person

New Daily Population 2019 to Buildout by Center [a]

Location	Students [b]		Faculty/Staff [c]		Total	
Chinatown/N. Beach	17.0%	1,012	16.8%	26	17.0%	1,038
Civic Center	6.0%	360	6.4%	10	6.1%	370
Downtown	11.4%	680	24.0%	37	11.8%	717
Evans	7.6%	451	11.5%	18	7.7%	469
John Adams	12.0%	716	10.5%	16	12.0%	732
Mission	20.2%	1,202	20.4%	32	20.2%	1,234
Southeast	0.5%	28	1.3%	2	0.5%	30
Online	25.2%	1,497	9.1%	14	24.8%	1,511
	100.0%	5,946	100.0%	155	100.0%	6,101

[a] Excludes Ocean Campus and consolidates Ft. Mason with Civic Center.
[b] CCSF Fall enrollemnt - Factsheet Three year average Fall 2017-Fall 2019
[c] CCSF Educational Master Plan 2018-2025 - June 2019 (survey conducted in April 2018)

Mode of Travel by Center

Location	District Name [a]	Type [a]	Modal Split [a] Auto	Taxi/TNC	Transit	Walk/Bike	Total	Average Veh. Occup. w/out TNC
Chinatown/N. Beach	Downtown/North Beach	1	18.4%	6.1%	29.4%	46.0%	100.0%	1.23
Civic Center	Downtown/North Beach	1	18.4%	6.1%	29.4%	46.0%	100.0%	1.23
Downtown	SoMa	1	18.4%	6.1%	29.4%	46.0%	100.0%	1.23
Evans	Bayshore	3	69.5%	2.0%	22.2%	6.3%	100.0%	1.12
John Adams	Marina/Western Market	2	37.4%	11.1%	31.5%	19.9%	100.0%	1.17
Mission	Mission	1	18.4%	6.1%	29.4%	46.0%	100.0%	1.23
Southeast	Bayshore	3	69.5%	2.0%	22.2%	6.3%	100.0%	1.12
			27.0%	6.5%	29.0%	37.6%	100.0%	1.19

[a] SF Guidelines, October 2019; Mission center assumed to be in a type 1 location, instead of type 2.

New Daily Person Trips 2019 to Buildout by Center

Location	Number of Person Trips Auto	Taxi/TNC	Transit	Walk/Bike	Total	Number of Vehicle Trips Auto	Taxi/TNC	Total
Chinatown/N. Beach	421	139	672	1,051	2,284	341	279	620
Civic Center	150	50	239	375	814	122	99	221
Downtown	291	96	464	726	1,577	236	192	428
Evans	717	21	229	65	1,032	639	41	680
John Adams	603	179	508	321	1,610	514	358	872
Mission	501	166	799	1,250	2,715	405	331	737
Southeast	46	1	15	4	66	41	3	44
Total	2,728	652	2,926	3,792	10,098	2,297	1,304	3,601

New Peak Hour Person and Transit Trips 2019 to Buildout

AM Peak Hour percentage of daily:	8.5%	[a]
PM Peak Hour percentage of daily:	7.5%	[a]

[a] Based on data from Ocean Campus

CCSF 2019 FMP
TRIP GENERATION - OTHER CENTERS

	All Person Trips		Transit Trips	
Location	AM Pk Hr	PM Pk Hr	AM Pk Hr	PM Pk Hr
Chinatown/N. Beach	194	171	57	50
Civic Center	69	61	20	18
Downtown	134	118	39	35
Evans	88	77	19	17
John Adams	137	121	43	38
Mission	231	204	68	60
Southeast	6	5	1	1
Total	858	757	249	219
	8.5%	*7.5%*	*8.5%*	*7.5%*

New Peak Hour Vehicle Trips 2019 to Buildout

	AM Peak Hour			PM Peak Hour		
Location	Inbound	Outbound	Total	Inbound	Outbound	Total
Chinatown/N. Beach	40	13	53	19	27	46
Civic Center	14	5	19	7	10	17
Downtown	27	9	36	13	19	32
Evans	43	15	58	20	31	51
John Adams	56	18	74	26	39	65
Mission	47	16	63	22	33	55
Southeast	3	1	4	1	2	3
Total	230	76	306	108	162	270
In/Out Split [a]	75%	25%		40%	60%	
			8.5%			*7.5%*

2019 Facilities Master Plan – Parking Demand

CCSF 2019 FMP (Proposed Project)
PARKING DEMAND

CCSF - OCEAN CAMPUS	Students	Fac./Staff	Total
Daily one-way auto vehicle trips	2,966	169	3,135
% who park on campus [a]	77%	99%	78%
Daily vehicles who park on campus	2,284	167	2,451
Typical Parking Demand			
Average turnover (veh per space) [b]	3.9	1.9	3.6
Parking demand rate (spaces/veh) [b]	0.26	0.52	0.27
Peak hourly demand (spaces)	587	87	674
Maximum Parking Demand			
Parking demand rate (spaces/veh) [b]	0.39	0.54	0.40
Peak hourly demand (spaces)	880	91	971
% increase from typical demand	*50%*	*5%*	*44%*

[a] TDM and Parking Plan, Fehr & Peers, March 2019.
[b] Adavant Consulting, with data from Fehr & Peers TDM and Parking Plan analysis.

CCSF - OTHER CENTERS	Daily one-way auto person-trips			Daily one-way auto vehicle-trips			Typical Peak Hour Parking Demand [a]		
							Students	Fac./Staff	Total
Location	Students	Fac./Staff	Total	Students	Fac./Staff	Total	3.9	1.9	spaces
Chinatown/N. Beach	205	5	211	166	4	171	43	2	45
Civic Center	73	2	75	59	2	61	15	1	16
Downtown	138	8	145	112	6	118	29	3	32
Evans	345	14	358	307	12	320	79	6	85
John Adams	295	7	301	251	6	257	65	3	67
Mission	244	6	250	197	5	203	51	3	53
Southeast	21	2	23	19	1	20	5	1	6
Total	1,321	43	1,364	1,112	36	1,149	286	19	305

[a] Hourly space turnover assumed to be similar to the Ocean Campus conditions.

2019 FMP Alternative – Ocean Campus

CCSF 2019 FMP (Proposed Project)
TRIP GENERATION - OCEAN CAMPUS ALTERNATIVE

Proposed Project

Student Population	Total CCSF	Student Headcount					
		Online Attendance		Ocean Campus		Other Centers	
2019	38,256	11%	4,232	64%	24,344	25%	9,680
2030	59,814	11%	6,617	61%	36,754	27%	16,443
Growth	21,558	11%	2,385	58%	12,410	31%	6,763

Project Alternative - Move 60% of Ocean Campus Growth to Online Instruction

Student Population	Total CCSF	Student Headcount					
		Online Attendance		Ocean Campus		Other Centers	
2019	38,256	11%	4,232	64%	24,344	25%	9,680
2030	59,814	24%	14,063	49%	29,308	27%	16,443
Growth	21,558	46%	9,831	23%	4,964	31%	6,763

CCSF 2019 FMP (Proposed Project)
TRIP GENERATION - OCEAN CAMPUS ALTERNATIVE

Increase in Population 2019 to Buildout	CCSF	Ocean Campus Total Population		Ocean Campus Daily Population	
Students	21,558	23%	4,964	65%	3,227
Staff	320	80%	256	88%	225
Total	21,878		5,220		3,452

Person trip rate

Students	2.2	daily trips per person
Fac./Staff	2.2	daily trips per person

New Daily Person Trips 2019 to Buildout

	Students		Faculty/Staff		Total	
Auto	36.1%	2,562	70.3%	348	38.3%	2,910
Taxi/TNC	7.7%	544	0.2%	2	7.2%	546
Transit	34.5%	2,446	19.9%	98	33.5%	2,544
Walk/Bike	20.4%	1,448	7.1%	36	19.5%	1,484
Other	1.4%	98	2.5%	12	1.4%	110
Total	100.0%	7,098	100.0%	496	100.0%	7,594

New Daily Transit Trips 2019 to Buildout

	Students		Faculty/Staff		Total	
SF Muni	68.5%	1,675	28.1%	28	66.9%	1,703
BART	31.5%	771	71.9%	70	33.1%	841
Total	100.0%	2,446	100.0%	98	100.0%	2,544

	Students	Fac./Staff	
Average Vehicle Occupancy	1.08	1.03	*(from 2018 F&P TDM)*

TNC person trips = 2.0 vehicle trips per person

New Daily Vehicle Trips in 2019 to Buildout

	Students	Fac./Staff	Total
Auto	2,372	338	2,710
Taxi/TNC	1,088	4	1,092
Total	3,460	342	3,802

New Peak Hour Person Trips 2019 to Buildout

AM Peak Hour percentage of daily:	8.5%
PM Peak Hour percentage of daily:	7.5%

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
Auto	218	30	247	192	26	218
Taxi/TNC	46	0	46	41	0	41
Transit	208	8	216	183	7	191
Walk/Bike	123	3	126	109	3	111
Other	8	1	9	7	1	8
Total	603	42	645	532	37	570

CCSF 2019 FMP (Proposed Project)
TRIP GENERATION - OCEAN CAMPUS ALTERNATIVE

New Peak Hour Transit Trips 2019 to Buildout

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
SF Muni	142	2	145	126	2	128
BART	66	6	71	58	5	63
Total	208	8	216	183	7	191
			8.5%			*7.5%*

New Peak Hour Vehicle Trips 2019 to Buildout

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
Auto	202	29	230	178	25	203
Taxi/TNC	92	0	93	82	0	82
Total	294	29	323	260	26	285

New Peak Hour Transit and Vehicle Trips 2019 to Buildout

	AM Peak Hour	PM Peak Hour
Inbound	75%	40%
Outbound	25%	60%

	AM Peak Hour		PM Peak Hour	
	Pers. Trips	Vehicles	Pers. Trips	Vehicles
Inbound	484	242	228	114
Outbound	161	81	342	171
Total	645	323	570	285

	AM Peak Hour			PM Peak Hour		
	SF Muni	BART	All Transit	SF Muni	BART	All Transit
Inbound	109	54	162	51	25	76
Outbound	36	18	54	77	38	114
Total	145	71	216	128	63	191

	Students	Fac./Staff
Park on campus (F&P 2018)	*77%*	99%

New vehicles entering/exiting CCSF campus during peak hour

	AM Peak Hour			PM Peak Hour		
	Students	Fac./Staff	Total	Students	Fac./Staff	Total
Inbound	186	22	207	87	10	98
Outbound	62	7	69	131	15	146
Total	248	29	277	219	25	244

Balboa	AM Peak Hour		PM Peak Hour	
Reservoir	Transit	Vehicles	Transit	Vehicles
Inbound	25	92	162	203
Outbound	128	157	33	115
Total	153	249	195	318

PARKING SUPPLY, DEMAND & UTILIZATION – Ocean Campus

Parking Supply, Demand and Utilization Summaries

CCSF Ocean Campus - Evolution of Parking Supply

Year	Activity	East of F. Kahlo	West of F. Kahlo	Total Spaces	Source
1993	Existing	729	800	1,529	[a]
2000	South Lot added		700	700	[a]
	Total	729	1,500	2,229	
2005	Wellness Center	-96		-96	[a]
	Total	633	1,500	2,133	
2006	Career Development Center / Middle Lot added	-80	579	499	[a]
	Total	553	2,079	2,632	
2008	Two bldgs removed East of stadium / Multi use bldg const.	310	-379	-69	[a]
	Total	863	1,700	2,563	
2011	Sports practice field const. / Multi use bldg. completed	-55	456	401	[a]
	Total	808	2,156	2,964	
2016	New Career Development Center	-10		-10	[a]
	Total	798	2,156	2,954	
2016	CCSF Ocean Campus Preliminary Parking Analysis				
	Total	750	2,156	2,906	[b]
2018 [Existing]	CCSF TDM and Parking Plan				
	Total Existing (2018)	720	2,171	2,891	[c]
Baseline	New Child Care Center / DRT and STEAM buildings	27	-569	-542	[d]
	Balboa Reservoir Residential Project		-1007	-1,007	[d]
	Total Baseline	747	595	1,342	
Buildout	Removal of 600s and 700s bungalows	200		200	[e]
(Baseline + FMP)	New Student Success Center (removal of A & H Lots)	-153		-153	[e]
	New Student Success Center (25 spaces provided onsite)	25		25	[f]
	Elimination of faculty/staff parking on Cloud Circle	-33		-33	[g]
	Total Baseline plus 2019 FMP	786	595	1,381	

Sources:

[a] *tBP Architects, January 2017*
[b] *SANDIS, September 2016*
[c] *Fehr & Peers, May 2018*
[d] *Addendum 2 to the CCSF 2004 FEIR, May 2020*
[e] *Aiambiq, February 2020*
[f] *Student Success Center site plan; CCSF September 2020*
[g] *There are 33 regular, 29 ADA, and 3 CCSF police parking spaces on Cloud Circle; only the 33 regular parking spaces are assumed to be eliminated.*

CCSF Ocean Campus - Parking Supply, Demand and Utilization Summary

Year	Staff and Faculty	Students/ Gral. Parking	ADA / Reserved	Total
PARKING SUPPLY (spaces)				
2016 [a]	619	2,114	173	2,906
2018 [b]	614	2,086	191	2,891
Change 2018 to Baseline	-82	-1,447	-20	-1,549
Baseline	532	639	171	1,342
Change due to 2019 FMP	-86	100	25	39
Buildout (Baseline + FMP)	446	739	196	1,381
TYPICAL DAY PEAK HOURLY PARKING DEMAND (spaces)				
2016 [c]	374	979	62	1,415
2018 [b]	583	1,279	130	1,992
Change 2018 to Baseline	42	137	10	189
Baseline	625	1,416	140	2,181
Change due to 2019 FMP	87	587	50	724
Buildout (Baseline + FMP)	712	2,003	190	2,905
TYPICAL DAY PARKING SUPPLY MINUS PEAK HOURLY DEMAND (spaces)				
2016	245	1,135	111	1,491
2018	31	807	61	899
Baseline	-93	-777	31	-839
Buildout (Baseline + FMP)	-266	-1,264	6	-1,524
TYPICAL DAY PEAK HOURLY UTILIZATION				
2016	60%	46%	36%	49%
2018	95%	61%	68%	69%
Baseline	117%	222%	82%	163%
Buildout (Baseline + FMP)	160%	271%	97%	210%

[a] SANDIS, September 2016
[b] Nelson\Nygaard, May 2016
[c] Fehr & Peers, May 2018

CCSF Ocean Campus - Parking Supply, Demand and Utilization 2014-2018 [a]

	Aiambiq	Fehr & Peers	Fehr & Peers	Kittelson	Kittelson	Kittelson	SANDIS	Nelson\ Nygaard	AECOM	AECOM
	Feb 2020 [b]	*Aug 2018 [c]*	*May 2018 [d]*	*Apr 2018 [e]*	*Jan 2018 [e]*	*Dec 2017 [e]*	*Aug 2016*	*May 2016 [f]*	*Feb 2015 [g]*	*Nov 2014 [g]*
Location					**Number of Spaces Available**					
East Parking (S, D & N Lots)	371	371	371				374	368		
East of F. Kahlo & West of Stadium	374	349	349				376	325		
Upper Reservoir & Q Lot	1,135	1,164	1,164	1,167	1,167	1,167	1,152	1,181	1,182	1,182
Lower Reservoir	990	1,007	1,007	1,007	1,007	1,007	1,004	961	1,005	1,005
Total	2,870	2,891	2,891	2,174	2,174	2,174	2,906	2,835	2,187	2,187
Location					**Peak Hourly Demand**					
East Parking (S, D & N Lots)		371	347				366	255		
East of F. Kahlo & West of Stadium		342	326				350	271		
Upper Reservoir & Q Lot		1,155	1,079	1,078	1,094	1,083	1,091	812	1,068	863
Lower Reservoir		829	240	238	533	253	458	77	262	65
Total		2,697	1,992	1,316	1,627	1,336	2,265	1,415	1,330	928
Location					**Peak Hourly Utilization**					
East Parking (S, D & N Lots)		100%	94%				98%	69%		
East of F. Kahlo & West of Stadium		98%	93%				93%	83%		
Upper Reservoir & Q Lot		99%	93%	92%	94%	93%	95%	69%	90%	73%
Lower Reservoir		82%	24%	24%	53%	25%	46%	8%	26%	6%
Total		93%	69%	61%	75%	61%	78%	50%	61%	42%

Type					**Number of Spaces Available**					
Staff and Faculty	538	614	614				619	522	56	56
Students/General Parking	2,179	2,086	2,086				2,114	2,172	2,080	2,080
ADA	93	117	117				118	106	20	20
Reserved	60	74	74				55	35	31	31
Total	2,870	2,891	2,891				2,906	2,835	2,187	2,187
Type					**Peak Hourly Demand**					
Staff and Faculty		610	583				560	374	53	46
Students/General Parking		1,919	1,279				1,586	979	1,258	863
ADA		99	71				70	34	0	0
Reserved		69	59				49	28	19	19
Total		2,697	1,992				2,265	1,415	1,330	928
Type					**Peak Hourly Utilization**					
Staff and Faculty		99%	95%				90%	72%	95%	82%
Students/General Parking		92%	61%				75%	45%	60%	41%
ADA		85%	61%				59%	32%	0%	0%
Reserved		93%	80%				89%	80%	61%	61%
Total		93%	69%				78%	50%	61%	42%

[a] Excludes motorcycle spaces and on-street parking on Frida Kahlo Way; generally includes ADA and reserved parking spaces.

[b] Based on CCSF aerial topographic survey by SANDIS in August 2018; does not include all the reserved spaces.

[c] Considered typical day in the TDM Plan and Parking Study.

[d] First days of clasess; considered peak demand day in TDM Plan and Parking Study.

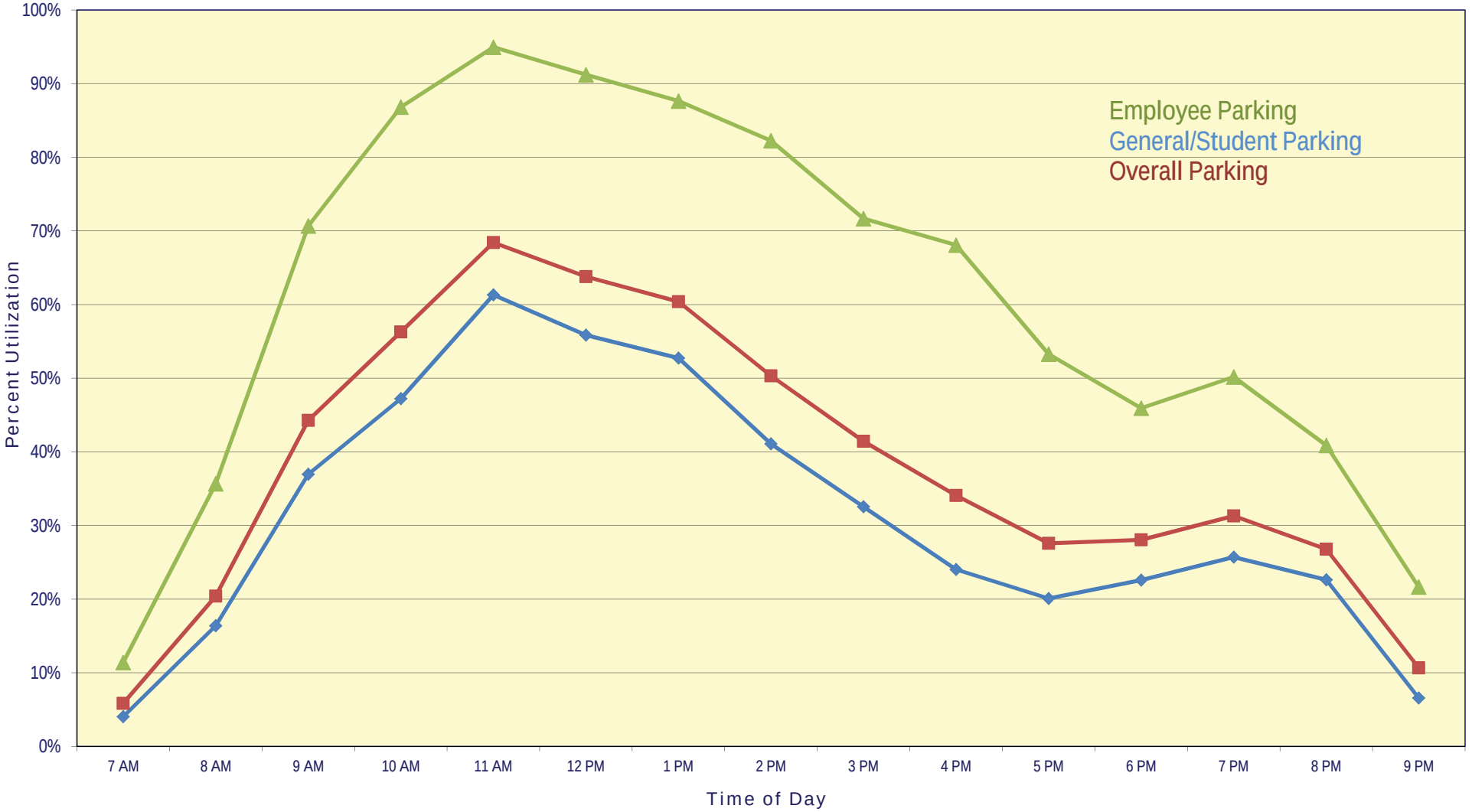
[e] All spaces combined parking data collected for the Q Lot, Upper Reservoir, and Lower Reservoir only.

[f] The Nelson\Nygaard study calculated the ***average*** *utilization between 10 AM and 4 PM, and between 10 PM and midnight; count does not include reserved spaces, unless they are located in their own parking area.*

[g] Parking data collected for the Q Lot, Upper Reserv., and Lower Reserv. only; parking data for the Q Lot did not differentiate between faculty/staff, student, or ADA parking. The AECOM study calculated parking utilization once between 9:30 AM and 11:30 AM, once between 1:30 PM and 3:30 PM, and once between 7 PM and 9 PM.

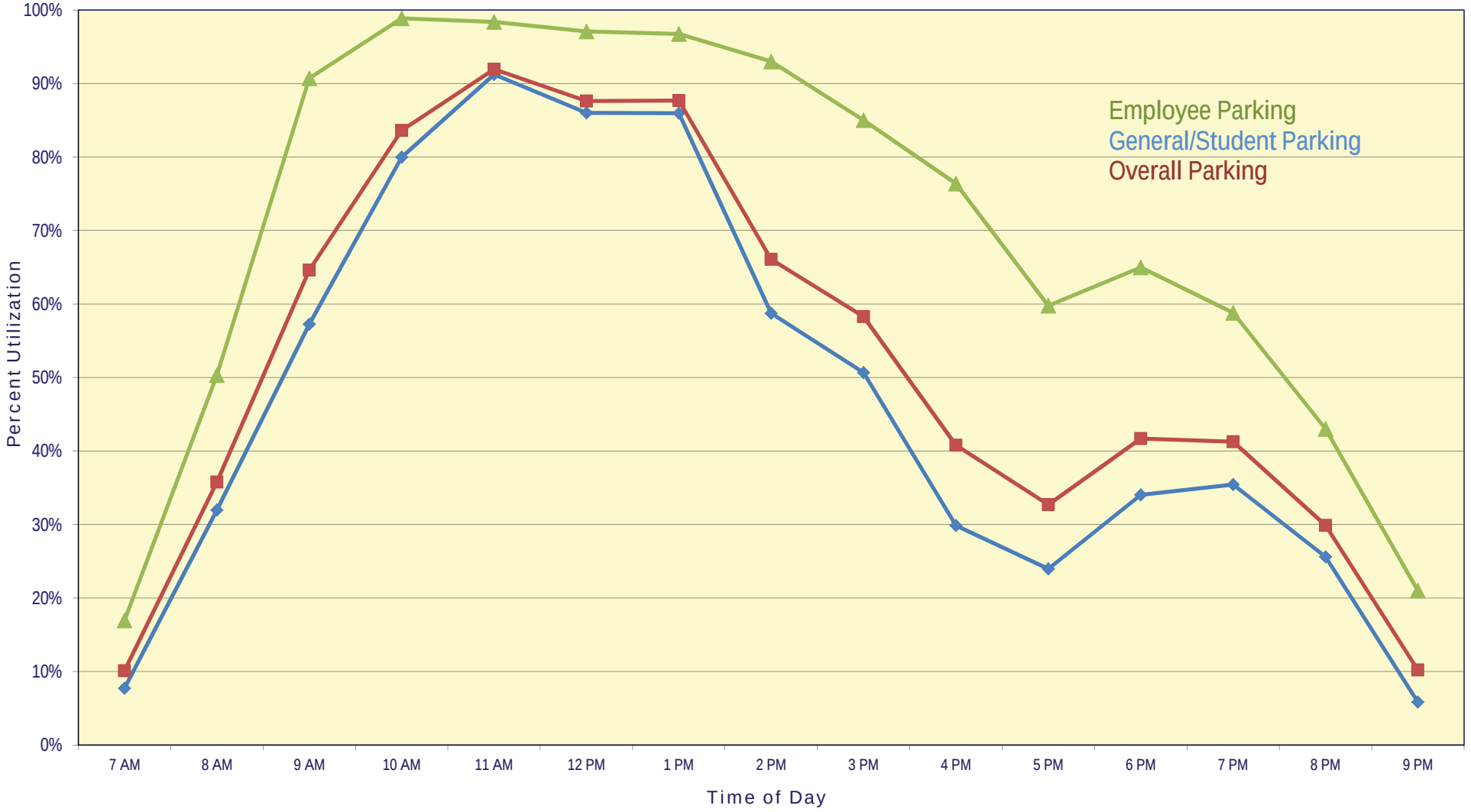
CCSF Parking Utilization

May 2018 - Fehr & Peers



CCSF Parking Utilization

August 2018 - Fehr & Peers



Parking Demand, Supply & Utilization by Location (Fehr & Peers, 2018)

CCSF Parking Supply [a]
at Ocean Campus

Location	*Fehr & Peers* August 2018 [First days of instruction]					*Fehr & Peers* May 2018 [Typical demand]				
	Staff/Fac.	Stdnt/Gral	ADA	Reserv.	All Spaces	Staff/Fac.	Stdnt/Gral	ADA	Reserv.	All Spaces
East Parking (S, D & N Lots)	137	209	10	15	371	137	209	10	15	371
East of F. Kahlo Way & West of Stadium	266	0	53	30	349	266	0	53	30	349
Upper Reservoir & Q Lot	211	890	34	29	1,164	211	890	34	29	1,164
Lower Reservoir	0	987	20	0	1,007	0	987	20	0	1,007
Total	614	2,086	117	74	2,891	614	2,086	117	74	2,891
	21%	72%	4%	3%	100%	21%	72%	4%	3%	100%
East Parking (S, D & N Lots)	22%	10%	9%	20%	13%	22%	10%	9%	20%	13%
East of F. Kahlo Way & West of Stadium	43%	0%	45%	41%	12%	43%	0%	45%	41%	12%
Upper Reservoir & Q Lot	34%	43%	29%	39%	40%	34%	43%	29%	39%	40%
Lower Reservoir	0%	47%	17%	0%	35%	0%	47%	17%	0%	35%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

CCSF Parking Demand & Utilization [a]
at Ocean Campus

Location	*Fehr & Peers* August 2018 [First days of instruction]					*Fehr & Peers* May 2018 [Typical demand]				
	Staff/Fac.	Stdnt/Gral	ADA	Reserv.	All Spaces	Staff/Fac.	Stdnt/Gral	ADA	Reserv.	All Spaces
East Parking (S, D & N Lots)	137	209	10	15	371	124	205	3	15	347
East of F. Kahlo Way & West of Stadium	265		52	25	342	262		44	20	326
Upper Reservoir & Q Lot	208	890	28	29	1,155	197	836	22	24	1,079
Lower Reservoir		820	9		829		238	2		240
All Spaces	610	1,919	99	69	2,697	583	1,279	71	59	1,992
East Parking (S, D & N Lots)	100%	100%	100%	100%	100%	91%	98%	30%	100%	94%
East of F. Kahlo Way & West of Stadium	100%		98%	83%	98%	98%		83%	67%	93%
Upper Reservoir & Q Lot	99%	100%	82%	100%	99%	93%	94%	65%	83%	93%
Lower Reservoir		83%	45%		82%		24%	10%		24%
All Spaces	99%	92%	85%	93%	93%	95%	61%	61%	80%	69%

[a] Excludes motorcycle spaces and on-street parking on Frida Kahlo Way.

[b] Based on CCSF aerial topographic survey by SANDIS in August 2018; does not include all the reserved spaces and some are included in the faculty/stafff category.

CCSF Parking Demand and Supply Survey
May/August 2018 - Fehr & Peers

	Area C (A Lot)				Area D (H Lot)				Area G			Area H				Area J (N Lot)				Area L	Area P (Q Lot)				
Start Time	R	Chancellor	ADA	Subtotal	R	Chancellor	ADA	Subtotal	R	ADA	Subtotal	R	Reserv [1]	ADA	Subtotal	R	M	ADA	Subtotal	R	R	ADA	Bookstore	Car Share	Subtotal
Supply	79	2	4	85	64	1	3	68	24	2	26	30	5	8	43	137	1	10	148	10	128	27	1	1	157
	Monday, May 14, 2018																								
7:00 AM	3	-	-	3	11	-	-	11	17	-	17	5	-	-	5	2	-	-	2	1	6	2	-	-	8
8:00 AM	32	-	-	32	33	-	-	33	20	1	21	9	-	2	11	38	1	2	41	10	18	2	-	-	20
9:00 AM	59	1	1	61	64	-	1	65	24	2	26	22	1	7	30	87	1	2	90	10	69	8	1	-	78
10:00 AM	79	1	4	84	64	-	1	65	24	1	25	27	1	8	36	118	3	2	123	10	95	13	1	-	109
11:00 AM	78	1	4	83	64	-	1	65	24	-	24	29	-	6	35	124	3	3	130	10	118	20	1	-	139
12:00 PM	78	1	4	83	64	-	2	66	24	1	25	24	5	6	35	116	3	3	122	10	112	19	1	-	132
1:00 PM	75	1	2	78	64	-	3	67	21	2	23	25	1	5	31	108	3	2	113	10	108	21	1	-	130
2:00 PM	79	1	3	83	58	-	1	59	18	2	20	25	-	5	30	99	1	1	101	10	96	17	1	-	114
3:00 PM	72	1	1	74	58	-	2	60	19	1	20	24	-	5	29	78	-	1	79	7	77	11	-	-	88
4:00 PM	68	1	1	70	57	-	1	58	20	-	20	23	-	4	27	46	1	1	48	10	87	10	-	1	98
5:00 PM	50	1	1	52	37	-	-	37	20	-	20	17	2	4	23	38	-	-	38	6	68	10	-	1	79
6:00 PM	41	1	1	43	17	-	-	17	22	-	22	15	-	4	19	46	1	1	48	9	42	10	-	1	53
7:00 PM	57	-	-	57	8	-	-	8	21	1	22	18	3	2	23	64	1	1	66	6	36	9	1	1	47
8:00 PM	52	-	-	52	5	-	-	5	22	2	24	21	3	1	25	28	-	1	29	6	30	7	1	1	39
9:00 PM	20	-	-	20	2	-	-	2	18	1	19	16	4	-	20	13	-	1	14	6	15	4	1	1	21
	Monday, August 20, 2018																								
7:00 AM	7	-	-	7	11	-	1	12	14	-	14	9	-	-	9	5	-	-	5	3	16	2	1	1	20
8:00 AM	41	1	-	42	44	-	3	47	23	-	23	22	1	4	27	43	-	2	45	10	38	3	1	1	43
9:00 AM	79	1	4	84	64	-	3	67	24	2	26	26	1	6	33	113	1	4	118	10	117	13	1	1	132
10:00 AM	79	1	4	84	64	-	3	67	24	2	26	26	1	8	35	137	1	4	142	10	128	18	1	1	148
11:00 AM	78	1	4	83	64	-	3	67	24	1	25	26	2	8	36	130	1	6	137	10	123	17	1	1	142
12:00 PM	79	1	3	83	63	-	1	64	24	2	26	24	4	6	34	122	1	5	128	10	126	18	1	1	146
1:00 PM	79	1	2	82	64	-	2	66	24	1	25	26	2	7	35	122	1	7	130	10	127	25	1	1	154
2:00 PM	79	1	3	83	63	-	3	66	23	1	24	25	2	7	34	104	1	6	111	10	124	20	1	1	146
3:00 PM	79	1	1	81	60	-	2	62	23	1	24	25	5	8	38	92	1	5	98	10	104	14	-	1	119
4:00 PM	77	1	-	78	55	-	1	56	24	1	25	22	2	6	30	83	1	4	88	7	88	6	-	1	95
5:00 PM	61	1	2	64	33	-	-	33	24	1	25	22	5	3	30	52	1	4	57	4	70	10	-	1	81
6:00 PM	57	1	2	60	18	-	-	18	24	2	26	22	4	6	32	63	1	5	69	10	53	15	1	1	70
7:00 PM	47	-	-	47	8	-	-	8	22	2	24	22	5	5	32	64	1	2	67	8	36	12	1	1	50
8:00 PM	36	-	-	36	6	-	-	6	22	1	23	16	2	3	21	52	1	1	54	7	28	6	1	1	36
9:00 PM	16	-	-	16	3	-	-	3	16	1	17	14	1	1	16	15	-	-	15	2	16	3	1	1	21
	Tuesday, August 21, 2018																								
7:00 AM	3	-	-	3	9	-	1	10	18	1	19	9	-	-	9	4	-	-	4	2	14	3	1	1	19
8:00 AM	39	1	-	40	49	-	3	52	23	1	24	25	1	4	30	37	1	1	39	7	33	4	1	-	38
9:00 AM	79	1	2	82	64	-	3	67	24	-	24	26	5	7	38	87	1	1	89	10	93	10	1	-	104
10:00 AM	79	-	4	83	64	-	3	67	24	2	26	28	1	8	37	136	1	8	145	10	127	16	1	-	144
11:00 AM	79	1	4	84	64	-	3	67	24	1	25	29	1	8	38	133	1	10	144	10	123	25	1	-	149
12:00 PM	79	1	4	84	64	-	3	67	24	2	26	26	3	7	36	126	1	7	134	10	117	23	1	-	141
1:00 PM	79	1	4	84	62	-	3	65	24	2	26	28	3	8	39	125	1	5	131	9	119	24	1	-	144
2:00 PM	78	1	3	82	63	-	3	66	23	1	24	25	3	6	34	111	1	4	116	10	107	20	1	-	128
3:00 PM	72	1	4	77	58	-	2	60	24	2	26	25	3	7	35	94	1	4	99	9	98	15	-	-	113
4:00 PM	67	-	1	68	57	-	2	59	24	2	26	23	4	6	33	78	1	4	83	6	87	14	-	-	101
5:00 PM	58	1	1	60	29	-	1	30	21	2	23	18	3	4	25	50	-	4	54	4	67	11	-	1	79
6:00 PM	38	1	-	39	14	-	1	15	22	2	24	17	1	5	23	78	-	4	82	4	67	12	-	1	80
7:00 PM	34	1	-	35	10	-	-	10	17	2	19	14	3	1	18	82	-	2	84	4	55	9	1	1	66
8:00 PM	22	-	-	22	7	-	-	7	10	1	11	6	1	-	7	41	-	-	41	4	33	7	1	1	42
9:00 PM	10	-	-	10	3	-	-	3	10	-	10	5	-	-	5	7	-	1	8	3	9	3	1	1	14

R - Regular space
M - Motorcycle space
ADA - Accessible space
[1] Children drop off only M-F, 7 AM - 10 AM
[2] Police vehicles only
[3] Fuel Efficient Vehicle space

CCSF Parking Demand and Supply Survey
May/August 2018 - Fehr & Peers

	F. Kahlo Way - On-Street West			F. Kahlo Way - On-Street East			Area B (Science Circle/N & S of Cloud Hall)					Area E	Area F (Cloud Circle)				Area I (S & D Lots)			Area M (Lower Reservoir)			Area N (Upper Reservoir)			Area O (Upper Reservoir)						Subtotal	TOTAL ALL
Start Time	R	M	Subtotal	R	M	Subtotal	R	ADA	Loading	Reserv. [2]	Subtotal	Mainten.	R	ADA	Reserv. [2]	Subtotal	R	Reserv.	Subtotal	R	ADA	Subtotal	Faculty	Students	Subtotal	Faculty	Students	ADA	Carpool	FEV [3]	Subtotal	N&O&P	SPACES
Supply	34	33	67	30	21	51	26	7	3	3	39	10	33	29	6	68	209	15	224	987	20	1,007	56	709	765	27	181	7	9	18	242	1,164	3,010
Monday, May 14, 2018																																	
7:00 AM	30	-	30	28	1	29	11	-	-	-	11	9	14	-	4	18	33	-	33	3	-	3	-	44	44	-	4	-	-	-	4	56	228
8:00 AM	34	1	35	28	3	31	23	3	1	-	27	9	29	4	4	37	101	-	101	4	-	4	7	218	225	-	19	-	1	-	20	265	657
9:00 AM	34	2	36	28	7	35	26	5	2	-	33	8	32	14	5	51	186	6	192	9	-	9	37	470	507	4	106	1	5	5	121	706	1,352
10:00 AM	33	8	41	28	11	39	26	5	1	-	32	7	32	25	6	63	199	13	212	126	-	126	42	525	567	16	135	1	7	12	171	847	1,710
11:00 AM	34	7	41	28	14	42	26	5	3	-	34	6	31	21	6	58	205	15	220	238	-	238	53	678	731	26	158	1	8	15	208	1,078	2,064
12:00 PM	33	8	41	28	11	39	26	5	1	-	32	8	33	23	5	61	200	15	215	181	-	181	50	648	698	23	136	2	8	10	179	1,009	1,927
1:00 PM	33	6	39	29	11	40	26	4	1	1	32	8	33	19	6	58	191	12	203	185	2	187	47	604	651	21	120	1	7	9	158	939	1,828
2:00 PM	34	6	40	30	7	37	26	3	1	1	31	8	33	21	6	60	167	10	177	85	-	85	44	521	565	17	84	2	5	5	113	792	1,533
3:00 PM	33	6	39	29	5	34	23	3	1	1	28	9	33	19	5	57	124	11	135	67	-	67	36	396	432	13	92	1	3	4	113	633	1,271
4:00 PM	32	5	37	28	3	31	24	4	1	1	30	9	29	16	2	47	86	6	92	39	-	39	40	328	368	14	48	1	4	3	70	536	1,054
5:00 PM	31	2	33	27	5	32	19	3	2	1	25	8	29	9	1	39	75	3	78	22	-	22	29	286	315	14	36	1	1	3	55	449	862
6:00 PM	34	3	37	30	5	35	26	6	2	1	35	9	25	12	3	40	62	2	64	17	-	17	31	363	394	8	29	1	2	2	42	489	884
7:00 PM	31	4	35	30	6	36	22	5	2	1	30	8	30	16	4	50	62	1	63	10	-	10	41	432	473	5	32	1	2	3	43	563	977
8:00 PM	27	3	30	26	5	31	16	2	2	1	21	8	26	12	4	42	45	2	47	5	-	5	41	397	438	4	25	1	1	2	33	510	835
9:00 PM	13	3	16	26	2	28	7	2	2	2	13	8	19	5	4	28	31	1	32	5	-	5	15	96	111	2	5	1	1	-	9	141	352
Monday, August 20, 2018																																	
7:00 AM	34	-	34	26	1	27	12	-	-	-	12	9	23	1	4	28	23	-	23	1	-	1	-	127	127	-	10	-	-	-	10	157	341
8:00 AM	34	1	35	25	5	30	20	1	1	-	22	9	30	9	2	41	88	-	88	4	-	4	22	378	400	-	30	1	2	2	35	478	901
9:00 AM	34	5	39	27	17	44	25	4	2	-	31	8	33	21	3	57	184	4	188	108	1	109	56	704	760	9	138	2	7	6	162	1,054	1,868
10:00 AM	34	9	43	26	21	47	26	4	1	-	31	7	33	29	3	65	209	15	224	381	1	382	56	704	760	22	181	2	9	15	229	1,137	2,300
11:00 AM	34	11	45	27	19	46	26	3	2	-	31	10	33	27	4	64	208	14	222	583	1	584	55	707	762	27	166	-	9	16	218	1,122	2,482
12:00 PM	34	11	45	26	16	42	26	5	1	-	32	10	33	26	5	64	196	13	209	457	-	457	54	703	757	25	143	-	8	11	187	1,090	2,294
1:00 PM	31	11	42	25	12	37	26	1	1	-	28	6	32	25	4	61	209	15	224	326	-	326	53	683	736	23	134	-	8	10	175	1,065	2,137
2:00 PM	34	8	42	25	10	35	26	2	1	1	30	10	32	21	5	58	178	10	188	244	-	244	56	625	681	19	109	2	6	5	141	968	1,903
3:00 PM	34	6	40	22	8	30	23	3	-	1	27	10	32	19	4	55	138	10	148	112	-	112	52	559	611	17	174	1	3	6	201	931	1,666
4:00 PM	30	6	36	25	5	30	24	3	-	-	27	9	30	3	3	36	125	6	131	82	-	82	41	353	394	15	57	2	3	3	80	569	1,204
5:00 PM	32	5	37	26	4	30	14	2	1	-	17	9	33	11	4	48	103	4	107	34	-	34	30	308	338	14	41	1	-	4	60	479	974
6:00 PM	33	5	38	25	11	36	26	5	2	-	33	10	33	20	3	56	109	5	114	18	-	18	50	525	575	8	45	1	2	2	58	703	1,223
7:00 PM	32	5	37	23	15	38	20	5	3	-	28	10	27	23	4	54	88	4	92	11	-	11	52	481	533	5	33	-	2	1	41	624	1,080
8:00 PM	25	3	28	22	12	34	18	1	3	-	22	10	25	20	5	50	64	2	66	5	-	5	42	360	402	2	23	-	-	1	26	464	826
9:00 PM	9	-	9	16	1	17	9	1	-	-	10	10	14	3	4	21	26	1	27	3	-	3	14	79	93	1	7	-	-	-	8	122	288
Tuesday, August 21, 2018																																	
7:00 AM	32	-	32	26	1	27	10	-	-	-	10	10	14	4	6	24	17	-	17	1	-	1	-	83	83	-	10	-	-	-	10	112	280
8:00 AM	32	2	34	26	7	33	26	5	1	-	32	10	32	14	5	51	122	-	122	9	-	9	7	491	498	-	45	-	1	-	46	582	1,065
9:00 AM	32	7	39	25	10	35	26	6	1	-	33	10	33	28	5	66	198	-	198	87	-	87	56	709	765	4	179	-	9	9	201	1,070	1,848
10:00 AM	33	7	40	26	18	44	26	6	-	-	32	8	33	29	6	68	209	15	224	569	1	570	56	709	765	21	180	1	9	18	229	1,138	2,492
11:00 AM	33	13	46	26	20	46	26	6	3	-	35	10	33	28	4	65	207	15	222	820	1	821	56	709	765	27	163	3	8	15	216	1,130	2,743
12:00 PM	33	12	45	26	14	40	26	5	1	-	32	8	32	28	5	65	205	15	220	726	2	728	56	709	765	26	154	4	9	11	204	1,110	2,605
1:00 PM	33	9	42	27	13	40	26	6	1	1	34	9	33	26	6	65	206	15	221	745	9	754	54	696	750	24	143	2	8	10	187	1,081	2,600
2:00 PM	27	8	35	25	11	36	26	4	-	-	30	10	33	20	5	58	161	9	170	313	1	314	50	625	675	21	94	2	6	7	130	933	1,918
3:00 PM	26	9	35	25	12	37	22	3	1	1	27	10	33	19	5	57	140	6	146	184	-	184	44	490	534	18	66	2	6	5	97	744	1,546
4:00 PM	22	3	25	26	9	35	23	5	1	2	31	10	29	13	4	46	99	3	102	88	-	88	39	306	345	14	37	1	5	4	61	507	1,119
5:00 PM	34	3	37	27	7	34	24	4	3	2	33	10	29	12	4	45	70	1	71	48	-	48	28	267	295	14	31	1	3	2	51	425	899
6:00 PM	34	7	41	27	16	43	25	6	1	1	33	10	33	17	4	54	109	3	112	31	-	31	37	501	538	14	38	3	4	3	62	680	1,191
7:00 PM	34	5	39	27	18	45	24	4	1	1	30	10	32	21	4	57	92	4	96	20	-	20	49	584	633	7	43	3	4	7	64	763	1,230
8:00 PM	26	4	30	18	8	26	13	2	-	2	17	9	26	14	4	44	50	2	52	14	-	14	39	428	467	5	28	2	1	3	39	548	832
9:00 PM	19	-	19	9	3	12	5	2	3	3	13	10	20	10	1	31	15	1	16	7	-	7	12	82	94	3	2	1	1	-	7	115	262

R - Regular space
M - Motorcycle space
ADA - Accessible space
[1] Children drop off only M-F, 7 AM - 10 AM
[2] Police vehicles only
[3] Fuel Efficient Vehicle space

CCSF Parking Demand and Supply Survey
May/August 2018 - Fehr & Peers

	East of Frida Kahlo Way												Frida Kahlo Way						Lower Reservoir						Upper Reservoir						TOTAL ALL SPACES					
	East of Stadium/Soccer Field (N,D,S Lots)						West of Stadium/Soccer Field																													
Start Time	Empl.	Std/Gral	Mcycle	ADA	Other	Subtotal	Empl.	Std/Gral	Mcycle	ADA	Other	Subtotal	Empl.	Std/Gral	Mcycle	ADA	Other	Subtotal	Empl.	Std/Gral	Mcycle	ADA	Other	Subtotal	Empl.	Std/Gral	Mcycle	ADA	Other	Subtotal	Empl.	Std/Gral	Mcycle	ADA	Other	Total
Supply	137	209	1	10	15	372	266		53	30	349		64	54				118	987		20			1,007	211	890		34	29	1,164	614	2,150	55	117	74	3,010
Monday, May 14, 2018																																				
7:00 AM	2	33	-	-	-	35	62		-	13	75		58	1				59	3		-			3	6	48		2	-	56	70	142	1	2	13	228
8:00 AM	38	101	1	2	-	142	156		10	14	180		62	4				66	4		-			4	25	237		2	1	265	219	404	5	14	15	657
9:00 AM	87	186	1	2	6	282	237		30	17	284		62	9				71	9		-			9	110	576		9	11	706	434	833	10	41	34	1,352
10:00 AM	118	199	3	2	13	335	262		44	16	322		61	19				80	126		-			126	153	660		14	20	847	533	1,046	22	60	49	1,710
11:00 AM	124	205	3	3	15	350	262		37	16	315		62	21				83	238		-			238	197	836		21	24	1,078	583	1,341	24	61	55	2,064
12:00 PM	116	200	3	3	15	337	259		41	20	320		61	19				80	181		-			181	185	784		21	19	1,009	560	1,226	22	65	54	1,927
1:00 PM	108	191	3	2	12	316	254		35	18	307		62	17				79	185		2			187	176	724		22	17	939	538	1,162	20	61	47	1,828
2:00 PM	99	167	1	1	10	278	249		35	17	301		64	13				77	85		-			85	157	605		19	11	792	505	921	14	55	38	1,533
3:00 PM	78	124	-	1	11	214	236		31	17	284		62	11				73	67		-			67	126	488		12	7	633	440	741	11	44	35	1,271
4:00 PM	46	86	1	1	6	140	231		26	14	271		60	8				68	39		-			39	141	376		11	8	536	418	561	9	38	28	1,054
5:00 PM	38	75	-	-	3	116	178		17	15	210		58	7				65	22		-			22	111	322		11	5	449	327	477	7	28	23	862
6:00 PM	46	62	1	1	2	112	155		23	16	194		64	8				72	17		-			17	81	392		11	5	489	282	535	9	35	23	884
7:00 PM	64	62	1	1	1	129	162		24	18	204		61	10				71	10		-			10	82	464		10	7	563	308	597	11	35	26	977
8:00 PM	28	45	-	1	2	76	148		17	18	183		53	8				61	5		-			5	75	422		8	5	510	251	525	8	26	25	835
9:00 PM	13	31	-	1	1	46	88		8	20	116		39	5				44	5		-			5	32	101		5	3	141	133	176	5	14	24	352
Monday, August 20, 2018																																				
7:00 AM	5	23	-	-	-	28	79		2	13	94		60	1				61	1		-			1	16	137		2	2	157	100	221	1	4	15	341
8:00 AM	43	88	-	2	-	133	190		17	14	221		59	6				65	4		-			4	60	408		4	6	478	293	559	6	23	20	901
9:00 AM	113	184	1	4	4	306	261		40	15	316		61	22				83	108		1			109	182	842		15	15	1,054	556	1,195	23	60	34	1,868
10:00 AM	137	209	1	4	15	366	262		50	13	325		60	30				90	381		1			382	206	885		20	26	1,137	605	1,535	31	75	54	2,300
11:00 AM	130	208	1	6	14	359	261		46	19	326		61	30				91	583		1			584	205	873		17	27	1,122	596	1,725	31	70	60	2,482
12:00 PM	122	196	1	5	13	337	259		43	21	323		60	27				87	457		-			457	205	846		18	21	1,090	586	1,559	28	66	55	2,294
1:00 PM	122	209	1	7	15	354	261		38	14	313		56	23				79	326		-			326	203	817		25	20	1,065	586	1,408	24	70	49	2,137
2:00 PM	104	178	1	6	10	299	258		37	20	315		59	18				77	244		-			244	199	734		22	13	968	561	1,215	19	65	43	1,903
3:00 PM	92	138	1	5	10	246	252		34	21	307		56	14				70	112		-			112	173	733		15	10	931	517	1,039	15	54	41	1,666
4:00 PM	83	125	1	4	6	219	239		14	15	268		55	11				66	82		-			82	144	410		8	7	569	466	672	12	26	28	1,204
5:00 PM	52	103	1	4	4	164	191		19	20	230		58	9				67	34		-			34	114	349		11	5	479	357	544	10	34	29	974
6:00 PM	63	109	1	5	5	183	190		35	20	245		58	16				74	18		-			18	111	570		16	6	703	364	755	17	56	31	1,223
7:00 PM	64	88	1	2	4	159	154		35	22	211		55	20				75	11		-			11	93	514		12	5	624	311	668	21	49	31	1,080
8:00 PM	52	64	1	1	2	120	130		25	20	175		47	15				62	5		-			5	72	383		6	3	464	254	499	16	32	25	826
9:00 PM	15	26	-	-	1	42	74		6	15	95		25	1				26	3		-			3	31	86		3	2	122	120	140	1	9	18	288
Tuesday, August 21, 2018																																				
7:00 AM	4	17	-	-	-	21	65		6	16	87		58	1				59	1		-			1	14	93		3	2	112	83	169	1	9	18	280
8:00 AM	37	122	1	1	-	161	201		27	18	246		58	9				67	9		-			9	40	536		4	2	582	278	725	10	32	20	1,065
9:00 AM	87	198	1	1	-	287	262		46	22	330		57	17				74	87		-			87	153	888		10	19	1,070	502	1,230	18	57	41	1,848
10:00 AM	136	209	1	8	15	369	264		52	15	331		59	25				84	569		1			570	204	889		17	28	1,138	604	1,726	26	78	58	2,492
11:00 AM	133	207	1	10	15	366	265		50	19	334		59	33				92	820		1			821	206	872		28	24	1,130	604	1,958	34	89	58	2,743
12:00 PM	126	205	1	7	15	354	261		49	18	328		59	26				85	726		2			728	199	863		27	21	1,110	586	1,853	27	85	54	2,605
1:00 PM	125	206	1	5	15	352	261		49	21	331		60	22				82	745		9			754	197	839		26	19	1,081	583	1,850	23	89	55	2,600
2:00 PM	111	161	1	4	9	286	258		37	19	314		52	19				71	313		1			314	178	719		22	14	933	547	1,245	20	64	42	1,918
3:00 PM	94	140	1	4	6	245	243		37	21	301		51	21				72	184		-			184	160	556		17	11	744	497	931	22	58	38	1,546
4:00 PM	78	99	1	4	3	185	229		29	21	279		48	12				60	88		-			88	140	343		15	9	507	447	578	13	48	33	1,119
5:00 PM	50	70	-	4	1	125	183		24	23	230		61	10				71	48		-			48	109	298		12	6	425	342	477	10	40	30	899
6:00 PM	78	109	-	4	3	194	153		31	18	202		61	23				84	31		-			31	118	539		15	8	680	349	740	23	50	29	1,191
7:00 PM	82	92	-	2	4	180	135		28	20	183		61	23				84	20		-			20	111	627		12	13	763	328	800	23	42	37	1,230
8:00 PM	41	50	-	-	2	93	88		17	16	121		44	12				56	14		-			14	77	456		9	6	548	206	564	12	26	24	832
9:00 PM	7	15	-	1	1	24	56		12	17	85		28	3				31	7		-			7	24	84		4	3	115	87	134	3	17	21	262

R - Regular space
M - Motorcycle space
ADA - Accessible space
[1] Children drop off only M-F, 7 AM - 10 AM
[2] Police vehicles only
[3] Fuel Efficient Vehicle space

VEHICLE MILES OF TRAVEL CALCULATIONS

CCSF Updated Facilities Master Plan - VMT Summary

vehicle miles traveled per capita

	Office Use		Residential		Retail	
	Existing	**2040**	**Existing**	**2040**	**Existing**	**2040**
0. Regional	19.1	17.1	17.2	16.1	14.9	14.6
1. Main Campus (Ocean Campus)						
TAZ 65 (east of FKW)	12.8	12.6	11.4	10.4	2.5	2.8
Delta	-6.3	-4.5	-5.8	-5.7	-12.4	-11.8
% Below Regional	-33.0%	-26.3%	-33.7%	-35.4%	-83.2%	-80.8%
TAZ 915 (west of FKW)	13	12.6	11.7	10.6	1.9	2.2
Delta	-6.1	-4.5	-5.5	-5.5	-13	-12.4
% Below Regional	-31.9%	-26.3%	-32.0%	-34.2%	-87.2%	-84.9%
2. Chinatown/N. Beach (TAZ 799)	7.9	6.3				
Delta	-11.2	-10.8				
% Below Regional	-58.6%	-63.2%				
3. Civic Center (TAZ 299)	7.1	6.5				
Delta	-12	-10.6				
% Below Regional	-62.8%	-62.0%				
4. Downtown Center (TAZ 684)	7.6	6.2				
Delta	-11.5	-10.9				
% Below Regional	-60.2%	-63.7%				
5. Evans Center (TAZ 494)	14.8	12.6				
Delta	-4.3	-4.5				
% Below Regional	-22.5%	-26.3%				
6. John Adams Center (TAZ 254)	8.9	8.4				
Delta	-10.2	-8.7				
% Below Regional	-53.4%	-50.9%				
7. Mission Center (TAZ 157)	9.1	8.3				
Delta	-10	-8.8				
% Below Regional	-52.4%	-51.5%				
8. Southeast Center (TAZ 488)	13.8	11.4				
Delta	-5.3	-5.7				
% Below Regional	-27.7%	-33.3%				

Source: San Francisco Planning Department, TIMS Database

TURNING MOVEMENT VOLUMES – Ocean Campus

AM Peak Hour

CCSF 2019 FMP
Weekday AM Peak Hour

#	Intersection Name	TABLE 1A - INTERSECTION TURNING MOVEMENT VOLUMES																
		Northbound				Southbound				Eastbound				Westbound				Total All
		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Approaches
2018-2019 Base Counts (QC 2019 & Kittelson 2018)																		
1	Frida Kahlo Way/North Road	54	272		326		273	235	508	45		60	105				0	939
2	Frida Kahlo Way/Cloud Circle N.		283		283		333		333				0	48		43	91	707
3	Frida Kahlo Way/Center Road	341	276		617		354	27	381	7		30	37				0	1,035
4	Frida Kahlo Way/Cloud Circle S.		617	102	719	43	341		384				0				0	1,103
5	Frida Kahlo Way/A & H Lots		693	50	743	13	345		358				0	1		26	28	1,129
6	Frida Kahlo Way/Ocean Ave				0	48	211	87	346	185	557	294	1,036		800	558	1,358	2,740
7	Howth St-West Rd/Ocean Ave	27	76	62	165	41		17	58		611		611		678	73	751	1,585
8	Havelock St				0				0		65		65		110		110	175
9	Geneva Ave/Ocean Ave	636		6	642				0		605		605		722		722	1,969
EIR Baseline (Existing plus STEAM, Child Care, DRT, & No Lower Reser. Parking)																		
1	Frida Kahlo Way/North Road	268	326		594		249	312	561	68		99	168				0	1,323
2	Frida Kahlo Way/Cloud Circle N.		551		551		349		349				0	48		43	91	991
3	Frida Kahlo Way/Center Road	0	551		551		397	0	397	0		0	0				0	948
4	Frida Kahlo Way/Cloud Circle S.		551	153	705	43	354		397				0				0	1,101
5	Frida Kahlo Way/A & H Lots		678	50	729	13	357		371				0	1		26	28	1,127
6	Frida Kahlo Way/Ocean Ave				0	43	230	86	359	194	557	294	1,045		809	534	1,343	2,747
7	Howth St-West Rd/Ocean Ave	27	127	62	216	50		26	76		606		606		641	124	766	1,664
8	Havelock St				0				0		69		69		177		177	247
9	Geneva Ave/Ocean Ave	649		6	655				0		600		600		694		694	1,950
2019 FMP Assignment																		
1	Frida Kahlo Way/North Road	123	-19		104		-44	24	-20	9		44	52				0	136
2	Frida Kahlo Way/Cloud Circle N.		96		96		0		0				0	37		7	45	141
3	Frida Kahlo Way/Center Road	0	96		96		37	0	37	0		0	0				0	133
4	Frida Kahlo Way/Cloud Circle S.		96	120	216	12	25		37				0				0	253
5	Frida Kahlo Way/A & H Lots		242	-50	192	-13	38		25				0	-1		-26	-28	189
6	Frida Kahlo Way/Ocean Ave				0	30	22	-16	37	164	0	0	164		71	28	98	299
7	Howth St-West Rd/Ocean Ave	0	105	0	105	52		28	80		30		30		46	138	184	400
8	Havelock St				0				0		42		42		114		114	156
9	Geneva Ave/Ocean Ave	25		0	25				0		30		30		73		73	129
EIR Baseline + 2019 FMP																		
1	Frida Kahlo Way/North Road	391	307		698		205	336	541	77		143	220				0	1,459
2	Frida Kahlo Way/Cloud Circle N.		648		648		348		348				0	85		50	136	1,132
3	Frida Kahlo Way/Center Road	0	648		648		434	0	434	0		0	0				0	1,081
4	Frida Kahlo Way/Cloud Circle S.		648	273	921	55	378		434				0				0	1,354
5	Frida Kahlo Way/A & H Lots		921	0	921	0	395		395				0	0		0	0	1,316
6	Frida Kahlo Way/Ocean Ave				0	74	252	70	395	358	557	294	1,209		880	562	1,442	3,046
7	Howth St-West Rd/Ocean Ave	27	233	62	322	102		54	156		637		637		687	263	950	2,064
8	Havelock St				0				0		111		111		292		292	403
9	Geneva Ave/Ocean Ave	674		6	680				0		631		631		768		768	2,078

PM Peak Hour

CCSF 2019 FMP
Weekday PM Peak Hour

#	Intersection Name	TABLE 1A - INTERSECTION TURNING MOVEMENT VOLUMES																Total All Approaches
		Northbound				Southbound				Eastbound				Westbound				
		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
2018-2019 Base Counts (QC 2019 & Kittelson 2018)																		
1	Frida Kahlo Way/North Road	34	418		452		290	76	366	129		84	213				0	1,031
2	Frida Kahlo Way/Cloud Circle N.		376		376		374		374				0	103		76	179	929
3	Frida Kahlo Way/Center Road	152	359		511		443	34	477	17		168	185				0	1,173
4	Frida Kahlo Way/Cloud Circle S.		511	93	604	61	550		611				0				0	1,215
5	Frida Kahlo Way/A & H Lots		596	26	621	2	564		566				0	37		9	46	1,233
6	Frida Kahlo Way/Ocean Ave				0	97	346	158	601	146	586	323	1,055		760	475	1,235	2,891
7	Howth St-West Rd/Ocean Ave	10	17	40	67	46		29	75		689		689		598	36	634	1,465
8	Havelock St				0				0		110		110		30		30	140
9	Geneva Ave/Ocean Ave	598		6	604				0		683		683		637		637	1,924
EIR Baseline (Existing plus STEAM, Child Care, DRT, & No Lower Reser. Parking)																		
1	Frida Kahlo Way/North Road	141	429		570		264	120	384	206		197	402				0	1,356
2	Frida Kahlo Way/Cloud Circle N.		494		494		460		460				0	103		76	179	1,134
3	Frida Kahlo Way/Center Road	0	494		494		563	0	563	0		0	0				0	1,058
4	Frida Kahlo Way/Cloud Circle S.		494	116	610	61	502		563				0				0	1,174
5	Frida Kahlo Way/A & H Lots		602	26	627	2	516		518				0	37		9	46	1,191
6	Frida Kahlo Way/Ocean Ave				0	55	377	122	553	153	586	323	1,062		810	474	1,285	2,900
7	Howth St-West Rd/Ocean Ave	10	40	40	90	96		79	176		647		647		587	59	645	1,558
8	Havelock St				0				0		120		120		73		73	193
9	Geneva Ave/Ocean Ave	609		6	615				0		641		641		676		676	1,932
2019 FMP Assignment																		
1	Frida Kahlo Way/North Road	44	6		50		-7	9	2	18		89	107				0	159
2	Frida Kahlo Way/Cloud Circle N.		35		35		83		83				0	75		15	89	207
3	Frida Kahlo Way/Center Road	0	35		35		157	0	157	0		0	0				0	193
4	Frida Kahlo Way/Cloud Circle S.		35	86	121	12	145		157				0				0	279
5	Frida Kahlo Way/A & H Lots		130	-26	104	-2	147		145				0	-37		-9	-46	204
6	Frida Kahlo Way/Ocean Ave				0	44	45	21	110	77	0	0	77		95	27	122	310
7	Howth St-West Rd/Ocean Ave	0	45	0	45	133		78	211		44		44		28	59	87	388
8	Havelock St				0				0		43		43		42		42	85
9	Geneva Ave/Ocean Ave	16		0	16				0		44		44		106		106	167
EIR Baseline + 2019 FMP																		
1	Frida Kahlo Way/North Road	185	435		620		257	129	386	223		286	509				0	1,515
2	Frida Kahlo Way/Cloud Circle N.		530		530		543		543				0	178		91	268	1,341
3	Frida Kahlo Way/Center Road	0	530		530		721	0	721	0		0	0				0	1,250
4	Frida Kahlo Way/Cloud Circle S.		530	202	732	73	647		721				0				0	1,452
5	Frida Kahlo Way/A & H Lots		732	0	732	0	663		663				0	0		0	0	1,395
6	Frida Kahlo Way/Ocean Ave				0	100	421	143	663	230	586	323	1,139		905	501	1,407	3,209
7	Howth St-West Rd/Ocean Ave	10	85	40	135	229		158	387		692		692		614	118	732	1,946
8	Havelock St				0				0		163		163		116		116	279
9	Geneva Ave/Ocean Ave	625		6	631				0		686		686		782		782	2,099

VEHICLE ASSIGNMENTS – Ocean Campus

Adjacent Streets

Existing (2018) Vehicle Trips	Location	AM Peak Hr	PM Peak Hr
Frida Kahlo Way	between Judson Ave and North St/Cloud Circle North	825	913
	between North St/Cloud Circle N. and Cloud Circle S.	1,001	1,122
	between Cloud Circle South and Ocean Ave	1,089	1,222
Ocean Avenue	west of Frida Kahlo Way/Geneva Ave	1,923	1,973
	between Frida Kahlo Way/Geneva Ave and Howth St	1,333	1,326
	east of Howth St	1,465	1,409
Geneva Avenue	south of Ocean Ave	1,147	1,273
Howth Street	between Geneva Ave and Ocean Ave	165	67

Baseline Vehicle Trips	Location	AM Peak Hr	PM Peak Hr
Frida Kahlo Way	between Judson Ave and North St/Cloud Circle North	955	1,018
	between North St/Cloud Circle N. and Cloud Circle S.	948	1,058
	between Cloud Circle South and Ocean Ave	1,087	1,181
Ocean Avenue	west of Frida Kahlo Way/Geneva Ave	1,940	1,994
	between Frida Kahlo Way/Geneva Ave and Howth St	1,301	1,323
	east of Howth St	1,484	1,429
Geneva Avenue	south of Ocean Ave	1,179	1,314
Howth Street	between Geneva Ave and Ocean Ave	216	90

2019 FMP Vehicle Trips	Location	AM Peak Hr	PM Peak Hr
Frida Kahlo Way	between Judson Ave and North St/Cloud Circle North	-30	26
	between North St/Cloud Circle N. and Cloud Circle S.	133	193
	between Cloud Circle South and Ocean Ave	229	214
Ocean Avenue	west of Frida Kahlo Way/Geneva Ave	219	193
	between Frida Kahlo Way/Geneva Ave and Howth St	104	151
	east of Howth St	267	264
Geneva Avenue	south of Ocean Ave	47	61
Howth Street	between Geneva Ave and Ocean Ave	105	45

Baseline+2019 FMP Veh Trips	Location	AM Peak Hr	PM Peak Hr
Frida Kahlo Way	between Judson Ave and North St/Cloud Circle North	925	1,044
	between North St/Cloud Circle N. and Cloud Circle S.	1,081	1,250
	between Cloud Circle South and Ocean Ave	1,316	1,395
Ocean Avenue	west of Frida Kahlo Way/Geneva Ave	2,159	2,187
	between Frida Kahlo Way/Geneva Ave and Howth St	1,404	1,474
	east of Howth St	1,751	1,693
Geneva Avenue	south of Ocean Ave	1,226	1,375
Howth Street	between Geneva Ave and Ocean Ave	322	135

Campus Gateways

CCSF Ocean Campus Existing (2018) Gate Volumes	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Reservoir - North Dr	290	105	395	110	215	325
Cloud Circle North		90	90		180	180
Reservoir - Center Dr	370	35	405	185	185	370
Cloud Circle South	145		145	155		155
A & H Lots Driveway	65	30	95	30	50	80
Howth St / West Rd	150	60	210	55	75	130
Havelock St	110	65	175	30	110	140
Total	1,130	385	1,515	565	815	1,380

CCSF Ocean Campus Baseline Gate Volumes	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Reservoir - North Dr	580	168	748	261	402	663
Cloud Circle North		91	91		179	179
Reservoir - Center Dr	-	-	-	-	-	-
Cloud Circle South	196		196	177		177
A & H Lots Driveway	64	28	91	28	46	73
Howth St / West Rd	251	76	327	99	176	274
Havelock St	177	69	247	73	120	193
Total	1,269	432	1,700	637	923	1,560

CCSF Ocean Campus 2019 FMP Gate Volumes	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Reservoir - North Dr	147	52	199	53	107	159
Cloud Circle North	0	45	45	0	89	89
Reservoir - Center Dr	0	0	0	0	0	0
Cloud Circle South	132	0	132	98	0	98
A & H Lots Driveway	-64	-28	-91	-28	-46	-73
Howth St / West Rd	244	80	324	104	211	315
Havelock St	114	42	156	42	43	85
Total	573	191	764	270	405	675

CCSF Ocean Campus Baseline+2019 FMP Gate Vol.	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Reservoir - North Dr	727	220	947	314	509	823
Cloud Circle North		136	136		268	268
Reservoir - Center Dr	-	-	-	-	-	-
Cloud Circle South	328		328	275		275
A & H Lots Driveway	-	-	-	-	-	-
Howth St / West Rd	495	156	651	203	387	590
Havelock St	292	111	403	116	163	279
Total	1,842	623	2,465	907	1,327	2,235