

**CITY COLLEGE OF SAN FRANCISCO**  
**Evans Center Retrofitting and Modernization**  
**and**  
**Aircraft Maintenance Technology Program Relocation**  
**Initial Study / Mitigated Negative Declaration**

The following Initial Study has been prepared in compliance with the  
California Environmental Quality Act.

**Prepared For:**

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

**Prepared By:**

Impact Sciences, Inc.  
505 14<sup>th</sup> Street, Suite 900  
Oakland, California 94612

**August 2021**

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## INTRODUCTION

### Initial Study

Pursuant to Section 15063 of the *California Environmental Quality Act (CEQA) Guidelines* (Title 14, California Code of Regulations, Sections 15000 et seq.), an Initial Study is a preliminary environmental analysis that is used by the lead agency (the public agency principally responsible for approving or carrying out the proposed project) as a basis for determining whether an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The *State CEQA Guidelines* require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the name of persons who prepared the study.

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed renovation of the existing building at Evans Center of the City College of San Francisco (CCSF) and relocation of the Aircraft Maintenance Technology (AMT) Program from San Francisco International Airport (SFO) to Evans Center located at 1400 Evans Avenue in San Francisco.

### Public and Agency Review

This Initial Study/Proposed Mitigated Negative Declaration will be circulated for public and agency review from **August 23, 2021**, to **September 22, 2021**. Copies of this document are available for review at the District's website at <https://www.ccsf.edu/about-ccsf/administration/finance-and-administration/office-facilities-and-capital-planning>. Comments on this Initial Study / Proposed Mitigated Negative Declaration must be received no later than 5:00 PM on **September 22, 2021**, and can be mailed or emailed to:

Alberto Vasquez  
Interim Associate Vice Chancellor of Construction/Capital Planning  
[Facilities@ccsf.edu](mailto:Facilities@ccsf.edu)  
(415) 239-3055

### Organization of the Initial Study

This Initial Study is organized into the following sections:

- **Section I, Project Information**, provides summary background information about the proposed project, including project location, lead agency, and contact information.

- **Section II, Project Location and Description**, includes a description of the proposed project, including the need for the projects, the project objectives, and the elements included in the projects.
- **Section III, Environmental Factors Potentially Affected**, identifies what environmental resources, if any, would involve at least one significant or potentially significant impact that cannot be reduced to a less than significant level.
- **Section IV, Determination**, indicates whether impacts associated with the proposed project would be significant, and what, if any, additional environmental documentation is required.
- **Section V, Evaluation of Environmental Impacts**, contains the Environmental Checklist form for each resource and presents an explanation of all checklist answers. The checklist is used to assist in evaluating the potential environmental impacts of the proposed project and determining which impacts, if any, need to be further evaluated in an EIR.
- **Section VI, Initial Study Preparers**, lists the names of individuals involved in the preparation of this document.
- **Appendices** present the technical studies used in the preparation of this Initial Study.

## **I. PROJECT INFORMATION**

1. **Project Title:**

CCSF Evans Center Renovation and Aircraft Maintenance Technology Program Relocation

2. **Lead Agency Name and Address:**

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

3. **Contact Person and Phone Number:**

Alberto Vasquez  
Interim Associate Vice Chancellor of Construction/Capital Planning  
[Facilities@ccsf.edu](mailto:Facilities@ccsf.edu)  
(415) 239-3055

4. **Project Location:**

1400 Evans Avenue  
San Francisco, CA 94124

## **II. PROJECT LOCATION AND DESCRIPTION**

### **Project Overview**

The City College of San Francisco (CCSF) proposes to retrofit and renovate the existing building at CCSF Evans Center and relocate the Aircraft Maintenance Technology (AMT) Program from San Francisco International Airport (SFO) to Evans Center located at 1400 Evans Avenue in San Francisco. The proposed modernization of Evans Center would include seismic upgrades, a new roof, replacement of the mechanical, electrical, plumbing, heating ventilation and air conditioning system, and reconfiguration of the interior spaces. The project would also include lighting, fencing, and landscaping. The modernization of Evans Center and relocation of the AMT Program and the planned configuration of Evans Center during the renovation activities (interim phase) and after completion of these activities (permanent phase) would form the proposed project analyzed in this document. Two new temporary sprung and modular structures installed in the parking located south of the existing building would serve as swing space for classrooms and administrative office space during the interim phase.

### **Background**

CCSF is part of the California Community College System. The California Community Colleges is the largest higher education system in the nation. The system is comprised of 73 districts, 115 colleges and enrolls more than 2.1 million students. Community colleges provide basic skills education, workforce training and courses to prepare students to transfer to four-year universities.

The College was founded in 1935 in response to a demand from the citizens for a public institution to serve both the academic and the vocational needs of students as an integral part of the San Francisco Unified School District. In 1970, the College was separated from the San Francisco Unified School District, and a new entity, the San Francisco Community College District, was formed. This new entity included not only the College but also the Adult and Occupational Education Division of the Unified District. Responding to the expressed community need, the College maintained these neighborhood education programs composed primarily of noncredit courses. Because of rapid growth, the College subsequently formed two separate divisions: one for credit courses located on the Balboa Park (Ocean) Campus; and one for noncredit courses offered throughout the City, under the umbrella of the San Francisco Community College District. The two divisions were merged in 1990, and a single City College of San Francisco, offering both credit and noncredit courses at 12 campuses and nearly 200 neighborhood sites, was created. After certain consolidation and in addition to online learning there are currently the Main Campus at 50 Frida Kahlo Way and nine centers at Chinatown/North Beach, Civic, Downtown, Evans Center, Fort Mason, John Adams, Mission, Ocean, and Southeast. The College serves approximately 60,000 students each year.



## **Project Objectives**

- To relocate the AMT Program after the end of the lease at the San Francisco International Airport
- To integrate the AMT Program equipment and operations into the Evans Center
- To retrofit and renovate the Evans Center

## **Project Location and Site Characteristics**

### ***Project Location***

The project site is located in the Bayview-Hunters Point district of San Francisco close to San Francisco Bay. The 2.8-acre project site occupies the southeastern block bound by Evans Avenue, Newhall Street, and Mendell Street (See **Figure 1, Site Location**). Main access to the center is at the southeastern corner of the intersection of Evans Avenue and Mendell Street.

Evans Avenue is a two-way street that travels northwest to southeast, with two lanes in each direction. Mendell Street is a two-way street that wraps around the project site from the east and southeast side and travels north to southwest with one lane in each direction. Newhall Street wraps around the block from the west and north sides. It is a two-way street with one lane in each direction. Parallel parking is available on both sides of the three streets surrounding the block of the project site.

The project site is within an area served by several transit lines of the San Francisco Municipal Railway (Muni). Muni bus stops near the project sites are served by Muni Lines 19 and 44. In addition, Muni operates numerous surface buses on Third Street at approximately 0.2 miles west of the project site. Muni also operates the Muni Metro light rail system, which in the project vicinity runs along Third Street.

### ***Existing Conditions***

#### **Project Site**

The project site is generally flat with a ground surface elevation of approximately 8 feet above mean sea level. A two-story building of approximately 89,120 gross square feet, constructed in 1984, is located at the site. The remaining portion of the project site is mostly paved with the exception of landscaped areas surrounding the existing building at the site and bounding the project site along Evans Avenue, Mendell Street, and Newhall Street.

In 2020, the College installed sprung and modular structures to serve as flexible offices and classroom spaces in the paved area fronting the existing building along Evans Avenue. The two rows of structures is

approximately 155-feet long with the southern structure approximately 46-feet wide and the northern structure approximately 30-feet wide. These structures, supported by conventional shallow foundation systems, include restroom-modular structures. Low voltage power connections are provided at the temporary structures in addition to other utilities, such as water, sewer, and telecommunication. These structures are intended to remain on site for approximately 3 years.

The paved area to the back of the building includes a fenced portion at the northeastern corner of the site that is used as a construction yard and contains several structures used as a mockup for the construction program provided at the center.

Vehicle and pedestrian access to the project site is provided through two curb cuts on each of Mendell Street and Newhall Street. In addition, the project site is accessed through an alley that runs along the western side of the site from Evans Avenue to Mendell Street.

The project site has a total of 24 parking spaces with 20 parking spaces along the western side of the building and 3 American Disability Act (ADA) compliant parking spaces on the corner of Mendell Street and Evans Avenue that are accessed from Mendell Street.

CCSF Evans Center houses the Automotive/Motorcycle, Construction, and Building Maintenance departments. **Table 1, Programs and Degrees Provided at Evans Center**, below, presents the degrees offered by each of these departments. As shown on **Figure 2, Existing Building Configuration**,<sup>1</sup> workshops for the Automotive department are located on the first floor of the existing building, in addition to storage areas and classrooms shared by several departments. Laboratories for the construction department, computer classrooms, lecture classrooms, and staff and faculty offices are located on the second floor. **Table 2, Existing Area Per Department**, below, presents the square footage and the location of each department. Currently, the existing building has a total of 13 classrooms, with 7 classrooms on the ground floor and 6 classrooms on the second floor. The temporary sprung and modular structures installed in the parking lot along Evans Avenue contain 6 classrooms.

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<sup>1</sup> Upholstery laboratory and sewing area shown on Figure 2 has been designated for general classroom purposes after the fashion department was relocated to the Downtown Center in November 2020.



SOURCE: Google Earth, 2021

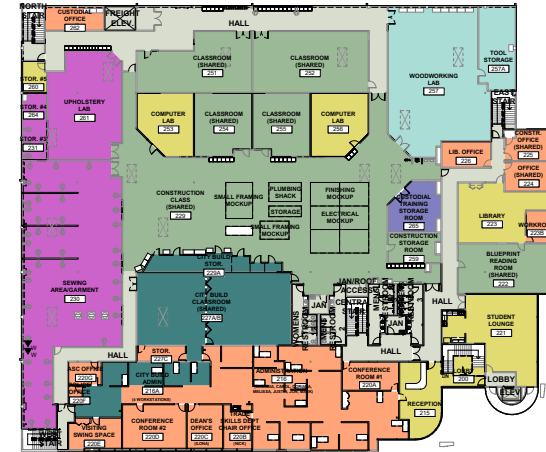
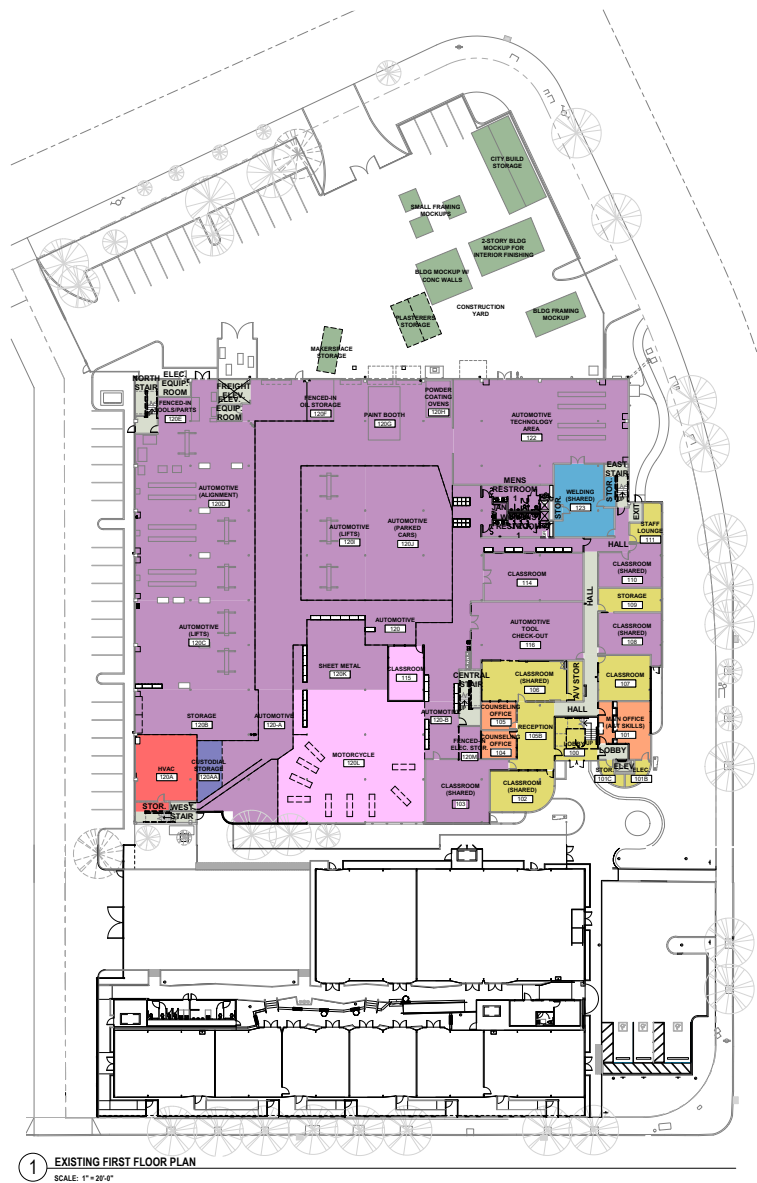
FIGURE 1

Project Location

**Table 1**  
**Programs and Degrees Provided at Evans Center**

Department	Degree
Automotive	Automotive Technician AS Degree
	Automotive Technician Certificate of Achievement
	Autobody Repair and Refinishing AS Degree
	Autobody Repair and Refinishing Certificate of Achievement
	Automotive Hybrid and EV Technology Certificate of Achievement
	Utility Technician/Helper Certificate of Accomplishment
Motorcycle	Motorcycle Technician AS Degree
	Motorcycle Technician Certificate of Accomplishment
Construction	Construction AS Degree
	Carpentry Certificate of Accomplishment
	Construction Certificate of Accomplishment
Custodial	Custodial Training Certificate of Completion
	Custodian for Health Care Industry Certificate of Completion
Welding	Building Maintenance/Custodial Noncredit Certificate
	Welding Technology Level I

Notes: Additional program provided at Evans Center include the CityBuild Academy— a pre-apprenticeship construction program offered in partnership with the San Francisco Office of Economic and Workforce Development, City College of San Francisco, community non-profit organizations, labor unions, and industry employers.



SOURCE: Gelfand Partners Architects, 2021

**Table 2**  
**Existing Area Per Department**

Department	Level	Total Area (square feet)
Administration	Ground Floor	879
Administration	Second Floor	6,436
<b>Administration Total</b>		<b>7,315</b>
Automotive	Ground Floor	30,276
City Build	Second Floor	3,432
Construction	Second Floor	12,254
Custodial	Ground Floor	275
Custodial	Second Floor	446
<b>Custodial Total</b>		<b>721</b>
General	Ground Floor	3,000
General	Second Floor	9,795
<b>General Total</b>		<b>12,795<sup>1</sup></b>
HVAC	Ground Floor	813
Motorcycle	Ground Floor	3,982
Welding	Ground Floor	744
Wood	Second Floor	3,225
<b>Grand Total</b>		<b>75,557</b>

Source: Gelfand Partners Architects, 2020.

Note: <sup>1</sup> General: refers to shared space without specific designated programming. General uses on second floor include 5,570 square feet of space previously allocated for the Fashion Department that has been relocated to the Downtown Center in November 2020.

## AMT Program

The AMT Program is an aviation maintenance technician school designed for full-time students only. Students take two courses each semester for four semesters over a two-year period. Currently, 86 students are enrolled in the program receiving instruction in the areas of airframe and power plant. Instructions include lectures sessions and workshops. Workshop activities include aircraft maintenance activities, such as disassembling and reassembling brakes, shock struts, actuators, engines, oil pumps, and other aircraft mechanical parts. Workshop activities include the use of certain chemical products to perform non-destructive testing on aircraft parts and cleaning tires and windows, cutting sheet metal, drilling holes, and installing rivets, and other hardware.

After completing the program, students will earn Certificates of Achievement in Airframe and Powerplant and if they completed the CCSF graduation requirements, will also earn associate degrees in both Airframe Maintenance Technology and Aircraft Powerplant Maintenance Technology. In addition, students who receive the Certificates of Achievement in Airframe and Powerplant, are qualified to take the Federal

Aviation Administration (FAA) exams for Airframe and Powerplant certificates. CCSF Aeronautics Department communicates any changes in faculty members with FAA. Each semester, The department also provides FAA a current list of teaching assignments. In addition, FAA receives the list of all students anticipated to complete the Airframe or Powerplant curriculum for approval to take the Oral and Practical exams. A final list of all students having completed the coursework for the Airframe or Powerplant curriculum is also sent to FAA within one week of issuing the CCSF Certificates.

The program has currently 12 faculty members. The Department Chair ensures that each class maintains a 25:1 student-to-faculty ratio. The program’s is provided five days a week with class hours from 7:10 AM to 10:00 AM and 10:30 AM to 1:20 PM.

At SFO, the AMT Program operated eight jet engines (1 radial engine, 2 turbine engines, and 5 piston engines) throughout each semester. In 2021, the CCSF AMT department determined that a radial engine would not be needed in order to be in compliance with FAA certificate requirement. **Table 3, CCSF AMT Program Jet Engines**, provides a summary of the jet engines that are part of the AMT Program and the estimated hours of operation per semester. Aircraft engines are usually run about three times each semester with each engine running between 5 to 40 minutes each time.

**Table 3  
CCSF AMT Program Jet Engines**

Engine Type	Model	Fuel Type	Number of Engines	Hours of Use per Semester
Turbine	Rolls-Royce/Allison 250 Series Turboshaft Engine Test Cell	Jet A	1	15
Turbine	PT6 Turboprop	Jet A	1	3
Piston	Cessna 150 Continental O-200	Avgas	2	15
Piston	Lycoming O-320	Avgas	1	10
Piston	Lycoming O-360	Avgas	1	10
Piston	Lycoming O-540	Avgas	1	10

*Source: CCSF, 2021.  
Note: Avgas = Aviation Gas*

An aircraft engine includes the following four basic steps:

1. Intake of air (and possibly fuel)
2. Compression of the air (and possibly fuel)
3. Combustion, where the fuel is injected and burned to convert the stored energy

4. Expansion and exhaust, where the converted energy is put to use

As shown in **Table 3**, piston,<sup>2</sup> and turbine engines are used in the AMT Program. Aircraft engines of the program include one Allison 250, an O320 engine and eight to ten other reciprocating engines. The piston is similar to a car engine where the intake, compression, combustion, and expansion occur in the same place (cylinder head) at different times as the piston goes up and down. In a turbine engine, these same four steps occur at the same time but in different places.

### **Surrounding Uses**

Surrounding uses are mostly one to two-story commercial/office spaces and warehouses. The San Francisco Fire Department Station 49 is located at the southwest corner of Evans Avenue and Mendell Street.

The project site is within the Bayview Hunters Point neighborhood in an area zoned as PDR-2 District: Core Production, Distribution and Repair<sup>3</sup> and within a 65-J<sup>4</sup> Height and Bulk District. In addition, the project site is within the 3<sup>rd</sup> Street Alcohol Restricted Use District and the India Basin Industrial Park Special Use Districts, and with one-fourth mile of the Fringe Financial Service Redevelopment Use District.

Class II bike lanes<sup>5</sup> are located on Evans Avenue in both directions at the level of the project site. Class III bike routes<sup>6</sup> are located along the segment of Evans Avenue to the west of 3<sup>rd</sup> Street and in both direction along 3<sup>rd</sup> Street, located approximately 1000 feet west of the project site.

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<sup>2</sup> An aircraft piston engine, also commonly referred to as a reciprocating engine, is an internal combustion engine that uses one or more reciprocating pistons to convert pressure into a rotational motion. The aircraft piston engine operates on the same principles as the engines found in most automobiles. However, modifications, such as dual ignition systems, to improve redundancy and safety, and air cooling to reduce weight, have been incorporated into engines designed for aviation use.

<sup>3</sup> The intent of this District is to encourage the introduction, intensification, and protection of a wide range of light and contemporary industrial activities. Thus, this District prohibits new housing, large office developments, large-scale retail, and the heaviest of industrial uses, such as incinerators. Generally, all other uses are permitted. The conservation of existing flexible industrial buildings is also encouraged. This District permits certain non-industrial, non-residential uses, including small-scale Retail and Office, Entertainment, certain institutions, and similar uses that would not create conflicts with the primary industrial uses or are compatible with the operational characteristics of businesses in the area.

<sup>4</sup> The height of the building or structure does not exceed 65 feet.

<sup>5</sup> A standard bike lane (Class II) is a portion of road reserved for the preferential or exclusive use of people biking, indicated by road markings.

<sup>6</sup> Class III bike routes are typically wide travel lanes shared by bicyclists and vehicles. They are commonly marked with the standard or greenback sharrows and wayfinding signs to indicate shared use.



## **Project Characteristics**

**Background.** On January 23, 2020, the CCSF District's Board of Trustees approved a CEQA determination as a categorical Exemption for the Evans Center Renovation and Temporary Campus Project. In its determination the District concluded that the renovation and temporary campus project is not barred by any exceptions contained in *CEQA Guidelines* section 15300.2. The District found that the project 1) is not located in a sensitive environment, 2) has no cumulative impact, 3) will not have significant effect on the environment due to unusual circumstances, 4) will not result in damage to scenic resources, 5) is not located on a hazardous waste site, and 6) will not cause a substantial adverse change in the significance of a historical resource. Based on these findings, CCSF filed a Notice of Exemption for this renovation and temporary campus project.

Based on the CEQA determination, the District installed the temporary sprung and modular structures in the parking lot to temporary house the administration offices and to provide classrooms for the programs offered at Evans Center. Installation of the temporary structures required minor site work that included demolition of portions of the asphalt at the parking lot and up to two-foot excavation to install the foundations.

Since the filing of the Notice of Exemption, the SFO lease for the AMT Program ended and the District considered relocating the program to Evans Center. This document assesses the renovation of Evans Center as well as the relocation of the AMT Program.

### ***Evans Center Renovation***

Renovations to Evans Center would include seismic upgrade and installation of a new roof to the existing building. In addition, the proposed project would replace the heating, ventilation, and air condition (HVAC) system as part of the renovation activities. The proposed renovation activities would include site lighting, fencing, site furnishings, and landscaping.

To accommodate the AMT Program, a bifold hangar door would be installed on the southwestern façade of the existing building to access the aviation maintenance yard that would be located in the southwestern corner of the building. Other improvements would include upgrades to the overall façade of the building, such as window replacement and new painting, depending on available funding.

Renovation and proposed improvements at Evans Center to accommodate the AMT Program 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.

## ***AMT Program***

As described above, in 2021, the CCSF AMT department determined that a radial engine would not be needed in order to be in compliance with FAA certificate requirements. Therefore, the AMT Program at Evans Center would operate seven engines instead of eight engines originally used at SFO. The use of the radial engine would be limited to inspection and repair. Engines that would operate at Evans Center would include 2 turbine and 5 piston engines. However, the total hours of engines use for the program would not change. The program topics that require running a reciprocating engine, such as the radial engines, would be using the Cessna (piston) engine.

## ***Space Configuration during the Interim Phase***

As shown on **Figure 3, Ground Floor Proposed Configuration in the Interim Phase**, Evans Center would be configured to allow for the operations of classrooms and workshops including the AMT Program during the renovation activities. **Table 4, Proposed Square Footage Per Department (Interim)**, below, presents the square footage distribution within the departments during the interim period. During the interim period, 8 classrooms would be available on the ground level of the existing building and 6 classrooms would be available on the second floor, for a total of 14 classrooms. In addition, 6 classrooms would be available in the temporary structures.

As shown on **Figure 3**, the majority of space use on the ground floor would be allocated to the workshops of the Automotive department. In addition, the hangar and workshops for the AMT Program would be located on the ground floor on the southwest corner of the building. The AMT Program workshops include the hydraulic shop laboratory, the sheet metal shop, and the engine shop. Other space use allocated to the AMT Program include a tools room, a storage room and a space for students' records. The maintenance yard of the AMT Program would be located in front of the hangar. However, aircraft engines would not be operated during the interim phase. As shown on **Figure 3**, a portion of the yard in front of the hangar would be used as a maintenance yard for motorcycle during the interim phase.

The ground floor would also include a shared space for welding, shared classrooms, as well as administrative spaces for counseling, reception, main office, and staff lounge.

A portion of the yard on the north side of the building would be used as a construction yard with spaces for building and framing mockups and storage. As shown on **Figure 3**, in the interim phase, the Automotive department would occupy the portion to the northwest site of this yard including approximately 13 vehicle parking spaces.

The second floor would be configured to provide workshops and classrooms for the AMT Program and Construction department. In addition, classrooms, administrative space, police office, and storage would be provided on this floor for the CityBuild Academy (A joint program with the Mayor’s Office of Economic, and Workforce Development). The second floor would also include shared computer laboratories, woodworking laboratory with tool storage space, faculty offices and shared space, library, student lounge, and shared classroom space (See **Figure 4, Second Floor Proposed Configuration in the Interim Phase**).

Vehicular access to the building would be maintained through the two curb cuts on each of Mendell Street and Newhall Street. Access to the northern yard would be also maintained from the alley that runs along the western side of the site from Evans Avenue to Mendell Street. Pedestrian access would also remain unchanged from existing conditions.

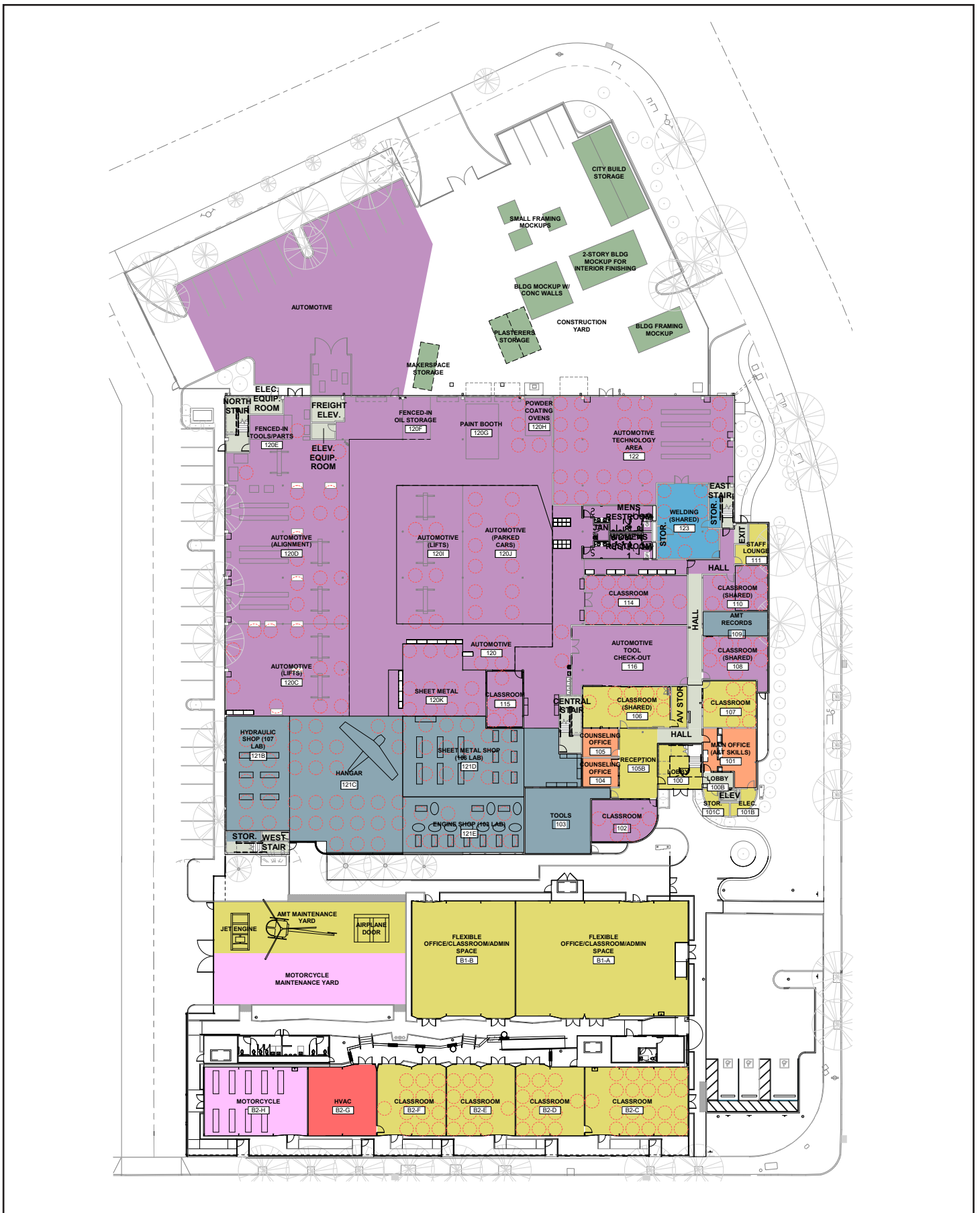
**Table 4  
Proposed Square Footage Per Department (Interim)**

Department	Level	Total Area (square feet)
Administration	Ground floor	879
Administration	Second floor	6,072
<b>Administration Total</b>		<b>6,951</b>
AMT Program	Ground floor	8,372
AMT Program	Second floor	5,605
<b>AMT Program Total</b>		<b>13,977</b>
Automotive	Ground floor	27,215
CityBuild Academy	Second floor	3,801
Construction	Second floor	12,260
Custodial	Second floor	446
General <sup>1</sup>	Ground floor	12,317
General <sup>1</sup>	Second floor	4,220
<b>General Total</b>		<b>16,537</b>
HVAC	Ground floor	895
Motorcycle	Ground floor	1,327
Welding	Ground floor	744
Wood	Second floor	3,225
<b>Grand Total</b>		<b>87,378</b>

Sources: Gelfand Partners Architects, 2021.

Note: Square footages presented above are based on preliminary site plans prepared in 2020. Final square footage of the different uses may be slightly different.

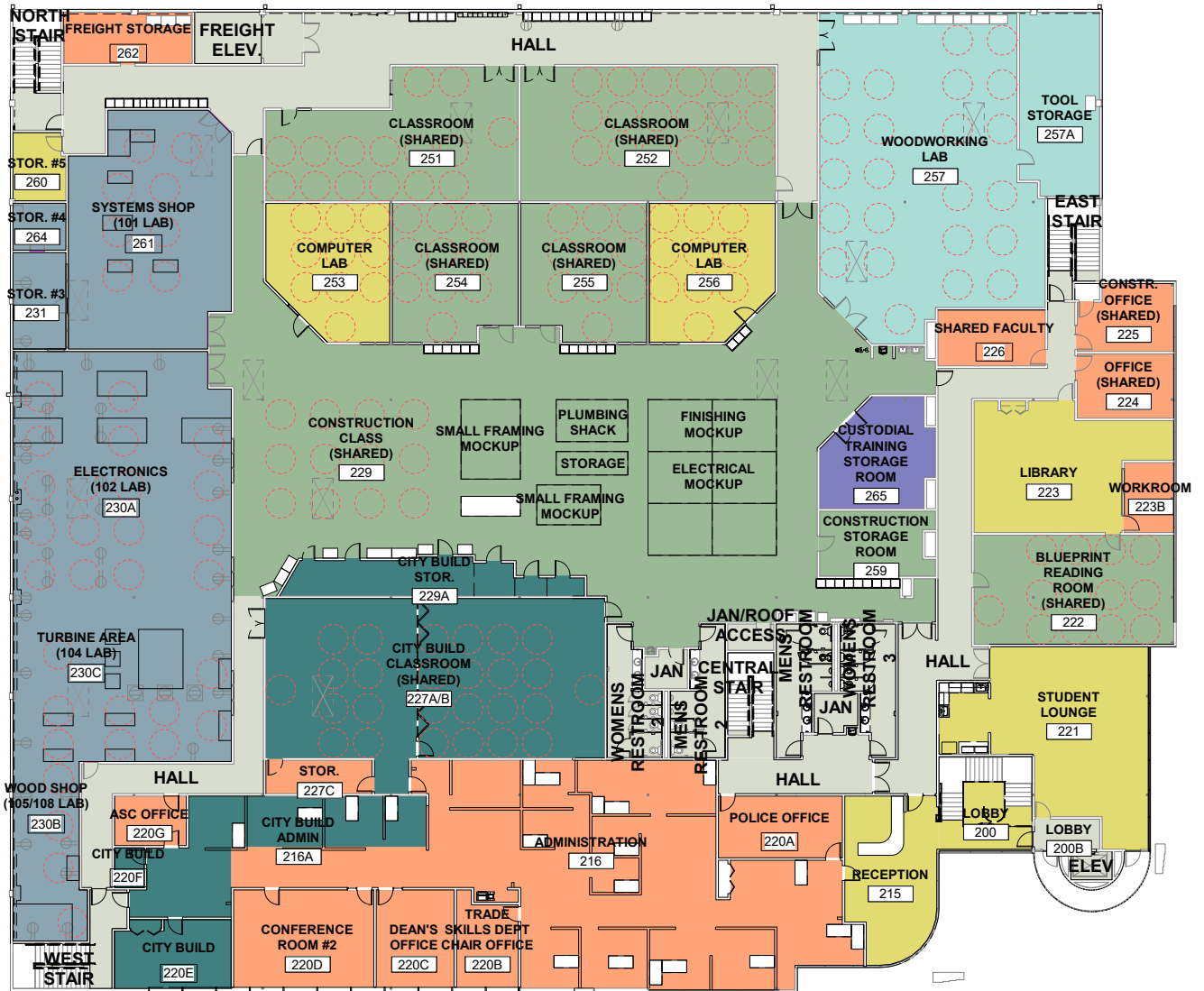
<sup>1</sup> General: refers to shared space without specific designated programming.



SOURCE: Gehland Partners Architects, 2021.

FIGURE 3

## Ground Floor Proposed Configuration in the Interim Phase



SOURCE: Gehland Partners Architects, 2021.

FIGURE 4



## Second Floor Proposed Configuration in the Interim Phase

## ***Permanent Space Configuration***

**Table 5, Proposed Square Footage Per Department (Permanent)**, presents a preliminary square footage estimate of long-term configuration of the space at Evans Center, once construction activities have been completed. After the completion of the retrofitting and renovation activities and the removal of the temporary structures, Evans Center would have 13 total classrooms, similar to existing conditions. However, the ground floor would have 4 classrooms and the second floor would have 9 classrooms.

Configuration of the ground floor would generally remain unchanged from the interim configuration with few exceptions:

- As shown on **Figure 5, Ground Floor Proposed Configuration in the Permanent Phase**, the motorcycle workshop would be provided inside the building near the Automotive lifts workshop. The outdoor maintenance at the southwest corner of the building would be fully allocated to the AMT Program.
- The HVAC workshop would replace one of the classrooms on the east side of the building.
- The lobby area on the southeast corner of the building would be improved and expanded to include a community conference room.
- The classroom at the southeast corner allocated to the automotive department during the interim would be a shared classroom under the permanent configuration.
- The temporary sprung and modular structures located at the front yard along Evans Avenue would be removed.
- As shown on **Figure 5**, the approximately 13 parking spaces in the north maintenance yard would be designated for the automotive department.
- On the second floor, shared classroom space would replace portions of the reception and administrative uses. Administration office for the AMT Program would also be located on this floor (See **Figure 6, Second Floor Proposed Configuration in the Permanent Phase**). A portion of the space allocated for the AMT Program under the interim phase would be designated as a blueprint reading room and maker space and storage under the permanent phase.

**Table 5  
Proposed Square Footage Per Department (Permanent)**

Department	Level	Total Area (square feet)
Administration	Ground floor	620
Administration	Second floor	3,132
<b>Administration Total</b>		<b>3,752</b>
AMT Program	Ground floor	9,330
AMT Program	Second floor	4,876
<b>AMT Program Total</b>		<b>14,206</b>
Automotive	Ground floor	25,269
CityBuild Academy	Second floor	3,284
Construction	Second floor	9,795
Custodial	Second floor	1,207
General <sup>1</sup>	Ground floor	1,792
General <sup>1</sup>	Second floor	5,071
<b>General Total</b>		<b>6,863</b>
HVAC	Ground floor	489
Motorcycle	Ground floor	1,279
Welding	Ground floor	744
Wood	Second floor	3,225
<b>Grand Total</b>		<b>70,113</b>

Source: Gelfand Partners Architects, 2020.

Note: Square footages presented above are based on preliminary site plans prepared in 2020. Final square footage of the different uses may be slightly different.

<sup>1</sup> General: refers to shared space without specific designated programming.

### **Other Improvements**

Other planned improvements to the site include various flatwork improvements, air conditioning, and concrete paving. In addition, the proposed project would upgrade the electrical and plumbing of the existing building.

### **Operations**

During the interim and permanent phases, existing programs would continue to be provided at Evans Center. Classrooms and workshops of the AMT Program would be provided at the center during both phases as well. However, operations at the AMT maintenance yard would not occur during the interim phase. During the permanent phase, the AMT Program would operate similar aircraft equipment as those used at SFO with the exception of the radial engine, which would be replaced by a Cessna piston engine. The AMT Program would not increase the number of hours of operations of these engines. **Appendix A**

includes an inventory of the equipment used in the AMT Program that would be operated at the Evans Center. In addition, workshop operations and aircraft maintenance activities under this program would remain unchanged and would use the same accessories and products used at the SFO. The proposed project would not directly result in an increase in the number of students at any of the programs or departments. Future student growth at the programs offered at Evans Center, including the AMT Program, is estimated to be within the College's forecasted growth of the CCSF Updated Facilities Master Plan.<sup>7</sup>

### ***Access, Freight Loading, and Bicycle Parking***

Vehicular and pedestrian access to the site would remain unchanged. Vehicular access would be maintained to the front yard with three ADA parking spaces accessed from Mendell Street. Access to the north maintenance yard would also be maintained from the two curb cuts on each of Mendell and Newhall Streets. Pedestrian access would also remain through Mendell Street from the southeast and northeast corners of the building. Loading trucks would continue to access the site from the gated entrance along Newhall Street.

### ***Project Construction***

The proposed construction activities would take place over an 18-month period beginning in spring 2022 and would include demolition, earthwork, minor grading, asphalt pavement around the existing building. Renovation activities would require limited excavation around the existing building to seismically retrofit the foundations including the installation of a shear wall along the eastern façade of the building. Maximum depth of excavation would be approximately 5 feet with total excavated soil to be approximately 260 cubic yards that would be used as a backfill onsite. Excavation activities to seismically retrofit the building would result in the removal of approximately 10 trees. At the completion of the construction activities, removed trees would be replaced on a one-to-one ratio.

### **Project Approvals**

As a public agency principally responsible for approving or carrying out the proposed project, the CCSF District is the Lead Agency under CEQA. The CCSF District Board of Trustees would be responsible for reviewing and adopting the environmental document and approving the proposed project.

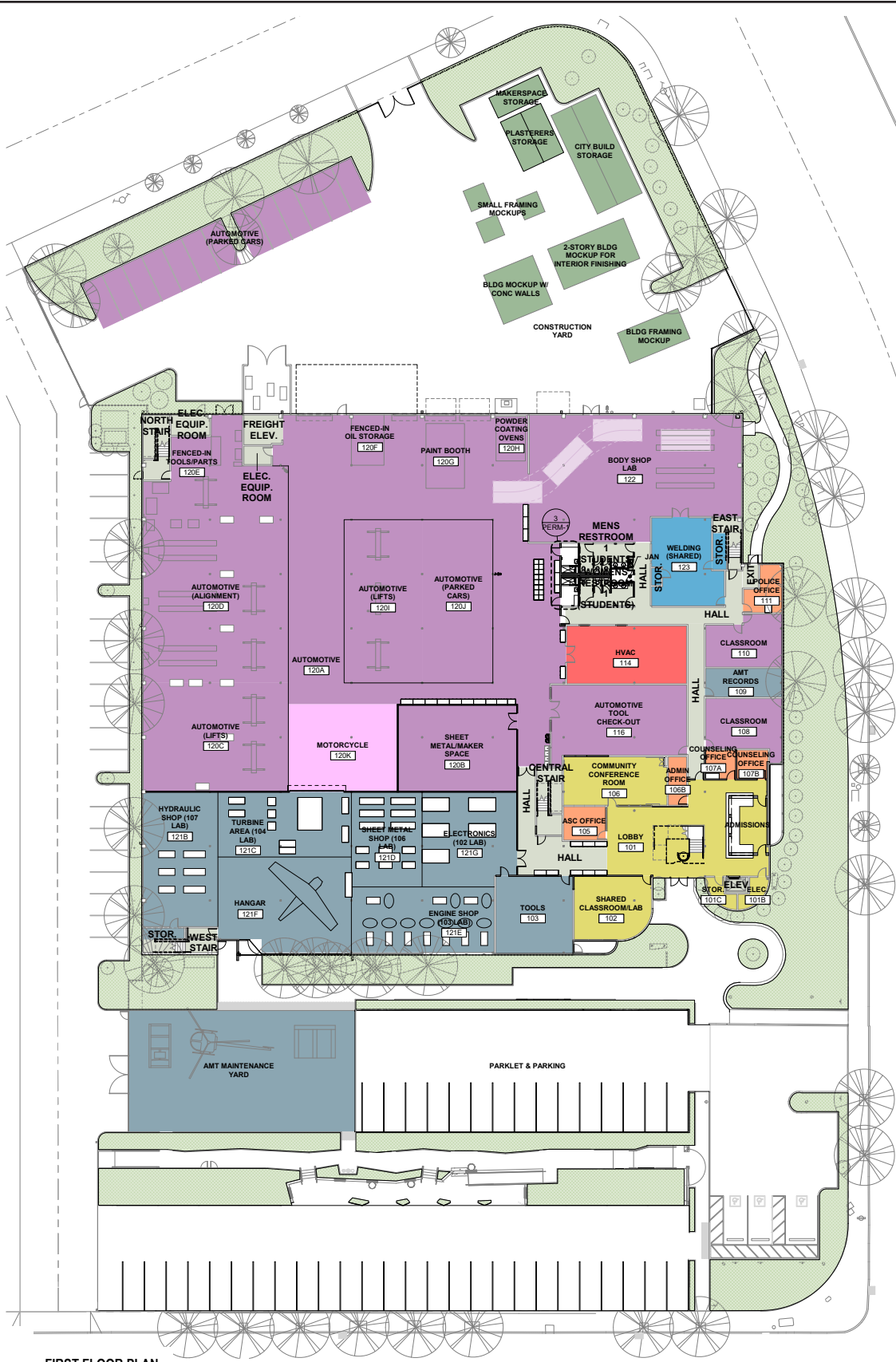
The following additional agencies would be involved in discretionary approvals and permits required for various project components:

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<sup>7</sup> CCSF. 2021. Updated Facilities Master Plan EIR. June 24.



- The Division of State Architect (DSA) for review of project design and its compliance with the California Building Code (CBC);
- The Bay Area Air Quality Management District for any new stationary sources of air emissions; and
- The City and County of San Francisco, for approval of new and removed site trees; approval of any construction that would need to extend beyond normal hours (i.e., between 8 p.m. and 7 a.m.); and approval pursuant to Maher Ordinance.



1 FIRST FLOOR PLAN  
SCALE: 1" = 20'-0"

SOURCE: Gehland Partners Architects, 2021.

FIGURE 5

## Ground Floor Proposed Configuration in the Permanent Phase



### III. 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.

- |   |   |
|---|---|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry Resources |
| <input type="checkbox"/> Air Quality                        | <input checked="" type="checkbox"/> Biological Resources    |
| <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology and Soils                  | <input type="checkbox"/> Greenhouse Gas Emissions           |
| <input type="checkbox"/> Hazards and Hazardous Materials    | <input type="checkbox"/> Hydrology/Water Quality            |
| <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources                  |
| <input checked="" type="checkbox"/> Noise                   | <input type="checkbox"/> Population and Housing             |
| <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Wildfire                           |
| <input type="checkbox"/> Mandatory Findings of Significance |   |

All items on the Initial Study Checklist that have been checked “Less Than Significant Impact,” or “No Impact” indicate that, upon evaluation, the District has determined that the proposed project could not have a significant adverse environmental effect relating to that issue. For items that have been checked “Less than Significant with Mitigation Incorporated,” the District has determined that the proposed project would not have a significant adverse environmental effect with implementation of mitigation measures identified for this issue in this document. A discussion is included for most issues checked “Less than Significant with Mitigation Incorporated,” “Less than Significant Impact,” or “No Impact.” For each checklist item, the evaluation has considered the impacts of the project both individually and cumulatively.

#### IV. DETERMINATION

On the basis of the initial evaluation that follows:

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

I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made that would avoid or reduce any potential significant effects to a less than significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.

- I find that the proposed project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

\_\_\_\_\_  
Name  
*Job title*

\_\_\_\_\_  
Date

## **V. EVALUATION OF ENVIRONMENTAL IMPACTS**

During the completion of the environmental evaluation, the District relied on the following categories of impacts, noted as column headings in the IS checklist. All impact determinations are explained and supported by the information sources cited.

- A) “Potentially Significant Impact” is appropriate if there is substantial evidence that the project’s effect may be significant. If there are one or more “Potentially Significant Impacts” for which effective mitigation may not be possible, a Project EIR will be prepared.
- B) “Less Than Significant With Mitigation Incorporated” applies where the incorporation of project-specific mitigation would reduce an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” All mitigation measures must be described, including a brief explanation of how the measures would reduce the effect to a less than significant level.
- C) “Less Than Significant Impact” applies where the project would not result in a significant effect (i.e., the project impact would be less than significant without the need to incorporate mitigation).
- D) “No Impact” applies where the project would not result in any impact in the category or the category does not apply. This may be because the impact category does not apply to the proposed project (for instance, the project site is not within a surface fault rupture hazard zone), or because of other project-specific factors.

## Impact Questions and Responses

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>1. AESTHETICS</b> – Except as provided in Public Resources Code section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### *Environmental Setting*

As shown on **Figure 2**, the project site occupies the southeastern block bound by Evans Avenue, Newhall Street, and Mendell Street in the Bayview Hunters Point neighborhood of San Francisco.

The project site is generally flat and occupied by a two-story building, constructed in 1984. The remaining portion of the project site is mostly paved with the exception of landscaped areas surrounding the existing building. In 2020, the College installed sprung and modular structures to serve as flexible offices and classroom spaces in the paved area fronting the existing building along Evans Avenue.

Surrounding uses are mostly one to two-story commercial/office spaces and warehouses. The San Francisco Fire Department Station 49 is located in the southwest corner of Evans Avenue and Mendell Street.

## ***Discussion of Potential Project Impacts***

- a) **The proposed project 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 (*No Impact*).**

A scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. The majority of proposed project renovation activities would occur indoor with limited outdoor construction activities that include improvements to the building façade and retrofitting of the building foundations. The sprung and modular structures located in the parking lot along Evans Center would be removed within a maximum of three years after completion of the renovation activities. All proposed improvements would be located within the existing footprints of the project site and the proposed project would not block or degrade important scenic vistas, resources, or visual landscape elements. Therefore, there would be no impact.

- b) **The proposed project would not damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (*No Impact*).**

The project site is not located on or near a state scenic highway per the Department of Transportation's online California Scenic Highway Mapping System. Therefore, the proposed project would not result in an adverse effect on a scenic vista, nor would it damage scenic resources within a state scenic highway. No rock outcroppings or other natural unique scenic resources or features, other than trees, are located within the project site. Furthermore, no historic buildings exist on the project site. As a result, there would be no impact.

- c) **The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings (*Less than Significant Impact*).**

The majority of proposed project renovation activities would occur indoor with limited outdoor construction activities that include improvements to the building façade and retrofitting of the building foundations. The sprung structures and modular located in the parking lot along Evans Center would be removed within a maximum of three years after completion of the renovation activities. All proposed improvements would be located within the existing footprints of the project site. As discussed in **Section V.3, Biological Resources**, of the 22 street trees present at the project site, 8 trees meet the significant-trees criteria of the San Francisco Department of Public Works. Excavation activities along the building facades would remove approximately 10 trees. However, none of the trees that would be removed is a significant tree. At the completion of the construction activities, the trees would be replaced at a minimum on one-to-one ratio. In addition, the proposed project would include landscaping, and site furnishing which would



maintain the aesthetic characteristics of the site. Because the proposed renovation activities and relocation of the AMT Program would be completed within the existing footprint of the project site and would not be highly visible from surrounding areas, the change in the physical characteristics of the site would not be readily apparent to the viewers at public locations. Therefore, the project would have a less-than-significant impact on the existing visual character or quality of the site and surroundings.

**d) The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (*Less than Significant Impact*).**

Existing sources of light at Evans Center include inside and outside lighting of the existing building, lighting of pedestrian paths, and parking lighting. Proposed improvements would include installation of new outdoor lighting and indoor upgrade to existing lighting. New lighting would meet the energy conservation requirements of the Green Building Code for energy conservation. Also, in compliance with the CCSF Sustainability Plan, 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, project impacts associated with obtrusive light or glare would be less than significant.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>2. AGRICULTURE AND FORESTRY RESOURCES –</b> Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Evans Center is 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. The proposed project 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”. 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 and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre”. The project site does not contain forest land or timberland and is not zoned for such uses. The proposed project 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.

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
3. <b>AIR QUALITY</b> – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

#### San Francisco Bay Area Air Basin

##### San Francisco Bay Area Air Basin Characteristics

The City of San Francisco is located within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB encompasses 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.<sup>8</sup>

##### Climate

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits resulting in a western coast gap

<sup>8</sup> Bay Area Air Quality Management District. 2017. *CEQA Guidelines*. Available online at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed April 7, 2021.

(Golden Gate) and an eastern coast gap (Carquinez Strait), which allow air to flow in and out of the SFBAAB and the Central Valley.

The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high-pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold-water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

In the winter, the Pacific high-pressure cell weakens and shifts southward resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential.

### *High Pressure Cell*

During the summer, the large-scale meteorological condition that dominates the West Coast is a semi-permanent high-pressure cell centered over the northeastern Pacific Ocean. This high-pressure cell keeps storms from affecting the California coast. Hence, the SFBAAB experiences little precipitation in the summer months. Winds tend to blow on shore out of the north/northwest.

The steady northwesterly flow induces upwelling of cold water from below. This upwelling produces a band of cold water off the California coast. When air approaches the California coast, already cool and moisture-laden from its long journey over the Pacific, it is further cooled as it crosses this bank of cold water. This cooling often produces condensation resulting in a high incidence of fog and stratus clouds along the Northern California coast in the summer.

Generally, in the winter, the Pacific high weakens and shifts southward, winds tend to flow offshore, upwelling ceases and storms occur. During the winter rainy periods, inversions are weak or nonexistent, winds are usually moderate and air pollution potential is low. The Pacific high does periodically become dominant, bringing strong inversions, light winds and high pollution potential.

### *Topography*

The topography of the SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys and bays. This complex terrain, especially the higher elevations, distorts the normal wind flow patterns in the SFBAAB. The greatest distortion occurs when low-level inversions are present and the

air beneath the inversion flow independently of air above the inversion, a condition that is common in the summer time.

The only major break in California's Coast Range occurs in the SFBAAB. Here the Coast Range splits into western and eastern ranges. Between the two ranges lies the San Francisco Bay. The gap in the western coast range gap (Golden Gate) and the eastern coast range gap (Carquinez Strait) allow air to pass into and out of the SFBAAB and the Central Valley.

### ***Wind Patterns***

During the summer, winds flowing from the northwest are drawn inland through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more directly from the west as they stream through the Golden Gate. This channeling of wind through the Golden Gate produces a jet that sweeps eastward and splits off to the northwest toward Richmond and to the southwest toward San Jose when it meets the East Bay hills.

In the winter, the SFBAAB frequently experiences stormy conditions with moderate to strong winds, as well as periods of stagnation with very light winds. Winter stagnation episodes are characterized by drainage flows in coastal valleys. Drainage is a reversal of the usual daytime air-flow patterns; air moves from the Central Valley towards the coast and back down toward the Bay from the smaller valleys within the SFBAAB.

### ***Temperature***

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient (differential) in temperature is often created between the coast and the Central Valley, and small-scale local gradients are often produced along the shorelines of the ocean and bays. The temperature gradient near the ocean is also exaggerated, especially in summer, because of the upwelling of cold ocean bottom water along the coast. On summer afternoons the temperatures at the coast can be 35 degrees Fahrenheit (°F) cooler than temperatures 15 to 20 miles inland. At night, this contrast usually decreases to less than 10°F.

In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large.

### ***Precipitation***

The SFBAAB is characterized by moderately wet winters and dry summers. Winter rains account for about 75% of the average annual rainfall. The amount of annual precipitation can vary greatly from one part of the SFBAAB to another even within short distances. In general, total annual rainfall can reach 40 inches in the mountains, but it is often less than 16 inches in sheltered valleys.

During rainy periods, ventilation (rapid horizontal movement of air and injection of cleaner air) and vertical mixing are usually high, and pollution levels tend to be low. However, frequent dry periods do occur during the winter when mixing and ventilation are low and pollutant levels build up.

### ***Air Pollutants of Concern***

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons such as children, pregnant women, and the elderly, from illness or discomfort. Criteria air pollutants include ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>), particulate matter ten microns or less in diameter (PM<sub>10</sub>), and lead (Pb). Note that Reactive Organic Gases (ROGs), which are also known as reactive organic compounds (ROCs) or volatile organic compounds (VOCs), and nitrogen oxide (NO<sub>x</sub>) are not classified as criteria pollutants. However, ROGs and NO<sub>x</sub> are widely emitted from land development projects and participate in photochemical reactions in the atmosphere to form O<sub>3</sub>; therefore, NO<sub>x</sub> and ROGs are relevant to the proposed project and are of concern in the air basin and are listed below along with the criteria pollutants.<sup>9</sup>

- **Ozone (O<sub>3</sub>).** O<sub>3</sub> is a gas that is formed when NO<sub>x</sub> and ROGs, both byproducts of internal combustion engine exhaust and other sources, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when the combination of direct sunlight, light wind, and warm temperature conditions create conditions favorable to the formation of this pollutant.
- **Reactive Organic Gases (ROG).** ROGs are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of these

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<sup>9</sup> CAPCOA. Health Effects. Available: <http://www.capcoa.org/health-effects/>, accessed April 7, 2021.

hydrocarbons. Adverse effects on human health are not caused directly by ROG<sub>s</sub>, but rather by reactions of ROG<sub>s</sub> to form secondary air pollutants, including ozone.

- **Nitrogen Dioxide (NO<sub>2</sub>) and Nitrogen Oxides (NO<sub>x</sub>).** Fuel combustion produces nitrogen which combines with oxygen to produce nitric oxide (NO). Further oxidation of NO results in the formation of NO<sub>2</sub>, which is a criteria pollutant. NO<sub>2</sub> is a reddish-brown, highly reactive gas which acts as an acute irritant and, in equal concentrations, is more injurious than NO. NO and NO<sub>2</sub> are referred to together as oxides of nitrogen (NO<sub>x</sub>). As noted above, NO<sub>x</sub> is involved in photochemical reactions that produce ozone.
- **Carbon Monoxide (CO).** CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines and motor vehicles operating at slow speeds, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.
- **Sulfur dioxide (SO<sub>2</sub>).** SO<sub>2</sub> is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO<sub>4</sub>).
- **Respirable Particulate Matter (PM<sub>10</sub>).** PM<sub>10</sub> consists of extremely small, suspended particles or droplets 10 micrometers or smaller in diameter. Some sources of PM<sub>10</sub>, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM<sub>10</sub> is caused by road dust, diesel soot, and combustion products, abrasion of tires and brakes, and construction activities.
- **Fine Particulate Matter (PM<sub>2.5</sub>).** PM<sub>2.5</sub> refers to particulate matter that is 2.5 micrometers or smaller in size. The sources of PM<sub>2.5</sub> include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as sulfur dioxide, NO<sub>x</sub>, and VOCs are transformed in the air by chemical reactions.
- **Lead (Pb).** Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles such as racecars that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.



## Ambient Air Quality

### Criteria Air Pollutant Monitoring Data

Ambient air quality in San Francisco can be characterized by ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends and projections in the vicinity of San Francisco are documented by measurements made by the Bay Area Air Quality Management District (BAAQMD), the air pollution regulatory agency in the SFBAAB regions. BAAQMD maintains air quality monitoring stations within SFBAAB and processes ambient air quality measurements.

The purpose of the monitoring station is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). Ozone and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) are pollutants of particular concern in the SFBAAB. The monitoring station located closest to the proposed project site and most representative of air quality near the project site is the San Francisco – Arkansas Street, located approximately 1.8 miles north of the project site. Ambient air emission concentrations vary due to localized variations in emissions sources and climate and should be considered “generally” representative of ambient concentrations in the area. The San Francisco - Arkansas Street station monitors O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and NO<sub>2</sub>, see **Table 6, San Francisco -Arkansas Street Air Monitoring Station Ambient Pollutant Concentrations.**

**Table 6**  
**San Francisco – Arkansas Street Air Monitoring Station Ambient Pollutant Concentrations**

Pollutant	Standards <sup>1</sup>	Year		
		2017	2018	2019
<b>OZONE (O<sub>3</sub>)</b>				
Maximum 1-hour concentration monitored (ppm)		0.087	0.065	0.091
Maximum 8-hour concentration monitored (ppm)		0.054	0.049	0.073
Number of days exceeding state 1-hour standard	0.09 ppm	0	0	0
Number of days exceeding federal/state 8-hour standard	0.070 ppm	0	0	1
<b>NITROGEN DIOXIDE (NO<sub>2</sub>)</b>				
Maximum 1-hour concentration monitored (ppm)		0.073	0.068	0.061
Annual average concentration monitored (ppm)		0.011	0.011	0.009
Number of days exceeding state 1-hour standard	0.18 ppm	0	0	0
<b>FINE PARTICULATE MATTER (PM<sub>2.5</sub>)</b>				
Maximum 24-hour concentration monitored (µg/m <sup>3</sup> )		49.9	177.4	25.4
Annual average concentration monitored (µg/m <sup>3</sup> )		9.7	11.6	7.6
Number of samples exceeding federal standard	35 µg/m <sup>3</sup>	7	14	0
<b>RESPIRABLE PARTICULATE MATTER (PM<sub>10</sub>)</b>				
Maximum 24-hour concentration monitored (µg/m <sup>3</sup> )		77.0	43.0	42.0

Pollutant	Standards <sup>1</sup>	Year		
		2017	2018	2019
Annual average concentration monitored ( $\mu\text{g}/\text{m}^3$ )		22.1	N/A	14.8
Number of samples exceeding state standard	50 $\mu\text{g}/\text{m}^3$	2	0	0

Source: California Air Resources Board, "Air Quality Data Statistics," <http://www.arb.ca.gov/adam/>, accessed March 16, 2021.

NA = not available

<sup>1</sup> Parts by volume per million of air (ppm), micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ), or annual arithmetic mean (aam).

<sup>2</sup> The 8-hour federal O<sub>3</sub> standard was revised from 0.075 ppm to 0.070 ppm in 2015. The statistics shown are based on the 2015 standard of 0.070 ppm.

The attainment status for the SFBAAB region is included in **Table 7, Attainment Status of the San Francisco Bay Area Air Basin**. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The SFBAAB region is designated as a nonattainment area for federal ozone and for state ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> standards.

**Table 7**  
**Attainment Status of the San Francisco Bay Area Air Basin**

Pollutant	State	Federal
Ozone (O <sub>3</sub> )	Non-Attainment	Non-attainment
Particulate Matter (PM <sub>10</sub> )	Non-Attainment	Unclassified
Particulate Matter (PM <sub>2.5</sub> )	Non-Attainment	Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment
Lead	Attainment	Attainment

Source: BAAQMD. 2017. *Air Quality Standards and Attainment Status*. Available online at: <http://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status#ten>, accessed March 16, 2021.

### Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold, therefore health impacts are assumed to occur at any emissions level, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes, such as petroleum refining and chrome-plating operations; commercial operations, such as gasoline stations and dry cleaners; and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.<sup>10</sup>

To date, CARB has designated 244 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds.<sup>11</sup>

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances, including 40 cancer-causing substances. Diesel exhaust is a complex mixture of particulates and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

In addition, CARB identified lead compounds as a TAC. Lead exposure can occur through multiple pathways including inhalation and ingestion. Sources of environmental contamination include mining smelting, manufacturing and recycling activities, as well as the continued use of leaded paint and leaded aviation fuel. Children are particularly vulnerable to the toxic effects of lead and can suffer profound and

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<sup>10</sup> Bay Area Air Quality Management District. 2017. *CEQA Guidelines*. Available online at: [https://www.baaqmd.gov/-/media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](https://www.baaqmd.gov/-/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed April 7, 2021.

<sup>11</sup> California Air Resources Board. 2021. *CARB Identified Toxic Air Contaminants*. Available online at: <https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>, accessed April 7, 2021.

permanent adverse health effects particularly affecting the development of the brain and nervous system. Lead exposure in adults can cause high blood pressure and kidney damage.<sup>12</sup>

### ***Sensitive Receptors***

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.<sup>13</sup>

Residential areas are considered to be sensitive receptors to air pollutants because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to health effects of air pollution due to their immature immune systems and developing organs.<sup>14</sup> As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation.

## **Regulatory Framework**

### ***Federal***

#### **Clean Air Act**

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the U.S. Environmental Protection Agency (EPA) to establish NAAQS, with requires retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide is an air pollutant covered by the CAA; however, no NAAQS have been established for carbon dioxide.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to

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<sup>12</sup> World Health Organization. 2019. *Lead poisoning and health*. Available online at: <https://www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health>, accessed April 7, 2021.

<sup>13</sup> California Air Resources Board. 2021. *Sensitive Receptor Assessment*. Available online at: <https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment>, accessed April 7, 2021.

<sup>14</sup> Office of Environmental Health Hazard Assessment and The American Lung Association of California. 2003. *Air Pollution and Children’s Health*. Available online at: <https://oehha.ca.gov/media/downloads/faqs/kidsair4-02.pdf>, accessed April 7, 2021.

further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The EPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designations. **Table 3** lists the federal attainment status of the SCAB for the criteria pollutants.

### **National Emissions Standards for Hazardous Air Pollutants Program**

Under federal law, 187 substances are currently listed as hazardous air pollutants (HAPs). Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) program. The EPA is establishing regulatory schemes for specific source categories and requires implementation of the Maximum Achievable Control Technologies (MACT) for major sources of HAPs in each source category. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and is aimed at HAPs that are a problem in California. The state has formally identified 244 substances as TACs and is adopting appropriate control measures for each. Once adopted at the state level, each air district will be required to adopt a measure that is equally or more stringent.

### *National Ambient Air Quality Standards*

The federal CAA required the U.S. EPA to establish NAAQS. The NAAQS set primary standards and secondary standards for specific air pollutants. Primary standards define limits for the protection of public health, which include sensitive populations such as asthmatics, children, and the elderly. Secondary Standards define limits to protect public welfare to include protection against decreased visibility, damage to animals, crops, vegetation, and buildings. A summary of the federal ambient air quality standards is shown in **Table 8, National Ambient Air Quality Standards**.

**Table 8**  
**National Ambient Air Quality Standards**

Pollutant		Primary/Secondary	Averaging Time	Level
Carbon Monoxide		Primary	8 hours	9 ppm
			1 hour	35 ppm
Lead		Primary and secondary	Rolling 3-month average	0.15 µg/m <sup>3</sup>
Nitrogen dioxide		Primary	1 hour	100 ppb
		Primary and secondary	Annual	0.053 ppm
Ozone		Primary and secondary	8 hours	0.070 ppm
Particulate Matter	PM2.5	Primary	Annual	12 µg/m <sup>3</sup>
		Secondary	Annual	15 µg/m <sup>3</sup>
		Primary and secondary	24 hours	35 µg/m <sup>3</sup>
	PM10	Primary and secondary	24 hours	150 µg/m <sup>3</sup>
Sulfur dioxide		Primary	1 hour	75 ppb
		Secondary	3 hours	0.5 ppm

Source:

California Air Resources Board. May 2016. *Ambient Air Quality Standards*. Available online at: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, accessed March 16, 2021.

## State

### California Clean Air Act of 1988

The California CAA of 1988 (CCAA) allows states to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (Cal EPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. The CCAA, amended in 1992, requires all air quality management districts (AQMDs) in the state to achieve and maintain the CAAQS. The CAAQS are generally stricter than national standards for the same pollutants. CARB has additionally established state standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles, for which there are no national standards. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

### California Ambient Air Quality Standards

The federal CAA permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants, such as particulate matter and ozone, which are more protective of public health than respective federal standards. California has also set standards for some pollutants that are not addressed by federal standards. The state standards for ambient air quality are summarized in **Table 9, California Ambient Air Quality Standards**.

**Table 9**  
**California Ambient Air Quality Standards**

Pollutant		Averaging Time	Level
Carbon monoxide		8 hours	9 ppm
		1 hour	20 ppm
Lead		30-day average	1.5 µg/m <sup>3</sup>
Nitrogen dioxide		1 hour	0.180 ppm
		Annual	0.030 ppm
Ozone		8 hours	0.070 ppm
		1 hour	0.09 ppm
Particulate matter	PM2.5	Annual	12 µg/m <sup>3</sup>
	PM10	24 hours	50 µg/m <sup>3</sup>
		Annual	20 µg/m <sup>3</sup>
Sulfur dioxide		1 hour	0.25 ppm
		24 hours	0.04 ppm
Sulfates		24 hours	25 µg/m <sup>3</sup>
Hydrogen sulfide		1 hour	0.03 ppm
Vinyl chloride		24 hours	0.01 ppm

Source:

California Air Resources Board. May 2016. *Ambient Air Quality Standards*. Available online at: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, accessed March 16, 2021.

### California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as a SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the EPA for approval and publication in the Federal Register. The 2017 *Clean Air Plan, Spare the Air, Cool the Climate* is the SIP for SFBAAB. The 2017 Clean Air Plan is a regional blueprint for achieving air quality standards and healthful air in the SFBAAB. The 2017 Clean Air Plan focuses on two closely-related goals: protecting public health and protecting the climate. Consistent with the GHG reduction targets adopted by the state of California, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050. The 2017 plan also addressed a multi-pollutant strategy to simultaneously reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as GHG's. The control strategy focuses on the following priorities: reduce emissions of criteria air pollutants and TACs from all key sectors; reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases; decrease demand for fossil fuels (gasoline, diesel and natural gas); and decarbonize the energy system.<sup>15</sup>

#### **California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588)**

The California Air Toxics Program is supplemented by the Air Toxics "Hot Spots" program, which became law (AB 2588, Statutes of 1987) in 1987. In 1992, the AB 2588 program was amended by Senate Bill 1731 to require facilities that pose a significant health risk to the community to perform a risk reduction audit and reduce their emissions through implementation of a risk management plan. Under this program, which is required under the Air Toxics "Hot Spots" Information and Assessment Act (Section 44363 of the California Health and Safety Code), facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks when present.

Typically, land development projects generate diesel emissions from construction vehicles during the construction phase, as well as some diesel emissions from small trucks during the operational phase. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances. Emissions from diesel engines currently include over 40 substances that are listed by EPA as hazardous air pollutants and by CARB as TACs. In 1997, CARB identified inorganic lead as a TAC. The primary basis for the identification was the health implications associated with neurodevelopmental impairment in children as well as increased blood pressure in adults and cancer.<sup>16</sup>

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<sup>15</sup> BAAQMD. 2017. *Clean Air Plan 2017*. Available online at: <https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a-proposed-final-cap-vol-1-pdf.pdf?la=en>, accessed April 7, 2021.

<sup>16</sup> Cal EPA and CARB. 2001. *Risk Management Guidelines for New, Modified, and Existing Sources of Lead*. Available online at: <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/lead/mainandappend.pdf?ga=2.97130777.765928880.1615842085-992278915.1615253163>, accessed April 7, 2021.



In March 2015, the California Office of Environmental Health Hazard Assessment (OEHHA) adopted “The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments” in accordance with the Health and Safety Code, Section 44300. The Final Guidance Manual incorporates the scientific basis from three earlier developed Technical Support Documents to assess risk from exposure to facility emissions. The 2015 OEHHA Final Guidance has key changes including greater age sensitivity in particular for children, decreased exposure durations, and higher breathing rate profiles. Because cancer risk could be up to three times greater using this new guidance, it may result in greater mitigation requirements, more agency backlog, and increased difficulty in getting air permits.

The CARB provides a computer program, the Hot Spots Analysis and Reporting Program (HARP), to assist in a coherent and consistent preparation of a health risk assessment (HRA). HARP2, an update to HARP, was released in March 2015. HARP2 has a more refined risk characterization in HRA and CEQA documents and incorporates the 2015 OEHHA Final Guidance.

## ***Regional***

### **Bay Area Air Quality Management District**

BAAQMD is the primary agency responsible for assuring that the NAAQS and CAAQS are attained and maintained in the Bay Area. BAAQMD’s jurisdiction includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara counties, and the southern portions of Solano and Sonoma counties. The Air District’s responsibilities in improving air quality in the region include: preparing plans for attaining and maintaining air quality standards; adopting and enforcing rules and regulations; issuing permits for stationary sources of air pollutants; inspecting stationary sources and responding to citizen complaints; monitors air quality and meteorological conditions; awarding grants to reduce mobile emissions; implementing public outreach campaigns; and assisting local governments in addressing climate change.

The BAAQMD recommends that all proposed projects implement the following Basic Construction Mitigation Measures:<sup>17</sup>

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

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<sup>17</sup> Bay Area Air Quality Managements District. 2017. *CEQA Guidelines*. Available online at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed April 7, 2021.

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. 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.
6. Idling times shall be minimized either by shutting equipment off when not in use or 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 Regulation [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determine to be running in proper condition prior to operation.
8. 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 within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

### **BAAQMD Rules and Regulations**

Specific rules and regulations have been adopted by the BAAQMD that limit emissions that can be generated by various uses and/or activities. These rules regulate not only the emissions of the state and federal criteria pollutants, but also the emissions of TACs. The rules are also subject to ongoing refinement by the BAAQMD.

In general, all stationary sources with air emissions are subject to the BAAQMD's rules governing their operational emissions. Some emission sources are further subject to regulation through the BAAQMD's permitting process. Through this permitting process, the BAAQMD also monitors the amount of emissions being generated by stationary sources and uses this information in developing the CAP. A few of the primary BAAQMD rules applicable to the proposed project include the following:

**Regulation 2, Rule 2 (New Source Review):** This rule implements the New Source Review provisions of the federal and California Clean Air Acts (including the federal non-attainment New Source Review.

Prevention of Significance Deterioration, and Minor New Source Review provisions) and the no-net-increase requirements of the California Health and Safety Code, among other requirements.

**Regulation 7 (Odorous Substances):** This Regulation places general limitation on odorous substances and specific emission limitation on certain odorous compounds. This regulation states that a person shall not discharge any odorous which remains odorous after dilution with odor-free air.

**Regulation 8, Rule 3 (Architectural Coatings):** This rule sets limits on the ROG content in architectural coatings sold, supplied, offered for sale, or manufactured within the BAAQMD's jurisdiction. The rule also includes time schedules that specify when more stringent ROG standards are to be enforced. The rule applies during the construction phase of a project. In addition, any periodic architectural coating maintenance operations are required to comply with this rule.

**Regulation 8, Rule 15 (Emulsified and Liquid Asphalts):** This rule sets limits on the ROG content in emulsified and liquid asphalt used for maintenance and paving operations. The rule includes specific ROG content requirements for various types of asphalt (e.g., emulsified asphalt, rapid-cure liquid asphalt, slow-cure liquid asphalt). This rule applies during the construction phase of a project. In addition, any future asphalt maintenance of a project's roads would be required to comply with the ROG standards set in Rule 15.

**Regulation 9, Rule 6 (Nitrogen Oxide Emission from Natural Gas-Fired Water Heaters):** This rule sets a limit on the NO<sub>x</sub> emissions from natural gas-fired water heaters. The rule applies to natural gas-fired water heaters manufactured after July 1, 1992, with a heat input rating of less than 75,000 BTU/hour. Water heaters subject to the rule must not emit more than 40 nanograms of NO<sub>x</sub> per joule of heat output.

**Regulation 9, Rule 7 (Nitrogen Oxide and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters):** This rule limits the NO<sub>x</sub> and CO emissions from industrial, institutional, and commercial boilers, steam generators, and process heaters. The rule applies to boilers with a heat input rating greater than 10 million BTU/hour fired exclusively with natural gas, liquefied petroleum gas, or a combination or boilers with a heat input rating greater than 1 million BTU/hour fired with other fuels.

**Regulation 9, Rule 8 (Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines):** This rule limits the NO<sub>x</sub> and CO emissions from stationary internal combustion engines. The rule applies to engines rated at greater than 50 brake horsepower, but it exempts emergency generators that would not run for more than 100 hours per year.

**Regulation 11, Rule 1 (Lead):** This rule limits the discharge of any emission of lead, or compound of lead, from any emission point in excess of 6.75 kilogram (kg) (15 lbs) per day.

### **BAAQMD CEQA Guidelines**

On June 2, 2010, the BAAQMD's Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act (CEQA). These thresholds were designed to establish the level at which the Air District believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on the Air District's website and included in the Air District's 2012 *CEQA Air Quality Guidelines*. The thresholds were challenged in court. Following litigation in the trial court, the court of appeal, and the California Supreme Court, all of the thresholds were upheld. However, in an opinion issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools, near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA.

In view of the Supreme Court's opinion, local agencies may rely on BAAQMD thresholds designed to reflect the impact of locating development near areas of toxic air contamination where such an analysis is required by CEQA or where the agency has determined that such an analysis would assist in making a decision about a project. However, these thresholds are not mandatory and agencies should apply them only after determining that they reflect an appropriate measure of a project's impacts.

The BAAQMD recently published a new version of the guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion.<sup>18</sup> The Air District is currently working to update any outdated information in the guidelines.

### ***Methodology***

The 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. Based on the results of monitoring and inventories of existing and projected air pollutant emissions prepared for the air basin as part of its planning process, the BAAQMD has developed numeric thresholds for annual mass emissions

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<sup>18</sup> BAAQMD. 2017. *CEQA Guidelines*. Available online at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf), accessed April 7, 2021.

and average daily emissions. The lead agency may use the thresholds to evaluate whether the emissions that would be added to the air basin by a proposed project would be substantial enough to result in an exceedance of an air quality standard or would contribute substantially to an existing air quality exceedance and would therefore have the potential to result in adverse health effects. If a project would result in emissions below the numeric thresholds provided by the BAAQMD, the project would not contribute substantially to an existing exceedance or cause an exceedance, and hence would not have the potential to result in adverse health effects. The numeric thresholds for air quality impact evaluation from the BAAQMD CEQA Air Quality Guidelines are presented below, see **Table 10, Bay Area Air Quality Management District Regional Significance Thresholds**. The BAAQMD has also established significance thresholds for the excess health risks posed to nearby sensitive receptors, see **Table 11, Health Risk Significance Thresholds**.

**Table 10**  
**Bay Area Air Quality Management District Regional Significance Thresholds**

<b>Pollutant</b>	<b>Construction-Related</b>	<b>Operational-Related</b>	
	<i>Average Daily Emissions (lbs/day)</i>	<i>Average Daily Emissions (lbs/day)</i>	<i>Maximum Annual Emissions (tpy)</i>
ROG	54	54	10
NOx	54	54	10
PM10	82 (exhaust)	82	15
PM2.5	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 (1-hour average)	
Fugitive Dust	Best Management Practices	None	

*Source: BAAQMD. 2017. CEQA Guidelines. Available online at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed April 7, 2021.*

**Table 11**  
**Health Risk Significance Thresholds**

Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence	Combined Sources (Cumulative from all sources within 1,000-foot zone of influences)
Excess Cancer Risk	>10 per one million	>100 per one million
Hazard Index	>1.0	>10.0
Incremental Annual PM2.5	>0.3 ug/m3	>0.8 ug/m3

Source: BAAQMD. 2017, CEQA Guidelines. Available online at: [https://www.baaqmd.gov/~/\\_media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](https://www.baaqmd.gov/~/_media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed April 7, 2021.

Air quality impacts were evaluated in accordance with the methodologies recommended by CARB and the BAAQMD. Project construction and redevelopment would utilize heavy-duty construction equipment that would emit DPM. However, the scope of construction would be minor, as earthmoving and use of heavy-duty construction equipment are expected to be minor based on the nature of the proposed project. Therefore, project construction were compared to the BAAQMD’s Screening Level Sizes for junior colleges to determine project significance.

Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model version 2016.3.2 (CalEEMod). 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. Average daily emissions from project operation from the area, energy, waste, water, and mobile sources were calculated with CalEEMod, including both on-site and off-site activities. During operation, the proposed project would also emit criteria air pollutant emissions from jet engines idling as part of the AMT program. Emissions from the jet engines were estimated based on the U.S. EPA’s *Air Pollutant Emission Factors for Military and Civil Aircraft*.<sup>19</sup> The jet engine emissions were added to the operational emissions calculated with CalEEMod and compared to the BAAQMD operational threshold to determine project significance.

Pollutant concentrations from the jet engines were estimated using the U.S. EPA AERMOD dispersion model and human health risks were estimated using the Hotspots Analysis and Reporting Program (HARP2) Risk Assessment Standalone Tool (RAST).

<sup>19</sup> U.S. Environmental Protection Agency. 1978. *Air Pollutant Emission Factors for Military and Civil Aircraft*. Available online at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/91010NB6.PDF?Dockey=91010NB6.PDF>, accessed April 6, 2021, accessed April 7, 2021.

In addition to examining potential air quality impact of the proposed project on the sensitive receptors near the project site, in compliance with CEQA section 21151.8, this analysis evaluates the potential impacts on the students and staff at the project site as a result of the relocation of instruction and workshop activities of the AMT Program to Evans Center.

### ***Discussion of Potential Project Impacts***

- a) Implementation of the proposed project would not conflict with or obstruct implementation of any applicable air quality plan (*Less Than Significant Impact*).**

The most recent clean air plan 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 San Francisco 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 Clean Air 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 CEQA Air Quality Guidelines include thresholds of significance that are used 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. The proposed project would not conflict with the latest Clean Air Plan policies since emissions would not exceed BAAQMD thresholds as demonstrated under **Impact-2** below. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan and no mitigation is necessary.

- b) Implementation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (*Less Than Significant Impact*).**

A project may have a significant impact if project implementation would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under NAAQS or CAAQS. In order to determine project significance, emissions were compared to the BAAQMD construction screening thresholds and operational air quality thresholds.

## **Regional Construction Significance Analysis**

Construction associated with the proposed project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur.

The BAAQMD has developed screening criteria to provide project applicants and lead agencies with a conservative indication of whether the proposed project could result in a potentially significant air quality impact. If all the screening criteria are met by the proposed project, then a detailed air quality assessment of the project's air pollutant emissions is not necessary.

The proposed construction activities would take place over an 18-month period beginning in spring 2022 and would include demolition, earthwork, minor grading, asphalt pavement around the existing building, and the construction of temporary buildings. Specifically, construction will involve the grading and removal of approximately 260 cubic yards of soil and the development of 11,780 square feet of temporary buildings on the southern portion of the project site. As part of a previous environmental review, the proposed project has already constructed the new buildings on the southern portion of the project site. However, in order to prepare a conservative analysis, this analysis accounts for the construction of the buildings to determine if the project would meet the screening criteria threshold.

According to the BAAQMD's *CEQA Guidelines*, the construction related screening size for a Junior College (2 years) is 277,000 square feet or 3,012 students. Therefore, any construction that is less than these screening sizes is assumed to be less than significant and would not require preparation of a quantified air quality assessment. The proposed building construction on the project site is approximately 4% of the screening threshold and in 2017, CCSF's Airport Center held approximately 74 full-time students.<sup>20, 21</sup> Therefore, the proposed new construction and the AMT Program students located from the Airport Center to the Evans Center is significantly lower than the BAAQMD's screening size threshold for a junior college land use. Furthermore, construction of the proposed project would not involve any stationary sources or generators that would invalidate the use of the screening criteria. Therefore, the proposed project's construction would not result in a cumulatively significant impact for which the area is in nonattainment.

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<sup>20</sup> CCSF. 2021. Appendix D of the *City College of San Francisco Updated Facilities Master Plan Draft Environmental Impact Report*. Available online at: [https://files.ceqanet.opr.ca.gov/264475-3/attachment/D84tMGpcAkhoyR44sEvmzJjCmAwskQQdxsm4P1LcDZc2NnUT8urPmoeS6eLay4\\_H3QWtYV\\_Qfn3JD2mh0](https://files.ceqanet.opr.ca.gov/264475-3/attachment/D84tMGpcAkhoyR44sEvmzJjCmAwskQQdxsm4P1LcDZc2NnUT8urPmoeS6eLay4_H3QWtYV_Qfn3JD2mh0), accessed April 7, 2021.

<sup>21</sup> The Airport Center only offers classes for the AMT/Aeronautics Department. Therefore, it can be assumed that all Airport Center students would move to the Evans Center for the AMT program.



As such, construction impact of the proposed project related to emissions of criteria air pollutants would be less than significant.

**Regional Operational Significance Analysis**

Operational emissions under the proposed project would result from the operation of jet engines for the AMT Program; mobile sources associated with the trip modification of the students and staff of the AMT Program; and energy, water, and waste-source emissions generated from the building and temporary structures. The air pollutants emissions and calculations from the proposed project’s jet engines, building, temporary structures, and mobile source emissions are discussed below.

**Jet Engines**

As mentioned above, the AMT Program is a two-year program spanning four semesters, with classes only offered during the fall and spring semesters. The curriculum for the AMT Program includes the occasional start up and idling of jet engines. At SFO, the AMT Program operated eight jet engines (1 radial engine, 2 turbine engines, and 5 piston engines) throughout each semester. However, as noted in **Section II, Project Location and Description**, in 2021, the CCSF AMT department determined that a radial engine would not be needed in order to be in compliance with FAA certificate requirement. **Table 12, CCSF AMT Program Jet Engines**, provides a summary of the jet engines that are part of the AMT program and the estimated hours of operation per semester.

**Table 12  
CCSF AMT Program Jet Engines**

Engine Type	Model	Fuel Type	Number of Engines	Hours of Use per Semester
Turbine	Rolls-Royce/Allison 250 Series Turboshaft Engine Test Cell	Jet A	1	15
Turbine	PT6 Turboprop	Jet A	1	3
Piston	Cessna 150 Continental O-200	Avgas	2	15
Piston	Lycoming O-320	Avgas	1	10
Piston	Lycoming O-360	Avgas	1	10
Piston	Lycoming O-540	Avgas	1	10

Source: CCSF, 2021.  
Note: Avgas = Aviation Gas

Aircraft engine emissions produce CO<sub>2</sub> (70%), H<sub>2</sub>O (less than 30%), and less than 1% each of NO<sub>x</sub>, CO, SO<sub>x</sub>, hydrocarbons, particulate matter, and other trace compounds.<sup>22</sup> Greenhouse gas emission impacts related to the CO<sub>2</sub> emissions of the jet engines are discussed in **Section V.8, Greenhouse Gas Emissions**. This discussion focuses on the criteria air pollutants of concern in the BAAQMD. Under the curriculum of the AMT Program, students perform controlled testing of the unmounted aircraft engines in idling position. Therefore, NO<sub>x</sub> and particulate matter air pollutant emissions from the engines were calculated using emission factors for idling engines from the U.S. EPA's *Air Pollutant Emission Factors for Military and Civil Aircraft*.<sup>23</sup> The emissions from aircraft emissions are provided in **Table 13, Jet Engine Operational Emissions**.

**Table 13**  
**Jet Engine Operational Emissions**

Engine Type	Model	Number of Engines	Hours of Use per Semester	Hours of Use per Year per Engine Type <sup>1</sup>	Model Emissions Rate (lbs/hour)		Emissions from Evans Center Engine (lbs/year)	
					NO <sub>x</sub>	PM <sub>2</sub>	NO <sub>x</sub>	PM <sub>2</sub>
Turbine	Rolls-Royce/Allison 250 Series Turboshaft Engine Test Cell	1	15	30	0.09	0.59	2.7	17.7
Turbine	PT6 Turboprop	1	3	6	0.29	0.59	1.74	3.54
Piston	Cessna 150 Continental O-200	2	15	60	0.013	0.59	0.78	35.4
Piston	Lycoming O-320	1	10	20	0.009	0.59	0.18	11.8
Piston	Lycoming O-360	1	10	20	0.0094	0.59	0.188	11.8
Piston	Lycoming O-540	1	10	20	0.0097	0.59	0.194	11.8
<b>TOTAL (lbs/year)</b>							<b>5.782</b>	<b>92.04</b>
<b>TOTAL (tons/year)</b>							<b>0.0029</b>	<b>0.0460</b>

Source: U.S. Environmental Protection Agency. 1978. *Air Pollutant Emission Factors for Military and Civil Aircraft*. Available online at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/91010NB6.PDF?Dockey=91010NB6.PDF>.

<sup>1</sup> Two semesters per year.

<sup>2</sup> Particulate Matter emissions are not differentiated between respirable PM (PM<sub>10</sub>) or fine PM (PM<sub>2.5</sub>).

<sup>22</sup> Federal Aviation Administration Office of Environment and Energy. 2015. *Aviation & Emissions A Primer*. Available online at: [https://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/media/primer\\_jan2015.pdf](https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/primer_jan2015.pdf), accessed April 7, 2021.

<sup>23</sup> U.S. Environmental Protection Agency. 1978. *Air Pollutant Emission Factors for Military and Civil Aircraft*. Available online at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/91010NB6.PDF?Dockey=91010NB6.PDF>, accessed April 6, 2021.

## ***Building and Mobile Source Emissions***

As stated above, sprung and modular structures have been installed on the existing parking lot along the south side of the existing building on the project site to serve as temporary classrooms in addition to the existing building, which would remain operational through project buildout. Existing programs provided at the Evans Center as well as the AMT Program would use the existing building as well as the sprung and modular structures during the interim phase. In the permanent phase, the Evans Center site would retain approximately 24 parking spaces on the existing surface parking lot.

Operational air pollutant emissions from the existing building and additional development on the Evans Center site would be generated primarily by automobile travel to and from the project site from students, staff, and faculty. Other sources of operational emissions would include architectural coatings and maintenance products, consumer products, and energy use of the project site, including the combustion of natural gas for heating. CalEEMod was used to estimate emissions from operation of the proposed project from building and mobile source emissions assuming full build out.

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates used by CalEEMod. The earliest year construction of the proposed project could possibly be 2022. As a result, mobile-source emissions were evaluated for the year 2022. Emissions associated with build-out later than 2022 would be lower, because newer vehicles have to meet increasingly more stringent emissions standards, while older, more polluting, vehicles are less utilized. It should be noted that the AMT program would operate on the project site during construction, however the operation of the jet engines would occur in the permanent phase. Therefore, estimated emissions during the interim phase would be lower than those estimated for the permanent phase. Additional mobile-source emissions that may be generated during the earlier operational period of 2022 or 2023 would be negligible.<sup>24</sup>

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<sup>24</sup> CalEEMod utilizes the emission factors from CARB's EMFAC2014 model. This model is not the latest version and as a result does not account for newer vehicle reduction standards. Review of the EMFAC2014 model demonstrates that the difference in single passenger, gasoline powered cars from 2022 to 2024 would have minimal changes in running criteria air pollution emissions. For example, running NO<sub>x</sub> emissions would be approximately 0.007 grams/mile higher in 2022 than in 2024. Therefore, if all 680 daily vehicle trips to the project site (traveling approximately 9.5 miles per trip) were gas-powered, single passenger cars then in 2022, the proposed project would only generate an additional 0.1 pounds per day or NO<sub>x</sub> or 0.02 tons per year. As a result, the difference would be negligible. CARB. EMFAC2014. <https://arb.ca.gov/emfac/2014/>, accessed May 26, 2021.

CalEEMod allows the use to enter specific vehicle trip generation rates. According to the transportation analysis prepared for CCSF’s Updated Facilities Master Plan (FMP), existing operations at Evans Center in addition to operations associated with the AMT Program would generate 680 vehicle trips by 2030.<sup>25</sup>

Operational emissions attributable to the proposed project from building and structures, mobile sources, and jet engine emissions are summarized in **Table 14, Long-Term Operational Emissions**. Operational emissions would not exceed BAAQMD thresholds, the proposed project’s construction would not result in a cumulatively significant impact for which the area is in nonattainment. Therefore, the proposed project’s impact related to emissions of criteria air pollutants would be less than significant.

**Table 14**  
**Long-Term Operational Emissions**

<b>Emissions Source</b>	<b>ROG</b>	<b>NOx</b>	<b>PM10</b>	<b>PM2.5</b>
<b>Building, and Mobile-Source Emissions</b>				
Area Source (tons/year)	0.448	0.00001	0.00	0.00
Energy Source (tons/year)	0.019	0.169	0.013	0.013
Mobile Source (tons/year)	0.154	0.607	0.653	0.181
<b>Jet Engine Emissions<sup>1</sup></b>				
Jet Sources (tons/year)	-	0.003	0.046	0.046
Total Annual Emissions (tons/year)	0.621	0.779	0.712	0.24
<b>Annual Thresholds (tons/year)</b>	<b>10</b>	<b>10</b>	<b>15</b>	<b>10</b>
Exceed Thresholds?	No	No	No	No
Average Daily Emissions (pounds/day)	3.40	4.27	3.90	1.32
<b>Thresholds (lbs/day)</b>	<b>54</b>	<b>54</b>	<b>82</b>	<b>54</b>
Exceed Threshold?	No	No	No	No

Source: Impact Sciences, CalEEMod modeling, 2021. See Appendix B.

<sup>1</sup> See Table 9.

As demonstrated above, the proposed project would not exceed BAAQMD screening thresholds for construction and would not exceed operational regional thresholds. Therefore, project’s air emission impacts would be less than significant.

<sup>25</sup> CCSF. 2021. Appendix D of the *City College of San Francisco Updated Facilities Master Plan Draft Environmental Impact Report*. Available online at: [https://files.ceqanet.opr.ca.gov/264475-3/attachment/D84tMGpcAkhoyR44sEvmzljCmAwskOOdxsm4P1LcDZc2NnUT8urPmoeS6eLay4\\_H3QWtYV\\_Ofn3lD2mh0](https://files.ceqanet.opr.ca.gov/264475-3/attachment/D84tMGpcAkhoyR44sEvmzljCmAwskOOdxsm4P1LcDZc2NnUT8urPmoeS6eLay4_H3QWtYV_Ofn3lD2mh0), accessed April 7, 2021.

**c) Implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations (*Less Than Significant Impact*).**

**Construction.** Temporary project impacts related to health risk can occur from project construction activity, which would generate dust and equipment exhaust that could affect nearby sensitive receptors. Construction of the proposed project would include demolition, minor grading, and asphalt pavement around the existing building. Construction equipment and associated heavy-duty truck trips generate exhaust which contains diesel particulate matter (DPM), designated by CARB as a TAC.

The BAAQMD recommends evaluating health risks posed to sensitive receptors (which are defined as residences, day care centers, schools, and elderly facilities) from DPM within a 1,000-foot radius of a project site.<sup>26</sup> The closest residences to the project site are approximately 830 feet to the south along Hudson Avenue. However, as discussed in **Impact-2**, the proposed level of construction is significantly lower than the BAAQMD screening levels for construction of a junior college. As a result, construction of the proposed project is not expected to generate high levels of DPM or TAC emissions over the 18-month construction period. Furthermore, according to the BAAQMD, the region experiences westerly or southwesterly onshore winds during the day when construction would occur.<sup>27</sup> Therefore, pollutants from the site are expected to be blown away from the residences along Hudson Avenue. As a result, during project construction, sensitive receptors would not be exposed to substantial pollutant concentrations. Therefore, construction impact of the proposed project related to health risk on sensitive receptors would be less than significant.

**Operation.** Project-operation impacts related to increased health risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors, or by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs.

The proposed project would not result in the addition of any sensitive land uses to the project site. However, the proposed project will include stationary sources of TAC emissions from the operation of jet engines on the project site. The main pollutant of concern is lead compounds from the jet engines fueled by aviation gas (AVGAS). AVGAS is the only remaining lead-containing transportation fuel. The lead additive (tetraethyl lead [TEL]) boosts octane levels in fuel and prevents sudden engine failure. TEL has not yet been banned for use in AVGAS because no operationally safe alternative is currently available.<sup>28</sup> The Federal

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<sup>26</sup> BAAQMD. 2017. *CEQA Guidelines*. Available online at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf), available online April 7, 2021.

<sup>27</sup> Ibid.

<sup>28</sup> Federal Aviation Administration. 2019. *Fact Sheet – Leaded Aviation Fuel and the Environment*. Available online at: [https://www.faa.gov/news/fact\\_sheets/news\\_story.cfm?newsId=14754](https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=14754), accessed April 7, 2021.

Aviation Administration (FAA) and EPA are working with aircraft and engine manufacturers, and fuel producers in order to create an unleaded fuel.<sup>29</sup> Five out of the seven engines owned and operated by the AMT program will use AVGAS. While these engines would only run for a limited period of time (three times per semester, with each engine running between 5 to 40 minutes) on the Evans Center campus during the fall and spring semesters, a health risk assessment was prepared due to the potential health implications of lead emissions and to ensure that nearby sensitive receptors would not be exposed to any adverse health impacts. Typically, health risk assessments are prepared in order to evaluate the risk posed to nearby sensitive receptors from DPM emissions that are produced from diesel powered engines, such as heavy-duty trucks. The jet engines are fueled by AVGAS or jet fuel and, as a result, would not use diesel or emit DPM. Further, the majority of trips to the Evans Center will be from students and faculty that would operate gasoline-powered vehicles. Any heavy-duty diesel truck trips to the site would be infrequent and negligible. As a result, the cancer risk analysis only evaluates the risk posed by lead emissions.

In order to evaluate the health impacts related to the jet engines, dispersion modeling was conducted to predict the off-site concentration of TEL emissions from the jet engines, so that lifetime excess cancer risk and non-cancer health risk could be estimated. 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.<sup>30</sup> **Table 10** presents the BAAQMD's significance thresholds for health risks.

As stated above, the BAAQMD recommends evaluating health risk posed to sensitive receptors (which are defined as residences, day care centers, schools, and elderly facilities) within 1,000 feet radius of a project site. The closest residences to the project site are 830 feet to the south along Hudson Avenue. The health risks were evaluated for a hypothetical maximally exposed individual resident (MEIR) located near the project site. The hypothetical MEIR is an individual assumed to be located and reside where the highest concentrations of air pollutants are predicted to occur as a result of jet engine operation.

**Cancer Risk.** The cancer risk posed to nearby sensitive receptors was calculated based on TEL emissions generated from the engines. TEL emissions were calculated for the five AVGAS fueled engines based on the annual estimated fuel consumption. Fuel consumption for each engine was determined based on the

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<sup>29</sup> Federal Aviation Administration. 2020. *Aviation Gasoline*. Available online at: <https://www.faa.gov/about/initiatives/avgas/#:~:text=Avgas%20is%20the%20only%20remaining,to%20remove%20it%20from%20avgas>, accessed April 6, 2021.

<sup>30</sup> OEHHA. 2015. *Air Toxics Hot Spot Program*. Available online at: <https://oehha.ca.gov/media/downloads/crnrr/2015guidancemanual.pdf>, accessed April 7, 2021.

fuel factors from U.S. EPA's *Air Pollutant Emission Factors for Military and Civil Aircraft*<sup>31</sup> and the estimated hours of operation per engine per year provided by the AMT program directors. Consistent with the U.S. EPA, it was assumed that every gallon of AVGAS contained 2.12 grams of lead.<sup>32</sup> The average annual TEL and PM2.5 emissions were calculated (see **Attachment A**) and input into the U.S. EPA dispersion model AERMOD to predict the TEL concentration at sensitive receptors within 1,000 feet of the project site, as recommended by the BAAQMD.<sup>33</sup> To model emissions, a release height of approximately 6.5 feet was chosen to represent the average release height from the jet engine. Modeled jet emissions were distributed throughout the proposed aviation yard located on the southwestern portion on the project site.

The modeling used the latest available 5-year meteorological data set (2009 to 2014) from SFO, prepared for use with the AERMOD model by CARB. Annual TEL concentrations from jet engine activities were calculated at nearby sensitive receptor locations within the default receptor height. The concentration of TEL and PM2.5 at the nearest sensitive receptor, located near the corner of Hudson and Mendell Street to the south of the project site, estimated in AERMOD, was utilized to calculate the cancer risk in accordance with OEHHA guidelines.

The current OEHHA guidance recommends that cancer risks be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, it recommends evaluating the risks for the third trimester of pregnancy to age zero (third trimester exposure), ages zero to less than two years (infant exposure), ages two year to less than 16 years (child exposure), and ages 16 years to 30 years (adult exposure). According to OEHHA, the cancer risk for a residential receptor is assumed to start in the third trimester of life. Cancer risk evaluations at individual residential receptors are presented for 9-, 30-, and 70-year exposure durations. The 9- and 70-year exposure durations present potential impacts over the range of residency periods, while the 30-year exposure duration is recommended for use as the basis for estimating cancer risks in all HRA's.

OEHHA recommends that lead cancer risks be evaluated for both inhalation and noninhalation pathways. Specifically, OEHHA recommends lead cancer risks account for inhalation, dermal, soil, and breast milk exposure from lead.

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<sup>31</sup> U.S. Environmental Protection Agency. 1978. *Air Pollutant Emission Factors for Military and Civil Aircraft*. Available online at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/91010NB6.PDF?Dockey=91010NB6.PDF>, accessed April 7, 2021.

<sup>32</sup> United States Environmental Protection Agency. *Lead Emissions from the Use of Leaded Aviation Gasoline in the United States*. Available online at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/P1004MXI.PDF?Dockey=P1004MXI.PDF>, accessed April 9, 2021.

<sup>33</sup> BAAQMD. 2017. *CEQA Guidelines*. Available online at: [https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf](https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf), accessed April 7, 2021.

Soil exposure accounts for the lead that eventually settles into the ground and may later be introduced by incidental soil ingestion. Dermal exposure accounts for the pollutants absorbed through the skin. The level of dermal exposure is dependent on the climate-type as it determines people's clothing choices and amount of skin exposed to pollution. For the project site, a mixed climate type was chosen to represent the area. Breast milk exposure pathway is based on an infant's first year of food intake and considers the transference of pollutant to infants through the mother.

OEHHA recognizes that young children are more susceptible than adults to many carcinogens. Therefore, OEHHA developed age sensitivity factors (ASFs) to account for the increased sensitivity to carcinogens during early-in-life exposure. When evaluating the inhalation health risk, OEHHA recommends an ASF of 10 for the third trimester and infant exposure, an ASF of 3 for child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilograms of body weight per day (L/kg-day). As recommended by the BAAQMD, 95th percentile breathing rates are used for the third trimester and infant exposure, and 80th percentile breathing rates are used for child and adult exposure. These age-specific breathing rates are 361 L/kg-day for the third trimester receptor, 1,090 L/kg-day for the infant receptors, 572 L/kg-day for child receptors, and 261 L/kg-day for adult receptors. Additionally, age-specific fraction of time at home (FAH) values were used in this analysis. According to OEHHA, FAH values of 0.85 should be used for the third trimester and infant receptors, 0.72 for the child receptors, and 0.73 for adult receptors. For inhalation cancer risk, it was assumed that each residential receptor would have an exposure duration of 350 days per year, consistent with OEHHA guidelines.

OEHHA guidelines and recommendations for calculating the inhalation and noninhalation (dermal, soil, and breast milk) exposure has been compiled into the CARB recommended HARP RAST tool. Based on the concentration of lead calculated within AERMOD for each sensitive receptor, the tool calculated the excess cancer risk using OEHHA's recommended procedures and input values described above.

Results of this assessment indicate that the maximum excess residential cancer risk posed to both the receptors over 9, 30, and 70 years of operational exposure from multiple exposure pathways (inhalation, soil, dermal, and breast milk) would each be less than 1 in one million and, therefore, would not exceed BAAQMD thresholds.

**Non-Cancer Health Hazards.** Sensitive groups can also develop non-cancer health risks from exposure to TACs. Non-cancer health risks are evaluated from the ratio of TAC concentrations generated by the project and a reference exposure level (REL). A REL is the concentration of a given pollutant in the air at or below



which no adverse health effects are anticipated for sensitive groups.<sup>34</sup> RELs are based on the most sensitive adverse effects reported in the medical and toxicological literature. According to OEHHA, CARB has not developed an REL lead because there is not a threshold level for chronic noncancer health effects. Thus, a hazard index (HI) approach is not used for lead. Instead, to determine the non-cancer health hazards, air concentrations are compared to defined air lead levels associated with specified percentages of children with a Blood Lead Level (BLL) greater than or equal to 10 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ). Acceptable risk is based on minimizing the number of children at or above a BLL of 10  $\mu\text{g}/\text{dL}$ .<sup>35</sup>

CARB's 2001 *Risk Management Guidelines for New, Modified, and Existing Sources of Lead* outlines a tiered site-specific non-cancer risk methodology to determine if the emissions from a project site has the potential to increase the percentage of children with a BLL equal to or higher than 10  $\mu\text{g}/\text{dL}$  based on the on-site lead emissions. This tiered methodology would not be appropriate in areas where the majority of homes were built before 1960 or in areas where more than 30% of the population has an income less than 1.25 times the poverty level. In the Hunter's Point neighborhood, over 53% of the homes have been constructed after 1960 and approximately 81% of the population lives above the poverty line. As a result, this tiered screening methodology is appropriate for the proposed project.<sup>36</sup>

Using AERMOD, the maximum off-site air concentration was determined for a nearby sensitive receptor over a 30-day averaging time and compared against CARB's recommended risk management levels for non-cancer health effects. The maximum concentration of lead averaged over a thirty-day period at a sensitive residential receptor near Evans Center was calculated to be 0.00017  $\mu\text{g}/\text{m}^3$ , which is significantly lower than CARB's identified approvable level of 0.30  $\mu\text{g}/\text{m}^3$ .<sup>37</sup> Therefore, the noncancer risk associated with the proposed project would not exceed applicable thresholds.

**PM2.5 Emissions.** PM2.5 can be emitted from both exhausts of internal combustion engines and from fugitive dust generated by entrainment of soils onto roads or disturbance of soils on the project site. According to the BAAQMD, the PM2.5 impacts during operation of the facility would be significant if its

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<sup>34</sup> OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual*. Available online at: <https://oehha.ca.gov/media/downloads/crnrr/2015guidancemanual.pdf>, accessed April 7, 2021.

<sup>35</sup> OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual - Appendix F: Overview of the Lead Risk Assessment Procedures*. Available online at: <https://oehha.ca.gov/media/downloads/crnrr/2015gmappendicesaf.pdf>, accessed April 7, 2021.

<sup>36</sup> Point2. *Hunter's Point Demographics*. Available online at: <https://www.point2homes.com/US/Neighborhood/CA/San-Francisco-County/San-Francisco/Hunters-Point-Demographics.html>, accessed March 16, 2021.

<sup>37</sup> CalEPA and CARB. 2001. *Risk Management Guidelines for New, Modified, and Existing Sources of Lead*. Available online at: [https://ww2.arb.ca.gov/sites/default/files/classic/toxics/lead/mainand59append.pdf?\\_ga=2.220332122.334733048.1617814976-1795643297.1617298681](https://ww2.arb.ca.gov/sites/default/files/classic/toxics/lead/mainand59append.pdf?_ga=2.220332122.334733048.1617814976-1795643297.1617298681), accessed April 7, 2021.

annual average concentration exceeds 0.3  $\mu\text{m}^3$ . AERMOD was used to estimate the PM<sub>2.5</sub> concentration at the nearest sensitive receptor based on emission factors from the U.S. EPA’s *Air Pollutant Emission Factors for Military and Civil Aircraft*. Fugitive dust is generated from aggregating storage piles, movement on unpaved roads, and heavy construction equipment. As a result, fugitive dust emissions would not be generated from operating the jet engines. Therefore, the PM<sub>2.5</sub> emissions only account for the engine exhaust.

The maximum concentration of PM<sub>2.5</sub> at the residential receptor resulting from the jet engines exhaust associated with the proposed project would be 0.003  $\mu\text{g}/\text{m}^3$ .

The results of the health risk for a residential receptor are provided in **Table 15, Maximum Health Risk Posed to Residential Receptor from Jet Engines**, and demonstrate that project operation would not exceed BAAQMD thresholds and the impact would be less than significant for the residential receptor.

**Table 15**  
**Maximum Health Risk Posed to Residential Receptor from Jet Engines**

Receptor	Lifetime Excess Cancer Risk (per million)	Annual PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	Non-Cancer Risk ( $\mu\text{g}/\text{m}^3$ )*
9-Year	0.0189	0.003	0.00017
30-Year	0.0197	0.003	0.00017
70-Year	0.0219	0.003	0.00017
<b>Significance Threshold</b>	<b>10</b>	<b>0.3</b>	<b>0.3</b>
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: Impact Sciences, 2021. Attachment A.

\* The concentration is calculated based on a 30-day averaging period.

**d) Implementation of the proposed project would not expose occupants of the project site to substantial pollutant concentrations (Less Than Significant Impact).**

**Cancer Risk.** Students, staff, and faculty would use the Evans Center during the interim and permanent phase of the proposed project. As described in **Section II, Project Description**, jet engines would run for short periods three times per semester during the two-year period of the program. However, staff and faculty at the center who may work at the site for a long period of time would have higher exposure than students. As a result, the cancer risk analysis, presented below, focuses on a hypothetical maximum exposed individual worker (MEIW). Consistent with OEHHA guidance, this analysis assumes that an individual staff would be exposed (i.e., work at the site) for a period of 25-years. In order to determine the MEIW, receptors were mapped across the Evans Center within AERMOD as a grid with a receptor located

approximately every 16 feet outside the proposed aviation yard on the southwest corner of the project site. This presents a conservative analysis as a worker at the site would most move around the project site and would not always be near the aviation yard every time a jet engine is running.

As stated above, OEHHA recommends that lead cancer risks be evaluated for both inhalation and non-inhalation pathways including dermal, soil, and breast milk exposure from lead. Breast milk exposure is only expected to occur over the first year of life and is not evaluated as part of the worker health risk calculation.

For an individual staff, it was assumed that exposure would take place 6-hours a day, 5 days per week and would occur at the same time that jet engines are in operation.<sup>38</sup> Per OEHHA guidance, the concentration of lead calculated in AERMOD was multiplied by a factor of 5.6 in order to convert the annual average concentration into an 6-hour concentration.<sup>39,40</sup> Staff are assumed to be at least 16 years old (considered an adult receptor) and would be exposed for a period of 25-years with an exposure frequency of 250 days per year. The 95<sup>th</sup> percentile moderate intensity, 8-hour breathing rate of 230 L/kg/8-hours was used for the worker receptor.

As stated above, OEHHA guidelines and recommendations for calculating the inhalation and non-inhalation (dermal and soil) exposure has been compiled into the CARB recommended HARP RAST tool. Based on the concentration of lead calculated within AERMOD for each sensitive receptor, the tool calculated the excess cancer risk using OEHHA's recommended procedures and input values described above.

Results of this assessment indicate that the maximum excess residential cancer risk posed to both the worker receptors over a 25-year exposure from multiple exposure pathways (inhalation, soil, and dermal) would each be less than 3.97 in one million and, therefore, would not exceed BAAQMD cancer risk thresholds.

**Non-Cancer Risk.** Following the same methodology as described above for a residential receptor, AERMOD was used to calculate a maximum on-site lead concentration with a 30-day averaging time and compared against CARB's recommended risk management levels for non-cancer health effects. The maximum concentration of lead averaged over a thirty-day period for an on-site receptor was calculated

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<sup>38</sup> The AMT Program classes are conducted from 7:00 am to 9:50 and 10:30 to 1:20.

<sup>39</sup> Multiplier = (24 hours per day / 6 hours of operation) x (7 days per week / 5 days per week) = 5.6.

<sup>40</sup> The maximum annual average on-site lead concentration is approximately 0.02163 µg/m<sup>3</sup>. As a result, the 6-hour concentration was assumed to be 0.12113 µg/m<sup>3</sup>.

to be 0.0031  $\mu\text{g}/\text{m}^3$ , which is significantly lower than CARB's identified approvable level of 0.30  $\mu\text{g}/\text{m}^3$ .<sup>41</sup> Therefore, the project's noncancer risk to site users would be below applicable thresholds.

**PM2.5 Emissions.** The maximum annual concentration of PM2.5 was estimated for a student or faculty member attending or teaching the AMT Program for one year. As stated above, the AMT Program takes place over two years with two semesters per year and two classes per semester. Therefore, each student or faculty member would only be within the aviation yard directly exposed to PM2.5 emissions over four classes per year and would not be exposed to the emissions associated with running jet engines over all eight classes. It is assumed that during the other periods of instruction, the students would be inside the Evans Center or new temporary structures and be shielded from the jet engines emissions that may occur from other instruction activities at different points in the program. It was also assumed that jet engines would be emitted uniformly during each of the eight classes.

As presented in **Table 13**, the U.S. EPA's Air Pollutant Emission Factors for Military and Civil Aircraft provides the emissions estimates for particulate matter but does not differentiate between PM10 and PM2.5 emissions. PM10, or respirable particulate matter, consists of particulates 10 micrometers or smaller in diameter. PM2.5, or fine particulate matter, is made up of particulates 2.5 micrometers or smaller. As a result, a portion of the particulate matter emissions from the jet engines will be PM10 emissions and the other portion will be PM2.5 emissions. It was conservatively assumed PM2.5 would make up approximately half of the total particulate matter jet emissions.

Further, the U.S. EPA's Air Pollutant Emission Factors for Military and Civil Aircraft was prepared in 1978. As a result, the guidance document is approximately 40 years old and presents a conservative estimate of the jet engine emissions. Since the release of the document, the FAA has worked to reduce criteria air pollutant emissions from jet engines. From 1980 to 2012, PM2.5 emissions declined by 11 percent.<sup>42</sup> Therefore, the PM emissions from the AMT Program's jet engines are significantly lower than what has been assumed above.

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<sup>41</sup> CalEPA and CARB. 2001. *Risk Management Guidelines for New, Modified, and Existing Sources of Lead*. Available online at: [https://ww2.arb.ca.gov/sites/default/files/classic/toxics/lead/mainand59append.pdf?\\_ga=2.220332122.334733048.1617814976-1795643297.1617298681](https://ww2.arb.ca.gov/sites/default/files/classic/toxics/lead/mainand59append.pdf?_ga=2.220332122.334733048.1617814976-1795643297.1617298681), accessed April 7, 2021.

<sup>42</sup> Federal Aviation Authority. 2015. *Aviation Emissions, Impacts & Mitigation: A Primer*. Available online at: [https://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/media/primer\\_jan2015.pdf](https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/primer_jan2015.pdf), accessed April 9, 2021.

Maximum on-site PM2.5 emissions would occur near the aviation yard and would be 0.188 µg/m<sup>3</sup>. Therefore, the PM2.5 impacts posed to a student or faculty member attending or teaching classes at the Evans Center would not exceed BAAQMD threshold of 0.3 µg/m<sup>3</sup> (see **Table 16**).

The results of the health risk for a worker receptor are provided in **Table 16** and demonstrate that project operation would not exceed BAAQMD cancer and non-cancer thresholds. In addition, air filters of existing building and sprung and modular structures would have Minimum Efficiency Report Value (MERV) 13 filters. MERV 13 filters remove between 80% to 89.9% of particulate matter between 1.0 and 3.0 µg/m<sup>3</sup>.<sup>43</sup>

**Table 16**  
**Maximum Health Risk Posed to an On-Site Worker Receptor from Jet Engines**

Receptor	Lifetime Excess Cancer Risk (per million)	Annual PM2.5 (µg/m <sup>3</sup> ) <sup>1</sup>	Non-Cancer Risk (µg/m <sup>3</sup> ) <sup>1,2</sup>
Worker (25-Year Exposure)	3.97	0.188	0.029
<b>Significance Threshold</b>	<b>10</b>	<b>0.3</b>	<b>0.3</b>
Exceed Threshold?	No	No	No

Source: Impact Sciences, 2021. Attachment A.

<sup>1</sup>The Annual PM2.5 exposure to a students or worker receptor.

<sup>2</sup> The concentration is calculated based on a 30-day averaging period.

Therefore, PM2.5 impacts posed to a student or faculty member attending or teaching classes at the project side would be less than significant.

- e) **Implementation of the proposed project would not substantially result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (Less Than Significant Impact).**

According to the BAAQMD CEQA Guidelines, land uses typically associated with odor include wastewater plants, landfills, refineries, food processing facilities, and smelter facilities.<sup>44</sup> Most of the proposed project uses are not associated with equipment or activities that would emit nuisance odors. However, the AMT Program would use a series of chemicals including adhesives, oils, hydraulic fluids, glass cleaners, spray paint, and lubricants. The use of these chemicals would be spread across the semester and integral to training students and maintaining engine equipment. Additionally, the operation of turbine

<sup>43</sup> Environmental Protection Agency. 2021. *What is a MERV rating?* Available online at: <https://www.epa.gov/indoor-air-quality-iaq/what-merv-rating-1>, accessed April 9, 2021.

<sup>44</sup> BAAQMD. 2017. *CEQA Guidelines*. Available online at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf), accessed April 7, 2021.

jet engines may produce odor from the burning of jet fuel and aviation gas. As stated above, the jet engines would only operate for a short period of time (see **Table 12**). Since the operation of engines and use of these chemicals would be spread across the semester, odor would dissipate in the air before reaching nearby sensitive receptors. The project would be required to comply with the BAAQMD's regulation of odorous substances, which places general limitation on odorous substances and emissions limitations on certain odorous compounds. Specifically, BAAQMD's Regulation 7 states that a person shall not discharge any odorous substances which remains odorous after dilution with odor-free air. Regulation 7 further states that a person shall not discharge any odorous substance which causes the ambient air at or beyond the property line to be odorous and to remain odorous after dilution with four parts of odorous air. The proposed project would comply with BAAQMD Regulation 7. Therefore, project impact associated with odors emissions would be less than significant level.

**The proposed project, in combination with past, present, and reasonably foreseeable future projects, could contribute to cumulative air quality impacts (*Less than Significant Impact*).**

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, construction and operation 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 and operation would not be considered cumulatively considerable.

<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>4. BIOLOGICAL RESOURCES – Would the project:</b>				
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any applicable policies protecting biological resources, such as tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### ***Environmental Setting***

Evan Center is located in an urban area and is mostly covered by impervious surfaces with the exception of few landscaped areas. 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). Islais Creek located at approximately 0.3-mile north is the nearest mapped water

body to the project site. The San Francisco Bay is located approximately 0.8 mile to the east of the project site. 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), (e), and (f) are not applicable to the proposed project.

A total of 30 trees are located at the project site. Tree species at the project site include red flowering gum, acacia, cork oak, carob, and juniper or cypress.

### ***Discussion of Potential Project Impacts***

- a) **The proposed project would not result in 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 (No Impact).**

The project site is located in an urban area and is mostly covered by impervious surfaces with the exception of few landscaped areas. Adjacent sites are currently developed. Based on current site conditions, records from the U.S. Fish and Wildlife Service, California Natural Diversity Database, and California Native Plant Society records, with the exception to common bird species that are likely to nest in the trees and landscaped areas, 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 (See **Appendix C**). 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.

- d) **The proposed project would not interfere 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 (Less than Significant Impact with Mitigation).**

Landscaped areas within Evans Center 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 wrentit (*Chamaea fasciata*), Nuttall's woodpecker (*Picoides nuttallii*), and Allen's hummingbird (*Selasphorus sasin*) (See **Appendix C**). With the exception to temporary disturbance to the landscaped areas near the existing building, the proposed project would not result in the temporary loss of nesting and foraging habitat. The proposed project would result in the removal of 10 trees located near the existing building. 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. With implementation of **MM-BIO-1**, the proposed project would not affect nesting birds or their nests. The impacts would be less than significant.

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

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.
  - e. The proposed project would not conflict with any applicable policies protecting biological resources, such as tree preservation policy or ordinance (*Less than Significant Impact*).

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,<sup>45</sup> significant trees,<sup>46</sup> 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.

A total of 30 trees are located at the project site. Tree species at the project site include red flowering gum, acacia, cork oak, carob, and juniper or cypress. A tree survey conducted on February 25, 2021, identified 22 street trees. In addition, 8 significant trees were identified within the project boundaries. **Figure 7, Protected Trees Map**, presents the location of the trees at the project site. Excavation activities to retrofit the building foundations would result in the removal of approximately ten trees. None of the trees to be removed has been identified as a significant tree. Tree removal would be subject to the Urban Forestry Ordinance (such as a street tree or significant tree) and would require a permit from the City's Public Works Department. 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).

In compliance with Public Works requirements, the District would submit a tree removal permit application and replace tree to be removed on a one-to-one ration.

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.

**The proposed project, in combination with past, present, and reasonably foreseeable future projects, would result in a cumulatively considerable contribution to cumulative impacts related to biological resources. (*Less Than Significant Impact with Mitigation*)**

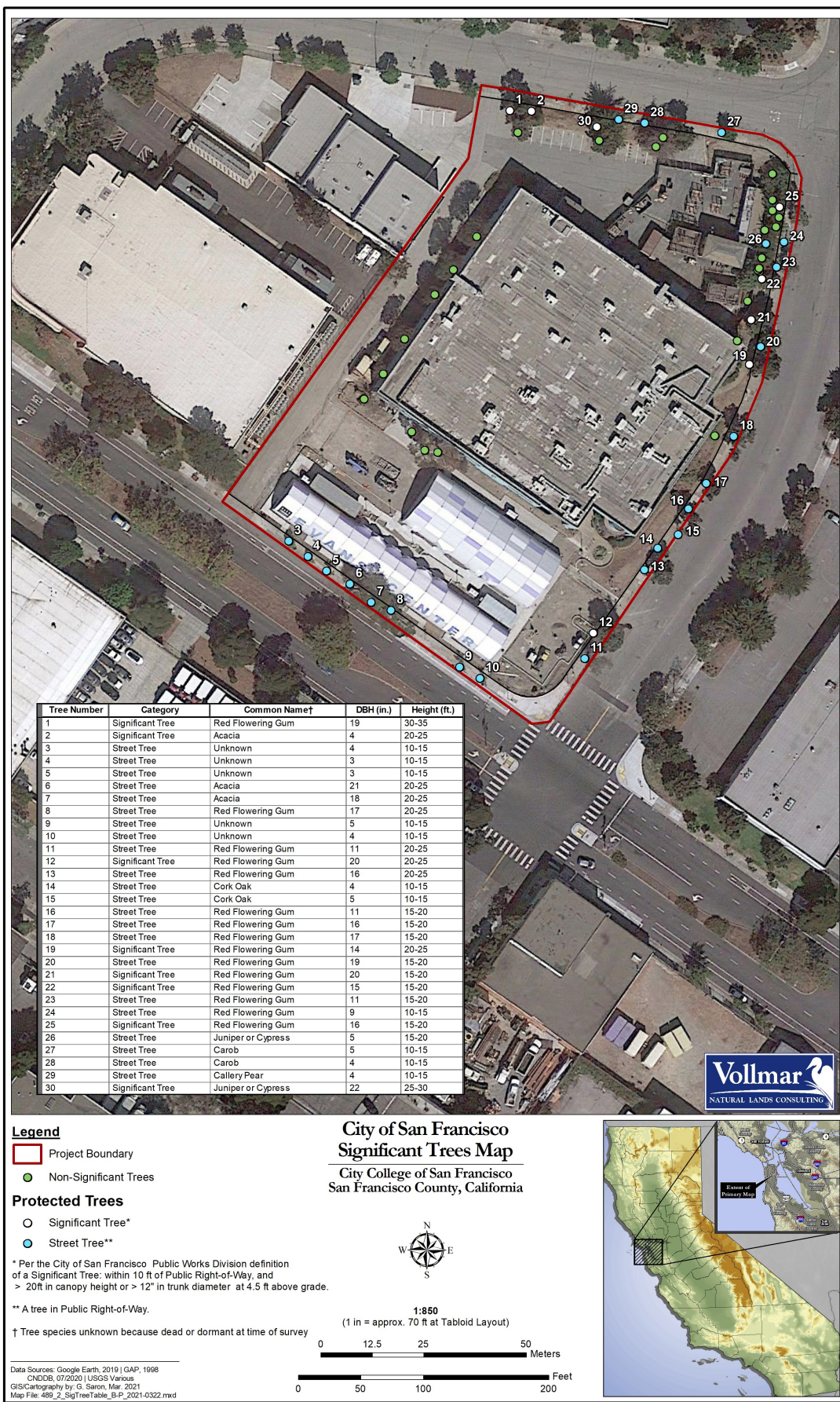
Similar to the proposed project, cumulative development within the vicinity of the project site would occur within an urban environment that lacks suitable habitat for candidate, sensitive, or special-status species. As with the proposed project, such development could have an impact on nesting and migratory birds that would be reduced to a less than significant level 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

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45 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.

46 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.

Urban Forestry Ordinance because Public Works permit requirements and tree protection plans would be required. With the required compliance with local, state, and federal plans, policies, and regulations, cumulative projects in the vicinity of the project site would not result in significant impacts on biological resources. With implementation of MM-BIO-1 to protect birds and their nests during construction, the proposed project would not result in significant impacts to biological resources and would not contribute considerably to any potentially significant cumulative impacts on biological resources in combination with past, present, and reasonably foreseeable projects.



SOURCE: Vollmar Natural Lands Consulting, 2020.

FIGURE 7

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>5. CULTURAL RESOURCES</b> – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

The existing pavement at the project site is underlain by artificial fills with an average depth of 12.5 to 15 feet below the ground surface.

### Discussion of Potential Project Impacts

- a) The proposed project would not cause an adverse change in the significance of a historical resource pursuant to in §15064.5 (No Impact)**

A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Section 15064.5 of the *State CEQA Guidelines* defines a historical resource as (1) a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; (2) a resource listed in a local register of historical resources or identified as significant in an historical resource survey meeting certain state guidelines; or (3) an object, building, structure, site, area, place, record or manuscript that a lead agency determines to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record.

The buildings at the proposed Project site were built in 1985. A review of the City and County of San Francisco's Property Information Map does not identify any known historical resources or landmarks at or within the vicinity of the Project site. The Project site has not been determined to be eligible for listing in the National Register of Historic Places, California Register of Historical Resources, and/or any local

register. The proposed Project would not cause any substantial adverse change in the immediate surroundings such that the significance of the historical resource would be materially impaired and impacts would be less than significant. As such, no adverse impact to historical resources would occur.

**b) The proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 (*Less Than Significant Impact*)**

Section 15064.5 of the *State CEQA Guidelines* defines significant archaeological resources as resources that meet the criteria for historical resources, as discussed above, or resources that constitute unique archaeological resources.

The buildings at the project site were built in 1985 and have been in use by CCSF since 1994 and has been subjected to past subsurface disturbance associated with excavation and grading activities associated with the construction of foundations for the existing buildings. Further, the proposed project seismic retrofit component only will excavate up to 5-foot depth, immediately adjacent to the 90,000 square foot main building. These soils would also have been excavated and filled when the building was first built. Therefore, it is unlikely that undisturbed unique archeological resources exist on the project site.

The proposed project would be subject to the provisions Section 21084.1 of the Public Resources Code to consider the effects of a proposed project on potentially buried cultural resources if an archeological site is determined to be a historical resource. If the archaeological site is determined to be a “unique” resource the site shall be treated in accordance with the provisions of section 21083.2.

These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies. They provide guidance concerning analytical techniques and approaches to defining compliance measures where potentially significant impacts may occur, such that in the event that archaeological resources are uncovered on the Project site during grading, or other construction activities, CCSF must be immediately notified and work must stop within a 30-foot radius until a qualified archeologist to be approved by the District, has evaluated the find. Construction activity may continue unimpeded on other portions of the Project site. If the find is determined by the qualified archeologist to be a unique archeological resource, as defined by Section 21083.2 of the Public Resources Code, the project site shall be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code. If the find is determined not to be a unique archeological resource, no further action is necessary and construction may continue. Compliance with the federal, State, and local regulations would ensure impacts to archaeological resources would be less than significant.

**c) The proposed project would not disturb any human remains, including those interred outside of formal cemeteries. (Less than Significant Impact)**

A significant impact would occur if previously interred human remains would be disturbed during excavation of the proposed project site. The proposed Project site is located in a highly developed portion of the City. Because the project area has already been previously disturbed, it has been subject to ground-disturbing activities. However, ground-disturbing activities have the potential to disturb previously undiscovered subsurface human remains.

While there are no known human remains on or near the proposed project site and no formal cemeteries, other places of human interment, or burial grounds or sites are known to occur within the project area, there is always a possibility that human remains can be encountered during construction. In the event that human remains are unexpectedly uncovered during ground-disturbing activities, there are regulatory provisions to address the handling of human remains in California Health and Safety Code Section 7050.5, Public Resource Code 5097.98, and *CEQA Guidelines* Section 15064.5I. Pursuant to these codes, in the event that human remain are discovered, it requires that disturbance of the site shall remain halted until the San Francisco Coroner (Coroner) has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The Coroner is required to make a determination within two working days of notification of the discovery of the human remains. If human remains of Native American origin are discovered during project construction, compliance with state laws, which fall within the jurisdiction of the Native American Heritage Commission (NAHC) (Public Resource Code Section 5097), relating to the disposition of Native American burials will be adhered to. If the Coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall consult with the Native American Heritage Commission (NAHC) by telephone within 24 hours, to designate a Most Likely Descendant (MLD) who shall recommend appropriate measures to the landowner regarding the treatment of the remains. If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC. Compliance with these County and Tribal regulatory protocols would reduce project impact of potential disturbance to human remains to a less than significant level.

**Implementation of the proposed project would not result in cumulatively considerable impacts to cultural resources. (Less Than Significant Impact)**

As discussed above, the proposed project would not result in any impacts to cultural resources. Therefore, the proposed project would not contribute to cumulative impacts on these resources.



Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>6. ENERGY – Would the project:</b>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

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.<sup>47</sup> 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.<sup>48</sup>

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.<sup>49</sup>

### Discussion of Potential Project Impacts

- a) **The proposed project would not consume energy resources in a wasteful, inefficient, or unnecessary way during construction or operation (*Less Than Significant Impact*).**

### Construction

Project construction would modernize the Evans Center, including seismic upgrades, a new roof, replacement of the mechanical, electrical, plumbing, low-voltage, fire-safety systems, and reconfiguration

<sup>47</sup> Pacific Gas and Electric. PG&E Overview. Available: [https://www.pgecorp.com/corp\\_responsibility/reports/2019/bu01\\_pge\\_overview.html](https://www.pgecorp.com/corp_responsibility/reports/2019/bu01_pge_overview.html). Accessed: November 27, 2020.

<sup>48</sup> 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](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.

<sup>49</sup> California Energy Commission. *Electricity Consumption by County*. Available online at: <http://www.ecdms.energy.ca.gov/electbycounty.aspx>.

of the interior spaces. The newly built temporary sprung and modular structures in two rows of structures would be used during the interim phase of the proposed project.

**Petroleum Fuel.** Construction of the proposed project would result in short-term consumption of petroleum-based fuels to power construction vehicles and equipment. During construction, energy would be consumed in the form of petroleum-based fuels (i.e., gasoline and diesel) used to power off-road construction vehicles and equipment on the project site, for construction worker travel to and from the project site as well as for delivery truck trips; and to operate generators to provide temporary power for lighting and electronic equipment. Specifically, during construction, the proposed project is anticipated to consume approximately 1,187 gallons of gasoline and 23,179 gallons of diesel, see **Table 17, On-Road Construction Fuel Consumption** and **Table 18, Off-Road Construction Fuel Consumption**.

**Table 17  
On-Road Construction Fuel Consumption**

Phase	Number of Trips	Number of Days	Average Commute Distance (in miles)	Fuel Usage (mpg)	Gasoline/Diesel Usage (in gallons)
<b>Worker Trips (Gasoline)</b>					
Demolition	13	30	10.8	24.2	174
Site Preparation	5	30	10.8	24.2	67
Grading	10	30	10.8	24.2	134
Building Construction	5	250	10.8	24.2	558
Paving	18	30	10.8	24.2	241
Architectural Coating	1	30	10.8	24.2	13
<b>Total Gasoline Usage</b>					<b>1,187</b>
<b>Vendor Trips (Diesel)</b>					
Building Construction	2		7.3	6.5	2
<b>Subtotal Diesel Usage</b>					<b>2</b>
<b>Hauling Trips (Diesel)</b>					
Grading	32		20.0	5.3	121
<b>Subtotal Diesel Usage</b>					<b>123</b>
<b>Total Diesel Usage</b>					<b>125</b>

Source: Impact Sciences, 2021, see CalEEMod output files.

Bureau of Transportation Statistics. Average Fuel Economy by Major Vehicle Category. See: <https://afdc.energy.gov/data/10310>, accessed April 9, 2021.

**Table 18**  
**Off-Road Construction Fuel Consumption**

Phase	Equipment Type	Units	Hours	Horse Power	Load Factor	Number of Days	Fuel Usage/HP/hr	Diesel Usage (in gallons)
Demolition	Concrete/Industrial Saws	1	8	81	0.73	30	0.05	710
	Rubber Tired Dozers	1	8	247	0.40	30	0.05	1,186
	Excavators	1	8	158	0.38	30	0.05	720
	Tractors/Loaders/Backhoes	2	6	97	0.37	30	0.05	646
Site Preparation	Tractors/Loaders/Backhoes	1	8	97	0.37	30	0.05	431
	Graders	1	8	187	0.41	30	0.05	920
Grading	Concrete/Industrial Saws	1	8	81	0.73	30	0.05	710
	Rubber Tired Dozers	1	1	247	0.40	30	0.05	148
	Tractors/Loaders/Backhoes	2	6	97	0.37	30	0.05	646
Building Construction	Cranes	1	4	231	0.29	250	0.05	3,350
	Forklifts	2	6	89	0.20	250	0.05	2,670
	Aerial Lifts	1	8	63	0.31	250	0.05	1,953
	Tractors/Loaders/Backhoes	2	8	97	0.37	250	0.05	7,178
Architectural Coating	Air Compressors	1	6	78	0.48	30	0.05	337
Paving	Cement and Mortar Mixers	4	6	9	0.56	30	0.05	181
	Pavers	1	7	130	0.42	30	0.05	573
	Rollers	1	7	80	0.38	30	0.05	319
	Tractors/Loaders/Backhoes	1	7	97	0.37	30	0.05	377
<b>Total Diesel Consumption</b>								<b>23,054</b>

Source: Impact Sciences, 2021, see CalEEMod output files.

The additional petroleum fuel resources used during construction would not cause a significant reduction in available supplies. Further, the proposed project contractors would be required to adhere to CARB regulations that govern construction equipment retrofitting, repowering, or replacements of construction equipment. CARB has also adopted 5-minute limits to heavy-duty diesel trucks idling in order to reduce diesel particulate matter which will work to limit diesel fuel use.<sup>50</sup> Compliance with CARB regulations would result in an efficient use of construction-related petroleum fuel use.

<sup>50</sup> California Air Resources Board. 2013. *California's Anti-Idling Regulations*. Available online at: <http://www.ncuaqmd.org/files/CARB%20fact%20sheet%20Anti-Idling%20regs.pdf>, accessed April 27, 2021.

**Natural Gas.** Project construction is not anticipated to use natural gas and, as a result, there would be no impact to natural gas resources during project construction.

**Electricity.** During construction of the proposed project, electricity would be consumed to supply and convey water for dust control and to power electric construction equipment as well as temporary lighting. Electricity use would be minor and cease upon the completion of construction.

## **Operation**

During project operation, energy would be consumed in the form of petroleum fuel, natural gas, and electricity in order for students and staff to travel to the site as well as for heating and lighting the buildings.

**Petroleum Fuel.** During operation, motor vehicle travel and building maintenance equipment would consume petroleum-based fuels. Fuel consumption of motor vehicles in California is regulated by the National Highway Traffic Safety Administration and EPA's Safer Affordable Fuel Efficiency (SAFE) Vehicles. As discussed in **Section II, Project Location and Description**, the proposed project is not anticipated to increase the student population at Evans Center. Further, the AMT Program students, staff, and facility that traveled to the Airport Center likely all use automobile and passenger vehicles due to the limited public transit available to the North Field of the Airport. The relocation of the AMT Program to the Evans Center under the proposed project would encourage a mode shift in AMT Program students, staff, and facility to transit as the Evans Center is 850 feet east of the existing SFMTA Rail Line T Station. As a result, the movement of the AMT Program to Evans Center would likely result in more transit use and less petroleum fuel usage than under the existing conditions.

The jet engines would also consume petroleum fuel in the form of aviation gas and jet fuel. Moving the AMT Program from the Airport Center to the Evans Center is not anticipated to result in an increase in students or AMT Program classes. Therefore, there would not be an increase in regional aviation gas or jet fuel use as a result of the proposed project.

**Natural Gas and Electricity.** According to the CalEEMod output files, see **Appendix B, Air Quality and GHG Technical Study**, during operation the proposed project is anticipated to consume approximately 3,451 million British Thermal Units per year (MBTU/year) of natural gas and 1,035 Mega Watt-hours per year (MWh/year).

The proposed project would upgrade the mechanical, electrical, and plumbing of the existing structure and the proposed project would be required to adhere to Title 24 standards. Renovated CCSF projects will be required to adhere to the CCSF Sustainability Plan, which includes goals to increase public transit use,

increase the life cycle of the building, and increase water and energy efficiency. As a result, the Evans Center would become more efficient under the proposed project as compared to existing conditions.

Therefore, the proposed project is not anticipated to result in an inefficient use of energy resources during Project construction or operation. This impact would be less than significant.

**b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency (*Less than Significant Impact*).**

A significant impact may occur if a project were to conflict with a state or local plan for renewable energy or energy efficiency.

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 (Senate Bill 350), the California Energy Efficiency Standards for Nonresidential Buildings, and the California Green Building Standards Code (CALGreen Code). Construction and operational activities under the proposed project 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 proposed project 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.

**The proposed project 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 Impact*).**

As stated above, the proposed project would comply with the CCSF Sustainability Plan. The proposed retrofitting and renovation would result in a more efficient building. Therefore, the proposed project would not significantly contribute to cumulative energy impacts.

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>7. GEOLOGY AND SOILS – Would the project:</b>				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) (California Building Code), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

### ***Environmental Setting***

This section describes the geology, soils, and seismicity characteristics of the project area as they relate to the proposed project and relies on the information and findings provided in a geotechnical investigation that was conducted for the project site.<sup>51</sup>

San Francisco Bay Area is located in the Coast Range geomorphic province of California which is characterized by north-west trending mountain ranges. The geology is complex with a history of faulting, subsidence, sedimentation and tectonic uplift. San Francisco is within the western portion of the Coast Range along the central California coast. Except for the hills and valleys, the northwest structural and topographic trend of the Coast Range is not prominent in San Francisco. Much of the present topography of San Francisco is the result of erosion of Mesozoic Franciscan Complex rocks with deposits of wind blow sand over bedrock exposures. Marine and estuarine deposition and artificial fill (man-made land) are prevalent along the coastline and responsible for the development of the present topography along San Francisco Bay and the Pacific Ocean.<sup>52</sup>

The elevation of the site is approximately 17 feet above mean sea level (MSL) and is situated approximately 0.3 miles south of Islais Creek Channel and 0.6 miles from San Francisco Bay. The surficial geologic deposits at the site and vicinity have been identified as artificial fill over tidal flat. The sedimentary deposits of the artificial fill over tidal flat are comprised of man-made fill, estuarine deposits, Young Bay Mud and alluvial/colluvial deposits which overlie Serpentine bedrock associated with the Mesozoic Franciscan Complex.<sup>53</sup>

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<sup>51</sup> Smith-Emery San Francisco. 2019. Report on Geotechnical Investigation and Geologic Hazards. City College of San Francisco Evans Campus. Proposed Temporary Structure. 1400 Evans Avenue. San Francisco. California. November 8.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

Located within the San Francisco Bay region, the project site has a relatively high amount of seismic activity due to the presence of the San Andreas, Hayward, San Gregorio, Calaveras, Concord-Green Valley, Greenville and other active earthquake faults. The closest and most significant active faults for which there is evidence of displacement during the last 200 years are the San Andreas fault located approximately 12.9 km (8.0 miles) southwest of the site and the Hayward fault located approximately 17.8 km (11.0 miles) northeast of the site.

The project site is located within a soil liquefaction hazard zone as identified by the State of California Earthquake Fault and Seismic Hazard Zones of Required Investigation (EZRIM) mapping program, San Francisco South Quadrangle dated November 17, 2000. The project site is underlain by artificial fills with an average depth of 12.5 to 15 feet below the ground surface.

The proposed project would not include the use septic tanks or alternative wastewater disposal systems; it would be connected to the existing wastewater disposal system. For these reasons, topic V.7(e) is not applicable to the proposed project.

### ***Discussion of Potential Project Impacts***

- a) The proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic ground shaking liquefaction or landslide (*Less than Significant Impact*).**

The project site is located in a seismically active area; however, the site is not within a currently designated Alquist-Priolo Special Studies Zone. The location of the project site in a seismically active area and within a soil liquefaction hazard zone, Evans Center would make it susceptible to very strong shaking induced by a major earthquake. The closest and most significant active faults are the San Andreas fault, located at approximately 8 miles to the southwest, and the Hayward fault located at approximately 11 miles to the northeast. Since there are no active faults that exist in the immediate vicinity, Evans Center is unlikely to experience surface fault rupture. The proposed project would include seismic retrofitting of the existing building, which would improve the structural conditions of the building in the event of an earthquake. Therefore, the proposed project would not exacerbate existing conditions that would increase the likelihood of surface fault rupture.

As noted above, the site has been mapped as within a soil liquefaction hazard zone. Silty sand, susceptible to liquefaction, was identified during subsurface investigation at the project site of soil layers between 16



feet to 22 feet below ground surface (bgs).<sup>54</sup> The potential for soil liquefaction increases where a long duration earthquake generates a sudden increase in excess pore water pressure that cannot be easily dissipated due to the fine-grained texture of the soil. Construction documents specifying the seismic retrofitting and renovation activities would be reviewed by the California Department of General Services (DGS), Division of State Architect (DSA), which has jurisdictions over all aspects of the District construction to ensure compliance with the California Geological Survey (CGS) guidance. Soils that could liquefy, or experience earthquake-induced settlement, would be removed during excavation activities and/or soil improvement techniques would be implemented in conjunction with development of seismic retrofitting design of the building foundations. Removal of potentially liquefiable materials and implementation of soil improvement techniques would reduce the potential for settlement within building footprints.

The topography at the project site and surrounding area is relatively flat. Therefore, the risk of damage to the project site from land sliding is considered to be very low.<sup>55</sup>

DSA would review the project structural retrofitting for conformance with the recommendations in the project-specific geotechnical report. DSA's review for compliance with applicable CGS guidance would ensure that the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure would be low. Therefore, the project would not result in any significant impacts related to soil liquefaction, seismicity, or other geological hazards.

For these reasons, the proposed project would not cause potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, liquefaction, or landslides. This impact would be less than significant.

**b) The proposed project would not result in substantial soil erosion or the loss of topsoil (*No Impact*).**

With the exception of few landscaped areas, the project site is entirely paved and is currently developed with a building, temporary structures, and surface parking lot. Therefore, proposed retrofitting and renovation activities would not result in the loss of topsoil. Excavation activities near the foundations of the existing building would disturb soil to a depth of up to 5 feet below ground surface and would result in the removal of approximately 260 cubic yards. The project site is generally flat and is therefore less susceptible to soil erosion than sloping areas. However, excavation activities and potential removal of

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<sup>54</sup> Smith-Emery San Francisco. 2019. Report on Geotechnical Investigation and Geologic Hazards. City College of San Francisco Evans Campus. Proposed Temporary Structure. 1400 Evans Avenue. San Francisco. California. November 8.

<sup>55</sup> Ibid.

existing vegetation in some locations around the existing building could create a potential for windborne and waterborne soil erosion. The proposed project would be required to comply with Article 4.2 of the San Francisco Public Works Code and sedimentation control measures to prevent sediment from entering the city's combined sewer system. In compliance with Article 4.2, the College would require the contractor to prepare an erosion and sediment control plan that would identify best management practices for erosion and sedimentation control measures. Compliance with this requirement would ensure that the proposed project would not result in substantial soil erosion. This impact would be less than significant.

- c) The proposed project 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 Impact*).**

As noted above, the site has been mapped as within a soil liquefaction hazard zone. However, the nature of the fill at the project site is medium to very dense and the topography is generally flat. Lateral spreading is normally associated with loose soil layers that have fully liquefied at shallower depths. Therefore, there is a low potential for lateral spreading at the project site.<sup>56</sup> In addition, as discussed above, construction activities at the project site would be subject to 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 proposed project related to unstable soil conditions would be less than significant.

- d) The proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) (California Building Code), and therefore would not create substantial direct or indirect risks to life or property (*Less than Significant Impact*).**

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. Based on the subsurface investigation, silty sand soils were identified at the project site. The geotechnical report prepared for the site determined that on-site soils are non-expansive. Therefore, impact related to expansive soils would be less than significant.

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<sup>56</sup> Smith-Emery San Francisco. 2019. Report on Geotechnical Investigation and Geologic Hazards. City College of San Francisco Evans Campus. Proposed Temporary Structure. 1400 Evans Avenue. San Francisco. California. November 8.

**f) The proposed project would not destroy a unique paleontological resource or site or unique geologic feature (*No Impact*).**

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 project site. Therefore, no impacts on unique geological features would occur.

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. Excavation activities near the foundations of the existing building would disturb soil to a depth of up to 5 feet below ground surface. The project site is underlain by artificial fills with an average depth of 12.5 to 15 feet below the ground surface. Therefore, the proposed project would unlikely expose or cause impacts on unknown paleontological resources. Therefore, no impact to paleontological resources would occur as a result of the proposed project.

**The proposed project, 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 Impact*).**

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 would be subject to these mandatory seismic safety standards and design review procedures and may require site-specific mitigation. 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.

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>8. GREENHOUSE GAS EMISSIONS –</b> Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer).<sup>57</sup> Climate change may result from:

- Natural factors, such as changes in the sun’s intensity or slow changes in the Earth’s orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and
- Human activities that change the atmosphere’s composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate.<sup>58</sup> Continuing changes to the global climate system and ecosystems, and to California, are projected to include:

57 US EPA. 2013. Overview of Greenhouse Gases. Available online at: <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>. Accessed on January 12, 2021.

58 Intergovernmental Panel on Climate Change. 2013. “Climate Change 2013: The Physical Science Basis.” Available online at: <http://www.climatechange2013.org/>. Accessed January 13, 2021.

- Rapidly diminishing sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;<sup>59</sup>
- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and ice sheets;
- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;
- Changing levels in snowpack, river flow and sea levels indicating that climate change is already affecting California's water resources;<sup>60</sup>
- Dry seasons that start earlier and end later, evoking more frequent and intense wildland fires;<sup>61</sup> and
- Increasing demand for electricity due to rising temperatures.<sup>62</sup>

The natural process through which heat is retained in the troposphere<sup>63</sup> is called the "greenhouse effect." Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere as short-wave radiation. It travels through the atmosphere without warming it and is absorbed by the Earth's surface. When the Earth re-emits this radiation back toward space, the radiation changes to long wave radiation. GHGs are transparent to incoming short wave solar radiation but absorb outgoing long wave radiation. As a result, radiation that otherwise would escape back into space is now retained, warming the atmosphere. This phenomenon is known as the greenhouse effect.

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<sup>59</sup> Ibid.

<sup>60</sup> California Environmental Protection Agency (Cal EPA). 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

<sup>61</sup> Ibid.

<sup>62</sup> California Environmental Protection Agency (Cal EPA). 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

<sup>63</sup> The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface from 6 to 7 miles).

## ***Greenhouse Gas Compounds***

California State law defines GHGs to include the following six compounds:

- **Carbon Dioxide** (CO<sub>2</sub>) is released to the atmosphere when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned. CO<sub>2</sub> emissions from motor vehicles occur during operation of vehicles and operation of air conditioning systems.
- **Methane** (CH<sub>4</sub>) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in solid waste landfills, raising livestock, natural gas and petroleum systems, stationary and mobile combustion, and wastewater treatment.
- **Nitrous Oxide** (N<sub>2</sub>O) is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels. N<sub>2</sub>O emissions from motor vehicles generally occur directly from operation of vehicles.
- **Hydrofluorocarbons** (HFCs) are one of several high global warming potential (GWP) gases that are not naturally occurring and are generated from industrial processes. HFC (refrigerant) emissions from vehicle air conditioning systems occur due to leakage, losses during recharging, or release from scrapping vehicles at end of their useful life.
- **Perfluorocarbons** (PFCs) are another high GWP gas that are not naturally occurring and are generated in a variety of industrial processes. Emissions of PFCs are generally negligible from motor vehicles.
- **Sulfur Hexafluoride** (SF<sub>6</sub>) is another high GWP gas that is not naturally occurring and is generated in a variety of industrial processes. Emissions of SF<sub>6</sub> are generally negligible from motor vehicles.

## **Regulatory Framework**

### ***Federal***

#### **Paris Climate Agreement**

The Paris Climate Agreement is an international treaty on climate change adopted on December 12, 2015. The goal of the agreement is to limit global warming to 1.5 degrees Celsius as compared to pre-industrial levels. Countries will aim to reach global peaking of GHG emissions as soon as possible to achieve a climate neutral world by mid-century. In order to achieve these reductions, the Paris Climate Agreement works on a 5-year cycle of increasingly ambitious climate action carried out by countries. Therefore, by 2020, countries were required to submit their plans for climate action, known as nationally determined

contributions. Additionally, the Agreement provides a framework for financial, technical and capacity building support to those countries who need it. Developed countries will take a lead in providing financial assistance to other countries since large scale investments are required for GHG mitigation and climate adaptation.<sup>64</sup>

The United States joined 190 other countries in the Paris Climate Agreement under the Obama administration in September 2016.<sup>65</sup> Under the Trump administration, the former President announced his intention to withdraw from the Agreement in June 2017 and formally notified the United Nations in November 2019. However, the Agreement requires a year-long waiting period before a formal withdrawal will be recognized. As a result, the United States officially withdrew from the Agreement in November 2020.<sup>66</sup> However, on January 20, 2021, President Biden accepted and rejoined the Paris Climate Agreement.<sup>67</sup>

## ***State***

The state of California has implemented a series of greenhouse gas plans and policies aimed at reducing state greenhouse gas emissions. Measures applicable to the project are summarized below:

### **Executive Order (EO) S-03-05**

On June 1, 2005, EO S-03-05 was issued by Governor Schwarzenegger in order to set statewide emissions reduction standards. The order required the state to reduce GHG emissions to 1990 levels by 2020 and reduce GHG emissions to 80% below 1990 levels by 2050. EO S-3-05 also calls for the Secretary of California Environmental Protection Agency (Cal/EPA) to be responsible for coordination of state agencies and progress reporting.

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<sup>64</sup> United Nations. *The Paris Agreement*. Available online at <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

<sup>65</sup> The White House. *President Obama: The United States Formally Entered the Paris Agreement*. Available online at: <https://obamawhitehouse.archives.gov/blog/2016/09/03/president-obama-united-states-formally-enters-paris-agreement>.

<sup>66</sup> NPR. *U.S. Officially Leaving Paris Climate Agreement*. Available online at: <https://www.npr.org/2020/11/03/930312701/u-s-officially-leaving-paris-climate-agreement>.

<sup>67</sup> The White House. 2021. *Paris Climate Agreement*. Available online at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/>.

### **Assembly Bill (AB) 32**

AB 32 (California Global Warming Solutions Act of 2006) was codified into law in 2006 and codified into law the 2020 GHG emissions targets set by EO S-03-05. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major sectors with penalties for noncompliance.

### **Senate Bill (SB) 32**

SB 32 was signed into law in 2015 and sets into law the mandated reduction targets set in EO B-30-15, which required a reduction in GHG emissions to 40% below the 1990 levels by 2030.

### **CARB's 2017 Final Scoping Plan**

The California Air Resources Board (CARB) in collaboration with over twenty state agencies issued a Final Scoping Plan in 2017 in order to set a framework for the state to meet the overall reduction goals set in SB 32. The 2017 Scoping Plan identified key sectors of the implementation strategy, which includes improvements in low carbon energy, industry, transportation sustainability, natural and working lands, waste management, and water. Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 MMTCO<sub>2e</sub>, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO<sub>2e</sub> beyond current policies and programs. Key elements of the 2017 Update include a proposed 20% reduction in GHG emissions from refineries and an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal.

### ***Local***

#### **City of San Francisco Greenhouse Gas Reduction Plan**

The City of San Francisco released a Greenhouse Gas Reduction Plan (GGRP) in 2010 in order to meet the following GHG reduction goals: reduce GHG emissions by 25% below 1990 levels by 2017; reduce GHG emissions by 40% below 1990 levels by 2025; and reduce GHG emissions by 80% below 1990 levels by 2050. These goals are consistent with the long-term reduction goals laid out in EO S-3-05 and more aggressive than SB 32's goals. The GGRP was revised in 2017 in order to update the City's progress towards GHG reduction goals.<sup>68</sup>

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<sup>68</sup> City of San Francisco. 2017. *Greenhouse Gas Reduction Strategy Update*. Available online at: [https://sfmea.sfplanning.org/GHG/GHG\\_Strategy\\_October2017.pdf](https://sfmea.sfplanning.org/GHG/GHG_Strategy_October2017.pdf).



## ***Methodology***

The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, the BAAQMD recommends quantification and disclosure of GHG construction emissions. Determining the significance of these construction-generated GHG emission impacts is recommended to be made in relation to meeting AB 32 GHG reduction goals, which requires the state to meet 1990 levels of GHG emissions by 2020.

Since GHG emissions are cumulative and construction emission are temporary and short term, it is common practice to amortize the total construction GHG emissions over 30 years to create an annual emissions rate that is combined with the operational GHG emissions for determining significance.

The BAAQMD *CEQA Air Quality Guidelines* provide numeric thresholds for GHG emissions during project operation. A proposed land use development project would not have a significant GHG impact, if operation of the project would meet one of the following thresholds:

- Compliance with a qualified GHG Reduction Strategy;
- Annual emissions less than 1,100 metric tons per year (MT/yr) of CO<sub>2</sub>e; or
- 4.6 metric tons of CO<sub>2</sub>e per service population<sup>69</sup> per year (MT CO<sub>2</sub>e/SP/yr)

As stated above, the proposed project would relocate the AMT Program from the existing facility at SFO to the project site. The AMT Program has been operating out of CCSF's SFO campus, which is located 9 miles from Evans Center. The relocation of the AMT Program to the Evans Center would not result in an increase in the program operations. Therefore, the GHG emissions generated from jet engines and the mobile source emissions generated from staff and students traveling to the site as well as energy, area, and water source emissions generated from the AMT Program at the SFO Airport would be transferred to the Evans Center. The proposed project would also involve the modernization of the existing building on-site. Modernization includes seismic upgrades, a new roof, and the reconfiguration of the interior space as well as the installation of two temporary structures. As a result, construction is not expected to expand the operational uses of the Evans Center beyond the addition of the AMT Program. Therefore, GHG emissions would occur only from the construction of the proposed project. However, since GHG emissions are cumulative in nature, the movement of the AMT Program within the City and the continued operation of the Evans

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<sup>69</sup> According to the BAAQMD's *CEQA Guidelines*, a service population is determined by adding the number of residents to the number of jobs estimated for a given point in time.

Center would not increase regional GHG emissions. GHG emissions that would occur on the project site were quantified and are presented below for informational purposes.

## **Project Impacts and Mitigation Measures**

- a) **Implementation of the proposed project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (*Less than Significant Impact*).**

### **Construction Emissions**

Construction of the proposed project is relatively minor and would result in the grading of approximately 260 cubic yards of soil and the renovation of the existing Evans Center building over a period of 18-months. 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 over the approximately 18-month construction duration of the proposed project would be approximately 231 metric tons of carbon dioxide equivalent (MT CO<sub>2e</sub>). 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 proposed project. The total construction GHG emissions were divided by 30 to determine an annual construction emission rate estimate to be amortized over the project's first 30 years of operational life, consistent with CARB guidance on integrating construction emissions into the operational analysis of GHG-related impacts. Amortized over a 30-year period, the proposed project is anticipated to emit approximately 7.7 MT CO<sub>2e</sub>/year from construction activities.

### **Operational Emissions**

The relocation of the AMT Program to the project site would result in the relocation of GHG emissions associated with the jet engines, mobile-source GHG emissions from AMT Program students and facility, and classroom building emissions from SFO Airport to CCSF's Evans Center. Proposed upgrades in the existing building would be in compliance with the CBC and would result in higher efficiency as compared to the classrooms at the Airport Center. The students, staff, and faculty members that travel to the Airport Center likely all use automobile and passenger vehicles due to the limited public transit available to the SFO. The relocation of the AMT Program would encourage a mode shift for AMT Program's students, staff, and faculty members to transit, as the Evans Center is 850 feet east of the existing SFMTA Rail Line T Station. As a result, the movement of the AMT Program would result in a decrease in GHG emissions from mobile and building sources.

Moreover, construction of the proposed project would result in a more efficient project site from utility improvements and would reduce the available on-site parking, which would encourage future students, staff, and faculty members to use transit.

At the SFO, the AMT Program operated eight jet engines as part of its curriculum. At Evans Center, the AMT Program would operate with seven jet engines instead resulting in less annual GHG emissions during operation than existing conditions.

Finally, the proposed project is not anticipated to result in an increase of students CCSF students. Future growth in students, staff, and facility is expected as part of the total growth under CCSF's Updated FMP. The emissions from this growth, including mobile source emissions, has already been accounted for within the Updated FMP. Since the proposed project would not induce growth, the operation of jet engines and the associated emissions as part of the AMT Program curriculum would not increase from the relocation of AMT Program from SFO Airport to the Evans Center.

## **Conclusion**

Construction activities at the Evans Center would be minor and would include seismic retrofit of the existing building. As a result, construction would result in minor emissions and the relocation of the AMT Program from SFO Airport to the Evans Center would not result in the regional increase in emissions. Furthermore, the operation of the existing structure would receive utilities upgrades to the electrical and plumbing system that would be more efficient than the existing systems.

Since GHG emissions are cumulative in nature, the movement of GHG emissions from one area of the Bay Area to another would not increase regional GHG emissions or result in any increases in global warming impacts. Moreover, the proposed project would not increase the building footprints at Evans Center. The proposed project would retrofit the existing building and, therefore, is not expected to change the current existing operational emissions at the project site beyond the relocated emissions associated with the AMT Program. In addition, the proposed renovation activities would include upgraded utilities within the existing building would result in some reductions of GHG emissions. The building's upgraded utilities would be more efficient and result in less emissions from building energy and water use. As a result, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and the impact would be less than significant.

- b) Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (*Less Than Significant Impact*).**

Pursuant to Appendix G of the *CEQA Guidelines*, a significant GHG impact is identified if the project could conflict with applicable GHG reduction plans, policies, or regulations. Development projects would be subject to compliance with SB 32. SB 32 was passed in 2016, which codified a 2030 GHG emissions reduction target of 40% below 1990 levels. CARB issued the 2017 Final Scoping Plan to reflect the target set by Executive Order B-30-15 and codified by SB 32.<sup>70</sup> The 2017 Final Scoping Plan outlines the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure, providing a blueprint to continue driving down GHG emissions and obtain the statewide target.

***Consistency with the Final 2017 Scoping Plan Update***

CARB issued the Final 2017 Scoping Plan Update in November 2017 and establishes emissions reduction strategies necessary to meet SB 32’s 2030 reduction goals. **Table 19, Project Consistency with Applicable 2017 Scoping Plan Measures**, identifies the Scoping Plan policies that are applicable to the proposed project. As shown, the Proposed Project would be consistent with the Scoping Plan.

**Table 19**  
**Project Consistency with CARB 2017 Scoping Plan**  
**Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
<b><i>Implement SB 350 by 2030:</i></b>	
<ul style="list-style-type: none"> <li>• Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and grid reliability</li> </ul>	<b>Not Applicable.</b> The measure is not related to development projects but intended for energy providers.
<ul style="list-style-type: none"> <li>• Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.</li> </ul>	<b>Not Applicable.</b> This measure is directed towards policymakers, not development projects. However, the Proposed Project is designed to meet CALGreen building standards by including measures designed to reduce energy consumption.
<ul style="list-style-type: none"> <li>• Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in the IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly-owned utilities meet GHG emissions planning targets through a combination of measures as described in IRPs.</li> </ul>	<b>Consistent.</b> The Proposed Project will be required to adhere to the latest CALGreen building Codes for new structures and Title 24, which will result in a more efficient project site.
<b><i>Implement Mobile Source Strategy (Cleaner Technology and Fuels):</i></b>	
<ul style="list-style-type: none"> <li>• Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."</li> </ul>	<b>Not Applicable.</b> This measure is directed towards policymakers, not development projects.

<sup>70</sup> CARB *California’s 2017 Climate Change Scoping Plan*. Available online at: [https://ww3.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf), accessed February 20, 2020.

Strategy	Project Consistency
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road use, parking pricing, transit discounts).	<b>Not Applicable.</b> This measure is directed towards policymakers, not development projects.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	<b>Not Applicable.</b> This measure is directed towards CARB, CalRecycle, CDFR, SWRCB, and local air districts. However, the statewide policy goals of 75% of solid waste generated be source reduce, recycled, or composted by 2020 under AB 341. Since the project will be operational after this year, the project's waste collection service will be required to be compliant with this waste reduction.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	<b>Consistent.</b> The Proposed Project will be required to adhere to the latest CALGreen Building Standards for new structures and Title 24.

Source: Impact Sciences, 2021.

CARB. California's 2017 Climate Change Scoping Plan. Available online at: [https://ww3.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf), accessed March 19, 2021.

Based on this evaluation, this analysis finds the project would be consistent with all feasible and applicable strategies recommended in the 2017 Scoping Plan Update.

### Consistency with San Francisco's Greenhouse Gas Reduction Plan

As a state-funded institution, CCSF is not required to show consistency 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 and the proposed project would adhere to applicable ordinances listed within the GGRP Checklist. 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. **Table 20, Project Consistency with the GGRP**, identifies the applicable ordinances within the GGRP.

**Table 20**  
**Project Consistency with the GGRP**

Regulation	Requirements	Remarks
Commuter Benefits Ordinance	All employers of 20 or more employees nationwide must provide at least one of the following benefit programs:	<b>Consistent.</b> CCSF includes a Commuter Benefits Program, which allows CCSF employees to use pre-tax dollars for public transit and parking associated with the daily commute to work. See: <a href="https://www.ccsf.edu/en/about-city-college/administration/human-resources/benefits.html">https://www.ccsf.edu/en/about-city-college/administration/human-resources/benefits.html</a>
	(1) A pre-tax election consistent with 26 U.S.C. § 132(f), allowing employees to elect to exclude from taxable wages and compensation, employee commuting costs incurred for transit passes or vanpool charges, or	
	(2) Employer paid benefit whereby the employer supplies a transit or vanpool subsidy for each covered employee. The subsidy must be at least equal in value	

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Regulation	Requirements	Remarks
	to the current cost of the Muni and BART monthly pass , or	
	(3) Employer provided transportation furnished by the employer at no cost to the employee in a vanpool or bus, or similar multi-passenger vehicle operated by or for the employer.	
San Francisco Green Building Requirements for Water Use Reduction	All new buildings must comply with current California water fixture and fitting efficiency requirements. All fixtures and fittings within areas of alteration, or serving areas of alteration, must be upgraded to current California and San Francisco fixture and fitting water efficiency requirements.	<b>Consistent.</b> The Evans Center will upgrade utilities of the existing building and the project (including new buildings) will be required to adhere to CCSF's Sustainable Design Standard that sets the goal of reducing potable water consumption 30% below CalGreen baseline.
Commercial Water Conservation Ordinance	Requires all alterations to existing commercial properties to achieve the following:  1. If showerheads have a maximum flow greater than 2.5 gallons per minute (gpm), replace with less than or equal to 2.0 gpm.  2. All showers have no more than one showerhead per valve  3. If faucets and faucet aerators have a maximum flow rate greater than 2.2 gpm, replace with unit meeting current code: · Non-residential lavatory: less than or equal to 0.4 gpm · Kitchen faucet: less than or equal to 0.8 gpm · Metering faucet: less than or equal to 0.2 gal/cycle  4. If toilets have a maximum rated water consumption greater than or equal to 1.6 gallons per flush (gpf), replace with less than or equal 1.28 gpf toilet  5. If urinals have a maximum flow rate greater than 1.0 gpf, replace with less than or equal to 0.5 gpf unit  6. Repair all water leaks.	<b>Consistent.</b> The Evans Center will upgrade utilities of the existing building and the project (including new buildings) will be required to adhere to CCSF's Sustainable Design Standard that sets the goal of reducing potable water consumption 30% below CalGreen baseline.
Light pollution reduction	For nonresidential projects, comply with lighting power requirements in California Energy Code, CCR Part 6. Meet California Energy Code minimum for lighting zones 1 through 4 with backlight/uplight/glare ratings meeting CalGreen Table 5.106.8 requirements.	<b>Consistent.</b> Any new structures will be required to meet applicable CalGreen standards.
Mandatory Recycling and Composting Ordinance	All persons in San Francisco are required to separate their refuse into recyclables, compostables, and trash, and place each type of refuse in a separate container designated for disposal of that type of refuse.  All new construction, renovation and alterations must provide for the storage, collection, and loading of recyclables, compost and solid waste in a manner that is convenient for all users of the building.	<b>Consistent.</b> The projects will comply as CCSF separates refuse into recyclables, compostable, and trash and place each in separate containers.

Regulation	Requirements	Remarks
San Francisco Construction and Demolition Debris Recovery Ordinance	<p>Applies to all projects: No construction and demolition material may be taken to landfill or placed in the garbage. All (100% of) mixed debris must be transported by a registered hauler to a registered facility to be processed for recycling. Source separated material must be taken to a facility that recycles or reuses those materials.</p> <p>Additionally, projects that include full demolition of an existing structure must submit a waste diversion plan to the Director of the Department of Environment and the plan must provide for a minimum of 65% diversion from landfill of construction and demolition debris, including materials source separated for reuse or recycling.</p>	<p><b>Consistent.</b> The CCSF Design Standards commits new construction projects to meet a minimum of 75% waste diversion. Therefore, the projects will divert at least 75% of the construction waste from landfills.</p>
Enhanced Refrigerant Management	Commercial buildings must not install equipment that contains chlorofluorocarbons or halons. Applies to new construction and all alterations.	<p><b>Consistent.</b> The project will not install any such products or equipment.</p>
Low-emitting adhesives, sealants, caulks, paints, coatings, composite wood, and flooring	Adhesives, sealants, and caulks - Comply with VOC limits in SCAQMD Rule 1168 VOC limits and California Code of Regulations Title 17 for aerosol adhesives. (Refer to CalGreen tables 4.504.1 and 4.504.2).	<p><b>Consistent.</b> CCSF's Sustainable Design Standards and CalGreen include VOC limits for Architectural Coatings. The District will comply with whichever one of these VOC limits is most stringent for each of the Architectural Coatings.</p>
Wood Burning Rule	Bans the construction of wood-burning devices in new buildings constructed in the Bay Area since November 1, 2016. Gas-fueled fireplaces and logs, gas inserts, and electrical fireplaces are acceptable.	<p><b>Consistent.</b> The proposed project will not install any wood burning devices.</p>

Source: *Impact Sciences, 2021.*

City of San Francisco. 2017. *2017 Greenhouse Gas Reduction Plan*. Available online at:

[https://sfmea.sfplanning.org/GHG/GHG\\_Strategy\\_October2017.pdf](https://sfmea.sfplanning.org/GHG/GHG_Strategy_October2017.pdf), accessed April 9, 2021.

### Conclusion

The proposed project would not conflict with or otherwise interfere with the statewide GHG reduction measures. The proposed project would retrofit the Evans Center, construct temporary buildings, and host the AMT program. As a result, the proposed project will only result in a minor increase in regional GHG emissions from project construction. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases. The impact would be less than significant.

<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>9. HAZARDS AND HAZARDOUS MATERIALS</b> – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### ***Environmental Setting***

Uses in the immediate vicinity of the project site are primarily light industrial and commercial. The nearest residential uses are 0.15 miles south of Evans Center, and the nearest public park is 0.10 miles to the south. The project site was part of San Francisco’s Butchertown from at least the 1880s until the 1950s and was



occupied by slaughterhouses, tallow works, and animal pens. Part of the property was used for automotive storage from the 1950s until the late 1960s or early 1970s when the site was cleared and regraded as part of larger development work in the area. The existing Evans Center building was built in the 1980s and has been occupied by CCSF since 1994.

The project site is not 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.

### ***Discussion of Potential Project Impacts***

- a) **The proposed project 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 Impact*).**

**Construction.** Construction materials used at the project site for upgrade and renovation activities would include varying amounts of hazardous materials. Materials that may be transported to and used at the project site include fuels (diesel and gasoline), lubricants, paints, solvents, and flammable gasses for welding. Storage and use of hazardous materials during construction activities could result in release of small volumes of hazardous materials which could impact soil and/or groundwater quality at the project site. However, pursuant to the CCSF Sustainability Plan, the College would require the contractor at the project site to implement storm water pollution prevention measures and outline best management practices as defined by the State Water Resources Control Board. These would include proper storage and use of hazardous materials in a manner as to prevent accidental spills and releases to the environment and/or stormwater. Best management practices will be installed and maintained in accordance with the industry standard, such as those described in the California Stormwater Association's Storm Water Best Management Practice Handbook. The College would also require the contractor to comply with the Contract Document No. 1.1.12.19, Hazardous Materials Procedures and Requirements, which outlines the District's regulations related to the handling of hazardous materials and hazardous waste.

Routine transport of hazardous materials to and from the project site could indirectly result in an incremental increase in the potential for accidents. Transport of hazardous materials to and from the project site would be in compliance with the regulations of the U.S. Department of Transportation (DOT) and the California Highway Patrol for the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. In addition, use of hazardous materials at the project site would be in compliance with worker safety regulations under the California Occupational Safety and Health

Administration (Cal/OSHA), which cover hazards related to the prevention of exposure to hazardous materials and a release to the environment from hazardous materials use. In compliance with California Department of Toxic Substances Control (DTSC) and San Francisco Regional Water Quality Control Board (RWQCB) regulations, 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 at an appropriate landfill.

**Operations.** Existing operations at the Evans Center include the use and storage of small volumes of hazardous materials including lubricants, paints, solvents, and fuels used for automotive maintenance instruction, flammable gasses used for welding instruction, and other lubricants, solvents, and adhesives used for construction and woodworking instruction. Relocation of the AMT Program to the Evans Center would include storage and use of small amounts of additional hazardous materials, including lubricating oils and greases, adhesives, paints, solvents/degreasers, and aviation and jet fuels.

Storage and use of these materials during operation of the Evans Center would follow all state and local risk management requirements for hazardous materials including proper storage, use, and transport. Disposal of hazardous waste from the Evans Center would continue to be coordinated with San Francisco Department of Public Health (SFDPH), which provides pick up, transportation, and disposal of wastes. For these reasons, the project impacts related to the routine use, storage, and disposal of hazardous materials during construction and operation would be less than significant. 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). Therefore, the project impacts related to the routine use, storage, and disposal of hazardous materials during construction and operation would be less than significant.

- b) The proposed project 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 (*Less than Significant Impact*).**

**Construction.** The project site is located within an area that falls under the jurisdiction of the San Francisco Department of Public Health's Article 22A (Maher Ordinance). For disturbance of more than 50 cubic yards, projects subject to Article 22A require investigation, site management, and reporting that is administered and overseen by the San Francisco Department of Public Health. The proposed project would disturb more than 50 cubic yards of soil, and, therefore, the proposed project is subject to the Maher Ordinance.

The District prepared a Phase I Environmental Site Assessment (ESA) (**Appendix D**) to assess the current potential for site contamination. The Phase I ESA included a reconnaissance field survey of the site and

vicinity, review of relevant reports, review of public local, state, and federal records related to hazardous materials, review of relevant documents and maps regarding local geologic and hydrogeologic conditions, and review of historical documents including aerial photographs and topographic maps. The Phase I ESA determined that there was no evidence of recognized environmental conditions in connection with the project site. Based on the information and conclusions from the Phase I ESA, the proposed project would not result in a significant hazard to the public or the environment from the release of hazardous materials associated with contaminated soil, groundwater, and storage areas. The District would comply with the City's Maher Ordinance requires and submit the Maher Ordinance application to the San Francisco Department of Public Health with the required site information and would implement any further requirements.

As discussed above, materials typically used during construction and renovation include varying amounts of hazardous materials. Materials expected to be used and stored at the Evans Center during construction include fuels (diesel and gasoline), lubricants, paints, solvents, and flammable gasses for welding. During upgrade and renovation of the existing building, wastes including lead and asbestos-containing building materials, metal, glass, concrete, and other debris may be generated for off-site removal and disposal or recycling. Prior to the start of any construction activities, the District would require contractor to submit and implement a site-specific Health and Safety Plan (HASP) to address chemical hazards identified for the construction including hazardous materials brought on-site, potential lead/asbestos containing building debris, and any impacted soils if identified in future environmental site assessments. The HASP, at a minimum, would be required to conform to the general requirements of Occupational Safety and Health Administration (OSHA) standards (29 CFR 1910.120) and California Occupational Safety and health Program (Cal-OSHA) standards (8 CCR GISO 5192) for protecting workers and the community from construction hazards and chemicals of concern in soil. Use of engineering controls, work practices, and use of personal protective equipment specified in the Health and Safety Plan would ensure that exposure to hazardous materials would not result in adverse health impacts.

**Operations.** Operation of the Evans Center following construction will be subject to city and state management requirements for hazardous materials. All chemicals used and stored 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), the Hazardous Waste Control Regulations (22 CCR 4.5), site-specific Hazardous Materials Business Plan (CA Health and Safety Code 25500-25547.8) and, if applicable, Spill Prevention Control and Countermeasures Plan (40 CFR Parts 112 and 761). Therefore, with mandatory compliance with existing laws and regulatory requirements the potential hazard to the public and the environment from reasonably foreseeable conditions involving the release of hazardous materials into the environment during construction or operation would be less than significant.

- c) The proposed project would not create a significant hazard through emission of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (*Less than Significant Impact*).**

Two schools are located within one-quarter mile of the project site. The Erikson School is located 0.10 miles to the southeast and Rise University Preparatory is located 0.20 miles to the southeast. 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, operation of the jet engines of the AMT Program, and emergency generators. Air quality impacts associated with emissions of the proposed project during construction and operation are addressed in **Section V.3, Air Quality**. As described in **Section V.3**, the proposed project would have less than significant air quality impacts.

No treatment or recovery of hazardous wastes occurs at Evans Center. Hazardous wastes generated by operation of the facility and instruction activities are periodically collected and transported by SFDPH for disposal. Wastes are limited to small amounts of lubricating oils and greases, paints, and solvents. Due to the amounts and nature of the hazardous wastes generated by operation of the project site, impacts from the proposed project would be less than significant.

- d) The proposed project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (*No Impact*).**

According to a search of available environmental databases and as documented in the Phase I Environmental Site Assessment for Evans Center (See **Appendix D**), the project site is not listed as a site with a hazardous material release. Therefore, no potential impact related to a significant hazard to the public or the environment from such a site would exist. The proposed project would not create a risk to the public or the environment from exposure to hazardous materials from historical site uses.

- f) The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (*Less than Significant Impact*).**

Construction activities at the project site may cause temporary closure of portions of the property, including established evacuation routes. Construction activities would be coordinated to allow maintenance of existing evacuation routes, or temporary evacuation plans and routes will be developed for the duration of the project. All elements of the proposed project would be sited with sufficient clearance so as not to interfere with emergency access to and evacuation from the project site.

Upon completion of the proposed project, the existing emergency response plan and emergency evacuation plans for Evans Center would be updated to reflect interior layout changes and changes in the locations of hazardous material storage, use areas, and emergency response equipment. Construction work in adjacent streets would be limited to lateral utility connections and would be coordinated to minimize traffic diversions. Traffic control would be provided for any lane closures. For these reasons, project impacts will be less than significant.

**The proposed project, 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 Impact*)**

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 proposed project. The proposed project would conform with applicable regulatory requirements for transport, use, and handling of hazardous materials. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact related to hazards and hazardous materials.

<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>10. HYDROLOGY AND WATER QUALITY – Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### ***Environmental Setting***

The proposed project would retrofit, renovate, and reconfigure the existing building and would not result in the construction of new buildings.

Evans Center is 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.

The historical shoreline is depicted within the southwest corner of the project site. The southwest corner is also delineated as historical water bodies.<sup>71,72</sup> 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. Evans Center is located at approximately 0.3 miles south of Islais Creek Channel and 0.6 miles from San Francisco Bay. The elevation of the site is approximately 17 feet above MSL.

**Water Quality.** Water quality in the vicinity of the project site 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, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds, furan compounds, invasive species, mercury, polychlorinated biphenyls (PCBs) (including dioxin-like compounds), selenium, and trash.<sup>73</sup>

**Groundwater Hydrology and Quality.** The project site is within the Islais Valley Groundwater Basin located within the San Francisco Bay Hydrologic Region. Sources of recharge include infiltration of rainfall, irrigation return flows, and leakage from water and sewer pipes. Groundwater at the project site was encountered at depths ranging from 9.8 to 11.9 feet below the existing ground surface.<sup>74</sup>

Groundwater within the Islais Valley Groundwater Basin is a mixed cation bicarbonate type. Water from many wells can be considered to be hard. Elevated nitrate levels is the most common water quality problem with wells in the San Francisco peninsula and high chloride concentrations were observed in some wells.<sup>75</sup>

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<sup>71</sup> San Francisco Public Utilities Commission. 100-Year Storm Flood Risk Map. Available at: <https://sfplanninggis.org/floodmap/>.

<sup>72</sup> California Emergency Agency, University of Southern California, and the California Geological Survey. 2009. Tsunami Inundation for Emergency Planning. State of California – City and County of San Francisco. San Francisco North Quadrangle. San Francisco South Quadrangle (San Francisco Bay). June 15.

<sup>73</sup> 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](https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml).

<sup>74</sup> Smith-Emery San Francisco. 2019. Report on Geotechnical Investigations and Geologic Hazards. City College of San Francisco Evans Campus. Proposed Temporary Structure. 1400 Evans Avenue, San Francisco, California. November 8.

<sup>75</sup> 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](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/2_033_IslaiValley.pdf).

**Combined Sewer System and Overflows.** The City's combined sewer system (CSS) is divided into the Bayside and Westside drainage basins which collect wastewater and stormwater from the east and west sides of the City, respectively. The project site is within the Bayside drainage basin, which includes five urban watersheds North Shore, Channel, Islais, Sunnyvale and Yosemite. Wastewater and stormwater flows from the project site would drain to the Islais Creek urban watershed.<sup>76</sup> Wastewater flows from the Bayside drainage basin are transported to the Southeast Treatment Plan. All dry and wet weather discharges from the CSS, through either the outfalls or the combined sewer overflow 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 Francisco Bay Region.<sup>77</sup>

### *Discussion of Potential Project Impacts*

- a) **The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (*Less Than Significant Impact*).**

**Construction.** Proposed retrofitting and renovation activities would include excavation around the perimeter of the existing building. 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. 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). 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.

All project construction activities would be subject to existing regulatory requirements. In compliance with the State Water Resources Construction Board regulations and Article 4.2 of the San Francisco Public Works

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<sup>76</sup> San Francisco Public Utilities Commission. Sewer System Improvement Program. <https://www.sfwater.org/modules/showdocument.aspx?documentid=13994>. Accessed on April 21, 2020.

<sup>77</sup> 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](https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2013/R2-2013-0029.pdf).



Code, the College would require the contractor to prepare an erosion control plan that would include 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 contractor would also be required to identify BMPs for the storage and handling of the backfill and the disturbed soil. A copy of the erosion control plan would be kept at the construction site and be available for DSA review on request. The construction BMPs that would most likely be implemented as part of the proposed project would address inspection and maintenance, water conservation, spill prevention and control, street cleaning, and prevention of illicit connection and discharge. These best management practices would minimize disturbance to the project site, adjacent areas, and storm drains and would retain sediment. In addition, prior to the commencement of any land-disturbing activities, the College would obtain a construction site runoff control permit from the San Francisco Public Utilities Commission. Compliance with the relevant regulations and implementation of BMPs would prevent construction-related contaminants from reaching impaired surface waters and contribution to urban impacts on water quality in the San Francisco Bay. The proposed project's impact related to water quality resulting from construction-related activities and ground disturbance activities would be less than significant.

Management of Demolition Activities and Debris. As described in **Section V.9, Hazards and Hazardous Materials**, spills, leaks, transport, and/or storage of hazardous materials under the proposed project 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 project construction would be less than significant.

**Operations.** During operation, existing classrooms and workshop activities at Evans Center would continue in addition to the classrooms and workshop activities of the relocated AMT Program. Maintenance yards for the automotive and construction programs would be located at the north yard. A small space within the front yard near the southwest corner of the existing building would be used as a maintenance yard for the AMT Program. Additional operational activities associated with the AMT Program would increase existing levels of pollutants at the center, such as oils, sediments, pesticides, trash, bacteria, nutrients, metals, and other toxins. These pollutants could reach surface waters in the vicinity through storm drains and ultimately discharge into San Francisco Bay. However, compliance with the local and state regulations related handling and storage of the used hazardous materials and hazardous waste generated at the site would reduce the impact associated with these materials as discussed in **Section V.9, Hazards and Hazardous Materials**. In addition, 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 project site. In conformance with the San Francisco Stormwater Management Ordinance (SMO), the College would coordinate with SFPUC to comply with the SMO. In addition, the proposed project would comply with CCSF Sustainability Plan to reduce adverse impact on water quality by increasing on-site infiltration, minimizing stormwater runoff and prevent sediments and contaminants from entering the CSS. Compliance with the city's SMO and the CCSF Sustainability Plan would ensure that the proposed project would include stormwater management systems that retain runoff on site, and limit discharges from the site from entering the CSS. Therefore, operational impacts of the proposed project related to water quality and waste discharge requirements would be less than significant.

- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin (*No Impact*).**

**Construction.** Groundwater at the project site was encountered at depths ranging from 9.8 to 11.9 feet below the existing ground surface. Excavation associated with the proposed project would be limited to the area near the foundation of the existing building and would not exceed 5 feet below the existing ground surface. Therefore, the proposed project would not impact groundwater during construction. 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 activities would comply with the Regulation Related to Recycled Water (Title 22) of the State Water Resources Control Board (SWRCB).

**Operation.** New impervious areas can reduce rainfall infiltration capacities that naturally recharge groundwater. However, the proposed project would not interfere with groundwater recharge because retrofitting and renovation activities would not change the existing impervious surface coverage. Therefore, operation under the proposed project would not use groundwater supplies, increase groundwater demand, or otherwise reduce infiltration or the size of groundwater recharge areas.

- c) The proposed project 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 Impact*).**

**Construction.** Excavation and trenching activities could result in disturbance of soils at the project site. 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 CSS. Under the proposed project, stormwater runoff would generally behave in the same manner. As discussed above (**Section V.10.a**), CCSF would comply with the State Water Resources Construction Board and the SFPUC regulations and implement erosion and sediment control BMPs to ensure hydrologic and water quality standards are met. The campus would continue to direct stormwater runoff to the CSS. BMPs would include, but would not necessarily be limited to, filtering runoff during construction during the rainy season. Therefore, with implementation of erosion and sedimentation control BMPs, the potential changes to drainage patterns during construction would have a less than significant impact.

**Operation.** The proposed project would not modify existing topography, drainage shed boundaries, or runoff rates/patterns. The District's Sustainability Plan 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 **Section V.10.a**, the proposed project 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 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.

**d) The proposed project would not result in flood hazards or release pollutants due to project inundation (*Less than Significant Impact*).**

As described above, the site's essentially flat topography of approximate elevation of 17 feet is not situated within a special flood hazard area subject to inundation by the 1% annual chance flood. The San Francisco Public Utility Commission Floodplain Management Program has published a Preliminary Floodplain Map which is based on a Preliminary Insurance Rate Map prepared by FEMA (2015) place the campus area within described as "areas determined to be outside the 0.2% annual chance flood hazard."

The project site is located approximately 0.3 miles south of Islais Creek Channel and 0.6 miles from San Francisco Bay. It is outside the limits of mapped tsunami and seiche run-up areas. Therefore, impact associated with floodplain, tsunamis, or seiche zones would be less than significant.

**e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (*No Impact*).**

The proposed project would comply with all applicable federal, state, and local regulations governing water quality and discharges into surface and underground bodies of water. Runoff from the project site would drain into the city's CSS where it is treated before being discharged to the San Francisco Bay. Therefore, the proposed project would not conflict with applicable water quality and groundwater management plans.

**Construction and operation of the proposed project, in conjunction with other cumulative development near the project site, 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 Impact*)**

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 proposed project, 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 Construction General Permit under the National Pollutant Discharge Elimination System and also the City's Stormwater Management Ordinance. All cumulative projects that disturb more than one acre would be required to include preparation and implementation of a Stormwater Pollution Prevention Plan that would include BMPs to reduce pollutants in stormwater and other non-point source runoff during construction. These regulatory requirements also include Low-Impact-Development (LID) design measures which must be implemented into project designs and are created to minimize off-site discharges and reduce pollutant loading. 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.

<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>11. LAND USE AND PLANNING – Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### *Environmental Setting*

The proposed project is a 2.8-acre project site, located on the east side of San Francisco in the Bayview-Hunters Point district of San Francisco. The project site is within the Bayview Hunters Point neighborhood in an area zoned as PDR-2 District: Core Production, Distribution and Repair and in a 65-J Height and Bulk District. In addition, the project site is within the 3rd Street Alcohol Restricted Use District and the India Basin Industrial Park Special Use Districts, and with one-fourth mile of the Fringe Financial Service Redevelopment Use District.

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.

### *Discussion of Potential Project Impacts*

- a) **The proposed project would not physically divide an established community (No Impact).**

The proposed project would not create a new barrier or obstruction that would physically divide the community. The proposed project would not result in development outside of the established CCSF Evans Center. It would not include any activities that would result in the division of surrounding neighborhoods. Therefore, the proposed project would have no impact with respect to physically dividing the surrounding community.

- b) **The proposed project would not cause a 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 (No Impact).**

The proposed project would retrofit and renovate the existing building at CCSF Evans Center and relocate the AMT Program to the project site. Operations under the proposed project would remain consistent with the existing institutional uses of the College facilities. In addition, project operations would all be within the boundaries CCSF Evans Center.

As noted above, as a state project, the College is not subject to municipal land use enactments, such as the San Francisco General 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. Evans Center is within the Bayview Hunters Point neighborhood in an area zoned as PDR-2 District: Core Production. Business and activities allowed in PDR Districts generally share a need for flexible operating space that features large open interior spaces, high ceilings, freight loading docks and elevators, floors capable of bearing heavy loads, and large (often uncovered exterior) storage areas. These uses are often not ideally compatible with housing for operational reasons. The PDR-2 District permits certain non-industrial, non-residential uses, including small-scale retail and office, entertainment, certain institutions, and similar uses that would not create conflicts with the primary industrial uses or are compatible with the operational characteristics of businesses in the area. Light industrial uses in this District may be conducted entirely within an enclosed structure, partly within enclosed structures, or some functions may occur entirely in open areas. The use of the Evans Center as a community college for programs that require workshops with large open interior space and uncovered exterior space is consistent with the City's zoning designation. 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. Parcels in this India Basin Special Use District (SUD) are subject of the PDR-2-District, discussed above. The SUD mandates special provides to specific parcels (not including the project site) close to Third Street.

The Third Street Alcohol Restricted Use District has been established to preserve the residential character and the neighborhood-serving commercial uses of the area by prohibiting on-sale and off-sale liquor establishment in the area generally bounded by Islais Creek to the North, Quint Street, Phelps Street, Tampa Street, Bridgeview Drive, Newhall Street, Venus Street and Egbert Avenue to the West, US Highway 101 to the South, and Mendell Street, La Salle Avenue, Keith Street, Palou Street, Jennings Street, and Ingalls Street to the East. As an institutional facility Evans Center would continue to be consistent with this district regulations.

For all these reasons, the proposed project 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.

**The proposed project, in combination past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative land use impacts.**  
*(No Impact)*

As described above, proposed activities would be within the boundaries of the project site and the proposed project would have no impacts associated with land use and planning. Therefore, the proposed project would not contribute to cumulative land use impacts.

<b>Issues</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>12. MINERAL RESOURCES</b> – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not designated as a mineral resource zone and does not include known or potential mineral resources. The area of the Evans Center is designated on the USGS Map Showing Mineral Resources as Bay Mud with no mineral resources. Bay Mud is defined as “mostly consolidated clay and silt-sized particles deposited in the San Francisco Bay and surround marshlands and in Sacramento-San Joaquin River Delta. Includes areas of manmade fill.”<sup>78</sup> Therefore, the project would have no impact on the loss of availability of a known mineral resource or locally important mineral resource recovery site.

<sup>78</sup> Department of the Interior. USGS. 1975. Map Showing Mineral Resources of the San Francisco Bay Region, California – Present Availability and Planning for the Future.



<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>13. NOISE – Would the project result in:</b>				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise is usually defined as unwanted sound that is an undesirable byproduct of society’s normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, and/or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies. For example, the human ear is less sensitive to low and high frequencies than medium frequencies, which more closely correspond with human speech. In response to the sensitivity of the human ear to different frequencies, the A-weighted noise level (or scale), which corresponds better with people’s subjective judgment of sound levels, has been developed. This A-weighted sound level, referenced in units of dB(A), is measured on a logarithmic scale such that a doubling of sound energy results in a 3 dB(A) increase in noise level. Typically, changes in a community noise level of less than 3 dB(A) are not noticed by the human ear. Changes from 3 to 5 dB(A) may be noticed by some individuals who are sensitive to changes in noise. A greater than 5 dB(A) increase is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound.

On the A-weighted scale, the range of human hearing extends from approximately 3 to 140 dB(A). **Table 21, A-Weighted Decibel Scale**, provides examples of A-weighted noise levels from common sources. Noise sources occur in two forms: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line sources, such as a roadway with a large number of point sources (motor vehicles). Sound

generated by a point source typically diminishes (attenuates) at a rate of 6 dB(A) for each doubling of distance from the source to the receptor at acoustically “hard” sites and 7.5 dB(A) at acoustically “soft” sites.<sup>79</sup> For example, if a noise source produces a noise level of 89 dB(A) at a reference distance of 50 feet, the noise level would be 83 dB(A) at a distance of 100 feet from the noise source, 77 dB(A) at a distance of 200 feet, and so on. Noise generated by a mobile source will decrease by approximately 3 dB(A) over hard surfaces and 4.5 dB(A) over soft surfaces for each doubling of distance.

**Table 21**  
**A-Weighted Decibel Scale**

<b>Typical A-Weighted Sound Levels</b>	<b>Sound Level (dB(A), Leq)</b>
Threshold of Pain	140
Jet Takeoff at 100 Meters	125
Jackhammer at 15 Meters	95
Heavy Diesel Truck at 15 Meters	85
Conversation at 1 Meter	60
Soft Whisper at 2 Meters	35

*Source: United States Occupational Safety & Health Administration, Noise and Hearing Conservation Technical Manual, 1999.*

*Note: Leq: Equivalent Noise Level ; dB(A) : A-Weighted Decibel Scale;*

Sound levels also can be attenuated by man-made or natural barriers (e.g., sound walls, berms, ridges), as well as elevational differences. Noise is most audible when traveling by direct line-of-sight, an interrupted visual path between the noise source and noise receptor. Barriers, such as walls or buildings that break the line-of-sight between the source and the receiver, can greatly reduce noise levels from the source since sound can only reach the receiver by diffraction. Sound barriers can reduce sound levels by up to 20 dB(A) or more. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

Solid walls and berms may reduce noise levels by 5 to 10 dB(A) depending on their height and distance relative to the noise source and the noise receptor.<sup>80</sup> Sound levels may also be attenuated 3 dB(A) by a first

<sup>79</sup> Federal Highway Administration, *Highway Noise Fundamentals*, (1980) 97. Examples of “hard” or reflective sites include asphalt, concrete, and hard and sparsely vegetated soils. Examples of acoustically “soft” or absorptive sites include soft, sand, plowed farmland, grass, crops, heavy ground cover, etc.

<sup>80</sup> Federal Highway Administration, *Highway Noise Mitigation*, (1980) 18.

row of houses and 1.5 dB(A) for each additional row of houses.<sup>81</sup> The minimum noise attenuation provided by typical structures in California is provided in **Table 22, Building Noise Reduction Factors**.

**Table 22**  
**Building Noise Reduction Factors**

<b>Building Type</b>	<b>Window Condition</b>	<b>Noise Reduction Due to Exterior of the Structure (dB(A))</b>
All	Open	10
Light Frame	Ordinary Sash (closed)	20
	Storm Windows	25
Masonry	Single Glazed	25
	Double Glazed	35

Source: Federal Highway Administration, *Highway Traffic Noise: Analysis and Abatement Guidance*, December 2011.

Note: dB(A): A-Weighted Decibel Scale;

## Environmental Setting

Information regarding the existing setting and engine equipment noise is based on a noise study conducted by Salter, Inc., in December 2020 (**Appendix E**).

### Existing Noise Environment at Evans Center

The project site is zoned as PDR-2 (Production, Distribution, and Repair), with other PDR-zoned parcels immediately adjacent to it.

To quantify the existing noise environment at the Evans Center, two long-term measurements and one simultaneous short-term (15-min) measurement were conducted between December 9-11, 2020 (**Table 23, Onsite Sound Measurements**). Transportation noise is the main source of noise in urban environments, largely from the operation of internal combustion engines and frictional contact between vehicles and ground and air.<sup>82</sup>

<sup>81</sup> California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.

<sup>82</sup> World Health Organization. *Guidelines for Community Noise*, <https://www.who.int/docstore/peh/noise/Comnoise-1.pdf>

**Table 23**  
**On-Site Sound Measurements**

Location	Minimum Daytime Measured Hourly L <sub>90</sub>
LT-1: Along Mendell Street, 12 feet above grade.	52 dB(A)
LT-2: Along Evans Street, 12 feet above grade.	55 dB(A)
ST-1: Near the residences, 12 feet above grade.	50* dB(A)

Source: Salter, 2020

Note:

LT: Long Term; ST: Short Term; dB(A): A-Weighted Decibel Scale;

L<sub>90</sub> is a statistical descriptor of the sound level exceeded 90% of the time of the measurement period.

\* Estimated sound levels based on simultaneous measurements at short and long-term locations.

It should be noted that due to the ongoing Coronavirus pandemic, traffic conditions are likely lower than usual. Therefore, noise measurements that were conducted in December of 2020 are likely lower than pre-pandemic conditions and therefore conservative representations of the existing noise environment.

## Airplane Engine Equipment Noise Levels

Sound levels for airplane equipment were measured at the previous AMT Program facility at SFO on December 8, 2020. **Table 24, AMT Equipment Sound Data**, shows the sound levels for AMT equipment at a reference distance of 5 feet.

**Table 24**  
**AMT Equipment Sound Data**

Equipment	Sound Pressure Level (5-feet)
Turbine Engine	105 dB(A) <sup>1</sup>
Prop Plane Piston Engine	107 dB(A) <sup>2</sup>

Source: Salter, 2020.

Note:

<sup>1</sup> Estimated Sound Pressure Level at 30-foot distance is 89 dB(A)

<sup>2</sup> Estimated Sound Pressure Level at 30-foot distance is 92 dB(A)

## Vibration

The only sources of groundborne vibration in the project site vicinity are heavy-duty vehicles (e.g., refuse trucks, delivery trucks, and school buses) traveling on local roadways. Trucks and buses typically generate groundborne vibration velocity levels of around 63 vibration decibels (VdB), and these levels could reach

72 VdB where trucks and buses pass over bumps in the road.<sup>83</sup> In terms of peak-particle-velocity (PPV) 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.

## ***State Regulations***

### ***Title 24, California Code of Regulations***

The California Noise Insulation Standards of 1988 (California Code of Regulations Title 24, Section 3501 et seq.) require that interior noise levels from the exterior sources not exceed 45 dB(A) Ldn/community noise equivalent level (CNEL)<sup>84</sup> in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed. Where exterior noise levels exceed 60 dB(A) CNEL/Ldn, an acoustical analysis is required to show that the building construction achieves an interior noise level of 45 dB(A) CNEL/Ldn or less.

## **Local**

### ***San Francisco Noise Ordinance***

Section 2909(b) limits commercial and industrial property noise to no more than eight dB(A) above the ambient at any point outside of the property plane. Ambient is defined as the lowest sound level repeating itself during a minimum ten-minute period. The minimum hourly L<sub>90</sub> was used as a representation of ambient for analyses, consistent with City-published noise measurement guidelines. L<sub>90</sub> is a statistical descriptor of the sound level exceeded 90% of the time of the measurement period. For the purposes of this chapter, in no case shall the ambient be considered or determined to be less than 35 dB(A) for interior residential noise, and 45 dB(A) exterior noise.

Construction noise is regulated by the City of San Francisco Municipal Code (sections 2907 and 2908 of the police code).

Section 2907 of the police code requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dB(A) at a distance of 100 feet from the source. Impact tools are not subject to the equipment noise limit provided that impact tools and equipment have intake and exhaust mufflers recommended by the manufacturers thereof and are approved by the Director of Public Works or the Director of Building Inspection as best accomplishing maximum noise attenuation, and that pavement

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<sup>83</sup> California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, 2013.

<sup>84</sup> Measurements are based on Ldn or CNEL.

breakers and jackhammers are also equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the Director of Public Works or the Director of Building Inspection as best accomplishing maximum noise attenuation.

Section 2908 of the police code prohibits construction work between 8:00 p.m. and 7:00 a.m., if noise would exceed the ambient noise level by 5 dB(A) at the project property line, unless a special permit is authorized by the Director of Public Works or the Director of Building Inspection.

### ***Methodology***

Noise levels associated with project-related construction activities were calculated using the FHWA Roadway Construction Noise Model (RCNM) and evaluated with existing ambient noise levels to determine new ambient noise levels with construction activities. Construction equipment assumptions of the California Emissions Estimator Model (CalEEMod) were used to develop a construction equipment list used for RCNM inputs. Noise levels were compared to the City's noise ordinance which includes provisions regarding construction noise levels.

In addition to the construction noise regulations promulgated in the city's noise ordinance (sections 2907 and 2908), additional criteria of 10 decibels (dB) above the ambient noise level and noise level greater than 90 dB(A) are also used by the planning department to assess substantial temporary ambient noise level increases. These criteria apply at the property lines of the nearest sensitive receptors.

For operational impacts due to noise from aircraft equipment, the mechanical equipment was analyzed to determine if sound levels at the property line and nearest residences would exceed allowable levels per the noise ordinance. Section 2909(b) limits Commercial and Industrial property noise to no more than eight dB(A) above the ambient at any point outside of the property boundary.

Traffic noise impacts from the project area were qualitatively analyzed based on predicted trips generated by the project and compared to the existing traffic volumes. As noted above, it takes a doubling of traffic volume to increase noise levels by 3 dB(A).

Construction vibration damage criteria are assessed based on structural category (e.g., reinforced-concrete, steel, or timber). FTA guidelines consider 0.2 inch/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 inch/sec PPV pursuant to FTA guidelines.<sup>85</sup> The FTA

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<sup>85</sup> Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual. September 2018.

Guidelines include a table showing the vibration damage criteria based on structural category and is presented below in **Table 25, Construction and Vibration Damage Criteria**.

**Table 25**  
**Construction and Vibration Damage Criteria**

<b>Building/Structural Category</b>	<b>PPV, in/sec</b>
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.

Note: PPV: peak particle velocity

### ***Discussion of Potential Project Impacts***

- a) **The proposed project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (*Less than Significant with Mitigation*)**

### **Construction Impacts**

#### ***Temporary on-Site Construction Activity Noise***

The proposed construction activities would include demolition, earthwork, minor grading, and asphalt pavement around the existing building. Construction would also include improvement to the site such as flatwork improvements and concrete paving.

Typically, noise levels peak during demolition and grading phases, when diesel-fueled heavy-duty equipment like excavators and dozers are needed to move large amounts of debris or dirt. These equipment are mobile in nature and does not always operate at 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 no noise is generated by that equipment. Equipment will 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 less than during demolition 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. As noted above, construction activities would include demolition, earthwork, and only minor grading. Therefore, the proposed project would likely not be simultaneously using multiple large heavy-duty pieces of equipment such as excavators and dozers.

Section 2907 of the police code requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dB(A) at a distance of 100 feet from the source. Section 2907(c) explains that the equipment noise limit does not apply to impact tools and equipment provided that such equipment has intake and exhaust mufflers recommended by the manufacturers thereof and are approved by the Director of Public Works or the Director of Building Inspection. **Table 26, Typical Noise Levels from Proposed Project Construction Equipment** shows noise levels at 50 feet and 100 feet from individual pieces of equipment that would be used during project construction. It should also be noted that the construction equipment list is based on default assumptions from the CalEEMod. CalEEMod prepares a standard list of construction equipment based on land uses and land use sizes entered within the model. Since the model assumes construction of default, model assumptions tend to be more conservative than what would likely occur during project construction.

**Table 26**  
**Typical Noise Levels from Proposed Project Construction Equipment**

Construction Equipment	Noise Level (dB(A), L <sub>max</sub> at 50 feet)	Noise Level (dB(A), L <sub>max</sub> at 100 feet)
<b>San Francisco Noise Ordinance Limit</b>	86	80
Air Compressor	78	72
Concrete Mixer Truck	79	73
Concrete Saw	<b>90</b>	<b>84</b>
Crane	81	75
Grader	85	79
Paver	77	71
Roller	80	74
Dozer	82	76
Front End Loader	79	73
Excavator	81	75

Note: **Bold** indicates levels above Ordinance Limit.

Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide. Available online at: [http://www.fhwa.dot.gov/environment/noise/construction\\_noise/rcnm/rcnm.pdf](http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf), accessed March 23, 2021.



Noise levels measured at 100 feet from individual pieces of equipment would exceed the 80 dB(A) threshold only for concrete saws. For concrete saws, noise is typically intermittent and temporary, as they are typically used for short durations over specific targeted areas of the site as opposed to generally throughout (such as demolition and grading equipment, trucks, etc.). The College would require the contractor to comply with Section 2907 of the police code to ensure the use of approved intake and exhaust mufflers on construction equipment, in particular on concrete saws.

Construction noise impacts to sensitive receptors were also assessed against local ambient noise conditions with a criterion of 10 dB above the existing ambient. The lowest measured ambient level, as shown above in **Table 24** is 50 dB(A). This measurement is used since it is located at the residences along Hudson Avenue and better represents the ambient noise levels for the closest sensitive receptors.

The closest sensitive receptors include residential uses to the southwest approximately 780 feet from the project site along Hudson Avenue and the Youngblood-Coleman Playground located approximately 550 feet south of the project site. As shown in **Table 27, Construction Noise Impacts at Off-Site Sensitive Receptors**, when considering ambient noise levels, the use of multiple pieces of powered equipment simultaneously could increase noise by up to approximately 3.9 dB(A) Equivalent Noise Level (Leq) at the closest residences on Hudson Avenue and an increase of up to approximately 9.2 dB(A) Leq at the Youngblood-Coleman Playground located to the south of the project site. These increases would be temporary construction impacts and are not considered significant as they would not exceed ambient noise levels by more than the 10 dB threshold.

**Table 27  
Construction Noise Impacts at Off-Site Sensitive Receptors (without Mitigation)**

Receptor	Distance (feet)	Maximum Construction Noise Level (dB(A) Leq)	Existing Ambient Noise Level (dB(A) Leq)	New Ambient Noise Level (dB(A) Leq)	Increase (dB(A) Leq)	Potentially Significant?
1. Residences – Hudson Avenue	780 ft.	51.6	50.0	53.9	3.9	No
2. Youngblood-Coleman Playground	550 ft.	58.7	50.0	59.2	9.2	No

Source: *Impact Sciences, 2020.*

Note: Leq: Equivalent Noise Level ; dB(A) : A-Weighted Decibel Scale

Given the project context and the required compliance with local noise regulations, construction of the proposed project would result in a less than significant noise impact.

### ***Temporary Off-Site Construction Activity Noise***

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.<sup>86</sup>

Construction haul trucks would generate noise off-site during construction. This would include removal of excavated soils, base materials, and demolished materials. While these vehicles activity would increase ambient noise levels along the haul routes, considering the magnitude of the project activities, ambient noise levels would not be expected to double the existing traffic levels and would not 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.

## **Operational Impacts**

### ***Aircraft Engine Equipment Noise Levels***

As described under Section II, Project Location and Description, aircraft engines would not operate during the interim phase. Therefore, noise impact related aircraft engines would only occur during the permanent phase. As previously noted, Section 2909(b) limits commercial and industrial property noise to no more than eight dB(A) above the ambient at any point outside of the property plane. The western property boundary is the nearest boundary to the proposed Maintenance Yard of the AMT Program. Existing ambient levels for the western property plane are approximately 55 dB(A) L<sub>90</sub>. Therefore, noise from aircraft equipment would need to be at 63 dB(A) or less to comply with the noise ordinance threshold allowed increase of eight dB(A) above ambient levels.

The location of the AMT maintenance yard from the property plane is approximately 30 feet. As shown in **Table 28, AMT Equipment Noise at Property Plane (Without Mitigation)**, the predicted sound pressure level for the AMT Program engines would range from 89 dB(A) to 91 dB(A) at the western property plane. It should be noted that aircraft engines for the AMT Program usually run about 3 times per semester, with hours of use ranging from 6 to 15 hours per semester. Furthermore, the operating time on dates when engines are in use ranges from 10 to 40 minutes. Therefore, it is assumed that engines would not be running simultaneously. Nevertheless, when the engines are in use, as shown in **Table 8**, they could exceed the noise ordinance threshold by up to 28 dB(A) without mitigation.

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<sup>86</sup> California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Protocol*. September 2013.

**Table 28**  
**AMT Equipment Noise at Property Plane (Without Mitigation)**

Equipment	Sound Pressure Level (5-foot)	Predicted Sound Pressure Levels at Property Plane (30 feet from AMT Maintenance Yard)	Sound Level Threshold per Noise Ordinance	Noise Level Above Noise Ordinance Threshold
Turbine Engine	105 dB(A)	89 dB(A)	63 dB(A)	26 dB(A)
Prop Plane Piston Engine	107 dB(A)	91 dB(A)	63 dB(A)	28 dB(A)

Source: Salter, 2020; Impact Sciences, 2021;

Note: dB(A): A-Weighted Decibel Scale;

**Mitigation Measure MM NOI-1**, would require the use of noise barriers to reduce operational noise levels resulting from the AMT Program engines. **Table 29, AMT Equipment Noise at Property Plane (With Mitigation)**, shows the anticipated noise levels of the aircraft engines with mitigation is incorporated. As shown below, with mitigation, noise from aircraft engines would range from 59 dB(A) to 61 dB(A) at the property plane. This would only exceed the ambient noise levels by 4 to 6 dB(A), and therefore, would not exceed the noise ordinance threshold of 8 dB(A) above ambient levels. As such, with the implementation of **MM NOI-1**, project operation impacts at the property plane would be less than significant.

**Table 29**  
**AMT Equipment Noise at Property Plane (With Mitigation)**

Equipment	Predicted Sound Pressure Levels at Property Plane	Sound Level Threshold per Noise Ordinance	Sound Level Above Noise Ordinance Threshold
Turbine Engine	59 dB(A)	63 dB(A)	Below Threshold
Prop Plane Piston Engine	61 dB(A)	63 dB(A)	Below Threshold

Source: Salter, 2020; Impact Sciences, 2021;

**MM NOI-1    Sound barriers for Engine Equipment**

- Replace the chain link fence surrounding the engines and equipment with a concrete masonry unit (CMU) wall, with the doors for the AMT Maintenance Yard moved to the side facing away from the western property line if possible. Otherwise, the doors should be sound gasketed.

- Provide localized sound-reducing barriers that extend at least one foot above the equipment. The barriers can be prefabricated.
- Alternatively, field-built barriers could be used provided they meet the following criteria:
  - Minimum surface density of 4 pounds per square foot (psf) and having weather-resistant sound-absorbing panels on the inside face with a minimum NRC4 of 0.80 (e.g., Tedlar-wrapped sound absorbing panels by CMA). Many constructions could meet the surface density requirement. For example, a stud wall with exterior-grade plywood sheathing and a stucco finish (or two layers of 5/8-inch thick plywood) would meet this requirement.
  - The barrier should be free of cracks and drainage holes/slots along the bottom of the barrier be kept to a minimum. Where needed, they should be covered by 1 psf mass-loaded vinyl flaps (e.g., Kinetics KNM-100) so water can flow around the vinyl and still drain.
  - Joints between sheathing layers be offset by 16 inches minimum.

### ***Operational Traffic Noise Levels***

As discussed in **Section II, Project Location and Description**, the proposed project would renovate an existing building and relocate the AMT Program to Evans Center. It would not result in any growth or capacity increase from either increased student population or operational uses. Student and staff of the AMT Program would commute to Evans Center instead of commuting to SFO. Therefore, there would be no increase in vehicle trips associated with the site after the completion of the relocation and modernization.

As noted previously, it takes an approximate doubling of roadway traffic volume to increase roadway noise levels by 3 dB(A). Therefore, noise impacts associated with operational traffic would be less than significant.

**b) The proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels (*Less than Significant*).**

The Federal Transit Administration provides groundborne vibration impact criteria with respect to building damage during construction activities. PPV, expressed in inches per second, is used to measure building vibration damage. Construction vibration damage criteria are assessed based on structural category (e.g., reinforced-concrete, steel, or timber). FTA guidelines consider 0.2 inch/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 inch/sec PPV pursuant to FTA guidelines.<sup>87</sup>

Groundborne vibration generated by construction activities associated with the proposed project would affect sensitive uses located in close proximity to the project site. **Table 30, Vibration Levels at Off-Site Sensitive Uses from Project Construction**, shows the estimated vibration velocities for nearby sensitive receptors.

**Table 30**  
**Vibration Levels at Off-Site Sensitive Uses from Project Construction**

Sensitive Uses Off-Site	Distance to Project Site (feet)	Receptor Significance Threshold PPV (in/sec)	Estimated PPV (in/sec)
1. Residences – Hudson Avenue	780	0.2	0.001
2. Youngblood-Coleman Playground	550	0.2	0.001

Source: Impact Sciences, 2021.

Note: in/sec: inches per second; PPV: Peak Particle Velocity;

The vibration velocities predicted to occur at the nearest sensitive receptors would be 0.001 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 0.2 in/sec PPV threshold. Therefore, vibration impacts associated with building damage due to project construction activities would be less than significant. No mitigation is required.

- c) **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise? (No Impact).**

The project site is not in the vicinity of a private airstrip or airport land use plan. Likewise, the project site is not located within an airport land use plan or within two miles of a public airport or public use airport. SFO is over five miles to the south of the project site. As such, the project would not expose people residing

<sup>87</sup> Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

or working in the project area to excessive airport-related noise levels. No impact would occur from the proposed project and no further analysis is required.

## Impacts to On-Site Receptors

The following analysis is to disclose potential noise impacts to the on-site receptors at the Evans Center and is for informational purposes only.

### Construction Impacts

#### *Temporary On-site Construction Activity Noise*

As noted above, noise levels would generally peak during demolition and grading phases, when diesel-fueled heavy-duty equipment like excavators and dozers are needed to move large amounts of debris or dirt. These equipment are mobile in nature and do 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 no noise is generated by that equipment.

During other phases of construction (e.g., site preparation, paving, building construction), noise impacts are generally less than during demolition 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.

Construction noise from heavy construction equipment could occur within 50 feet of on-site receptors. Since on-site receptors would likely be located indoors, the building exterior would give an attenuation of 10 dB(A) which would reduce potential noise impacts (see **Table 22**). **Table 31, Construction Noise Impacts at On-Site Receptors**, shows the potential construction noise impacts for on-site receptors that would be located approximately 50 feet away and indoors, such as within classrooms.

**Table 31**  
**Construction Noise Impacts at On-Site Sensitive Receptors**

Receptor	Distance (feet)	Maximum Construction Noise Level (dB(A) Leq)	Existing Ambient Noise Level (dB(A) Leq)	New Ambient Noise Level (dB(A) Leq)	Increase (dB(A) Leq)
On-Site Receptor in Classroom	50	75.5	50.0	75.5	25.5

Source: Impact Sciences, 2020.

Note: dB(A): A-Weighted Decibel Scale; Leq: Equivalent Noise Level;

As noted in **Table 31**, noise from construction equipment to on-site receptors could reach approximately 25.5 dB(A) above ambient noise levels. This would be a substantial increase in noise while this construction equipment is running. As noted above, the College would require the contractor to comply with Section 2907 of the police code to ensure the use of approved intake and exhaust mufflers on construction equipment. The use of “quiet” construction equipment such as improved mufflers would reduce construction noise impacts by approximately 3 dB(A). As such, even with the use of intake and exhaust mufflers, construction noise would likely increase ambient noise levels for on-site receptors by approximately 20 dB(A) to 25 dB(A) during construction activities. However, as noted above, operation of the heavy duty would be intermittent and would be limited to the demolition phase of the project construction.

## **Operational Impacts**

### *Aircraft Engine Noise to On-Site Receptors*

As noted above, aircraft engines for the AMT Program usually run about 3 times per semester, with hours of use ranging from 6 to 15 hours per semester. Furthermore, the operating time on dates when engines are in use ranges from 10 to 40 minutes. As such, noise impacts from engines to on-site receptors would be very intermittent, depending on how often the engines are used for the program. Nevertheless, **Table 32, AMT Equipment Noise at On-Site Receptors (With Mitigation)** shows the potential noise impacts to on-site receptors located in classrooms approximately 50 feet away. Since mitigation would already be required to reduce engine noise impacts, the analysis below shows the anticipated impacts with mitigation incorporated.

**Table 32**  
**AMT Equipment Noise at On-Site Receptors (With Mitigation)**

<b>Equipment</b>	<b>Predicted Sound Pressure Levels at Indoor Receptors</b>	<b>Ambient Noise Level</b>	<b>Noise Level Above Ambient</b>
Turbine Engine	55 dB(A)	50 dB(A)	5 dB(A)
Prop Plane Piston Engine	57 dB(A)	50 dB(A)	7 dB(A)

*Source: Salter, 2020; Impact Sciences, 2021;*

*Note: dB(A): A-Weighted Decibel Scale;*

As shown in **Table 32**, when mitigation is incorporated and accounting for attenuation from the exterior walls of the classroom building (See **Table 22**), noise from AMT engines could reach 5 dB(A) above ambient noise levels for turbine engines and 7 dB(A) for Prop Plane Piston Engines.

<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>14. POPULATION AND HOUSING – Would the Project:</b>				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### *Environmental Setting*

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.

### *Discussion of Potential Project Impacts*

- a) and b) **The proposed project would not directly or indirectly induce substantial unplanned population growth and would not displace substantial numbers of existing housing units or people necessitating the construction of replacement housing (No Impact).**

The proposed project would retrofit and renovate the existing building at Evans Center and would relocate the AMT Program from San Francisco International Airport to Evans Center. It would support existing programs and operations of the College programs and would not increase their capacity or the expand Evans Center. Construction and operation under the proposed project would be within the footprints of the project site. In addition, the proposed project would not include the construction or development of housing facilities. Therefore, the proposed project would not induce growth in CCSF students or staff. The projected increase in overall College enrollment has been accounted for in the Updated Facilities Master Plan for which an EIR have been prepared and certified on **June 24, 2021**. The AMT Program would still be in the same general San Francisco Bay area, and it is unlikely that students or employee would move to be closer to Evans Center. Therefore, the proposed project would have no impact on population growth, the displacement of population, or the need to construct replacement housing.



<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
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**15. PUBLIC SERVICES –**

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

a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Environmental Setting**

**Fire Protection.** San Francisco Fire Department (SFFD) provides fire suppression and emergency medical services in the City and County of San Francisco, including CCSF’s Evans Center. San Francisco Fire Department Station 49 is located near the project site at the southwest corner of the intersection of Evans Avenue and Mendell Street. Other fire station located within less than 1-mile radius of the project site include Stations 25, 17, and 9. SFFD 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% of the time.<sup>88</sup> SFFD consists of three divisions, which are subdivided into 10 battalions and 45 active stations throughout the City.

**Police Protection.** On May 5, 1980, the governing board of the San Francisco Community College District established a “Community College Police Department,” now known as the San Francisco Community College Police Department (SFCCPD). The SFCCPD provides law enforcement and security services at CCSF Evans Center. These services include providing both personal safety as well as the protection of

<sup>88</sup> City and County of San Francisco. Mayor’s 2017-2018 and 2018-2019 Proposed Budget. Mayor’s Office of Public Policy and Finance.

district property. The SFCCPD is a certified California Peace Officers Standards and Training (P.O.S.T.) police agency, recognized by the State of California. The SFCCPD are sworn officers readily identified by their uniforms which include their distinctive patch and silver star. The Department also employs security officers, called Campus Control aides, who wear a grey shirted uniform with the SFCCPD patch.

**Recreational Facilities.** 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.<sup>89,90</sup> 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).<sup>91</sup>

**Public Libraries.** The San Francisco Public Library operates 27 branches throughout San Francisco. The closest libraries to the Evans Center are the Bayview Linda Brooks-Burton Branch Library located to the southwest at 5075 3<sup>rd</sup> Street and the Potrero Branch Public Library, located to the north at 1616 20<sup>th</sup> Street.

### *Discussion of Potential Project Impacts*

- a) **The proposed project would not result in an increased demand for fire protection services to the extent that it would require new or physically altered fire protection facilities, the construction of which would result in significant environmental impacts (*Less than Significant Impact*).**

As discussed in the **Section II, Project Description**, the proposed project would not result increase the College capacity beyond the projected enrollment of the Updated Facilities Master Plan prepared in 2019 for which an EIR was certified on June 24, 2021. However, the students and staff of the AMT Program would attend lectures and workshops at Evans Center instead of the San Francisco International Airport. Currently, 86 students are registered in the AMT program. CCSF's Updated Facilities Master Plan projected a 47% increase in College students within the next 10 years, which would add approximately 127 students at Evans Center. However, the estimated increase in students at Evans Center would not be substantial in comparison to the population served by the existing fire stations near Evans Center and existing demand

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<sup>89</sup> 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/>

<sup>90</sup> 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.

<sup>91</sup> San Francisco Recreation and Parks Department. 2004. Recreation Assessment Report, p. 21.

and capacity for fire protection and emergency medical services. The proposed project 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 **Section II, Project Location and Description**, renovation and proposed improvements at Evans Center to accommodate the AMT Program 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. Therefore, the proposed project would enhance fire safety at Evans Center and would result in a less than significant impact regarding the construction of new or physically altered fire protection facilities.

- b) The proposed project 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 Impact*).**

As described in **Section II, Project Description**, the proposed reconfiguration of Evans Center would maintain the police office at the project site. The SFCCPD 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 College facilities. 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 SFCCPD would examine if adjustments are needed based on the transfer of the student and staff of the AMT Program to Evans Center. Therefore, implementation of the proposed project would result in less-than-significant impact on the College police services.

- c) The proposed project would not result in adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts (*No Impact*).**

The proposed project would not build new housing. Therefore, it would not result in direct impact on schools due to an increase in residential population. As discussed in **Section V.14, Population and Housing**, the AMT Program would still be in the same general San Francisco Bay area, and it is unlikely that students or employee would move to be closer to Evans Center. Therefore, the proposed project would have no impact on population growth within the project area and would not result in additional school age students in the nearby community. Therefore, the proposed project would have no impact on schools.

- d) The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated, or such that the construction of new facilities would be required (*Less than Significant Impact*).**

The nearest parks are Heron's Head Park and the India Basin Shoreline Park, located 0.5 and 0.6 miles from the project site, respectively. Given the distance between the public parks and Evans Center, it is unlikely that the additional number of students resulting from the relocation of the AMT Program would substantially increase the use of the public parks in the area or require the construction or expansion of recreational facilities. Therefore, the proposed project would have less than significant impact on parks and open spaces.

- e) The proposed project 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 Impact*).**

The proposed project would not include new residences. Therefore, it would not result in direct impact on public libraries. As described above, the closest libraries to the Evans Center are the Bayview Linda Brooks-Burton Branch Library located to the southwest at 5075 3<sup>rd</sup> Street and the Potrero Branch Public Library, located to the north at 1616 20<sup>th</sup> Street. Given the availability of a library at the center, it is unlikely that student, faculty, or staff would utilize off-campus public libraries. Therefore, the impact of the proposed project on libraries would be less than significant.

**The proposed project, 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 Impact*)**

As discussed above, the proposed project 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 space designated for this purpose at Evans Center. Therefore, the project's contribution to public services would not be cumulatively considerable and the impact would be less than significant.

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>17. TRANSPORTATION/TRAFFIC</b> – Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with <i>CEQA Guidelines</i> section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (*Less Than Significant Impact*)**

**Construction.** The proposed construction activities would take place over an 18-month period beginning in spring 2022. Construction activities would generally be limited to the hours between 7:00 a.m. and 6:00 p.m. on non-holiday and weekdays. Construction personnel may arrive on site and depart approximately one hour prior to or after regular construction times. Construction activities and staging areas would all be located within the boundaries of the project site and are not anticipated to result in lane closures.

The College would require the contractor to meet the City of San Francisco’s Regulations for Working in San Francisco Streets, (the blue book). The College and the construction contractor would meet with San Francisco Public Works and SFMTA staff to develop and review truck routing plans for demolition, disposal of excavated materials, materials delivery and storage. In addition to the regulations in the blue book, the contractor would be responsible for complying with all city, state, and federal codes, rules, and regulations.

The construction contractor would also be required to adhere to the San Francisco Public Works Code<sup>92</sup> and obtain all necessary permits for construction in the public-right-of-way. Section 724 of the code establishes requirements for the temporary occupation of the public right-of-way including, but not limited to, clearances for traffic-signal equipment, pedestrian clearances, construction worker parking plans in certain use districts, debris management, and clearances for San Francisco Fire Department equipment.

Given the project site context, construction duration and magnitude, and compliance with City requirements, the proposed project would not result in significant traffic impact during construction.

As noted above, all project activities would occur within the boundaries of the project site. The proposed project would not impede with the development or function of planned transit, pedestrian, or bicycle facilities and would not affect or conflict with the adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially reduce the performance or safety of such facilities. As mentioned above, all traffic impacts would be less than significant. Therefore, the proposed project would not impede the operation of a transit system as a result of congestion. Impacts would be less than significant.

The project would also involve the modernization of Evans Center and the relocation of the AMT Program. It would not result in any growth or capacity increase from either increased student population or operational uses. Therefore, there would be no increase in vehicle trips associated with the proposed project after the completion of the relocation and modernization and impacts would be less than significant.

**b) The proposed project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (*Less Than Significant Impact*)**

As discussed above, construction of the proposed project would be of short duration and low magnitude, and therefore, would not result in significant traffic impact. In addition, the proposed project is not anticipated to result in additional operational trips once completed. The relocated activities of the AMT Program from the San Francisco International Airport to Evans Center are expected to result in shorter trips for the program's students and staff. Therefore, the proposed project would not generate additional vehicle miles traveled (VMT). Therefore, the proposed project would neither conflict with nor be inconsistent with CEQA Guidelines Section 15064.3, and the impact would be less than significant.

**c) The proposed project would not increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (*No Impact*).**

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<sup>92</sup> San Francisco Public Works Code, [https://codelibrary.amlegal.com/codes/san\\_francisco/latest/sf\\_publicworks/0-0-0-2](https://codelibrary.amlegal.com/codes/san_francisco/latest/sf_publicworks/0-0-0-2), accessed February 2021.

The proposed project would not result in any proposed to the design or configuration of roadways surrounding the project site. In addition, vehicular and pedestrian access to the site would remain unchanged. The proposed project would not create new hazards due to design features or incompatible uses and there would be no impact.

**d) The proposed project would not result in inadequate emergency access (*Less Than Significant Impact*)**

The proposed project is not anticipated to interfere with an emergency response plan or evacuation plan. Construction activities would occur within the project site boundaries and are not anticipated to result in temporary partial obstruction of adjacent roadways. In addition, as noted above the College would comply with City of San Francisco's Regulations for Working in San Francisco Streets. Therefore, the impact would be less than significant.

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<p><b>18. TRIBAL CULTURAL RESOURCES</b> – 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:</p>				
<p>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), or</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>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.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Environmental Setting**

Public Resource Code 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 April 26, 2021, Sarah Fonseca of the Native American Heritage Commission (NAHC) provided a letter responding to a request for a search of the Sacred Lands File. Ms. Fonseca indicated that search results of the Sacred Lands File were negative (*Appendix F*). The NAHC provided a list of eight tribal groups or individuals who may have knowledge of cultural resources in the project area or may have an interest in the proposed project. On June 10, 2021, CCSF sent certified letters were sent to each of the eight Native



American Tribes requesting any information they may have on Native cultural resources or sensitive areas within or near the *project area (Appendix F)*. No responses have been received to date.

### ***Discussion of Potential Project Impacts***

- a and b) The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074 (*Less Than Significant Impact*).**

As noted above, the NAHC search results of the Sacred Land Files were negative. NAHC provided a list of tribes to contact. Pursuant to Assembly Bill 52, on June 10, 2021, the District sent notification letters of CCSF's proposed project at Evans Center. 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 project site. During the 30-day comment period, no Native American tribal representatives contacted CCSF to request consultation. No known Tribal resources were identified for the Evans Center. Proposed soil disturbance would be limited to the area near the building foundations at a maximum depth of five feet below ground surface. Therefore, potential impact of the proposed project to tribal cultural resources would be less than significant.

<b>Issues</b>	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>19. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### ***Environmental Setting***

The project site is 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.** As noted above in **Section V.10, Hydrology & Water Quality**, Evans Center is located within the Islais Creek Urban Watershed. Flows from this urban watershed are treated at the Southeast Treatment Plant. Excess flow to the Southeast Treatment Plant is directed to the North Point Wet-Weather Facility. 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.<sup>93</sup>

San Francisco's combined sewer system (CSS) 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.<sup>94</sup> 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% chance of occurring in one year).<sup>95</sup>

**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% of the water provided to San Francisco is supplied by the SFPUC Regional Water System, which originates from the Hetch Hetchy Reservoir and Bay Area reservoirs in the Alameda Creek and Peninsula watersheds. The remaining 3% is supplied by local water supplies, including recycled water, groundwater and non-potable water. The 2015 Urban Water Management Plan (UWMP) projects sufficient water supplies through 2040 during normal, dry, and multiple dry years.<sup>96</sup>

**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

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<sup>93</sup> 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](https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2013/R2-2013-0029.pdf).

<sup>94</sup> San Francisco Public Utilities Commission. Wastewater Collection System. Available at: <https://sfwater.org/index.aspx?page=399>. Accessed on April 22, 2021.

<sup>95</sup> 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](http://docs.ppsmixeduse.com/ppp/DEIR_References/2010_1210_sfpuc_509combinedsewer.PDF)

<sup>96</sup> San Francisco Public Utilities Commission. 2016. 2015 Urban Water Management Plan. Available at: <https://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839>. Accessed April 22, 2021.

to soil amendment and compost. The remaining material that cannot otherwise be reprocessed (“trash”) is transported to landfills.

In 2019,<sup>97</sup> 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.

**Electric and Natural Gas Facilities.** As noted in **Section V.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 2019,<sup>98</sup> 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.

**Telecommunications Facilities.** Telecommunications systems for the CCSF center 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.

### ***Discussion of Potential Project Impacts***

- a) and c) **The proposed project would not exceed the capacity of the wastewater treatment provider that would serve the project site and would not require the construction of new, or expansion of existing, wastewater treatment or stormwater drainage facilities (*Less than Significant Impact*).**

The proposed project would include retrofitting, renovation, and reconfiguration of the existing building at Evans Center. However, with the exception to the temporary use of the swing structures, the proposed project would not result in additional square footage. As described in **Section II, Project Description**, all improvements and renovation activities would comply with the District’s Sustainability Plan, which requires the installation of water-efficient plumbing, increasing on-site infiltration, and minimizing

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<sup>97</sup> The latest available data at the time of the preparation of this document.

<sup>98</sup> The latest available data at the time of the preparation of this document.

stormwater runoff. Therefore, implementation of the proposed project would not result in additional sewage or stormwater flow to the City's CSS. This impact would be less than significant.

- b) Sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years (*No Impact*).**

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. The proposed project would not include new residential uses. Therefore, a WSA is not required for the proposed project. As discussed under **Section V.19.a** above, the proposed project would not result in additional facilities square footage with the exception to the temporary use of the swing structures. In addition, the proposed project would comply with the District's Sustainability Plan, which requires the installation of water-efficient plumbing and implementation of water conservation practices. Therefore, the proposed project would not increase water demand and would not require additional water supply resources.

- d) The proposed project 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 Impact*).**

**Construction.** Retrofitting and renovation activities under the proposed project would generate construction debris. However, the proposed project would not include new facilities or require substantial demolition. Construction debris resulting from the proposed activities would be approximately 525 tons (1,950 cubic yards).<sup>99</sup> 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. 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% of all received construction and demolition debris. Given the available capacity at the Recology landfills and the required compliance with the reduction in landfill waste, solid waste generated during construction activities of the proposed project 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.

**Operation.** Future operations at Evans Center would generate solid waste. As described in **Section II, Project Description**, the proposed project would not increase the capacity of the College or result in additional students or staff. Instruction activities associated with the AMT Program would not increase as

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<sup>99</sup> EPA. 2003. Estimated 2003. Building-Related. Construction and Demolition Materials Amounts.

a result of the proposed project. However, these activities would be relocated from San Francisco International Airport to Evans Center. Therefore, the proposed project would not increase the quantity of generated solid waste. In compliance with CCSF Sustainability Plan, the College would continue to divert 75% of the generated solid waste at the College Main Campus and the centers and purchase products/materials with 40% recycled content. Therefore, this impact would be less than significant.

**The proposed project, 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 Impact*)**

As noted above, the proposed project would result in significant impacts to utilities and service systems, and therefore, would not make a considerable contribution to cumulative impacts on these resources. This impact would be less than significant.

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>20. WILDFIRE</b> – Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Evans Center is 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. Therefore, the proposed project would have no impacts to wildfire.

Issues	Potentially Significant Impact	Less than Significant with Project Mitigation	Less Than Significant Impact	No Impact
<b>21. MANDATORY FINDINGS OF SIGNIFICANCE</b> – The lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur. Where prior to commencement of the environmental analysis a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect on the environment or would mitigate the significant environmental effect, a lead agency need not prepare an EIR solely because without mitigation the environmental effects would have been significant (per Section 15065 of the <i>State CEQA Guidelines</i> ):				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>a - c) As discussed in sections V.1 through V.20 above, impacts resulting from the proposed project are anticipated to be less than significant or less than significant with mitigation in the case of biological resources and noise. As described in Section V.9, Biological Resources, removal of trees at the project site could affect nesting birds. However, implementation of Mitigation Measures MM-BIO-1, would reduce this potential impact to a less than significant level. Therefore, the proposed project would not result in a significant impact through the elimination of important examples of major periods of California history or prehistory or the exposure of nearby sensitive receptors to substantial additional air pollution either individually or cumulatively.</p>				



As discussed under each environmental topic, cumulative environmental effects, including substantial adverse effects on human beings, would be less than significant or less than significant with mitigation.

## **VI. INITIAL STUDY PREPARERS**

### **City College of San Francisco**

Alberto Vasquez, Interim Associate Vice Chancellor of Construction and Planning  
Marian Lam, Interim Assistant Director of Capital Planning.

### **Impact Sciences, Inc.**

Principal: John Anderson  
Project Planner / Noise Specialist: Raul Castillo  
Senior Noise Technical Specialist: Douglas Kim  
Air Quality and GHG Specialist: Kaitlyn Heck  
Publications Manager: Kara Yates Hines

### **Sertior**

Senior CEQA Planner: Rima Ghannam

### **AEW Engineering, Inc.**

Principal: Kenneth Leung  
Hazardous Materials Specialist: Ryder Musselman

### **Vollmar Natural Lands Consulting**

Senior Ecologist: Cassie Pinnell  
Biologist: Gabriel Saron