

**THIRD ADDENDUM
TO THE 2002 FINAL EIR**

for the proposed

**Los Angeles Pierce College 2019 Master Plan Update
of the 2002 Master Plan**

Prepared for

Los Angeles Community College District

Prepared by

ECORP Consulting, Inc.

SPRING 2019

Table of Contents

ADDENDUM AND ENVIRONMENTAL CHECKLIST FORM.....	1
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	19
EVALUATION OF ENVIRONMENTAL IMPACTS	19
1. AESTHETICS.....	19
2. AGRICULTURE RESOURCES	21
3. AIR QUALITY	22
4. BIOLOGICAL RESOURCES	27
5. CULTURAL RESOURCES	31
6. GEOLOGY AND SOILS	34
7. GREENHOUSE GAS EMISSIONS.....	37
8. HAZARDS AND HAZARDOUS MATERIALS	40
9. HYDROLOGY AND WATER QUALITY	45
10. LAND USE AND PLANNING.....	50
11. MINERAL RESOURCES	51
12. NOISE.....	51
13. POPULATION AND HOUSING	54
14. PUBLIC SERVICES.	55
15. RECREATION.....	57
16. TRANSPORTATION/TRAFFIC	58
17. UTILITIES AND SERVICE SYSTEMS.....	61
18. MANDATORY FINDINGS OF SIGNIFICANCE.....	64
REFERENCES	66
LIST OF PREPARERS	68

Appendices

Appendix A	Site Photos
Appendix B	Air Quality Data Sheets

List of Figures

Figure 1	Regional Project Location.....	2
Figure 2	Project Vicinity Map.....	3
Figure 3	Locations of 2002 Master Plan Projects	7
Figure 4	Approved 2010 Facility Master Plan Update.....	9
Figure 5	2014 Facility Master Plan Update/Changes.....	10
Figure 6	Current Facilities Master Plan	13
Figure 7	Facilities Master Plan Update	14
Figure 8	Proposed Facilities Master Plan	15

List of Tables

Table 1	Status of Projects Proposed under the 2002 Los Angeles Pierce College Facilities Master Plan	5
Table 2	Historical and Projected Student Enrollment at Pierce College.....	11
Table 3	New/Added and Demolished/Replaced Projects Proposed under Los Angeles Pierce College 2019 Master Plan Update	12
Table 4	Comparison of Environmental Impacts – 2002 Pierce College Master Plan, 2010 Master Plan 2014 Master Plan and 2019 Master Plan Updates	16
Table 5	Modeled Demolition & Construction Activity Timeline	23
Table 6	Forecast of Regional Construction Emissions	24
Table 7	Forecast of Localized Construction Emissions	25
Table 8	Forecast of Demolition & Construction-Generated GHG Emissions.	38
Table 9	Revised Project Consistency with Climate Action Team Strategies	40

Acronyms and Abbreviations

2002 EIR	2002 Los Angeles Pierce College Facilities Master Plan Environmental Impact Report
2002 FEIR	2002 Los Angeles Pierce College Facilities Master Plan Final Environmental Impact Report
2002 Master Plan	2002 Los Angeles Pierce College Facilities Master Plan 2006
CAT Report	Climate Action Team Report to Governor Schwarzenegger and the Legislature
2010 Master Plan Update	Los Angeles Pierce College 2010 Master Plan Update
2010 Addendum	2010 Master Plan Update Addendum to 2002 EIR
2014 Facility Master Plan	2014 Los Angeles Pierce College Facility Master Plan Update
ADA	Americans with Disabilities Act
AQMP	Air Quality Management Plan
ARB	Air Resources Board
Basin	South Coast Air Basin
BMP	best management practice
Caltrans	California Department of Transportation
carbon dioxide equivalent	CO ₂ e
CAT	Climate Action Team
CBC	California Building Code
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH ₄	methane
CNEL	Community Noise Exposure Level
CO	carbon monoxide
CO ₂	carbon dioxide
College	Los Angeles Pierce College
dBa	A-weighted decibels
DBH	diameter at breast height
FTE	full-time equivalent
GHG	greenhouse gas
HVAC	heating, ventilation and air-conditioning
LACCD	Los Angeles Community College District
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAUSD	Los Angeles Unified School District

LEED	Leadership in Energy and Environmental Design
LOS	level of service
LST	Localized Significance Threshold
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
mg/kg	milligrams per kilogram
MMT CO ₂ e	million metric tons of carbon dioxide equivalent
N ₂ O	nitrous oxide
NO _x	nitrogen oxides
O ₃	ozone
OSHA	Occupational Safety and Health Administration
PM ₁₀	particulate matter
PM _{2.5}	fine particulate matter
RCPG	Regional Comprehensive Plan and Guide
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SO _x	oxides of sulfur
SUSMP	Standard Urban Stormwater Mitigation Plan
TACs	toxic air contaminants
THP	total petroleum hydrocarbons
TIA	Transportation Impact Assessment
TIMP	Transportation Improvement Mitigation Program
UBC	Uniform Building Code
UST	underground storage tank
V/C	volume to capacity
VMT	vehicle miles travelled
WCSP	Warner Center Specific Plan
ZIMAS	Zoning Information and Map Access System

ADDENDUM AND ENVIRONMENTAL CHECKLIST FORM

- 1. Project Title**
Los Angeles Pierce College 2019 Master Plan Update
- 2. California Environmental Quality Act Lead Agency Name and Address**
Los Angeles Community College District
770 Wilshire Boulevard
Los Angeles, CA 90017
- 3. Contact Person and Phone Number**
Dr. Lawrence G. Buckley, President, Los Angeles Pierce
College Phone: 818.719.6408
- 4. Purpose of Addendum**
This addendum to the 2002 Los Angeles Pierce College Facilities Master Plan Final Environmental Impact Report (2002 EIR) analyzes the incremental difference in environmental effects between the previously approved 2002 Los Angeles Pierce College Facilities Master Plan (Project or 2002 Master Plan) and the Los Angeles Pierce College 2019 Facilities Master Plan Update (Revised Project or 2019 Master Plan Update).

As described in this addendum, the Revised Project does not result in any of the conditions described in Section 15162 of the State CEQA Guidelines. No new significant impacts would occur, and no previously examined significant effects would be substantially more severe than shown in the 2002 EIR. Thus, an addendum to the certified 2002 FEIR is the appropriate environmental documentation for the proposed 2019 Master Plan Update.
- 5. Project Location**
Los Angeles Pierce College (Pierce College or College) is located in the western portion of the San Fernando Valley in the City and County of Los Angeles. Regional access to the College is provided by two freeways, the Ventura Freeway (U.S. 101) and the San Diego Freeway (Interstate 405). The Ventura Freeway is located approximately 0.5 mile south of the College, and the San Diego Freeway is located approximately 6 miles to the east. **Figure 1** provides a map of the Los Angeles region in which the College is located.

Pierce College is located at 6201 Winnetka Avenue in the community of Woodland Hills in the City of Los Angeles. The College is located in the Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan Area, one of 35 community plan areas in the City of Los Angeles. The College is bounded by Victory Boulevard to the north, Oxnard Street to the south, Winnetka Avenue to the east, and De Soto Avenue to the west. The College, which is located east of the Warner Center Business District, encompasses a total land area of approximately 426 acres. **Figure 2** shows the Project site and the surrounding area.

Figure 1: Regional Project Location

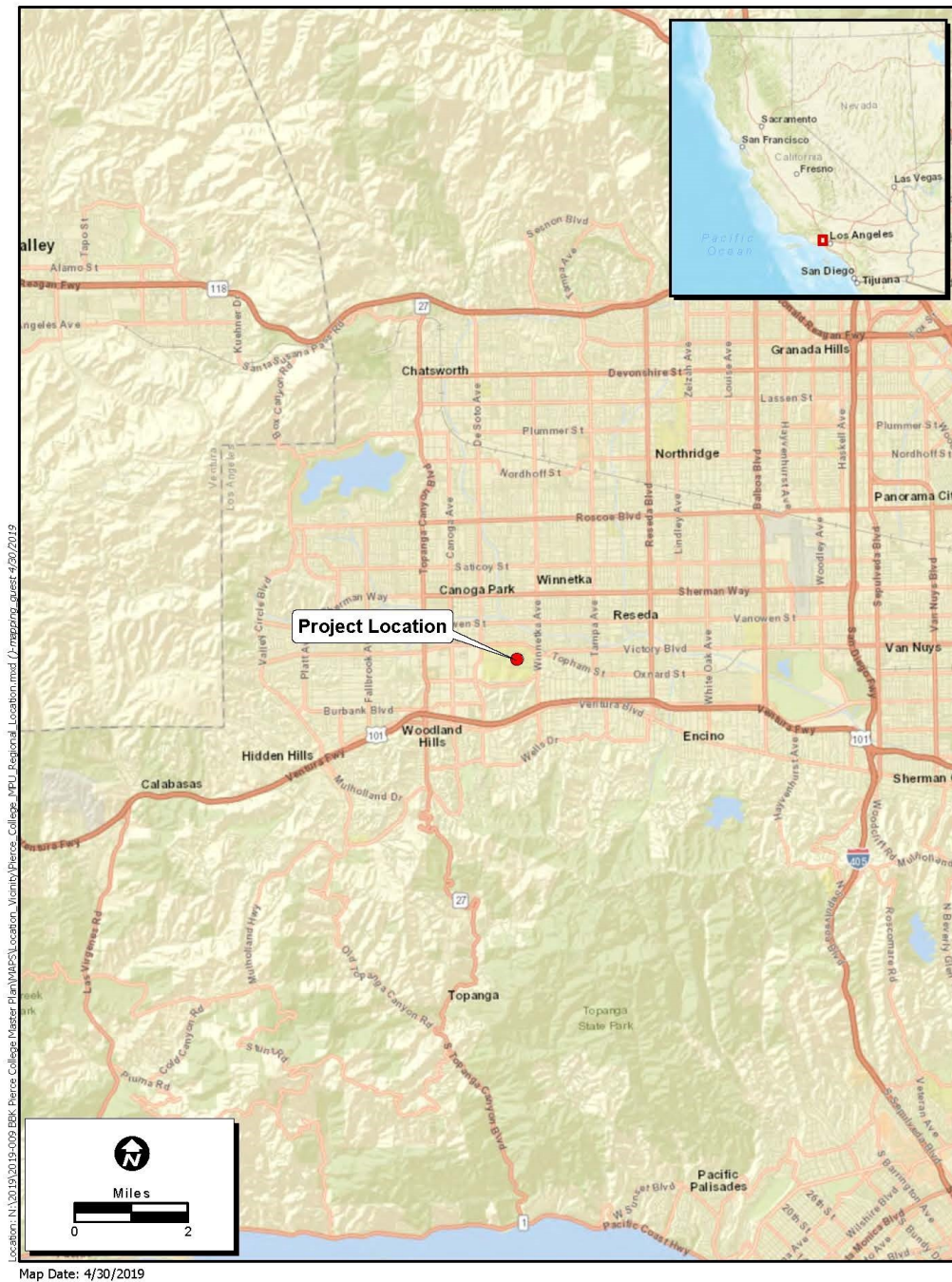


Figure 1. Regional Project Location

Los Angeles Pierce College 2018 Master Plan Update

Figure 2: Project Vicinity Map



Figure 2. Project Vicinity Map
Los Angeles Pierce College 2018 Master Plan Update

The Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan Area covers approximately 29 square miles in the western portion of the City of Los Angeles. According to the Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan (adopted), approximately 59% of the total land uses in this community plan area are residential uses.¹ Open space uses make up 12% of the total uses; commercial uses, 5%; and industrial uses, 4%.² Approximately 12% of the land uses are open space-related uses, while 19% are street uses.³

6. Project Sponsor's Name and Address

Los Angeles Pierce College
6201 Winnetka Avenue
Woodland Hills, CA 91371

7. Assessor's Parcel Number: 2149007902

8. General Plan Designation: Open Space and Public Facilities

9. Zoning: Open Space (OS-1XL), Public Facilities (PF-1XL)

10. Background

Over the years, the 2002 Master Plan has been revised to accommodate changes pertaining to student enrollment projections and facility requirements. This addendum for the proposed 2019 Master Plan Update has been prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines, Section 15162, to determine whether the proposed 2019 Master Plan Update would result in a new or substantially increased significant effect on the environment that was not previously identified in the 2002 EIR. The Los Angeles Community College District (LACCD) is the lead agency for the proposed 2019 Master Plan Update.

Pierce College, a two-year community college that was founded in 1947, is located in the southwest corner of the San Fernando Valley in the City of Los Angeles. More specifically, the College is located within the community of Woodland Hills and occupies approximately 426 acres. Pierce College includes educational and administrative facilities, agricultural land and facilities, surface parking lots, athletic fields and sports facilities, and open space. Approximately 226 of the College's 426 acres provide space for a farm, which is used as part of the College's agricultural program.

Pierce College is one of nine colleges in the LACCD and is fully accredited by the Western Association of Schools and College. It offers courses in approximately 100 disciplines and has a student enrollment of approximately 19,000.

In 2002, the LACCD approved the 2002 Master Plan. The 2002 Master Plan established a physical framework for the College and supported the school's mission as it expands its facilities to meet future demand. Project objectives of the 2002 Master Plan included creating a more active and productive College, improving the image of the school, enhancing land resources, creating public/private partnerships, developing new educational programs, and providing facilities to meet future projected enrollment.

¹ Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan. Available: <<http://cityplanning.lacity.org/complan/pdf/cpksumlu.pdf>>.

² Ibid.

³ Ibid.

⁴ Projected Unduplicated Enrollment Pierce College. 2019.

The 2002 Master Plan includes the following four types of projects:

- new construction,
- reconstruction and renovation,
- demolition, and
- public/private partnership projects.

A total of 33 projects were proposed under the 2002 Master Plan. However, subsequent to adoption of the 2002 Master Plan, most of the nine public/private partnership projects were cancelled. Table 1 shows the current status of the projects proposed under the 2002 Master Plan. **Figure 3** shows the locations of the 2002 Master Plan projects.

**Table 1: Status of Projects Proposed under the 2002
Los Angeles Pierce College Facilities Master Plan**

No.	Project Name	Status April 2019
1	Agriculture/Science/Nursing Building (renamed Center for the Sciences)	Completed
2	Technology Center (renamed the Green Technologies Building under the 2010 Master Plan Update)	Cancelled
3	Child Development Center	Completed
4	Central Maintenance and Operations Facility (renamed the Maintenance and Operations Facility under the 2010 Master Plan Update)	Completed
5	New Gardner's Maintenance and Operations Facility (renamed the Maintenance and Operations Facility under the 2010 Master Plan Update)	Completed
6	New Refrigeration Plant Maintenance and Operations Facility (renamed the Maintenance and Operations Facility under the 2010 Master Plan Update)	Completed
7	Automotive Maintenance and Operations Facility, Student Food Services Facility (renamed the Automotive and New Technical Education Facilities under the 2010 Master Plan Update)	At Division of State Architect
8	Horticulture Classroom Building and Greenhouse (renamed the Horticulture/ Animal Science Lab under the 2010 Master Plan Update)	On Hold
NA	Water Reclamation Facility	Cancelled
9	Campus Police Station	Completed
10	Equestrian Education Center	Completed
11	Admissions/Counseling/Student Services Building	Completed
Reconstruction, Renovation, and Modernization Projects (Proposition A Bond Projects)		
12	Life Science/Chemistry/Physics Building	Completed
13	Administration Building (lobby renovation, exterior renovation, interior renovation)	Completed
14	Campus Center	Completed

**Table 1 (cont.): Status of Projects Proposed under the 2002
Los Angeles Pierce College Facilities Master Plan**

No.	Project Name	Status April 20190
15	Computer Science/Computer Learning Center	Completed
16	Library	Completed
17	Behavioral Science, Social Science, Math, Business Education, English	Completed
18	Facility Offices	Completed
19	Fine Arts and Music	Completed
20	Theatre Building (proposed performing arts and Americans with Disabilities Act [ADA] improvements)	Completed
21	Animal Science Facilities	Completed
22	Life Science/Natural Resources Management	Cancelled
23	Physical Education Facilities	Completed
24	Roadway, Walkway, Grounds, Parking Lot, and Entrance Improvements	Completed
NA	Restroom/ADA Renovations	Cancelled
Proposition A Bond Projects Demolition Projects		
NA	Remaining Bungalows/Trailers	Completed
NA	Child Development Center	Completed
NA	Business Office/Student Store	Completed
NA	Cafeteria/Associated Student Organization Trailer	Cancelled
NA	Small Structures in Canyon de Lana	Cancelled
NA	Agricultural Sciences Building and Plant Facilities	Cancelled
NA	Soils Lab/Horticulture Unit (proposed horticulture/animal science lab under the 2010 Master Plan Update)	Cancelled
NA	Storage Structure in Horticulture Area	Cancelled
Public/Private Partnerships Projects		
25	Agriculture Education Experiences and Programs	In Progress (Programming)
26	Produce Stand	Not Found
27	Agricultural Fields	Not Found
28	Sciences Partnership Building	Cancelled
29	Horticulture Partnership	Cancelled
30	Viticulture Partnership	Cancelled
31	East Student Dormitory	Cancelled
32	Student Housing Partnership	Cancelled
33	Life-Long Learning Residences Partnership	Cancelled
<i>Source: BuildLACCD, 2019, Swinerton Consulting 2010</i>		

Figure 3: Locations of 2002 Master Plan Projects



Figure 3. Location of 2002 Master Plan Projects

2002 Facilities Master Plan and EIR. The 2002 EIR was prepared to identify environmental impacts related to the 2002 Master Plan. The level of impact after mitigation was considered significant for the following issue areas: aesthetics, air quality, historic resources, and transportation (Myra L. Frank & Associates 2002). All other impacts were considered less than significant or less than significant with implementation of proposed mitigation measures.

2010 Facility Master Plan Update and EIR Addendum. In 2010, the LACCD approved an update to the 2002 Master Plan that reflected a number of individual project cancellations or modifications in response to changing priorities and declining enrollments. A total of 14 projects were included in the 2010 Master Plan Update (shown in **Figure 4**). The 2010 Master Plan Update's buildout year was 2015. Proposed building modifications, repurposing, new construction, and renovations were determined through an Addendum to the 2002 EIR to result in no new significant environmental impacts. Under the 2002 Master Plan, significant unavoidable impacts on aesthetics were identified; no new or substantially increased significant aesthetics impacts were identified under the 2010 Master Plan Update. Under the 2002 Master Plan, significant unavoidable impacts on air quality and cultural resources were identified. With mitigation, no new or significantly increased air quality and cultural impacts were identified under the 2010 Master Plan Update.

2014 Facility Master Plan Update and EIR Addendum. The 2014 Master Plan Update reflected facility planning through 2019. Changes resulted in a reduction of 127,000 building square feet with no increase in student capacity. With the 2014 Master Plan Update, the Green Technologies Project was removed, and the building square footages of the Digital Arts & Media Project and Horticulture Project were reduced. The 2014 Master Plan Update's changes are depicted in **Figure 5**. An Addendum to the 2002 EIR was prepared and demonstrated that the changes in the 2014 Master Plan Update would not result in any new or substantially increased significant environmental effects. The 2014 EIR Addendum also analyzed removal of a mitigation measure for a campus structure (Quonset Hut) that was determined not to be a historic resource and a traffic mitigation measure for the Winnetka/Victory intersection that was determined to be not necessary.

11. Project Purpose and Need

The purpose of the proposed 2019 Master Plan Update is to allow Pierce College the flexibility to account for changing conditions. The 2019 Master Plan Update emphasizes efficient use of the College's resources to meet its educational mission and strategic plan. The 2019 Master Plan Update would build upon the 2002 Master Plan and establish a framework for the College's future, aligning its physical environment with its mission and academic plan. The 2002 Master Plan was developed to guide projects, many of which have been completed, under prior bond measures (i.e., Bond A/AA, Measure J). This updated plan creates a flexible approach that ensures the efficient use of resources, sets priorities, accounts for changes in enrollment and develops strategies for implementation.

12. Project Description and Background

Measure J, which passed in November 2008, authorized the LACCD to issue general obligation bonds to fund specific projects certified by the Board of Trustees of the district. Projects could include acquiring or leasing land and/or facilities, improving and repairing security and infrastructure, expanding education to meet the needs of the community, or acquiring furnishings and equipment for modernization, renovation, improvement, and new construction projects.

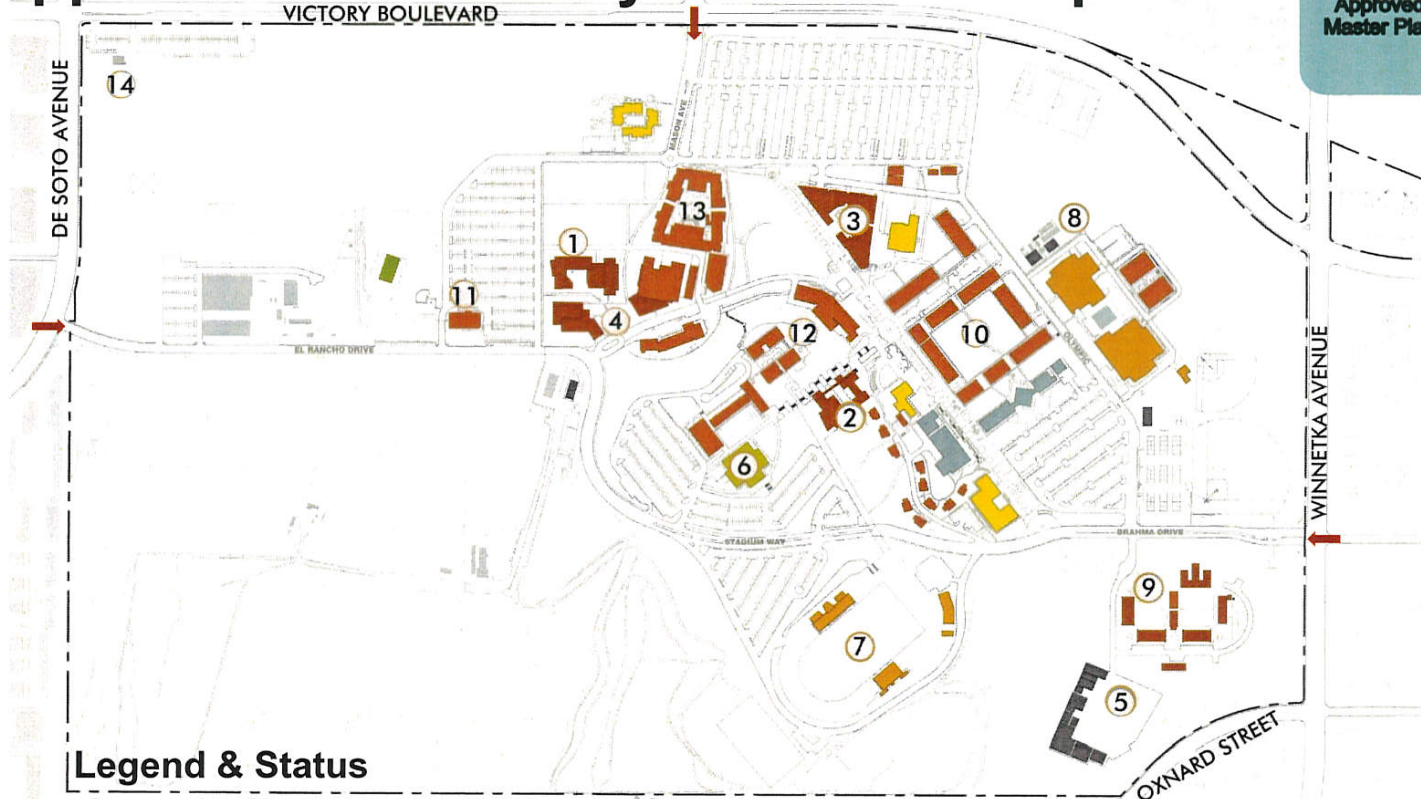
With the passage of Measure J, the College updated the Master Plan to guide its future development. The proposed 2019 Master Plan Update modifies the Master Plan that was adopted in 2002. Since 2002, a number of individual projects have been cancelled or modified, as indicated in Table 1. Also, student enrollment has been on the decline the last few years. The recent state budget cuts, as well as increased opportunities for distance learning, have also affected enrollment.

Enrollment Trends. Pierce College, like other agencies funded by the State of California, has experienced major budget cuts. The result has been a reversal of the enrollment growth trends that occurred during the period 2002-2009. The California community colleges have been encouraged to reduce their course offerings, and the LACCD has responded by directing all nine colleges to meet reduced enrollment targets.



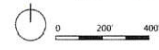
Approved 2010 Facility Master Plan Update

Approved Master Plan



Legend & Status

- | | | |
|--------------------------------|---|---|
| 1 Green Technology (unbuilt) | 7 Stadium Upgrades (under renovation) | 13 Ctr for Sci Renovation (compl. 2010) |
| 2 Digital Arts Media (unbuilt) | 8 Infrastructure, Central Plant Extension (unbuilt) | 14 Ag Ed Master Plan (unbuilt) |
| 3 Library (complete 2013) | 9 Horticulture Renovation/Expansion (unbuilt) | |
| 4 Auto / Tech (unbuilt) | 10 North of Mall Renovation (under renovation) | |
| 5 M & O Facility (compl. 2012) | 11 Ag Sci Renovation (under renovation) | |
| 6 Perf Arts ADA (under reno.) | 12 South of Mall Renovation (under renovation) | |



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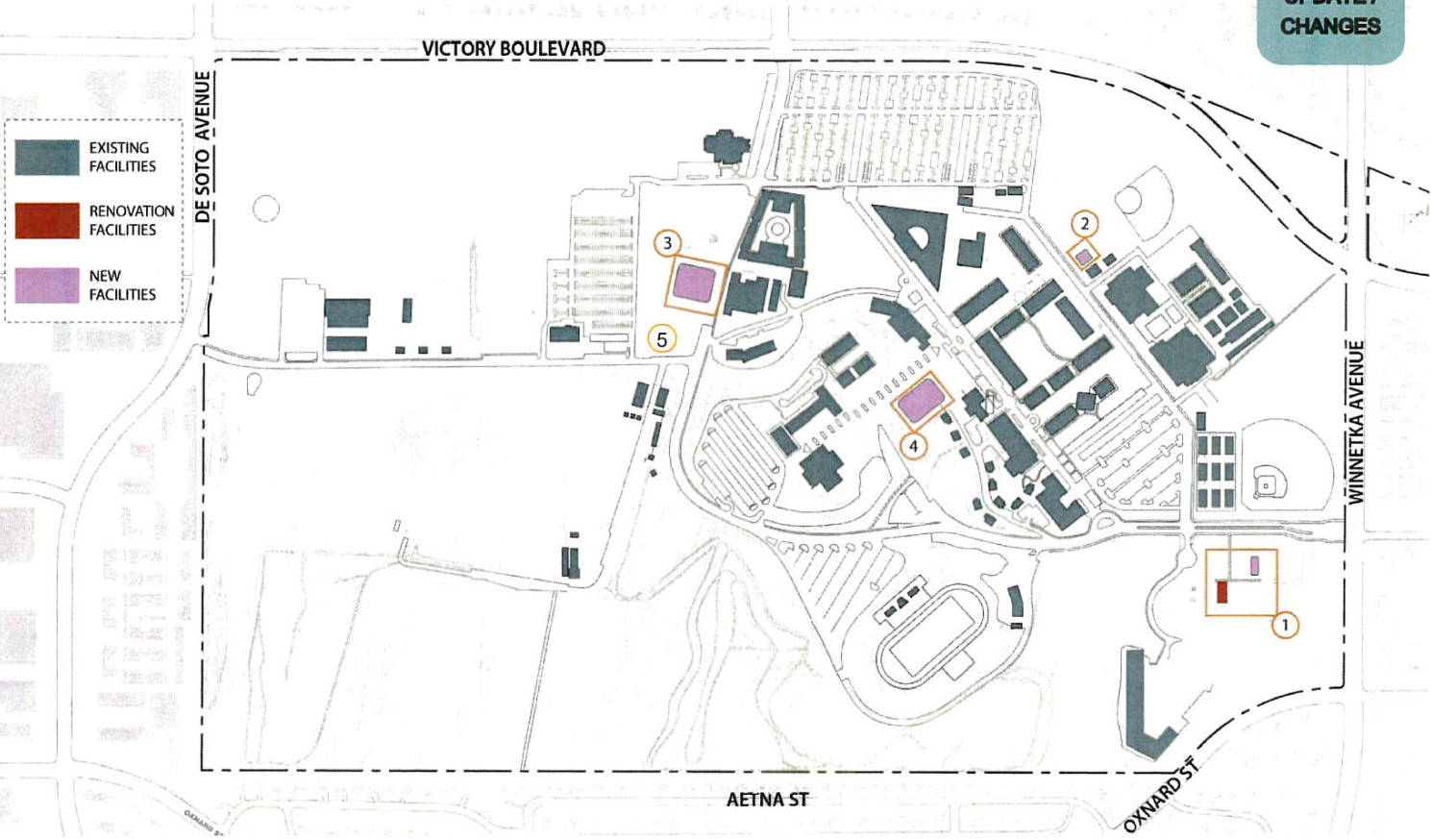
PIERCE COLLEGE

Figure 4. Approved 2010 Facility Master Plan Update



2014 Facility Master Plan Update / Changes

MASTER PLAN UPDATE / CHANGES



- EXISTING FACILITIES
- RENOVATION FACILITIES
- NEW FACILITIES

- 1 Horticulture
- 2 Central Plant Extensions
- 3 Expanded Automotive & New Technical Education Facilities
- 4 Digital Arts & Media
- 5 Green Technologies Building Deleted from Plan (programs re-distributed)



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PIERCE COLLEGE

Figure 5. 2014 Facility Master Plan Update/Changes
Los Angeles Pierce College 2019 Master Plan Update

The proposed 2019 Facilities Master Plan Update buildout year is 2025. Currently, the projected FTE student enrollment for fall semester 2019 is 5,907. The estimated FTE student enrollment for fall semester 2025 is 6,408. Historical data and projections indicate a historical decline in on-campus enrollment since 2010 (Table 2).

Table 2: Historical and Projected Student Enrollment at Pierce College

Year	On-Campus Full-Time Equivalent Students (FTE) ¹	On-Campus Unduplicated Enrollment
2019 Master Plan Update		
2010 (historical)	6,696	20,746
2011 (historical)	6,411	20,254
2012 (historical)	6,292	20,258
2013 (historical)	6,426	20,677
2014 (historical)	6,424	20,982
2015 (historical)	6,339	20,535
2016 (historical)	6,044	19,963
2017 (historical)	5,742	19,161
2018 (historical)	5,824	18,789
2019 (projected)	5,907	19,053
2020 (projected)	5,990	19,322
2021 (projected)	6,074	19,595
2022 (projected)	6,160	19,871
2023 (projected)	6,247	20,151
2024 (projected)	6,327	20,409
2025 (projected)	6,408	20,670
<i>Source: Los Angeles Pierce College (2/26/19)</i>		

Pierce College 2019 Facilities Master Plan Update Construction Projects. Under the 2019 Master Plan Update, several new construction projects and building demolition/replacement projects are proposed. Table 3 identifies changes to individual building projects under the 2010, 2014 and proposed 2019 Los Angeles Pierce College Master Plan Updates. The 2019 Master Plan Update identifies demolition/replacement of approximately 169,896 square feet of existing building area and approximately 106,500 square feet of new building construction; this results in a net academic building area reduction of 63,396 square feet.

¹ On-Campus FTE (Full-time Equivalent) defined as the number of students enrolled in on-campus course offerings with a full-time course load of 12 units for fall semester.

Table 3: New/Added and Demolished/Replaced Projects Proposed under Los Angeles Pierce College 2019 Master Plan Update

Building		2010 MP Update	2014 MP Update	2019 Proposed	Construction Timing	Notes
Multi-Purpose Academic & Workforce Education building		70,000 sf	26,000 sf	76,000 sf	Start: 9/2022 End: 3/2025	This project includes construction of Multi-Purpose Academic & Workforce Education building and the demo of buildings 1800, 1500, 1400, 1300, 1200, 8000, 8300, 8310, 8320, 8330 & 8345.
	New			50,000 sf		
	Demo/Replace			-112,456 sf		
Child Development Academic Department building		N/A	N/A	10,500 sf	Start: 10/2023 End: 10/2024	This project includes the construction of Child Development Academic Department building and demo of the Child Development Bungalows 6100, 6200, 6300 & 6400.
	New			10,500 sf		
	Demo/Replace			-7,440 sf		
Industrial Technology building		N/A	N/A	46,000 sf	Start: 11/2022 End: 4/2024	This project includes construction of new Industrial Technology building and the demo of buildings 3600A, 3600B & 3800.
	New			46,000 sf		
	Demo/Replace			-50,000 sf		
Agricultural Education Center building		13,580 sf	13,580 sf	13,580 sf	Start: 7/2021 End: 8/2022	This project includes relocating previously planned Agricultural Education Center building (8,540 sf), Greenhouse #1 (2,880 sf), and Greenhouse #2 (2,160 sf) to a new site on campus
	New			0		
TOTAL SF:		83,580 sf	39,580 sf	-63,396 sf		

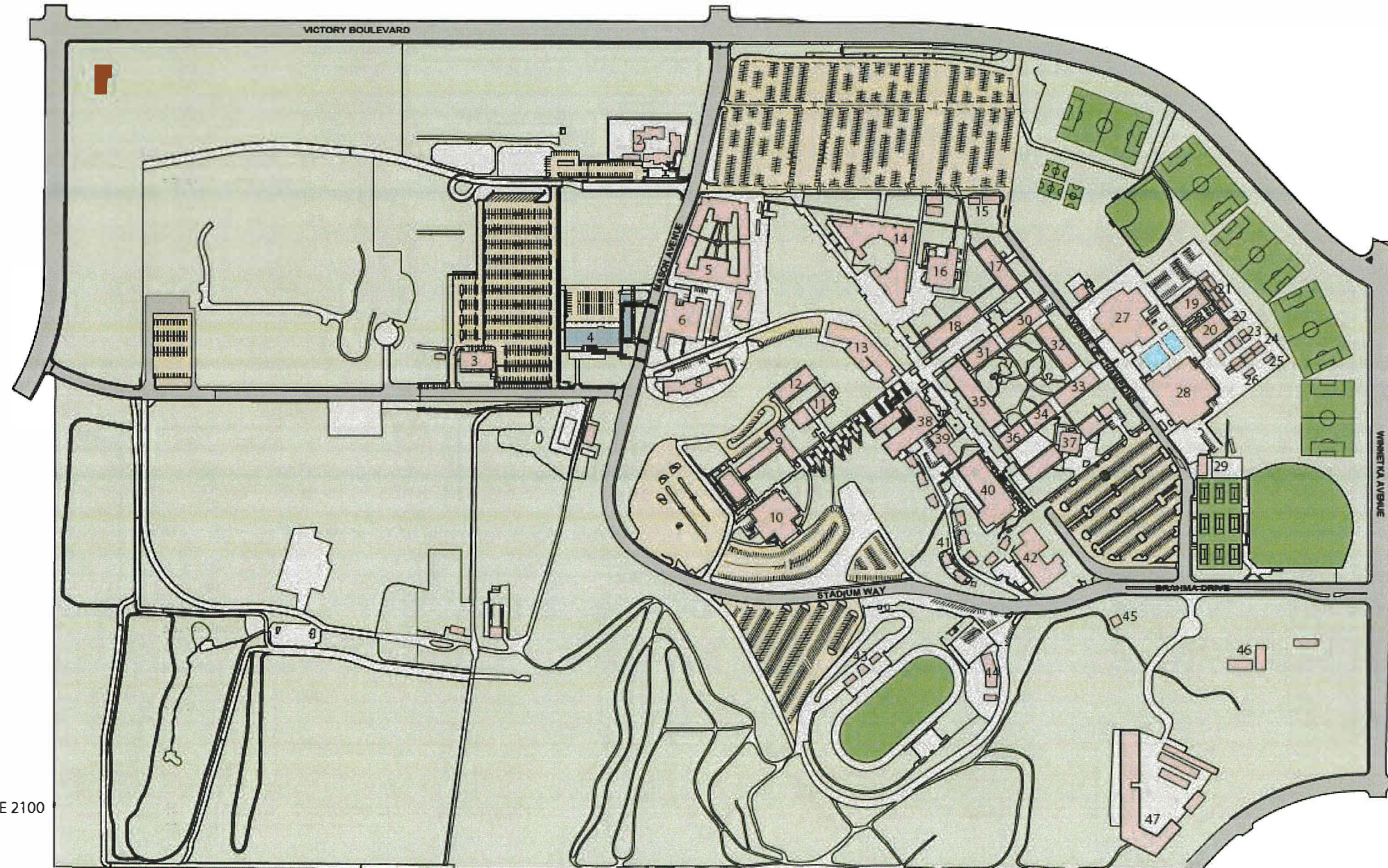
Figure 6 illustrates the Current Facilities Master Plan. **Figure 7** shows the 2019 Facilities Master Plan Update, including the proposed changes in Table 3. **Figure 8** depicts the Proposed Facilities Master Plan.

Table 4 compares the environmental impacts of the 2002 Master Plan with those of the 2010, 2014 and proposed 2019 Master Plan Updates. As shown in the table, the 2002 Master Plan had either no impacts or less-than-significant impacts related to agricultural resources, land use, mineral resources, population and housing, and recreation. With mitigation incorporated, the 2002 Master Plan resulted in less-than-significant impacts related to biological resources, geology, hazards, hydrology, noise, public services, and utilities. Under the 2002 Master Plan, significant and unavoidable impacts were identified for aesthetics, air quality, transportation, and cultural resources. With appropriate mitigation, the 2019 Master Plan Update will not result in any new or substantially increased significant environmental effects as compared to the 2002 Master Plan.



BUILDING LEGEND:

1. AGRICULTURAL EDUCATION BUILDING
(PREVIOUS LOCATION PER 2010 MASTER PLAN UPDATE)
2. CHILD DEVELOPMENT CENTER 3900
3. EARTH SCIENCES 4100
4. EXPANDED AUTOMOTIVE & NEW TECHNICAL
EDUCATION FACILITIES (FUTURE, FUNDED BY
MEASURE J)
5. CENTER FOR SCIENCE 9000
6. INDUSTRIAL TECHNOLOGY 3600
7. VET TECH
8. APPLIED TECHNOLOGY 3800
9. MUSIC 3400
10. PERFORMING ARTS CENTER 3500
11. ART GALLERY 3300
12. FINE ARTS 3300
13. BUSINESS EDUCATION 3200
14. LIBRARY / LEARNING CROSSROADS 5000
15. CHILD DEVELOPMENT ACADEMIC
DEPARTMENT 6100-6400
16. FACULTY AND STAFF CENTER 600
17. JUNIPER 800
18. IRIS 900
19. VILLAGE 8100
20. VILLAGE 8200
21. VILLAGE 8340, 8341,
8342, 8343, 8344, 8346
22. VILLAGE 8330
23. VILLAGE 8321
24. VILLAGE 8400, 8401,
8402, 8405, 8406, 8407
25. VILLAGE 8408
26. VILLAGE 8410
27. NORTH GYM 5600
28. SOUTH GYM 5400
29. SHERIFF'S OFFICE
30. COSC 1500
31. GINGER 1600
32. MATH 1400
33. BEH 1300
34. EB 1200
35. ELM 1700
36. BIRCH 1100
37. ALDER 1000 ADMINISTRATION
38. MEDIA CENTER 1800
39. GREAT HALL 1900
40. COLLEGE SERVICES / BUSINESS OFFICE / CAFE 2100
41. FACULTY OFFICES 2200-3100
42. STUDENT SERVICES / INFO DESK 4800
43. PRESS BOX
44. FIELD HOUSE 4700
45. WEATHER STATION
46. HORTICULTURE 4900
47. MAINTENANCE AND OPERATIONS FACILITY



LEGEND:

- EXISTING BUILDING
- NEW BUILDING
- LANDSCAPE & OPEN SPACE
- EXISTING PARKING
- EXISTING PAVING
- EXISTING STREET
- ATHLETIC FIELDS
- PREVIOUS LOCATION PER 2010 MASTER PLAN UPDATE

CURRENT FACILITIES MASTER PLAN

Current as of: 05/01/2019

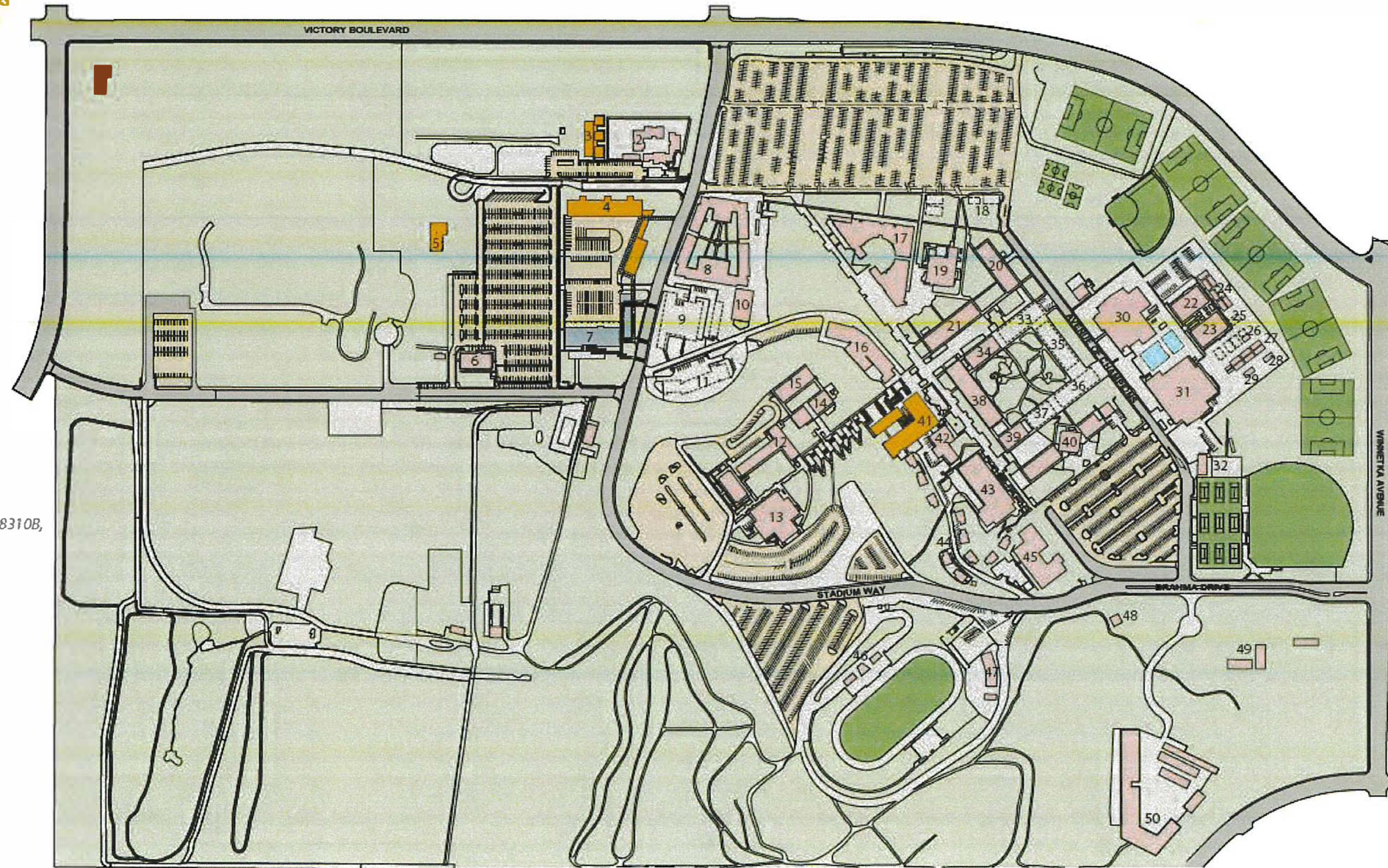


Figure 6 - Current Facilities Master Plan



BUILDING LEGEND:

1. AGRICULTURAL EDUCATION BUILDING
(PREVIOUS LOCATION PER 2010 MASTER PLAN UPDATE)
 2. CHILD DEVELOPMENT CENTER 3900
 3. **NEW CHILD DEVELOPMENT ACADEMIC FACILITY**
 4. **NEW INDUSTRIAL TECH REPLACEMENT BUILDING**
 5. **NEW AGRICULTURAL EDUCATION BUILDING**
 6. EARTH SCIENCES 4100
 7. EXPANDED AUTOMOTIVE & NEW TECHNICAL
EDUCATION FACILITIES (FUTURE, FUNDED BY
MEASURE J)
 8. CENTER FOR SCIENCE 9000
 9. INDUSTRIAL TECHNOLOGY 3600
 10. VET TECH
 11. APPLIED TECHNOLOGY 3800
 12. MUSIC 3400
 13. PERFORMING ARTS CENTER 3500
 14. ART GALLERY 3300
 15. FINE ARTS 3300
 16. BUSINESS EDUCATION 3200
 17. LIBRARY / LEARNING CROSSROADS 5000
 18. CHILD DEVELOPMENT ACADEMIC
DEPARTMENT 6100-6400
 19. FACULTY AND STAFF CENTER 600
 20. JUNIPER 800
 21. IRIS 900
 22. VILLAGE 8100
 23. VILLAGE 8200
 24. VILLAGE 8340, 8341, 8342, 8343, 8344, 8346
(SITE OF 8345 TO BE DEMOLISHED)
 25. VILLAGE 8330
 26. VILLAGE 8321
(SITES TO BE DEMOLISHED 8000, 8300, 8310A, 8310B,
8320)
 27. VILLAGE 8400, 8401,
8402, 8405, 8406, 8407
 28. VILLAGE 8408
 29. VILLAGE 8410
 30. NORTH GYM 5600
 31. SOUTH GYM 5400
 32. SHERIFF'S OFFICE
 33. COSC 1500
 34. GINGER 1600
 35. MATH 1400
 36. BEH 1300
 37. EB 1200
 38. ELM 1700
 39. BIRCH 1100
 40. ALDER 1000 ADMINISTRATION
 41. **NEW MULTI PURPOSE ACADEMIC &
WORKFORCE EDUCATION BUILDING**
(SITE OF MEDIA CENTER 1800 TO BE DEMOLISHED)
 42. GREAT HALL 1900
 43. COLLEGE SERVICES / BUSINESS OFFICE / CAFE 2100
 44. FACULTY OFFICES 2200-3100
 45. STUDENT SERVICES / INFO DESK 4800
 46. PRESS BOX
 47. FIELD HOUSE 4700
 48. WEATHER STATION
 49. HORTICULTURE 4900
 50. MAINTENANCE AND OPERATIONS FACILITY
- Current as of: 05/01/2019



LEGEND:

- BUILDING
BEING
DEMOLISHED
- FUTURE
BUILDING
- EXISTING
BUILDING
- NEW
BUILDING
- LANDSCAPE &
OPEN SPACE
- EXISTING
PARKING
- EXISTING
PAVING
- EXISTING
STREET
- ATHLETIC
FIELDS
- PREVIOUS
LOCATION
PER 2010
MASTER PLAN
UPDATE

FACILITIES MASTER PLAN UPDATE

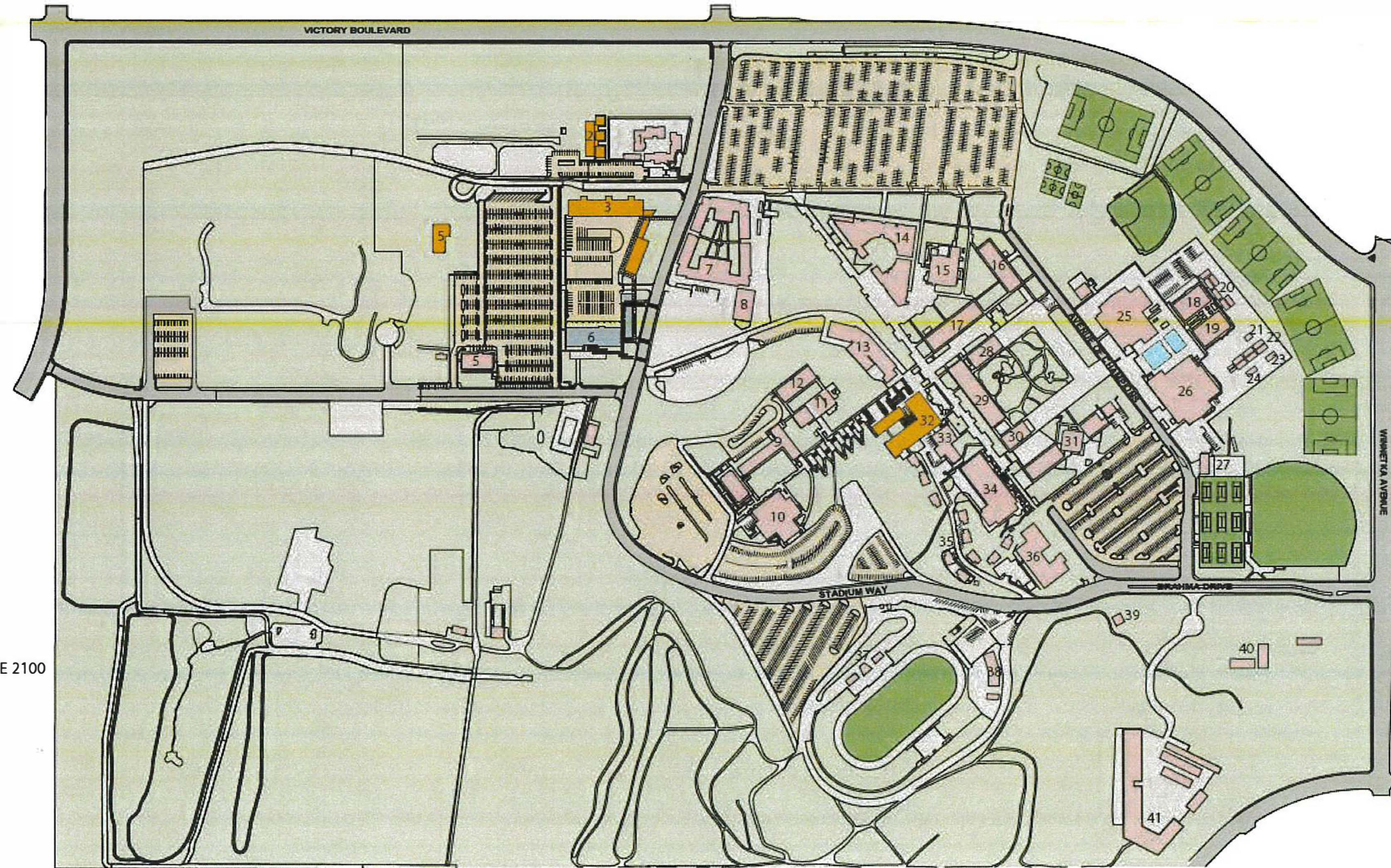


Figure 7 - Facilities Master Plan Update



BUILDING LEGEND:

1. CHILD DEVELOPMENT CENTER 3900
2. **NEW CHILD DEVELOPMENT ACADEMIC FACILITY**
3. **NEW INDUSTRIAL TECH REPLACEMENT BUILDING**
4. **NEW AGRICULTURAL EDUCATION BUILDING**
5. EARTH SCIENCES 4100
6. EXPANDED AUTOMOTIVE & NEW TECHNICAL EDUCATION FACILITIES (FUTURE, FUNDED BY MEASURE J)
7. CENTER FOR SCIENCE 9000
8. VET TECH
9. MUSIC 3400
10. PERFORMING ARTS CENTER 3500
11. ART GALLERY 3300
12. FINE ARTS 3300
13. BUSINESS EDUCATION 3200
14. LIBRARY / LEARNING CROSSROADS 5000
15. FACULTY AND STAFF CENTER 600
16. JUNIPER 800
17. IRIS 900
18. VILLAGE 8100
19. VILLAGE 8200
20. VILLAGE 8340, 8341, 8342, 8343, 8344, 8346
21. VILLAGE 8321
22. VILLAGE 8400, 8401, 8402, 8405, 8406, 8407
23. VILLAGE 8408
24. VILLAGE 8410
25. NORTH GYM 5600
26. SOUTH GYM 5400
27. SHERIFF'S OFFICE
28. GINGER 1600
29. ELM 1700
30. BIRCH 1100
31. ALDER 1000 ADMINISTRATION
32. **NEW MULTI PURPOSE ACADEMIC & WORKFORCE EDUCATION BUILDING**
33. GREAT HALL 1900
34. COLLEGE SERVICES / BUSINESS OFFICE / CAFE 2100
35. FACULTY OFFICES 2200-3100
36. STUDENT SERVICES / INFO DESK 4800
37. PRESS BOX
38. FIELD HOUSE 4700
39. WEATHER STATION
40. HORTICULTURE 4900
41. MAINTENANCE AND OPERATIONS FACILITY



LEGEND:

- PROPOSED BUILDING
- EXISTING BUILDING
- NEW BUILDING
- LANDSCAPE & OPEN SPACE
- EXISTING PARKING
- EXISTING PAVING
- EXISTING STREET
- ATHLETIC FIELDS

PROPOSED FACILITIES MASTER PLAN



Current as of: 05/01/2019

Figure 8 - Proposed Facilities Master Plan

**Table 4: Comparison of Environmental Impacts –
2002 Pierce College Master Plan, 2010 Master Plan, 2014 Master Plan and 2019 Master Plan Updates**

Environmental Resource Area	2002 Pierce College Master Plan	2010 Master Plan Update	2014 Master Plan Update	2019 Master Plan Update
Aesthetics	Significant after Mitigation.	No substantial increase in impacts.	No substantial increase in impacts.	No substantial increase in impacts.
Agricultural Resources	No Impact.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Air Quality	Significant after Mitigation.	No substantial increase in impacts.	No substantial increase in impacts.	No substantial increase in impacts. Impacts are less severe.
Biological Resources	Less than Significant with Mitigation.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Cultural Resources	Significant after Mitigation.	No substantial increase in impacts.	No substantial increase in impacts.	No substantial increase in impacts.
Geology and Soils	Less than Significant with Mitigation.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Greenhouse Gases	NA	No significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Hazards and Hazardous Materials	Less than Significant with Mitigation.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.

**Table 4 (cont.): Comparison of Environmental Impacts –
2002 Pierce College Master Plan, 2010 Master Plan, 2014 Master Plan and 2019 Master Plan Updates**

Hydrology and Water Quality	Less than Significant with Mitigation.	No new significant impacts identified.	No new significant impacts identified	No new significant impacts identified.
Land Use and Planning	Less than Significant.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Mineral Resources	No Impact.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Noise	Less than Significant with Mitigation.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Population and Housing	Less than Significant.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Public Services	Less than Significant with Mitigation.	No new significant impacts identified.	No new significant impacts identified	No new significant impacts identified.
Recreation	Less than Significant.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.
Transportation	Significant after Mitigation.	No substantial increase in impacts.	No substantial increase in impacts.	No substantial increase in impacts.
Utilities and Service Systems	Less than Significant with Mitigation.	No new significant impacts identified.	No new significant impacts identified.	No new significant impacts identified.

13. Construction Phasing

With the required approvals and permits in place, construction activities would be expected to begin in 2021 and end in 2025.

Table 3 included above, shows the construction schedule for all projects proposed under the 2019 Master Plan Update.

14. Surrounding Land Uses and Setting

As stated above, the College is located in a developed area of the City of Los Angeles. The area immediately surrounding the College is developed with mostly residential uses. Residential uses are located to the north, south, southeast, and southwest, while Warner Center is located immediately west of the College. The Metro Orange Line includes a station at the College along Winnetka Avenue and a second station at De Soto Avenue and Victory Boulevard.

15. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement)

- State of California
 - Division of the State Architect
 - Department of Food and Agriculture
 - Department of General Services
 - Department of Toxic Substances Control
 - State Fire Marshal
- Regional Water Quality Control Board (National Pollutant Discharge Elimination System Permit)
- South Coast Air Quality Management District (stationary-source permits)
- Los Angeles County Metropolitan Transportation Authority
- County of Los Angeles
 - Department of Health Services
 - Department of Public Works
- City of Los Angeles
 - Department of Water and Power
 - Fire Department
 - Public Works Department (grading permit)
 - Bureau of Engineering
 - Bureau of Sanitation
 - Department of Transportation

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below () could 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"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Agriculture Resources	<input type="checkbox"/>	Hydrology/Water Quality	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Air Quality	<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Transportation/Traffic
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Utilities/Service Systems
<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Noise	<input type="checkbox"/>	Mandatory Findings of Significance
<input type="checkbox"/>	Geology/Soils	<input type="checkbox"/>	Population/Housing		

EVALUATION OF ENVIRONMENTAL IMPACTS

Issues	Potentially Significant	Less-than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

No Impact (designated scenic vistas). The Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan indicates that no officially designated scenic vistas or views have been identified in the immediate vicinity of Pierce College. The nearest designated scenic vistas are along the Mulholland Scenic Parkway and the Ventura/Cahuenga Boulevard corridor; however, the proposed 2019 Master Plan Update would not affect views from these referenced scenic vantage point locations because of the limited scope of the facilities changes that would occur, the separating distance, the elevated configuration of the Ventura Freeway, and intervening development and topography. Hence, no impact on such officially designated scenic views would occur as a result of the Revised Project.

Less-than-Significant Impact (unofficial on-campus scenic vistas). Detailed visual analysis of the Pierce College campus and its visual setting was provided in the 2002 EIR. That analysis identified several unofficial scenic views at the Pierce College campus that are considered scenic resources of the neighboring communities but concluded that impacts on such views, occurring as a result of 2002 Master Plan project components, would be less than significant. Scenic resources include the undeveloped rolling hills in the southern portion of the campus and the agricultural fields in the northwest corner of the campus adjacent to De Soto Avenue and Victory Boulevard. The southwest portion of the campus offers panoramic views of other areas of the campus, the San Fernando Valley, and the Santa Susana Mountains to the north. In contrast to the 2002 Master Plan (e.g., previously proposed Viticulture Partnership), the proposed 2019 Master Plan Update would not locate any new facilities in the southwest portion of the campus. Building demolitions and new construction would occur within the central campus area defined by Mason Avenue, Stadium Way, Brahma Drive, Winnetka Avenue, and Victory Boulevard.

The 2019 Master Plan Update projects would relocate the previously-approved Agricultural Education Building in the northwest portion of the campus to a new site on campus but would not significantly modify the agricultural fields in the northwest corner of the campus. The extensive agricultural fields to the north and south of El Rancho Drive would, therefore, remain intact, and the open space character of the setting would not be significantly changed because of the relatively small scale and massing of the proposed features in contrast to the expansive

character of most informal views across the campus. Therefore, these views of campus open space would continue to be available to the general public, students, and faculty who use the adjacent pedestrian trails. In addition, informal views of key off-campus visual resources, such as the Chalk Hills to the south or to the more distant Santa Susana Mountains and Simi Hills (approximately 5 to 6 miles to the north and northwest, respectively), would not be adversely affected by the projects proposed as part of the 2019 Master Plan Update. The visual impact would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Substantially damage scenic resources, including trees, rock outcroppings, and historic buildings, within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. As described above in response 1(a), the nearest scenic highways are Mulholland Scenic Parkway and the Ventura/Cahuenga Boulevard corridor, which are located approximately 2.5 miles and 0.6 mile, respectively, south of the College. Given the distance from Pierce College, topographic differences, mature vegetation, and intervening development, including the elevated configuration of the Ventura Freeway through Woodland Hills, no unencumbered sightlines of development from scenic highways would occur under the proposed 2019 Master Plan Update. No impacts would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The proposed 2019 Master Plan Update would include the demolition, relocation and/or replacement of existing classroom buildings. It would not introduce new buildings, student activity spaces, or parking facilities in the undeveloped open space in the southern portion of the campus. As described in response 1(a), above, the southern portion of the College is considered a scenic resource for the neighboring communities. In addition, the 2019 Master Plan Update would not significantly modify the agricultural fields in the northwest corner of the campus. The approximately 480-acre expanse of agricultural land to the north along Victory Boulevard would remain intact, as would the agricultural fields/open space to the south across El Rancho Drive. New construction is proposed primarily within the campus core, an area where there is no uniformity in scale or architectural design among the extant buildings. As with existing development, any proposed development in the campus core would be oriented along the campus's existing northwest-to-southeast spine. Such development would take full advantage of the varied surrounding landscape and topographic features. Although core development would not be uniform in terms of height or massing, all new development would be sympathetically integrated and compatible with existing campus development in terms of scale, architectural style, color, materials, and landscape design. The proposed 2019 Master Plan Update would not substantially degrade the existing visual character or quality of the site or its surroundings. This would remain a less-than-significant impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The 2002 EIR identified less-than-significant impacts related to light and glare resulting from construction and operation of projects identified in the 2002 Master Plan. New construction under the proposed 2019 Master Plan Update would occur largely within the core area of the campus and no substantial new sources of nighttime lighting would be added. As with new construction under prior Master Plan updates, project

lighting design features (i.e., LEED-based efficient designs and cut-off shielded fixtures angled to be at least 45 degrees below horizontal) and the sizeable intervening distances that separate sensitive viewers from light sources would mitigate significant impacts. New Lighting associated with new or relocated buildings would be located within the central part of the College and located far away from nearby residential uses. As such, the potential for spillover and glare impacts on adjacent residential properties would be low. New or relocated buildings and structures would be designed with appropriate colors and textures, as well as non-reflective materials. These would be integrated into the adjoining landscape so as not to produce significant glare, spillover light, or sky-glow effects. This would be considered a less-than-significant impact. Thus, no new or substantially significant increased impacts would occur under the Revised Project, and no new mitigation measures are proposed.

2. AGRICULTURE RESOURCES: In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The 2002 FEIR found that approximately 12 to 13 acres of land designated as Prime or Unique Farmland would be converted for the development of projects such as the equestrian education center, the child development center, and the new maintenance and operations facility. This development would affect less than 5% of the designated Prime and Unique Farmland on campus. It was concluded that, given the relatively small amount of farmland that would be developed and the fact that the proposed facilities would fulfill the master plan goal of enhancing land resources and would be consistent with the College’s agricultural educational mission, the overall impact would not be significant.

Under the 2019 Master Plan Update no new projects would be placed on Prime or Unique Farmland. As such, impacts would remain as previously estimated in the 2002 EIR, less than significant.

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"/>
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No Impact. There is no Land Conservation Act (i.e., Williamson Act) contract for the site. The College is zoned as Open Space and Public Facilities. Therefore, the proposed 2019. Master Plan Update would not conflict with any Williamson Act contract or agricultural zoning. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) 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"/>

No Impact. The proposed 2019 Master Plan Update would relocate the previously planned Agricultural Education Building, Greenhouse #1, and Greenhouse #2 to a new site on campus. In so doing, the agricultural character of the school would be maintained consistent with the College’s agricultural educational mission and the 2002 Master Plan goal of enhancing land resources. No impacts would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

3. AIR QUALITY: 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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. A detailed analysis of potential air quality-related impacts was provided in the 2002 EIR. That analysis identified significant impacts to air quality planning in the region. The site is located within the South Coast Air Basin (SCAB), which includes all of Orange County (County) and portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality within the SCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for SCAB.

The main purpose of an AQMP is to describe air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area in order to bring the area into compliance with federal and State air quality standards. A nonattainment area is considered to have air quality worse than the National Ambient Air Quality Standards (NAAQS) as defined in the federal Clean Air Act. The SCAB is in nonattainment for the federal and State standards for ozone (O₃) and particulate matter less than 2.5 microns in diameter (PM_{2.5}). In addition, the SCAB is in nonattainment for the State standard for particulate matter less than 10 microns in diameter (PM₁₀). The SCAB is in attainment/maintenance for the federal PM₁₀, carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen dioxide (NO₂) standards (the Los Angeles portion of the SCAB is designated nonattainment for lead standards. Lead emissions would not be emitted from the Project).

As part of its enforcement responsibilities, the U.S. Environmental Protection Agency (EPA) requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and State ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The most up-to-date version of the AQMP was adopted in 2016 (2016 AQMP). The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving California and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the California Air Resources Board (CARB), SCAG, and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The 2019 Master Plan Update is subject to the SCAQMD's Air Quality Management Plan.

Consistency with the 2016 AQMP would be achieved if a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and State air quality standards. Per SCAQMD's *CEQA Air Quality Handbook* (1993), there are two main indicators of a project's consistency with the applicable AQMP: (1) whether the project would increase the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the applicable AQMP (2016 AQMP); and (2) whether the project would be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP.

As shown in Tables 6 and 8, the Revised Project would result in emissions that would be below the SCAQMD regional and localized thresholds during construction. As further described under below, the 2019 Master Plan Update would not instigate an increase of quantifiable criteria emissions beyond existing conditions during operations. Therefore, the Revised Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

The 2019 Master Plan Update does not include development of new housing or employment centers and would not induce population or employment growth. Therefore, it would not affect local plans for population growth beyond that previously analyzed.

For these reasons, the 2019 Master Plan Update would be consistent with and not conflict with or obstruct implementation of the 2016 AQMP. No impacts would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The analysis of potential air quality-related impacts provided in the 2002 EIR determined significant impacts associated with both construction and operational emissions in relation to air quality standards regulating the SCAB in 2002, despite the imposition of mitigation measures.

2019 Master Plan Update Regional Construction Impacts

As previously described, the 2019 Master Plan Update would result in the demolition of 169,896 square feet of building space on campus. 106,500 square feet of new academic building space would be constructed under the 2019 Master Plan Update, a net reduction of approximately 63,396 square feet of academic space. Building demolition and construction proposed under the 2019 Master Plan Update has the potential to generate air quality impacts due to the use of heavy-duty demolition equipment on the Project site, construction workers traveling to and from the Project site, and deliveries of materials to the Project site. Combustion emissions, primarily nitrogen oxides (NOX), would emanate from the use of on-site demolition equipment, such as tractors, wheeled loaders, and cranes.

Emissions modeling accounting for proposed demolition and construction activity Has been calculated based on an anticipated schedule provided by LACCD. Table 5 depicts the specific phasing scenario provided by LACCD and accounted for in the emissions modeling. Further, the assumed equipment mix and other details are provided in Appendix B.

As shown in Table 5, construction activities involved with the Multi-Purpose Academic Workforce Education Building, Industrial Technology Building, and Child Development Academic Facility are anticipated to occur simultaneously. This assumption is particularly noteworthy since demolition/construction emissions are directly related to the amount and intensity of demolition/construction activities (i.e., emissions increase as the amount of demolition and construction activity increases). The quantity, duration, and intensity of demolition/construction activity would have a substantial effect on the amount of emissions occurring at any one time. As such, the emissions forecasts provided herein reflect a specific set of conservative assumptions that are based on a work scenario wherein a relatively large amount of activity is occurring in a relatively intensive manner.

Table 5: Modeled Demolition & Construction Activity Timeline

Phase Name	Start Date	End Date	Phase Overlap
Agricultural Education Building – Construction	July 2021	August 2022	No Phase Overlap
Multi-Purpose Academic Workforce Education Building – Construction & Demolition	September 2022	March 2025	Overlaps with Industrial Technology Building & Child Development Academic Facility
Industrial Technology Building – Construction & Demolition	November 2022	April 2024	Overlaps with Multi-Purpose Academic Workforce Education Building & Child Development Academic Facility
Child Development Academic Facility – Construction & Demolition	October 2023	October 2024	Overlaps with Multi-Purpose Academic Workforce Education Building & Industrial Technology Building

Predicted maximum daily construction-related emissions are summarized in Table 6. In addition to showing the maximum daily construction-related emissions associated with the Project as a whole, predicted emissions associated with the construction of each individual building is also presented for the purposes of disclosure.

Table 6: Forecast of Regional Construction Emissions

Construction Phase	Criteria Pollutant Emissions (maximum pounds per day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Agricultural Education Building – Construction						
Year 2021 (July Start)	1.39	17.14	24.22	0.03	1.63	1.31
Year 2022 (August End)	1.37	12.54	17.65	0.02	0.95	0.81
Multi-Purpose Academic Workforce Education Building – Construction & Demolition						
Year 2022 (September Start)	0.71	15.32	16.69	0.03	2.69	1.54
Year 2023	3.15	20.17	27.68	0.04	1.47	1.17
Year 2024	3.07	19.95	27.51	0.04	1.44	1.13
Year 2025 (March End)	3.01	19.75	27.36	0.04	1.41	1.10
Industrial Technology Building – Construction & Demolition						
Year 2022 (November Start)	0.70	14.96	16.60	0.03	1.92	0.93
Year 2023	3.30	19.85	27.08	0.04	2.69	1.54
Year 2024 (April End)	3.22	19.64	26.95	0.04	1.31	1.10
Child Development Academic Facility – Construction & Demolition						
Year 2023 (October Start)	0.32	6.54	8.47	0.01	0.80	0.58
Year 2024 (October End)	1.38	12.29	17.45	0.02	0.91	0.78
Combined/Overlapping Phases						
Year 2021 (Agricultural Education Building)	1.39	17.14	24.22	0.03	1.63	1.31
Year 2022 (Multi-Purpose Academic Workforce Education Building & Industrial Technology Building)	1.41	30.28	33.29	0.06	4.61	2.47
Year 2023 (Multi-Purpose Academic Workforce Education Building, Industrial Technology Building, & Child Development Academic Facility)	6.77	46.56	63.23	0.09	4.96	3.29
Year 2024 (Multi-Purpose Academic Workforce Education Building, Industrial Technology Building, & Child Development Academic Facility)	7.67	51.88	71.91	0.10	3.66	3.01
Year 2025 (Multi-Purpose Academic Workforce Education Building)	3.01	19.75	27.36	0.04	1.41	1.10
SCAQMD Regional Emissions Threshold (lbs/day)	75	100	550	150	150	55
Exceed SCAQMD Regional Threshold?	No	No	No	No	No	No
Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs.						
Notes: Bold values represent maximum daily emissions. The reduction/credits for construction emissions are based on measures included in CalEEMod and as required by the SCAQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Emission estimates also account for EIR Mitigation measure AQ-2.						

As shown in Table 6, all criteria pollutant emissions would remain below their respective thresholds under a worst-case, compressed demolition and construction scenario under the 2019 Master Plan Update.

2019 Master Plan Update Localized Construction Impacts

In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing Localized Significance Thresholds (LSTs) for construction. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The nearest sensitive receptors to the Project site are residences surrounding the campus. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest off-campus residential receptors are east of Winnetka Avenue over 1,000 feet (300 meters) away from any proposed campus demolition or new construction. In order to provide a conservative analysis, the LST thresholds for 200 meters between the site and sensitive receptors is applied.

For the Revised Project, the appropriate source receptor area (SRA) for the localized significance thresholds is the West San Fernando Valley area (SRA 6) since this area includes the Project site. The most intensive construction work under the proposed 2018 Master Plan update would occur in the years 2023 and 2024, as the Multi-Purpose Academic Workforce Education Building, Industrial Technology Building, and Child Development Academic Facility would be under construction simultaneously. This combined activity is estimated to span over an approximate 3-acre footprint. Therefore, the LST threshold value for a 3-acre site was calculated using the information provided from the LST lookup tables.

The SCAQMD's methodology clearly states that "off-site mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. Table 7 presents the results of localized emissions during construction activity. The LSTs reflect a 4-acre Project site located 25 meters from the nearest sensitive receptors.

Table 7: Forecast of Localized Construction Emissions

Construction Phase	Criteria Pollutant Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Demolition and Construction in 2023	33.55	43.43	4.36	3.12
Demolition and Construction in 2024	50.04	67.93	2.73	2.73
<i>SCAQMD Localized Emissions Threshold Interpolated for 3.0 acres of daily disturbance (lbs/day)</i>	<i>218.50</i>	<i>3,250.0</i>	<i>75.00</i>	<i>23.50</i>
Exceed Threshold?	No	No	No	No
Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs. Notes: The reduction/credits for construction emissions are based on measures included in CalEEMod and as required by the SCAQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Emission estimates also account for EIR Mitigation Measure AQ-2.				

Table 7 shows that the emissions of localized pollutants resulting during Revised Project demolition would not result in significant concentrations of pollutants at nearby sensitive receptors.

2002 EIR Mitigation Measures

As described in the 2002 EIR, the following measures would reduce emissions from equipment by approximately 10 percent. (However, as described in the 2002 EIR, construction-period air quality impacts were considered significant and unavoidable because of the larger building program than that proposed in this 2019 update.)

AQ-1 Turn off equipment when not in use for longer than 5 minutes.

In addition to the mitigation measure above, which was included in the 2002 EIR, the following measure shall be employed to reduce emissions of NO_x, ROC, PM₁₀, and PM_{2.5} further in all off-road equipment.

AQ-2 Use EPA Tier 2 emissions-compliant equipment or newer. (Note: This standard has been modified to require use of EPA Tier 3 emissions-compliant equipment or newer.)

2019 Master Plan Update Regional and Localized Operational Impacts

The purpose of the proposed 2019 Master Plan Update is to allow the College the flexibility to account for changing conditions, including student enrollment projections. As previously described, the 2019 Master Plan Update modifies the master plan that was adopted in 2002, emphasizing efficient use of the College’s resources to meet its educational mission and strategic plan. Since 2002, a number of individual projects associated with Pierce College have been cancelled, as indicated previously in Table 1. Also, student enrollment has been on the decline the last few years. The recent state budget cuts, as well as increased opportunities for distance learning, have also affected enrollment. The California community colleges have been encouraged to reduce their course offerings, and the LACCD has responded by directing all of its nine colleges, including Pierce College, to meet reduced enrollment targets.

As previously described, the 2019 Master Plan Update proposes the construction of 106,500 square feet of new academic building space and the demolition of 169,896 square feet of existing building space, a net reduction of approximately 63,396 square feet of academic building space. Therefore, fulfillment of the 2019 Master Plan Update would not increase existing traffic beyond that currently instigated by Pierce College operations, but rather prepare an existing college campus for projected declines in student enrollment. Thus, the Revised Project would not increase traffic-generated air pollutants. Similarly, due to the net reduction of building space, the 2019 Master Plan Update would not result in an increase of energy-related or area sources of criteria air pollutants.

The 2019 Master Plan Update would not violate any air quality standard and is considered a less-than-significant impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. The cumulative setting for air quality includes the Los Angeles County portion of the SCAB. The Los Angeles County portion of the SCAB is designated as a nonattainment area for state standards of ozone, PM₁₀, and PM_{2.5}. The region is also designated as a nonattainment area for federal standards of ozone and PM_{2.5}. (As previously described, the Los Angeles portion of the SCAB is designated nonattainment for lead standards.) Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the Los Angeles County portion of the SCAB and associated growth and development anticipated in the region.

The SCAQMD’s approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. As discussed earlier, the 2019 Master Plan Update is consistent with the 2016 AQMP, which is intended to bring the SCAB into attainment for all criteria pollutants. In addition, the SCAQMD recommends that any given project’s potential contribution to cumulative impacts be assessed using the same significance criteria as for project-specific impacts. Therefore, individual projects that do not generate operational or construction emissions that exceed the SCAQMD’s daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the air basin is in nonattainment, and therefore would not be considered to have a significant, adverse air quality impact. Alternatively, individual Project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively

considerable. As previously noted, the 2019 Master Plan Update would not exceed the applicable SCAQMD significance thresholds. As such, the 2019 Master Plan Update will not result in a cumulatively significant impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. Construction activities would involve the use of a variety of gasoline- or diesel-powered equipment that emits exhaust fumes and generates dust during soil disturbance. These temporary air quality impacts could negatively affect sensitive receptors in the construction area, which is considered a potentially significant impact. As previously described, SCAQMD staff has developed the LST methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts during construction. As shown above, all LSTs would remain below their respective thresholds; therefore, construction activities associated with the 2019 Master Plan Update would not significantly impact sensitive receptors.

As previously described, the 2019 Master Plan Update would result in a net reduction of approximately 63,396 square feet of academic building space. No long-term (operational) emissions impacts would occur and no long-term operational *localized* impacts would occur.

Sensitive receptors would not be exposed to substantial pollutant concentrations. This is a less than significant impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. SCAQMD's *CEQA Air Quality Analysis Handbook* identifies various secondary significance criteria related to odorous air contaminants. Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills, or heavy manufacturing uses. The Project does not propose any such uses or activities that would result in potentially significant odor impacts. Some objectionable odors may emanate from the operation of diesel-powered construction equipment during construction of the proposed Project. However, these odors would be limited to the construction period and would disperse quickly; therefore, these odors would not be considered a significant impact.

No significant impacts related to objectionable odors would result from the proposed project. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

4. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. Biological surveys of Pierce College were conducted in 2002 during the preparation of the 2002 FEIR. In addition, an updated survey was conducted by an ICF Jones & Stokes biologist on August 3, 2009. While not observed during the 2009 survey, large numbers of Canada geese are known to feed and roost (rest) in the agricultural fields in the western portion of the campus during the winter months (generally November to March). Also, while not included on any list of sensitive species, Canada geese are

considered to be a locally sensitive species because of the lack of feeding and resting habitat for this species in coastal southern California.

None of the projects included in the 2002 Master Plan that were proposed for the agricultural fields in the western portion of the campus were constructed (see Table 1 for status of 2002 projects). The 2019 Master Plan Update does not propose any projects in the agricultural fields; therefore, the potential to affect Canada geese is limited. However, should any construction activities occur in the agricultural fields, the mitigation measure proposed in the 2002 EIR, and included below, would be implemented. Implementation of mitigation measure BR-1 would mitigate significant impacts (through habitat modifications) to the same level of less than significant.

2002 EIR Mitigation Measures

BR-1 To avoid significant impacts on Canada geese, a locally sensitive species, Pierce College shall attempt to avoid construction activities in the agricultural portions of the campus during the winter months when geese are present. If construction activities in agricultural areas during winter cannot be avoided, then several months prior to the scheduled initiation of construction activities, Pierce College shall plant low-growing herbaceous crops (alfalfa, grains) or wild grass favored by Canada geese in portions of the agricultural fields that would not be affected by construction activities to provide alternative feeding habitat for the geese. Human disturbance in the enhanced area shall be prohibited until the geese migrate from the area or until construction activities in the agricultural fields are complete. In addition, because the project includes permanent removal of some feeding and roosting habitat for geese, a mitigation plan shall be developed to minimize permanent impacts on the Canada geese population at the campus. The plan shall be developed by campus biology instructors who are familiar with the areas on campus used by Canada geese in conjunction with experts who are familiar with successful management of the wintering geese populations at Sepulveda Basin, the Salton Sea, and/or Central Valley. The plan shall include the following measures:

- An evaluation of the extent of use by geese of agricultural areas that are to be removed from agricultural use as part of the master plan. The number of acres to be enhanced for geese shall be directly proportional on a 1:1 basis to the number of acres to be removed from agricultural production. Such acreage will have been used by geese during one or more of the past 5 years.
- An evaluation of the remaining agricultural areas on campus that would be appropriate to enhance for roosting (resting) and foraging for geese. The enhancement areas shall be appropriate for maintaining limited human disturbance, for planting crops known to be used in other areas of California for geese foraging (rye grass, corn, sorghum, millet), and for providing a sufficient take-off area for geese so they don't feel boxed in.
- A planting plan that specifies the timing of planting, pre-planting, and post-planting methods (e.g., harvesting crops to prepare them for geese foraging) to maximize use by geese; methods for limiting human disturbance; and methods for limiting encroachment by geese into areas outside the enhancement site where they may suffer mortality because of campus traffic or other campus uses.
- Monitoring and reporting methods so that the success of the enhancement can be measured for a minimum of 5 years following the first planting. Monitoring shall be conducted a minimum of once monthly during each winter, and a monitoring report shall be prepared once annually. Population monitoring shall take into account the wide fluctuations in the geese population on campus that has occurred over the last several decades.

As with the 2002 Master Plan, the facilities proposed as part of the proposed 2019 Master Plan Update would result in the removal of trees and other vegetation that could support nesting birds and raptors protected by the federal Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code. Direct impacts on active nests would be considered a significant impact on special-status species. Implementation of mitigation measure BR-2, identified in the EIR prepared for the 2002 Master Plan (and provided below), would mitigate this impact to the same level of less than significant.

BR-2 To avoid violations of the MBTA or California Fish and Game Code Section 3503, Pierce College shall attempt to limit grubbing and the removal of trees and buildings during the bird breeding season (approximately March 1 to September 1 [as early as February 1 for raptors]). If the bird breeding season cannot be avoided, Pierce College shall retain a qualified ornithologist to initiate surveys of the construction zone 30 days prior to the initiation of construction and weekly thereafter, with the last survey not more than 3 days prior to the initiation of construction, to minimize the potential for nesting following the survey and prior to construction. If the ornithologist detects any occupied nest or nests of native birds within the construction zone, Pierce College will conspicuously flag off the area(s) supporting bird nests, providing a minimum buffer of 300 feet between the nests and limits of construction (500 feet for raptors). The construction crew will be instructed to avoid any activities in this zone until the bird nests are no longer occupied, per a subsequent survey by the ornithologist.

Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The proposed 2019 Master Plan Update does not include any improvements or development within Canyon de Lana, which is the only area on the project site that was found during 2009 surveys to support riparian habitat or other sensitive natural communities. Components of the proposed 2019 Master Plan Update would remove only trees and shrubs. No impacts on riparian habitat or sensitive natural communities would occur as a result on the proposed 2019 Master Plan Update. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The 2002 EIR stated that the pond renovation work in the Canyon de Lana area may result in a significant impact if proposed renovation required the discharge of fill material into the streambed of Canyon de Lana. Pierce College will obtain an individual permit under Section 404 of the Clean Water Act if needed. A Streambed Alteration Agreement will be obtained by Pierce College if activities associated with pond renovation result in a violation of Section 1600 of the Fish and Game Code or significant impacts on protected wetlands. The 2002 EIR included mitigation measure BR-4 to avoid violations of wetland laws. The mitigation required Pierce College to retain a qualified wetland specialist to conduct wetland delineations as necessary. The 2019 Master Plan Update does not include any improvements or development within Canyon de Lana, which is the only area on the subject property that was found during the 2009 survey to support areas that have the potential to be regulated under the Clean Water Act. The nearest construction project would be approximately 1,000 feet northwest of the Canyon de Lana area. Therefore, the potential for indirect impacts (including from dust, noise, or runoff) would be low. The 2019 Master Plan Update would not result in significant impacts on federally protected wetlands, as defined by Section 404 of the Clean Water Act. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The eastern portion of the Pierce College campus is primarily developed with educational and recreational facilities and does not serve as a wildlife corridor. The western portion of the campus is currently sparsely developed and supports open agricultural fields, grasslands, and Canyon de Lana. This area would provide a local corridor for wildlife on the campus; however, the campus is surrounded by development and therefore does not provide a connected corridor for wildlife to undeveloped areas off site. Furthermore, the limited amount of proposed development within the western portion of the campus would not interfere substantially with the movement of wildlife within or through the campus. Native wildlife nursery sites do not occur within or immediately adjacent to the subject property; therefore, their use would not be impeded as a result of the 2019 Master Plan Update. This would be considered a less-than-significant impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The project site is located in the City of Los Angeles. The city’s Protected Tree Ordinance (Los Angeles Municipal Code Section 46.00, Ordinance No. 153,478) regulates the relocation or removal of all native oak trees (excluding scrub oak), California black walnut trees, California sycamore trees, and California bay trees of at least 4 inches in diameter at breast height (DBH). These tree species are defined as “protected” by the City of Los Angeles. The ordinance prohibits, without a permit, the removal of any regulated protected tree, including “acts that inflict damage upon root systems or other parts of the tree,” and requires that all regulated protected trees that are removed be replaced on at least a 2:1 basis with trees that are of a protected variety.

Native trees, including oaks and sycamores, occur within the Canyon de Lana area and the Arboretum area, but not in the construction area. Construction of facilities proposed under the proposed 2019 Master Plan Update is not anticipated to result in impacts on trees protected by the city’s Protected Tree Ordinance. Therefore, impacts related to local policies and ordinances protecting biological resources would be less than significant. No new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

f) Conflict with the provisions of an adopted habitat conservation plan, natural conservation community plan, other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The project site is not located within the jurisdiction of any approved habitat conservation plan or natural community conservation plan. No impact is anticipated to occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less than Significant Impact. An intensive-level historical resources survey of Pierce College was conducted in 2002 during preparation of the 2002 FEIR.

One listed State Historical Landmark has been identified on the Pierce College campus. Known as Old Trapper's Lodge, this historical resource (State Historical Landmark No. 939) is a folk-art sculpture installation that was created by artist John Ehn (1897–1981). It is located approximately 50 feet west of the agricultural education building and just east of the equestrian center in a vest pocket-sized park. However, the proposed 2019 Master Plan Update would not affect Old Trapper's Lodge. It neither calls for relocation, demolition, or disassembly and reinstallation of the features that make up Old Trapper's Lodge, nor adverse atmospheric changes to the setting.

In addition to the referenced historical resource, 12 other buildings were identified as potential historical resources in the 2002 FEIR. These consist of a small number of key campus buildings that survived from the first three years of the College's existence (1947–1950): Exposition Hall (the Quonset hut in which the College's first classes and student assemblies were held in 1947), the business office/student store building, and the 10 faculty office cottages (located between the student store and Stadium Way). A finding in the 2002 FEIR states that in the event that the College chooses to demolish the Exposition Hall Quonset hut, a significant and unavoidable impact on a historic resource would result. The business office/student store building was largely demolished as part of the implementation of the 2002 Master Plan. The proposed 2010 Master Plan Update did not call for the demolition, alteration, or relocation of the faculty cottages; however, construction of the new 70,000-square-foot Green Technologies Building was proposed on the site of the Facilities Plant yard, which is where three of the campus's known surviving Quonset hut buildings are located.

Pursuant to the 2014 Master Plan Update, the Exposition Hall Quonset hut was found to be significantly altered and retained insufficient integrity to have significance as a historic resource (ICF; June 2014). As a result, Mitigation Measure HR-1 in the 2010 Master Plan Update Addendum, which required relocation of the Quonset hut to a new location on-campus and preparation of a preservation plan, was deleted with the 2014 Master Plan Update.

The 2019 Master Plan Update proposes demolition of approximately 18 buildings and relocation of the previously planned Agricultural Education Center building with associated Greenhouses (#1, #2) to a new site on campus. To accommodate construction of the new Industrial Technology Building, demolition of buildings 3600A, 3600B, and 3800 is proposed. Building 3800, the Applied Technology Building was evaluated for potential architectural and historical significance because of its location within the footprint of the Auto and Technical Education complex expansion proposed as part of the 2014 Update. Although this building appeared largely intact and a representative example of school architecture during the 1950's, building 3800 is not a distinguished stylistic example and does not meet the criteria for NRHP or CRHR eligibility based on design (ICF, June 2014). Building 3800 does not possess significance either as a noteworthy example of architectural design, or based on associations with broad patterns of history, or by virtue of the architect's biographical significance within the profession. No known historical resources at Pierce College would be affected by the proposed 2019 Master Plan Update projects. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. An intensive archaeological resources survey of Pierce College was conducted in 2002 during preparation of the 2002 EIR. No archaeological resources were identified during that survey. However, areas of sensitivity were defined, one in the southwestern corner of the College at Canyon de Lana where a water source was found and the other, a nature trail area, in the southeastern corner of the College where prehistoric Native American artifacts have reportedly been found in the past (Horne 2002). Pierce College indicated that, according to its records, the water source in Canyon de Lana is not naturally occurring. The 2019 Master Plan Update includes no projects scheduled for Canyon de Lana.

The results of the 2014 cultural resources literature and records search indicated that no prehistoric or historical archaeological sites or isolated artifacts have been previously recorded within the boundaries of Pierce College or within ½-mile radius of the project area. In addition, no prehistoric or historical archaeological sites are listed on the Archaeological Determination of Eligibility (DOE) list (ICF, June 2014). The lack of archaeological resources identified within the project area does not preclude the possibility of identifying subsurface archaeological material during construction activities. However, the project area has been heavily disturbed by past construction activities, including the construction and installation of utilities, roads, and College buildings; therefore, the likelihood of encountering intact, subsurface archaeological material within the project area is low. If cultural materials are discovered during construction, it is recommended that all earth-moving activity within and around the immediate discovery area be diverted until a qualified archaeologist can assess the nature and significance of the find. If the resource is determined to be significant, further treatment may include avoidance or data recovery activities. If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner shall be contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC who will then notify the Most Likely Descendent. Further provisions of PRC 5097.98 are to be followed as applicable.

These recommendations are implemented with Mitigation Measures AR-1, AR-2 and AR-3 included in the 2002 EIR and identified below, and no new measures or additions for archaeological resources are required.

2002 EIR Mitigation Measures

- AR-1** If buried cultural resources are discovered during construction, all work must be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource. In areas of archaeological sensitivity, such as in the vicinity of the water sources in the Canyon de Lana and the Chalk Hills in the southeastern corner of the campus, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources shall monitor project-related ground-disturbing activities. Specifically, monitoring is recommended during construction of the horticulture/animal science and maintenance and operations facility.
- AR-2** Provisions for the disposition of recovered prehistoric artifacts shall be made in consultation with culturally affiliated Native Americans.
- AR-3** In the event of an accidental discovery of any human remains, the procedures specified in Health and Safety Code Section 7050.5, CEQA Section 15064.5 (e), and Public Resources Code Section 5097.98 shall be implemented.

Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. Pierce College is situated on the edge of the Chalk Hills in the western San Fernando Valley. Flat portions of the campus are underlain by Quaternary alluvial fan deposits and scattered areas of artificial fill. The top few feet of these alluvial fan deposits are unlikely to contain significant vertebrate fossils, but the underlying alluvium of late Pleistocene age is known to contain vertebrate fossils. The hills in the southern part of the campus are made up of Late Miocene age Modelo Formation, which is composed of marine sedimentary rock that is likely to contain significant fossil resources. This bedrock is exposed at or near the ground surface.

A record search for paleontological resources was conducted in 2002 for the 2002 EIR. This search indicated that fossil resources had not been identified on the Pierce College campus, but resources had been found in the same geologic formations nearby. Conditions at the College campus have not changed; therefore, the same mitigation measures specified in the 2002 EIR would reduce impacts associated with the proposed 2019 Master Plan Update to a less-than-significant level. These mitigation measures are listed below.

2002 EIR Mitigation Measures

- PR-1** The monitoring of excavation in areas identified as likely to contain paleontological resources shall be conducted by a qualified paleontological monitor. The monitor shall be equipped to salvage fossils and samples of sediments as they are unearthed to avoid construction delays. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units, previously described, are not present or, if present, are determined by qualified paleontological personnel to have a low potential to contain fossil resources.
- PR-2** Recovered specimens shall be prepared to a point of identification and permanent preservation, including the washing of sediments to recover small invertebrates and vertebrates.
- PR-3** Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage.
- PR-4** A report of findings, with an appended itemized inventory of specimens, shall be prepared. The report and inventory, when submitted to Pierce College, would signify completion of the program to mitigate impacts on paleontological resources.

Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant. Impact. No human remains, or cemeteries are known to be present on the Pierce College campus. An archaeological resources survey of Pierce College was conducted in 2002, and no human remains were found. If human remains are discovered during construction, the coroner and designated Native American representatives would be notified in accordance with Public Resources Code

Section 5097.98, Health and Safety Code Section 7050.5, and CEQA Section 15064.5(e), as specified in AR-3, above. A less-than-significant impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

6. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to 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"/>

Less-than-Significant Impact. The 2002 EIR found that the project site is not located within an Alquist-Priolo Earthquake Fault Zone and that no known active faults cross through the project area or within the immediate vicinity of the project area.⁶ With respect to the 2019 Master Plan Update, conditions on the project site have not changed; the impacts considered in the 2002 EIR regarding ground rupture within the project area remain the same. Therefore, primary ground rupture is not anticipated, and impacts would be less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The 2002 EIR found that the project would be subject to ground shaking associated with earthquakes on faults of both the San Andreas and Transverse Ranges fault systems. The campus itself is located in the vicinity of many major active faults, including the Northridge thrust, Santa Susana, and San Fernando faults. These faults are considered potentially significant sources of ground shaking. However, these ground motion hazards are not unusual for the San Fernando Valley area. It was found in the 2002 EIR that this hazard would represent a less-than-significant impact provided that design and construction conforms to all applicable provisions of the State of California, Division of the State Architect, and the guidelines set forth in the 1998 California Building Code (CBC). The CBC is based on the 1997 Uniform Building Code (UBC) and sets forth regulations concerning proper earthquake design and engineering. Construction would also conform to the 1997 UBC earthquake design criteria for Seismic Zone 4.

Impacts related to seismic ground shaking would remain the same under the proposed 2019 Master Plan Update as those described in the 2002 EIR. The 2019 Master Plan Update would also include proper design and construction guidelines, as required by the previous EIR, to reduce impacts from ground shaking. Impacts would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. Liquefaction is a phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of strong earthquake-induced ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of granular sediments and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silt, sand, and silty sand within 50 feet of the ground surface are most susceptible to liquefaction. Liquefaction related phenomena may include lateral spreading, ground oscillation, loss of bearing strength and subsidence. Lateral spreading comprises the movement of surficial blocks of sediment due to liquefaction and commonly occurs on gentle slopes of 0.3 to 3 degrees.

⁶ California Division of Mines and Geology. 2001. *Seismic Hazard Zone Report for the Canoga 7.5-Minute Quadrangle, Los Angeles County, California*. Seismic Hazard Zone Report 007.

The 2002 EIR found that low-lying portions of the project area are within a California Division of Mines and Geology (CDMG) Seismic Hazard Mapping Program liquefaction hazard zone.⁷ Additionally, it was found that, although no historical liquefaction had been reported in the Canoga quadrangle, there was evidence of lateral spreading in the Northridge and Reseda areas after the Northridge earthquake. Furthermore, localized areas of shallow groundwater and unconsolidated sediments may exist within the project site and could lead to liquefaction phenomena. However, it was concluded that much of the campus is underlain by bedrock, and the remainder of the campus is underlain by fine-grained alluvial/colluvial material that would not be susceptible to liquefaction phenomena. Consequently, liquefaction-related phenomena would not pose a significant problem.

With respect to the 2019 Master Plan Update, impacts from liquefaction would remain the same as those identified under the 2002 FEIR. As such, impacts would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The 2002 EIR found that impacts from landslides would not occur. The 2019 Master Plan Update site is not located in an area susceptible to landslide hazards. Because the location proposed for the project would not change from that described in the 2002 EIR, it is concluded that no new impacts from landslides would occur under the 2019 Master Plan Update. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The 2002 EIR found that impacts from soil erosion or the loss of topsoil would not occur because the area is fully developed. Because the 2019 Master Plan Update would occupy the same project site, it is concluded that no new impacts would occur from soil erosion or the loss of topsoil. Additionally, the 2019 Master Plan Update would reduce the amount of building square footage proposed. As such, impacts would be less than those assumed under the 2002 Master Plan. There would be no new impacts. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR identified corrosion, compaction, and expansion as the soil characteristics that could have significant impacts on the design of new buildings and facilities. Corrosive soils could damage buried utilities and foundations. Loose alluvial soils and undocumented fill may be subject to compaction or settlement due to changes in foundation loads or in soil moisture content, which could result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater. Potential impacts are related to unacceptable settlement or heave for structures, concrete slabs supported on grade, and pavement supported on the aforementioned types of soil. The 2002 EIR provided that all earthwork and grading would meet the code requirements of the State of California and follow the recommendations of the geotechnical report created for the project. Further mitigation measures were provided to reduce impacts to less-than-significant levels. With respect to the 2019 Master Plan Update, the impact from unsuitable soils would pose a less-than-significant impact because the same appropriate mitigation measures must be implemented during design and construction. Impacts would remain less than significant with mitigation incorporated. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

⁷ California Division of Mines and Geology. 1998. *Seismic Hazard Zone Map, Canoga Quadrangle*.

2002 EIR Mitigation Measures

The six mitigation measures listed below from the 2002 FEIR would reduce impacts anticipated under the proposed 2019 Master Plan Update to a less-than-significant level.

Construction Mitigation

To minimize hazards to construction workers from unstable temporary slopes, the following measures shall be implemented by the construction contractor(s):

- GE-1** All earthwork and grading shall meet the requirements of State of California codes and shall be performed in accordance with the recommendations in the geotechnical investigation conducted for each proposed project at the Pierce College campus, and
- GE-2** All excavation and shoring systems shall meet the minimum requirements of the Occupational Safety and Health Administration (OSHA).

Operational Mitigation

Because of the potential for strong seismic ground shaking, unsuitable soils, and soil liquefaction, the following mitigation measures shall be implemented:

2002 EIR Mitigation Measures

- GS-1** Geotechnical investigations shall be performed by qualified licensed professionals before final design of any structures, and recommendations provided in these reports should be implemented, as appropriate;
- GS-2 Ground Shaking.** Design and construction of structures for the revised project shall conform to all applicable provisions of the State of California, Division of the State Architect, and the guidelines set forth in the 1998 California Building Code. The CBC is based on the 1997 Uniform Building Code and sets forth regulations concerning proper earthquake design and engineering. In addition, design and construction shall conform to the 1997 UBC earthquake design criteria for Seismic Zone 4.
- GS-3 Liquefaction.** If liquefiable soils are identified by geotechnical investigations for project structures, then mitigation should be implemented. Appropriate mitigation, which could include the use of piles, deep foundations, dynamic densification, ground improvement, grouting, or removal of suspect soils, is dependent on site-specific conditions, which should be identified by the geotechnical investigation.
- GS-4 Unsuitable Soil Conditions.** The geotechnical investigation of proposed facilities should fully characterize the presence and extent of corrosive, expansive, or loose compactable soil. After consideration of the collected data, appropriate mitigation can be designed. Mitigation options could include the following: removal of unsuitable subgrade soils and replacement with engineered fill, installation of cathodic protection systems to protect buried metal utilities, use of coated or nonmetallic (i.e., concrete or PVC) pipes that are not susceptible to corrosion, construction of foundations using sulfate-resistant concrete, support of structures on deep-pile foundation systems, densification of compactable subgrade soils with in situ techniques, and placement of moisture barriers above and around expansive subgrade soils to help prevent variations in soil moisture content.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR found that the expansion potential of soil within the project area could vary from very low for soils in sandy materials to very high for soils on lean clay units. The alluvium in several areas on campus is moderately expansive. Expansive soils are characterized by their ability to undergo significant volume change (shrink and swell) due to variations in soil moisture content. Potential impacts are related to unacceptable settlement or heave for structures, concrete slabs supported on grade, and pavement supported on the aforementioned types of soil. The 2002 EIR found that the impact from unsuitable soils would be less than significant provided that appropriate mitigation measures are implemented during design and construction. This finding remains the same for the proposed 2019 Master Plan Update. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Mitigation measures that will be carried forward as part of the proposed 2019 Master Plan Update are listed in Section 6.c) above.

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 wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The 2002 EIR did not find any impacts associated with the incapability of soils to adequately support the use of septic tanks or alternative wastewater disposal systems. The project site would not change under the proposed 2019 Master Plan Update. Therefore, impacts would be similar to those identified under the 2002 FEIR. No impact is anticipated to occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

7. GREENHOUSE GAS EMISSIONS. 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"/>

Less-than-Significant Impact. The 2002 EIR does not evaluate the effects of greenhouse gas (GHG) emissions generated since such was not required at that time. In 2010 amendments to the State CEQA Guidelines took effect which set forth requirements for the analysis of GHG emissions under CEQA. GHG emissions are analyzed herein.

The purpose of the proposed 2019 Master Plan Update is to allow the College the flexibility to account for changing conditions, including student enrollment projections. As previously described, the 2019 Master Plan Update modifies the 2002 Master Plan and emphasizes efficient use of the College's resources to meet its educational mission and strategic plan. Since 2002, a number of individual projects associated with Pierce College have been cancelled, as indicated in Table 1 above. Also, student enrollment has been on the decline the last few years. The recent state budget cuts, as well as increased opportunities for distance learning, have also affected enrollment. The California community colleges have been encouraged to reduce their course offerings, and the LACCD has responded by directing all of its nine colleges, including Pierce College, to meet reduced enrollment targets.

In terms of the generation of GHG emissions, it is noted that fulfillment of the 2019 Master Plan Update would not increase traffic beyond what was previously anticipated. As previously described, the 2019 Master Plan Update proposes the construction of 106,500 square feet of new academic building space and the demolition of 169,896 square feet of existing building space, a net reduction of approximately 63,396 square feet of academic building space. Due to the net reduction of building space, the 2019 Master Plan Update would not result in an increase of enrollment or traffic, and thus, there would be no increase in traffic-generated GHG emissions, and the Revised Project would not result in an increase of energy-related or area sources of GHG emissions.

The predominate source of GHG emissions associated with the 2019 Master Plan Update would result from demolition and construction activities. Demolition and construction would generate GHGs, including worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road equipment (e.g., dozers, loaders, excavators). The equipment-mix and the duration are detailed in *Appendix B*.

Projected GHG emissions from demolition have been quantified and compared to the SCAQMD interim screening level numeric bright-line threshold of 3,000 metric tons of carbon dioxide equivalent (CO₂e) annually. Table 8 illustrates the GHG emissions that would result from the 2019 Master Plan Update.

Emissions modeling accounting for proposed demolition and construction activity has been calculated based on an anticipated schedule provided by LACCD. In addition to showing the annual construction-related emissions on a year-to-year basis associated with the Project as a whole, predicted emissions associated with the construction of each individual building is also presented for the purposes of disclosure.

Table 8: Forecast of Demolition & Construction-Generated GHG Emissions

Construction Phase	Greenhouse Gas Emissions (metric tons per year)
	CO ₂ e
Agricultural Education Building – Construction	
Year 2021	147
Year 2022	162
Multi-Purpose Academic Workforce Education Building – Construction & Demolition	
Year 2022	68
Year 2023	422
Year 2024	525
Year 2025	106
Industrial Technology Building – Construction & Demolition	
Year 2022	31
Year 2023	400
Year 2024	125
Child Development Academic Facility – Construction & Demolition	
Year 2023	9
Year 2024	195
Overall Annual Emissions	
Year 2021	147
Year 2022	261
Year 2023	831
Year 2024	845
Year 2025	106
<i>SCAQMD Interim GHG Emissions Threshold (metric tons/year)</i>	<i>3,000</i>
Exceed SCAQMD Regional Threshold?	No
Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs.	

Table 8 (cont): Forecast of Demolition & Construction-Generated GHG Emissions

Construction Phase	Criteria Pollutant Emissions (pounds per day)
	CO ₂ e
Demolition & Construction – Year One	504
Demolition & Construction – Year Two	170
Combined Total	674
<i>SCAQMD Interim GHG Emissions Threshold (lbs/day)</i>	<i>3,000</i>
Exceed SCAQMD Regional Threshold?	No

Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs.

As shown in Table 8, Project-generated GHG would not exceed the SCAQMD's interim screening level numeric bright-line threshold of 3,000 metric tons of CO₂e annually.

For the reasons described, the impact is less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

2002 EIR Mitigation Measures

The following Air Quality mitigation measures are carried over from the 2002 EIR. These measures contribute to further reduction of greenhouse gas emissions.

Construction-period Measures

AQ-3 Require construction equipment to use the best available technology to reduce emissions.

AQ-4 Minimize, reuse, and recycle construction-related waste.

AQ-5 Minimize grading, earthmoving, and other energy-intensive construction practices.

AQ-6 Landscape to preserve natural vegetation and maintain watershed integrity.

AQ-7 Use recycled, low-carbon, and otherwise climate-friendly building materials, such as salvaged and recycled-content materials, for buildings, hard surfaces, and non-plant landscaping.

Operational-period Measures

AQ-8 Increase exterior wall and attic/roof insulation beyond Title 24 requirements.

AQ-9 Use light-colored roof materials to reflect heat.

AQ-10 Use double-paned windows.

AQ-11 Use energy-efficient low sodium parking lot lights.

AQ-12 Use energy-efficient and automated controls for lighting.

AQ-13 Use energy-efficient and automated controls for air conditioners.

AQ-14 Use energy-efficient appliances.

AQ-15 Use solar or low emission water heaters.

AQ-16 For vehicles that will serve the proposed 2019 Master Plan Update on a frequent basis (e.g. forklifts), require use of alternative fuels and measures to maximize fleet efficiency.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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"/>

Less-than-Significant Impact. The 2019 Master Plan Update would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG. As previously described, college operations under the 2019 Master Plan Update would not result in an increase of operational GHG emissions beyond that previously anticipated. Demolition emissions would be below the SCAQMD emissions threshold of 3,000 metric tons a year. A less than significant impact would occur.

Table 9: Revised Project Consistency with Climate Action Team Strategies

CAT Strategy	Implementing Agency	Revised Project Consistency
Vehicle Climate Change Standards	Air Resources Board	The revised project would be consistent with this strategy to the extent that new passenger vehicles and light trucks are purchased by the project's users, starting with the 2009 model year.
Hydrofluorocarbon Reduction Strategies	Air Resources Board	Revised project air-conditioning systems would comply with the latest standards for new systems. Consumer products containing hydrofluorocarbons would comply with California Air Resources Board regulations, when adopted.
Building Energy Efficiency Standards in Place	Energy Commission	The revised project will meet or exceed California energy standards or energy-efficient lighting requirements.
Appliance Energy Efficiency Standards in Place	Energy Commission	The revised project will meet or exceed California energy standards or energy-efficient lighting requirements.
Water Use Efficiency	Department of Water Resources	The revised project will meet or exceed California water use and conservation standards.
Source: California Climate Action Team. Final 2006 Climate Action Team Report to the Governor and Legislature, March 2006; compiled by ICF International, January 2010.		

With implementation of the design features, the Revised Project would be consistent with applicable plans, policies, and regulations. Impacts from project construction and operation related to GHG emissions plans, policies, and regulations would be less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
8. HAZARDS AND HAZARDOUS MATERIALS. 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR determined that the impact from use and storage of hazardous materials at Pierce College would be less than significant if anticipated areas of construction and ground disturbance would not overlap with hazardous material storage and use areas and if specified mitigation measures pertaining to remediation of asbestos-containing material and lead-based paint would

be completed before any new construction or demolition of existing buildings. According to records obtained by hazardous materials specialty firm Winzler & Kelley Consulting Engineers in August 2009, hazardous materials investigations have been conducted at the College. As a standard practice, the College and its hazardous materials subconsultant prepare hazardous materials studies for new building projects prior to construction, and the hazardous materials reports are made part of the bid package and provided to the general contractor in advance of construction. Remediation is carried out as recommended by the hazardous materials consultant.

According to a report prepared in October 2005 by Leymaster Environmental Consulting, two underground storage tanks (USTs) and associated piping and fuel dispensers were removed from the College in March 2005. Both USTs were 10,000 gallons in volume. Seven soil samples were collected at the site on March 29, 2005. One of the samples from beneath the fuel dispenser contained 250 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (TPH) as diesel. Two additional soil samples were collected on September 27, 2005. These samples were collected from beneath the fuel dispenser at depths of 5 and 10 feet. (The previous March 25, 2005, sample was collected beneath the fuel dispenser at approximately 2 feet.) TPH as diesel was not detected from the September 27, 2005, samples. The report concluded that, based on the lack of detectable TPH in the deeper samples, the 250 mg/kg of TPH in the March 2005 sample did not constitute a threat to groundwater, and no further investigation was recommended at the site.

Only one other operational UST is known to exist at the College. One UST is operational and used by the sheriff's station. Therefore, it is unlikely that the proposed construction would encounter any additional USTs. If, during construction of the 2019 Master Plan Update projects, USTs are encountered, 2002 EIR mitigation measures HM-1 and HM-2 will be implemented. Phase I studies conducted for the individual building projects included soil testing, and, to date, no herbicide or pesticide contamination has been reported. Nonetheless, soil testing for 2019 Master Plan Update projects shall be undertaken in accordance with 2002 mitigation measure HM-3.

As a standard practice, the College conducts asbestos and lead-based paint surveys for its demolition projects. Asbestos and lead-based paint are handled and disposed of according to state and county standards. The College will continue to implement mitigation measure HM-4 for any future demolition, including that proposed in the 2019 Master Plan Update. This level of impact would remain the same under the proposed 2019 Master Plan Update. Therefore, impacts would remain less than significant with mitigation incorporated. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The mitigation measures listed below will be carried forward from the 2002 EIR as part the 2019 Master Plan Update. The measures must be completed prior to construction of each revised project to allow development of appropriate worker protection and waste management plans that describe the proper handling, treatment, and storage of hazardous waste from the projects.

2002 EIR Mitigation Measures

HM-1 Moderate Potential Sites. A thorough review of available environmental records, a thorough historical land use assessment, and a site-specific inspection shall be completed. A record review shall identify data that confirm remediation of on-site and off-site contamination of former leaking underground storage tank (LUST) sites or agency-certified closure of the site. Tanks that are not reported shall undergo further record review to determine the status, condition, contents, and number of tanks. At sites with inactive or improperly abandoned underground storage tank (USTs), the tanks may be old and in poor condition and, therefore, shall be thoroughly evaluated for condition and possible leaks. A detailed site inspection of hazardous material storage areas in or near proposed project areas shall be performed to determine if leaks or spills may have caused potential environmental contamination. Results of the record review or visual inspection that indicate contamination may be present in a proposed project area shall cause sites with medium potential to be treated as sites with high potential.

Relocation of the plant facilities buildings and appurtenances will require removal and relocation of their two USTs. Removal of the active USTs in the plant facilities vehicle maintenance area shall be monitored by a qualified professional for evidence of leaks. If any evidence of leakage is noted, a site assessment shall be performed, and appropriate remediation completed.

HM-2 High Potential Site. Current agency records of the site with high potential (P. L. Porter Company) shall be reviewed to assess and verify the extent of potential contamination of surface and underlying soil as well as shallow groundwater. If the review indicates contamination may have spread to the revised project area on campus, an investigation shall be designed and performed to verify the presence and extent of contamination at the site. A qualified and approved environmental consultant shall perform the review and investigation. Results shall be reviewed and approved by the Los Angeles County Fire Department, Health Hazardous Materials Division, or California Department of Toxic Substances Control prior to construction. The investigation shall include collecting samples for laboratory analysis and quantification of contaminant levels within the proposed excavation and surface disturbance areas. Subsurface investigation for sites with high potential shall determine appropriate worker protection and hazardous material handling and disposal procedures appropriate for the subject site.

Construction activities that require dewatering may require treatment of contaminated groundwater prior to discharge. Appropriate regulatory agencies, such as the California Environmental Protection Agency, the Regional Water Quality Control Board (RWQCB), and the Los Angeles County Fire Department, Health Hazardous Materials Division, shall be notified in advance of construction, and discharge permits identifying discharge points, quantities, and groundwater treatment (if necessary) shall be identified and obtained.

Areas with contaminated soil determined to be hazardous waste shall be excavated by personnel who have been trained under the OSHA-recommended 40-hour safety program (29 Code of Federal Regulations [CFR] Section 1910.120), with an approved plan for excavation, control of contaminant releases to the air, and off-site transport or on-site treatment. Health and safety plans prepared by a qualified and approved industrial hygienist shall be developed to protect the public and all workers in the construction area. Health and safety plans shall be reviewed and approved by the appropriate agencies, such as the Los Angeles County Fire Department, Health Hazardous Materials Division, or California Department of Toxic Substances Control.

HM-3 Residual Pesticides/Herbicides. Soil samples shall be collected in construction areas where the land has historically or is currently being farmed to verify and delineate the possibility of and extent of pesticide and/or herbicide contamination. Excavated materials containing elevated levels of pesticide or herbicide require and shall undergo special handling and disposal procedures. Standard dust suppression procedures shall be used in construction areas to reduce airborne emissions of these contaminants and reduce the risk of exposure to workers and the public. Regulatory agencies for the State of California and County of Los Angeles shall be contacted to plan handling, treatment, and/or disposal options.

HM-4 Asbestos-Containing Material and Lead-Based Paint. Records of previously completed asbestos-containing material and lead-based paint remediation at the College shall be reviewed. A survey of buildings, structures, and pavement areas to be removed or demolished to assess the presence and extent of asbestos-containing materials and lead-based paint shall be conducted. A qualified and approved environmental specialist shall conduct this study prior to final project design. The investigation shall include collecting samples for laboratory analysis and quantification of contaminant levels in the buildings and structures proposed for demolition and in pavement disturbance areas. According to these findings, appropriate measures for handling, removal, and disposal of the materials can be developed. Regulatory agencies for the State of California and Los Angeles County shall be contacted to plan handling, treatment, and/or disposal options.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR determined that the impact from use and storage of hazardous materials at Pierce College would be less than significant if anticipated areas of construction and ground disturbance would not overlap with hazardous material storage and use areas and if specified mitigation measures pertaining to remediation of asbestos-containing material and lead-based paint would be completed before any new construction or demolition of existing buildings. This level of impact would remain the same under the Revised Project. The mitigation measures (HM-1 to HM-4) described above under impact response 7(a) would be carried forward. Therefore, impacts would remain less than significant with mitigation incorporated. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. Various types of hazardous materials and hazardous waste are stored on campus. These include paints, solvents, and small quantities of biological waste. Additionally, a number of different types of chemicals used for instructional purposes are stored on campus. The chemicals are safely stored and/or locked away. No new buildings are proposed that would result in the storage, transport, or use of hazardous wastes in substantial amounts compared to existing conditions.

The 2002 EIR identified, within and surrounding the project, two hazardous sites with moderate potential and one site with high potential to affect the 2019 Master Plan Update. The plant facilities building, located within the footprint of Pierce College, was regarded as a site with moderate potential to emit hazardous materials. Under the 2002 EIR, the plant facilities building was to have been demolished and, therefore, would have created a significant impact. However, under the 2019 Master Plan Update, the plant facilities building would no longer be demolished and would, therefore, no longer create a significant impact. Mitigation measures were provided in the 2002 EIR to prevent further contamination from the two remaining sites; such mitigation would continue to be required as part of the proposed 2010 Master Plan Update. These mitigation measures (HM-1 to HM-4) are described above under impact response 7(a). As such, no new impacts would be created. Impacts would remain the same if not less because of the removal of demolition of the plant facilities building from the list of master plan projects. Impacts would be less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. In support of the analysis conducted for the 2002 EIR, field reconnaissance of the project site and surrounding project area was conducted to verify current conditions. The field reconnaissance component of the study relied on a visual survey of surface conditions by an environmental geologist to identify sites where storage containers (chemicals, paint, oil) were present or evidence of stained soil or corroded pavement was visible, suggesting chemical spillage on the ground. This survey concentrated on the project site and sites identified in the 2002 Master Plan EDR database report. A site reconnaissance of the Pierce College campus was conducted in the presence of Pierce College personnel who

were familiar with campus hazardous material use, storage, and disposal. Reconnaissance of the area surrounding the campus was limited to viewing properties from adjacent public streets and alleys; no attempt was made to gain access to any properties except the open parking lot areas. The 2002 Master Plan would not have placed housing or structures on top of any parcel designated by the EDR report as lying within an area susceptible to moderate or high hazardous impacts. However, there were three sites located with a 0.25 mile of the project site that were included as part of the EDR report. Mitigation measures were prescribed as part of the 2002 Master Plan to reduce any impacts on the project because of the proximity of these hazardous sites. These mitigation measures (HM-1 to HM-4) are described above under impact response 7(a). An update to the previous EDR report was produced. No new hazardous sites were found to occur on the site (EDR 2009). Therefore, impacts would remain as previously estimated, and mitigation measures HM-1 to HM-4 would be carried forward as part of the proposed 2019 Master Plan Update. Therefore, impacts would remain less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The 2002 EIR found no impact related to safety hazards from proximity to airports. Because the location of the Project would not change, and no new airports have been developed in the immediate vicinity, impacts would remain the same as those previously analyzed. No impact is anticipated to occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The 2002 EIR found no impact related to safety hazards from proximity to airports. Because the project location discussed in the proposed 2019 Master Plan Update has not changed and no new airstrips have been developed within 2 miles, no impact would occur as a result of the proposed 2019 Master Plan Update. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR addressed issues related to potential impacts on emergency services in the Public Services section of the EIR. Specifically, it discussed the ability of the police and fire departments to arrive promptly at the scene of an emergency. The new events center would have increased the need for additional emergency services by increasing the number of visitors to the campus. The 2002 EIR included emergency response mitigation measures. These mitigation measures would be carried over as part of the 2019 Master Plan Update. The Revised Project does not diminish accessibility to the campus for the emergency provider through roadways, streets existing infrastructure. It is also designed to sustain the viability of any applicable emergency plan. Impacts would remain less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The mitigation measure related to emergency response that would be carried over to the proposed 2019 Master Plan Update is as follows:

2002 EIR Mitigation Measures

- PPS-2** Pierce College shall design and implement a Special Event Security Plan, in coordination with the Los Angeles County Sheriff's Department and the Los Angeles Police Department, for the new events center. Issues addressed may include security needs, emergency evacuation procedures, and money handling issues.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. The Public Services section of the 2002 EIR addressed potential impacts from fires, including impacts related to the ability of the fire department to access the scene of a fire. According to the Zoning Information and Map Access System for the City of Los Angeles (ZIMAS), the proposed 2019 Master Plan Update would be located in an area that is designated as a Very High Fire Hazard Severity Zone (City of Los Angeles 2019). The 2002 EIR included measures to decrease the potential for fires to occur on campus as well as fire code and regulation compliance measures. These mitigation measures would be carried over as part of the proposed 2019 Master Plan Update. Furthermore, in contrast to the 2002 Master Plan, the 2019 Master Plan Update does not include on-campus housing and, therefore, would not place housing within an area of high fire hazard. Impacts would be less than previously anticipated in the 2002 EIR. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The mitigation measure that would be carried over to the proposed 2019 Master Plan Update are as follows:

- FPS-1** The College shall consult with the city engineer and the fire department regarding appropriate standards (e.g., lane widths, grades, cut corners, etc.) for private streets and entry gates to ensure adequate access for fire department vehicles and equipment.
- FPS-2** All landscaping shall use fire-resistant plants and materials.
- FPS-3** Sprinkler systems shall be required throughout any structure to be built, in accordance with state codes and standards established by the State of California, Division of the State Architect, and State Fire Marshal.
- FPS-4** The revised project shall comply with all applicable codes and regulations administered by the State of California, Division of the State Architect, and State Fire Marshal.

Note that with adoption of the 2019 CEQA; Environmental Checklist Revisions (12/28/18), a Wildfire issue area was added to the Checklist. Pierce College is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. As a result, no significant impacts related to Wildfire hazards would occur. Impacts would remain less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

9. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. Similar to the 2002 EIR, the 2019 Master Plan Update would include projects that would create new sources of runoff and water discharge. However, the projects would comply with Section 404 of the federal Clean Water Act by implementing a Standard Urban Stormwater Mitigation Plan (SUSMP) to decrease impacts from runoff.

Furthermore, the 2002 Master Plan included improvements such as detention basins and water quality ponds to reduce polluted runoff and meet water quality standards established for the region; these elements would be carried forward as part the 2019 Master Plan Update. Under the 2019 Master Plan Update, all new buildings will be certified under the LEED program, in accordance with the policy adopted by the Board of Trustees in May 2002. Wastewater, as a result of the 2019 Master Plan update, would be treated similar to how wastewater is currently treated at the campus. However, some of the conservation methods incorporated into the design and campus planning would result in the reduction of water use and conservation of water over existing levels.

Maximizing Water Conservation

New buildings and landscape elements will incorporate appropriate water conservation strategies that focus on reducing the use of potable water. These strategies will include the use of efficient irrigation, low-maintenance and native plant species, low-flow plumbing fixtures, and automatic sensors. Reclaimed water will be used for irrigation should it become available at the campus.

Managing Stormwater

Stormwater management strategies would incorporate natural landscape elements to address issues related to water quantity and quality. Swales, bio-retention basins, green roofs, and permeable or porous paving materials will be used to manage stormwater by reducing runoff and the amount of contaminants.

No new impacts are anticipated, and impacts would remain as previously analyzed, less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The following mitigation measures will be carried forward as part of the proposed 2019 Master Plan Update:

2002 EIR Mitigation Measures

- SW-1** A Standard Urban Stormwater Mitigation Plan shall be developed in accordance with Los Angeles County stormwater permit requirements, and
- SW-2** Water quality ponds shall be implemented, where feasible, as a best management practice (BMP) to capture and treat polluted runoff from parking lots.
- SW-3** Vegetated swales and retention areas along pedestrian circulation routes, in parking lots, and around buildings will be constructed to capture stormwater runoff and allow groundwater recharge.
- SW-4** A campus-wide approach to stormwater catchment and appropriate plant ecology will be implemented to reduce infrastructure loads during rain events, increase groundwater availability, and reduce annual irrigation needs.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The 2002 EIR found that building renovations, new building construction, and development of the agricultural fields would have no adverse effects on groundwater resources. The campus relies on water delivered by the Los Angeles Department of Water and Power (LADWP) through existing pipelines, which were to be improved to meet the needs of the 2002 Master Plan. The College does not have any active wells on campus and therefore does not pump groundwater for its water needs. Because impacts on groundwater resources would not change under the proposed 2019 Master Plan Update, it is expected that impacts would remain the same as or less than previously analyzed. There would be no impacts on groundwater. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. Under the 2019 Master Plan Update, the existing drainage pattern would not be altered significantly. The 2002 EIR found that the eastern portion of the campus has an existing storm drain network with a well-planned hierarchy of storm drain diameters to accommodate increased

flow as the network collects additional runoff flowing toward the Los Angeles River.⁸ Campus facilities personnel have stated that the existing system performs adequately in this portion of the campus. Under the 2019 Master Plan Update, a net reduction in building square footage is proposed in the central core and eastern portions of the campus. As a result, the proposed building program is not expected to result in any significant increase in impervious surfaces relative to existing conditions and the amount of runoff flowing into the existing system is not expected to substantially increase. Nevertheless, as discussed in the 2002 EIR, localized drainage improvements would be made as necessary through the addition of new storm drains that would serve new construction and maintain an adequate level of service for this portion of campus. Substantial alterations of existing drainage patterns are not anticipated, and impacts would remain less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The following mitigation measures previously described in the 2002 EIR would be carried forward:

2002 EIR Mitigation Measures

- FD-1** Detention basins or other appropriate drainage facilities shall be installed, and the storm drain system shall be improved to (a) meet anticipated increases in runoff from new facilities and impervious surfaces and (b) bring the western portion of campus up to an adequate level of service and reduce flooding; and
- FD-2** Earth berms, channels, or vegetated swales shall be provided to capture runoff from agricultural fields to reduce topsoil runoff.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. See impact discussion under response 9(e). As stated above, the 2019 Master Plan Update would include projects that would result in sources of runoff and water discharge similar to projects proposed under the 2002 Master Plan and existing drainage patterns. The 2019 Master Plan does not propose substantial new parking lot development and pedestrian improvements that would otherwise result in increased impacts from runoff. In compliance with Section 404 of the federal Clean Water Act and Los Angeles County stormwater permit requirements, new building projects on the campus must comply with the Standard Urban Stormwater Mitigation Plan (SUSMP). Furthermore, the 2002 Master Plan included improvements such as detention basins and water quality ponds to reduce polluted runoff and meet water quality standards established for the region; these elements would be carried forward as part the 2019 Master Plan Update. As such, no new impacts are anticipated, and impacts would remain as previously analyzed, less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The following mitigation measures will be carried forward as part of the proposed 2019 Master Plan Update:

2002 EIR Mitigation Measures

- SW-1** A Standard Urban Stormwater Mitigation Plan shall be developed in accordance with Los Angeles County stormwater permit requirements, and
- SW-2** Water quality ponds shall be implemented, where feasible, as a BMP to capture and treat polluted runoff from parking lots.

⁸ Psomas. 2002. *Draft Preliminary Utility Evaluation for Pierce College Los Angeles Community College District*. February 11.

These mitigation measures would be adequate in reducing adverse effects on surface waters to levels below significant. No streams or rivers would be altered under the 2002 Master Plan or 2019 Master Plan Update.

e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. See impact discussion under responses 9(a) and (c). As stated above, the 2019 Master Plan Update would include projects with sources of runoff and drainage patterns similar to projects proposed under the 2002 Master Plan and existing conditions. Building projects would comply with Section 404 of the federal Clean Water Act by implementing a SUSMP to decrease impacts from runoff. Furthermore, the 2002 Master Plan included improvements such as detention basins and water quality ponds to reduce polluted runoff and meet water quality standards established for the region; these elements would be carried forward as part the proposed 2019 Master Plan Update. As such, no new impacts are anticipated, and impacts would remain as previously analyzed, less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The following mitigation measures will be carried forward as part of the proposed 2019 Master Plan Update:

2002 EIR Mitigation Measures

- SW-1** A Standard Urban Stormwater Mitigation Plan shall be developed in accordance with Los Angeles County stormwater permit requirements, and
- SW-2** Water quality ponds shall be implemented, where feasible, as a BMP to capture and treat polluted runoff from parking lots.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. See impact discussion under response 9(a). Similar to the 2002 EIR, the 2019 Master Plan Update would include projects that would create new sources of runoff and water discharge. However, the projects would comply with Section 404 of the federal Clean Water Act by implementing a Standard Urban Stormwater Mitigation Plan (SUSMP) to decrease impacts from runoff.

Furthermore, the 2002 Master Plan included improvements such as detention basins and water quality ponds to reduce polluted runoff and meet water quality standards established for the region; these elements would be carried forward as part the proposed 2019 Master Plan Update. Therefore, impacts on water quality would be similar to or less than previously anticipated. Additionally, the mitigation measures carried forward and described under impact discussion 8(a) (SW-1 and SW-2) would further reduce any impacts on water quality. Impacts would remain less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The Revised Project would not place residential structures in or near a 100-year floodplain. No new housing is proposed under the 2019 Master Plan Update. All construction and project operations occurring under the 2019 Master Plan Update, as also found in the 2002 EIR, would be within Zone X-delineated land. Zone X is defined as areas with a 0.2% chance of flooding in any year over a 500-year period. Therefore, the Revised Project

would not create a significant level of risk to properties or people by placing them in a floodplain. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The Revised Project would not place structures in or near a 100-year floodplain. All construction and project operations occurring under the proposed 2019 Master Plan Update, as also found in the 2002 EIR, would be within Zone X-delineated land. Zone X is defined as areas with a 0.2% chance of flooding in any year over a 500-year period. Therefore, the Revised Project would not create a significant level of risk to properties or people by placing them in a floodplain. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. The 2019 Master Plan Update would not place people in an area where they would be susceptible to loss, injury, or death from flooding. Although the 2002 EIR identified deficient drainage conditions that contribute to flooding on the western portion of campus, the 2019 Master Plan Update identifies building projects within the central core of the campus. The drainage patterns associated with these building projects would not contribute to flooding conditions on the western portion of the campus. As such, no new impacts are anticipated, and impacts would remain as previously analyzed, less than significant with mitigation incorporated. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed. The following mitigation measures will be carried forward as part of the proposed 2019 Master Plan Update:

2002 EIR Mitigation Measures

- FD-1** Detention basins or other appropriate drainage facilities shall be installed, and the storm drain system shall be improved to (a) meet anticipated increases in runoff from new facilities and impervious surfaces and (b) bring the western portion of the campus up to an adequate level of service and reduce flooding.
- FD-2** Earth berms, channels, or vegetated swales shall be provided to capture runoff from agricultural fields to reduce topsoil runoff.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The 2002 EIR did not address impacts related to seiche, tsunami, or mudflow. The College campus is not located in an area that would be subject to these types of occurrences. It is far enough inland from any coastline so that it would not incur impacts from tsunamis. Because of its current state of development and urban surrounding, the campus would not be subject to seiche or mudflow. Therefore, because the 2002 EIR did not find any impacts related to these occurrences and because the 2019 Master Plan Update improvements would still be limited to the boundaries of Pierce College, impacts would remain the same. No impact is anticipated to occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

10. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The 2019 Master Plan Update is an update to a master plan for an existing campus. The proposed improvements would not divide an already established community because the community and campus have co-existed for a number of years; the campus would not expand outside its existing footprint but would renovate and restructure the current layout and building uses. As noted in the 2002 EIR, construction activities would include demolition of various existing structures, excavation and grading of specific sites on campus, construction of new facilities, and renovation and relocation of existing facilities. Eight demolition projects were originally planned under the 2002 Master Plan. With the 2019 Master Plan Update, eighteen buildings will be removed or replaced to support three new construction or replacement projects. These projects include the Digital Arts & Media (now called Multi-Purpose Academic & Workforce Education), Child Development Academic, and Industrial Technology buildings. An additional project includes the relocation of the previously planned Agricultural Education Building, Greenhouse #1, and Greenhouse #2 to a new site on campus. Construction activities would result in some temporary, localized, site-specific disruptions for land uses in the area. These would be related primarily to construction-related traffic from trucks and equipment in the area, possible partial and/or complete street and lane closures, disruptions related to access to facilities and parking, increased noise and vibration, and changes in air emissions (see the air quality, noise, and traffic and circulation analyses for further discussion). However, none of the 2019 Master Plan Update projects would physically divide the established Pierce College campus and community or result in long-term land use and planning impacts not previously analyzed. Therefore, impacts would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. Applicable land use plans for the 2019 Master Plan Update are the City of Los Angeles General Plan and Zoning Code and the Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan. The city's general plan currently labels the project area with: Public Facilities and Open Space designations. The zoning code is consistent with these designations; the project area is zoned for Open Space (OS) and Public Facilities (PF) (ZIMAS 2019). Educational facilities are an allowed use under the Public Facilities designation. With the open space that would be preserved under the proposed update, the 2019 Master Plan Update would remain consistent with both the general plan and the community plan. Furthermore, the College has operated in this area for 62 years. Previous updates and revisions to the general and community plans recognize that the site is dedicated to Pierce College, and both plans acknowledge the benefit of the school to the area. As such, no new impacts are expected to occur. Within the community plan, Pierce College has been described as an important part of the history of the area. Its agricultural program is one of the few remaining connections to the community's agrarian past. The 2019 Master Plan Update would retain the agrarian nature of Pierce College through relocation of the planned agricultural education building. The community plan recognizes the need for continued development of equestrian, hiking, and bicycle trails in the area. No impacts were found within the 2002 EIR. As such, any impacts would be similar to those identified in the 2002 EIR. No new impacts would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The College supports no substantive areas of native vegetation, aside from the Ecological Studies Preserve in Canyon de Lana in the southwest corner of the campus, which supports restored native vegetation planted during the 1960s, and the Arboretum in the southeastern portion of the College, which supports some planted tree species native to southern California. Otherwise, biological resources on campus are limited to agricultural fields and large areas of open space that are dominated by non-native weedy vegetation, various

(primarily non-native) horticultural tree species, and ornamental shrubs. There are no habitat conservation plans or natural community conservation plans for which the proposed 2019 Master Plan Update would be in conflict. As such, impacts would remain the same as those previously determined, and there would be no new impacts. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

11. MINERAL RESOURCES. 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"/>

No Impact. The 2002 EIR did not identify any unique geological features or important mineral resources that would be affected by the 2019 Master Plan Update. Therefore, because the 2019 Master Plan Update improvements would continue to be limited to the boundaries of the Pierce College campus, impacts would remain the same. There would be no impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

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"/>
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No Impact. See impact discussion under response 10(a). The 2002 Master Plan did not identify any mineral resources on the College campus. Implementation of the 2019 Master Plan Update would occur on the same site. Therefore, impacts resulting from the loss of availability of an important mineral resource recovery site are not expected to occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

12. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels 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"/>

Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR concluded the Project would comply with City of Los Angeles Noise Ordinance limits on temporary construction noise and permanent operational noise after implementation of construction noise mitigation measures. The noise ordinance specifies the maximum noise level for powered equipment or powered hand tools.⁹ Any powered equipment or powered hand tool that produces noise exceeding 75 dBA at a distance of 50 feet from construction and industrial machinery is prohibited. However, the above noise limitation shall not apply where compliance is technically infeasible.

Construction noise is regulated under Section 41.40 of the Los Angeles Municipal Code. Construction activity is prohibited from causing “loud noises to the disturbance of persons occupying sleeping quarters” at night (defined as 9 p.m. to 7 a.m.). In addition, construction within 500 feet of residential buildings is prohibited on Sunday and during nighttime hours (defined as 6 p.m. to 8 a.m.) on Saturday or holidays. All construction contractors will be required to comply with these work-hour limitations

Some of the facilities proposed by the 2002 Master Plan that were either unusually noisy or close to residential areas at the campus boundary have been cancelled. These included the following: 1) the agricultural education experiences facility and 2) the horticultural partnership facility. The 2019 Master Plan Update includes no new facilities, demolitions or relocations within 1,000 feet of residential areas. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The construction noise mitigation measures previously described in the 2002 EIR would be carried forward for the proposed 2019 Master Plan Update.

2002 EIR Mitigation Measures

- N-1** Noise control devices, such as equipment mufflers, enclosures, and barriers, shall be used where feasible and appropriate based on the noise sources and the distance to the closest sensitive receptors.
- N-2** All sound-reducing devices and restrictions shall be maintained throughout the construction period.
- N-3** Construction schedules shall be coordinated with academic affairs personnel to minimize noise impacts on students and faculty.

Regarding new or relocated facilities proposed under the 2019 Master Plan Update, permanent operational noise could be generated by heating, ventilation, and air-conditioning (HVAC) equipment and outdoor operations such as activity at loading docks. Noise from such equipment and operations is regulated under Section 112.02 of the Los Angeles Noise Ordinance. Daytime and nighttime noise levels at the boundaries of the closest parcels zoned for residential and commercial use are not allowed to exceed 5 A-weighted decibels (dBA) beyond ambient background levels. All noise-generating equipment installed at the campus would be required to comply with this regulation. New and future buildings under the 2019 Master Plan Update are at least 1,000 feet from sensitive off-site residential receptors, and therefore, noise will not be an issue. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. The EIR for the 2002 Master Plan did not consider ground vibration or groundborne noise. A supplemental impact assessment was provided with the 2010 EIR Addendum. This assessment indicated the highest levels of ground vibration would be generated during temporary building demolition and building construction activity, and that pile driving will not be required to construct new buildings. Given that assumption, vibration levels generated during building demolition and building construction are not expected to be discernible, even at nearby school buildings. However, it is possible that a limited number of school buildings near future construction zones might contain research equipment that is exceptionally sensitive to vibration (e.g., electron microscopes). In those unusual circumstances, temporary ground vibration caused by construction activity might have the potential to disrupt research equipment. Vibration impacts from such unusual circumstances would be reduced to less-than-significant levels by implementation of the following mitigation measure previously described in the 2002 EIR that would be carried forward for the 2019 Master Plan Update.

2002 EIR Mitigation Measure

- N-4** Use of vibration-generating construction equipment at new facilities shall be coordinated with Academic Affairs personnel to minimize potential vibration impacts on exceptionally sensitive research equipment. If requested by the Academic Affairs office, a construction vibration control study will be required for specific vibration-sensitive buildings. Vibration control measures could include the following:
 - preparation of a vibration control plan;
 - prediction of temporary vibration levels during construction, which will be compared to acceptable vibration levels for sensitive equipment;
 - specification of low-vibration construction equipment;
 - vibration monitoring before and during construction activity; and
 - coordination with research staff to temporarily discontinue use of sensitive equipment during critical construction activity.

City of Los Angeles. *Los Angeles Municipal Code*, Section 112.05.

Operation of the new buildings would not cause discernible ground vibration at any nearby dwellings or existing school buildings. Passenger cars, delivery trucks, and HVAC equipment used during normal operations cause negligible ground vibration.¹¹

There would be no impact from groundborne noise during construction or operation. This issue is typically important only in limited circumstances involving large (usually underground) vibration sources and exceptionally sensitive indoor use areas. Construction and operation of the new buildings would not cause groundborne noise at nearby buildings. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. There are two issues related to this impact:

- Noise increases at existing on-site and off-site receptors caused by HVAC equipment and other outdoor noise sources at new buildings. Details on the impact assessment and proposed mitigation are provided in response 11(a). The impact would be less than significant; and
- Increased traffic noise along off-site public streets serving the campus. This impact would be less than significant, and no mitigation is required. Details are provided below.

The 2002 EIR included baseline monitoring results for representative homes and apartments. It concluded that the traffic volume increases associated with the 2002 Master Plan would not be high enough to cause a significant increase in traffic noise. The 2010 Master Plan Update would increase student enrollment to a level above the number that was estimated under the 2002 Master Plan. So, the traffic noise impact assessment was updated in 2010 to reflect the changed conditions.

The significance criteria used to assess traffic noise are the same as those described in the 2002 EIR. The *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) establishes noise compatibility criteria for various land uses, as listed in Table 13, below. Noise compatibility is based on the outdoor 24-hour Community Noise Exposure Level (CNEL).

The *L.A. CEQA Thresholds Guide* indicates that a significant noise increase would be triggered by either of the following conditions:

- If the noise level after project buildout triggers either the Normally Acceptable or Conditionally Acceptable categories, and the project-related noise increase is 5 dBA CNEL or greater; or
- If the noise level after project buildout triggers either the Normally Unacceptable or Clearly Unacceptable categories, and the project-related noise increase is 3 dBA CNEL or greater.

The 2002 EIR included baseline noise monitoring at representative homes and businesses outside the campus. To support the 2010 Master Plan Update, noise monitoring was repeated at the same locations and at approximately the same time of day. Noise levels measured in September 2009 were lower than the noise levels measured in 2002.

According to the *L.A. CEQA Thresholds Guide*, a significant impact would be triggered by a traffic noise increase of 3 dBA (peak-hour L_{eq} or CNEL) or more. This is the same traffic noise impact criterion that was used for the 2002 EIR.

¹⁰ Federal Transit Administration, 2006.

¹¹ Ibid.

The 2002 EIR demonstrated that to trigger the 3-dBA traffic noise impact criterion, the proposed 2010 Master Plan Update would have to cause a project-related traffic volume to increase of 100% (defined as the 2015 cumulative with-project traffic volume minus the 2015 cumulative no-project base volume). The forecast traffic increases caused by the 2010 Master Plan Update was much lower than that threshold. The updated traffic report (Fehr and Peers 2010) indicated that the forecast increase in peak-hour traffic volumes at the most heavily traveled roadways would be only 1% to 13%, which corresponds to traffic noise increases of less than 1 dBA.

The 2019 Master Plan Update reflects a reduction in both student enrollment and planned academic building square footage on campus relative to both the 2010 and 2014 Master Plan Updates. New and future buildings would be generally located within the central campus area, and traffic patterns would be similar to existing conditions. Therefore, it is reasonable to assume that permanent traffic noise impacts associated with college traffic on surrounding roadways would be similar to or less than noise impacts analyzed under previous Master Plan Updates, and no new mitigation is required. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. Temporary short-term noise impacts at existing campus buildings could result during demolition of existing buildings and construction of new buildings as part of the 2019 Master Plan Update. The 2002 EIR concluded that this impact would be less than significant after implementation of construction noise mitigation. The conclusions of this analysis for the 2019 Master Plan Update are the same. Required construction noise mitigation measures are presented in response 11(a). Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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 checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The 2002 EIR did not consider potential impacts from airport noise. The campus is more than 5 miles west-southwest of the closest general aviation airport (Van Nuys Airport) and more than 12 miles west of the closest commercial airport (Bob Hope/Burbank Airport). The Van Nuys Airport runway is oriented north/south, and the campus is nearly due west of the airport. Therefore, there is no potential for campus buildings to be subjected to excessive aircraft noise. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

f) For a project within the vicinity of a private airstrip, 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"/>
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No Impact. The campus is more than 5 miles from the nearest general aviation airport (Van Nuys Airport). Therefore, the private airport would cause no noise impact at campus buildings. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed. The findings of the 2002 EIR remain valid.

13. POPULATION AND HOUSING. Would the project:				
a) Induce substantial 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The 2002 FEIR found that the Project would not induce substantial population growth directly or indirectly. During construction, the Project would employ workers who would more than likely commute to and from the work site and not relocate their households. The Los Angeles metropolitan area has a large pool of construction labor from which to draw. With completion of the projects described in the 2002 EIR, the number of College employees would increase by 168. With current projections of declining or stagnant student enrollment, impacts related to population under the proposed 2019 Master Plan Update would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The 2002 EIR found that housing would not be displaced and that there would be no impacts. The 2019 Master Plan Update would not change this conclusion because it also would not remove any type or form of housing. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The 2002 EIR found that people would not be displaced and there would be no impacts. The 2019 Master Plan Update would not change this conclusion because it also would not displace any persons from the project area, thereby necessitating the construction of replacement housing. There would be no impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR found that less-than-significant impacts related to fire services would occur from implementation of the 2002 Master Plan. According to the 2002 EIR, the 2002 Master Plan proposed approximately 500,000 total gross square feet of new building space and 400 to 450 housing units. As shown in Table 3, with planned building demolition and replacements, a net reduction of approximately 63,396 square feet of building space would occur under the 2019 Master Plan Update. Therefore, the 2019 Master Plan Update would provide less new building space when compared to the 2002 Master Plan.

Because buildout under the 2019 Master Plan Update would not increase the number of students beyond the number forecast under the 2002 EIR (see Table 2), impacts would not be greater than what was described in the 2002 EIR.

Temporary construction would affect fire department access to the College. This impact would remain under the 2019 Master Plan Update due to interior street closures or other access impairments. The mitigation measures described in the 2002 EIR would be carried forward as part of the proposed 2019 Master Plan Update. Because no new impacts would be created, impacts would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

2002 EIR Mitigation Measures

- FPS-1** The College shall consult with the city engineer and the fire department regarding appropriate standards (e.g., lane widths, grades, cut corners, etc.) for private streets and entry gates to ensure adequate access for fire department vehicles and equipment.
- FPS-2** All landscaping shall use fire-resistant plants and materials.
- FPS-3** Sprinkler systems shall be required throughout any structure to be built, in accordance with state codes and standards established by the State of California, Division of the State Architect, State Fire Marshal.
- FPS-4** The revised project shall comply with all applicable codes and regulations administered by the State of California, Division of the State Architect, and State Fire Marshal.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact with Mitigation Incorporated. Police protection services for the LACCD are provided by the Los Angeles County Sheriff's Department (LASD). The 2002 EIR found that less-than-significant impacts related to police services would result from the master plan with mitigation incorporated. As noted in the response to 13(a), above, student enrollment under the proposed 2019 Master Plan Update would not be greater than the enrollment figure projected in the 2002 EIR. Temporary construction impacts would remain under the 2019 Master Plan Update because of street closures. The mitigation measures previously described in the 2002 EIR would be carried forward as part of the 2019 Master Plan Update. Because no new impacts would be created, impacts would remain less than significant with mitigation incorporated. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

2002 EIR Mitigation Measures

- PPS-1** Pierce College shall implement security features (i.e., improved lighting, improved landscaping, and additional security phones) as part of the proposed projects described in the master plan.
- PPS-2** Pierce College shall design and implement a Special Event Security Plan, in coordination with the Los Angeles County Sheriff's Department and the Los Angeles Police Department, for the new events center. Issues addressed may include security needs, emergency evacuation procedures, and money handling issues.

c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. Pierce College is located in the Los Angeles Unified School District's (LAUSD's) District C, which covers an area of approximately 70 square miles. This district is located in the southern portion of the west and central portions of the San Fernando Valley. District C includes the following communities: Encino, Reseda, Sherman Oaks, Tarzana, Van Nuys, Warner Center, and Winnetka as well as portions of Studio City, Valley Village, and Woodland Hills. The 2002 EIR found that although increases in student enrollment would have occurred because of development expected as part of the 2002 Master Plan, they would not have significantly affected any one school within the district and would not have over-burdened the school system. The 2002 Master Plan included the development of 400 to 450 housing units. The Revised Project does not have any effect on this. Impacts would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The 2002 EIR found that although increased enrollment would occur, it would not negatively affect the recreational resources of the project area or surrounding area, and impacts would be less than significant. Through the removal of the student housing element with the 2010 Master Plan Update and the projections of declining student enrollment through the 2019 Master Plan buildout year (2019-2023), impacts originally anticipated from increased student and employee use of parks would be reduced under the proposed 2019 Master Plan Update. As such, impacts would be less than previously anticipated and would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The 2002 EIR provided no impact analysis pertaining to other public facilities. However, because the campus already provides libraries, health care facilities, student services, etc., it is assumed that these facilities were regarded as incurring no impacts under the 2002 Master Plan. Because the 2019 Master Plan Update has no effect on this, any impacts would unchanged from what was previously anticipated. Therefore, there would be no impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
15. RECREATION.				
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The 2002 EIR found that despite increases in the number of students and employees, recreational facilities and parks located in the vicinity of Pierce College would not be overburdened and would not experience an increase in use that would accelerate deterioration. Implementation of the 2002 Master Plan would have included projects that would have renovated and modernized existing recreational and athletic facilities on the campus. The 2010 Master Plan Update included the renovation and modernization of the existing recreational and athletic facilities.

The 2019 Master Plan Update would not reduce any of the existing recreational uses at the campus. Therefore, impacts would be similar to those previously anticipated and would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The 2002 EIR found that no significant impacts would occur from the renovation and modernization of the existing recreational and athletic facilities. No new or expanded recreational facilities are planned as part of the 2019 Master Plan Update; therefore, impacts would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

16. TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The 2019 Master Plan Update represents a reduction in planned building square footage and projected enrollments as compared with the 2002 Master Plan and subsequent Master Plan Updates in 2010 and 2014. As such, traffic generated by the College would be similar to or less than daily and peak hour traffic generation estimates in prior Master Plan Update traffic studies. The most recent prior traffic and parking study for the College was prepared by Fehr and Peers in July 2014 for the 2014 Master Plan Update.

Because the 2002 EIR analyzed projects only until 2010, a new traffic analysis was prepared to study impacts up to 2019, which is the horizon year for the 2014 Master Plan Update. The 2014 report is included in its entirety as an appendix to the 2014 Master Plan Update Addendum. The study analyzed potential revised project-generated traffic impacts on the street and highway system surrounding and serving the Pierce College campus. The following traffic scenarios were analyzed in the 2014 study:

- Existing (Year 2013) Conditions
- Baseline plus Project Conditions
- Year 2019 Cumulative Base (No Project) Conditions
- Year 2019 Cumulative plus Project Conditions

The study evaluated the potential for traffic impacts at 32 intersections in the vicinity of the Pierce College campus during the weekday AM and PM peak hours.

Findings of the Traffic Study for the Pierce College 2014 Facilities Master Plan Update

The following summarizes the findings of the *2014 traffic study*:

- AM and PM peak hour capacity analyses were conducted for a total of 32 intersections on the street system in the vicinity of the Pierce College campus. Seven of these intersections operated at LOS E or F during the AM or PM peak hours.
- Buildout of the proposed Master Plan Update was anticipated by the Year 2019. A decrease in student FTE was projected between current conditions (2014) and the 2019 buildout year and between the Year 2002 Pierce College Master Plan baseline and the Year 2019 Master Plan buildout. The projected campus population change from the 2002 Pierce College baseline to the 2019 Master Plan buildout was projected to generate a net incremental decrease of approximately -240 daily trips, about -21 trips during the AM peak hour, and about -20 trips during the PM peak hour.
- The LOS analysis for the baseline plus project scenario (using the City of Los Angeles significance criteria) determined that the project would result in no significant impacts. No mitigation measures would therefore be required.
- Under Year 2019 Cumulative Base (i.e. no project) conditions, ten of the analyzed intersections were projected to operate at unacceptable LOS E or F conditions. The cumulative base forecasts include traffic generated by anticipated from 27 related projects, some of which were within the Warner Center Specific Plan area, and background traffic growth.
- The LOS analysis for the cumulative plus project scenario (using the City of Los Angeles significance criteria) determined that the project would result in no significant impacts. No mitigation measures were therefore required.
- No significant street segment impacts are projected for either the baseline plus project or cumulative plus project scenarios.
- Analyses of potential impacts on the regional transportation system conducted in accordance with CMP requirements determined that the project would not have a significant impact on the regional transportation system. No mitigation measures were required.

- Sufficient parking spaces are and will continue to be provided on the Pierce College campus to accommodate anticipated peak parking demands.

Impacts of the 2019 Master Plan Update

The 2019 Master Plan does not increase academic building area on campus (in fact, it will result in a net decrease) and anticipates declining student FTE enrollment. As a result, it is reasonable to assume the 2019 Master Plan Update will not lead to an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections). Moreover, the 2019 Master Plan Update's incremental traffic contribution to cumulative impacts at areawide intersections is expected to be less than impacts that were identified as less than cumulatively significant in the Traffic Study for the 2014 Facility Master Plan Update. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The 2014 traffic analysis of potential impacts on the regional transportation system was conducted in accordance with Congestion Management Program (CMP) requirements. The traffic study determined that the 2014 Master Plan Update would not have a significant impact on the regional transportation system. No mitigation measures were required.

The 2019 Master Plan Updates projects a decline in student FTE enrollments and proposes a reduction in academic-related building area on the campus. As a result, the 2019 Master Plan Update would not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The 2019 Master Plan Update includes new construction, building demolition and relocation projects. The 2019 Master Plan Update would not result in a change in air traffic patterns or result in any air safety risks. The proposed 2019 Master Plan Update does not propose high-rise buildings that might otherwise require air traffic to be rerouted. No impact is anticipated to occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

d) Substantially increase hazards related to a 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"/>
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No Impact. See response 15(c), above. Implementation of the new construction, demolition and relocation projects proposed under the 2019 Master Plan Update would not increase hazards related to a design feature or incompatible uses. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. Existing vehicular access to the Pierce College campus is available from four access points, as described below.

- Brahma Drive – Brahma Drive is an internal street that provides access from Winnetka Avenue on the east side of the campus. Brahma Drive intersects Winnetka Avenue opposite Calvert Street; its intersection with Winnetka Avenue/Calvert Street is controlled by a traffic signal. On campus, Brahma Drive provides access to Lot 1 and connects to Stadium Way, which, in turn, ultimately connects to Mason Street.
- Mason Street – Mason Street is an internal street that provides access from Victory Boulevard on the north side of the campus. Mason Street intersects Victory Boulevard opposite Mason Avenue; its intersection with Victory Boulevard is signalized. On campus, Mason Street provides access to parking lot 7. It then intersects with Olympic Drive and El Rancho Drive and continues as Stadium Way, ultimately connecting with Brahma Drive.
- El Rancho Drive – El Rancho Drive is an internal street that provides access from a signalized intersection with De Soto Avenue on the west side of the campus. On campus, El Rancho Drive connects to Mason Street/Stadium Way.
- Lot 7 Driveway – In addition to the three signalized access points described above, there is an unsignalized driveway from parking lot 7, leading directly to Victory Boulevard east of Mason Avenue.

Additional internal streets that provide circulation on the campus include the following:

- Olympic Drive – Olympic Drive runs along the south side of parking lot 7 and has a security gate at the east end of the lot. Beyond the security gate, it continues into the campus core, becoming part of the internal system, with a second gate near the sheriff’s substation.
- Stadium Way – Stadium Way is the primary through route around the south side of the campus core. It connects Brahma Drive with Mason Street and El Rancho Drive and provides access to Shepard Stadium and several student parking lots.

Proposed vehicular access under the 2019 Master Plan Update would not change the existing access, as described above. Similarly, emergency access to the campus would not change under the 2019 Master Plan Update. However, as described earlier, diminished access to the College would occur temporarily during construction activities (see Public Services, responses 13(a) and 13(b), above). Projects included under the 2019 Master Plan Update would comply with all applicable City of Los Angeles codes and regulations related to emergency access (see also Hazards and Hazardous Materials, response 7(g), for a mitigation measure related to emergency access.)

Implementation of the 2019 Master Plan Update is not anticipated to result in a permanent impact related to inadequate emergency access. Mitigation measures included in the 2002 EIR have also been included in this document. This would be considered a less-than-significant impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The 2014 traffic and parking analysis performed by Fehr and Peers determined that sufficient parking spaces are and will continue to be provided on the Pierce College campus to accommodate anticipated peak parking demands. The 2019 Master Plan Update projects a further decline in student FTE enrollments and proposes a reduction in academic-related building area on the campus. As a result, the 2019 Master Plan Update would not result in inadequate parking capacity. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. Implementation of projects included under the 2019 Master Plan Update would consist of new construction and demolition/replacement projects on the campus. The proposed 2019 Master Plan Update would not conflict with policies that support alternative transportation (e.g., bus turnouts, bicycle racks). The Revised Project would maintain existing roadways on the project site and would not conflict with any policies adopted by the City of Los Angeles that address alternative modes of transportation. No impact would occur. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

17. UTILITIES AND SERVICE SYSTEMS. Would the project:				
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a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. The 2002 EIR found that although increased wastewater flows would occur, the flows would not be significant enough to exceed the wastewater treatment requirements of the Regional Water Quality Control Board. Although a water reclamation facility was proposed in the 2002 Master Plan, it was dependent upon the expansion of City of Los Angeles graywater distribution lines to the campus. Therefore, the 2002 EIR analysis did not include the water reclamation facility in its wastewater calculations.

As indicated in Table 2, FTE enrollment anticipated under 2025 buildout conditions would be less than prior FTE enrollment estimates. FTE enrollment under 2025 buildout conditions would be less than the FTE enrollment estimates under buildout conditions previously analyzed in the 2002 EIR. Additionally, the proposed 2019 Master Plan Update reflects the reduction in impacts with the removal of student housing and the science public/private partnerships, which were part of the 2002 Master Plan. As a result, under the 2019 Master Plan Update, projected wastewater generation based on buildout-year FTE enrollment levels would be less than wastewater generation estimated in the 2002 EIR.

The 2019 Master Plan Update would follow the “green,” energy-efficient, sustainable design guidelines set forth under the LEED program. Proposed buildings would be LEED certified. In addition, the 2019 Master Plan Update would include a series of campus-wide strategies to improve water conservation. These include strategies that focus on reducing the use of potable water. Other strategies include the use of efficient irrigation, low-maintenance and native plant species, low-flow plumbing fixtures, and automatic sensors. Stormwater management strategies and landscaping recommendations are also included.

Pierce College follows green design guidelines in existing buildings and will continue to apply such elements throughout the 2019 Master Plan Update. High-efficiency wastewater fixtures would be installed on campus during construction and renovation. These fixtures help to decrease the amount of sewage generated on the campus. As such, impacts would be less than previously anticipated and would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Although no significant impacts are anticipated, the mitigation measures prescribed in the 2002 Master Plan will be carried forward as part of the proposed 2019 Master Plan Update. These mitigation measures include the following:

2002 EIR Mitigation Measures

WW-1 Existing campus sewer lines shall be flushed on a regular basis to mitigate negative effects of below-criteria velocity flows, and

WW-2 All new construction and renovation shall include water conservation measures, such as low-flush toilets.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. See the response to impact 16(a). With the 2010 Master Plan removal of student housing and the science public/private partnerships that were part of the 2002 Master Plan, impacts of the 2023 buildout conditions would be slightly less than the impacts of the buildout conditions analyzed in the 2002 EIR. Additionally, the 2019 Master Plan Update would follow the “green,” energy-efficient, sustainable design guidelines set forth under the LEED program. Pierce College has already begun implementing these design guidelines in existing buildings and will continue to apply such elements throughout the 2019 Master Plan Update. High-efficiency wastewater fixtures would be installed on campus during construction and renovation. These fixtures help to decrease the amount of sewage generated at the College. As such, impacts would be less than previously anticipated and would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. With the net reduction in building square footage proposed under the 2019 Master Plan, it is anticipated that improvements will result in no new impacts related to stormwater drainage facilities. The 2019 Facilities Master Plan identifies several future buildings in the area west of Mason Street on campus. These include the Child Development Academic Facility, the New Industrial Tech Replacement Building, and New Agricultural Education Building. To address stormwater drainage impacts of these facilities, the mitigation measure developed for the 2002 Master Plan would be carried forward as part of the proposed 2019 Master Plan Update, and impacts would remain less than significant with mitigation. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

The mitigation measure is as follows:

- SD-1** The area west of Mason Street and south of Victory Boulevard shall be upgraded during development of the specific projects in that area (as was done with parking lot 7) to develop a system that can adequately handle existing and future runoff. Proposed enhancements may include those identified in the Preliminary Utility Evaluation Report.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact with Mitigation Incorporated. It was found in the 2002 EIR that the projected increase in water consumption would not exceed LADWP’s available supplies. However, potential issues were raised about possible pressure loss due to pipe friction, which could decrease the amount of water the system would provide to a level below the anticipated demand of the College. However, mitigation measures were presented as part of the 2002 EIR to reduce these impacts. These mitigation measures will be carried forward as part of the proposed 2019 Master Plan Update. Finally, as noted earlier, student housing is no longer proposed and the impacts of the 2019 buildout conditions would not be greater than the impacts of the buildout conditions analyzed in the 2002 EIR. Therefore, water demand would not be greater than the demand originally anticipated under the 2002 Master Plan. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Pierce College has been implementing “green” design elements based on the national LEED guidelines pertaining to sustainable standards for existing buildings and will continue to apply these design elements throughout the master plan process. The College intends to plant water-efficient landscaping, install high-efficiency fixtures, and possibly use gray water for non-potable applications. These strategies will help to reduce demands on the water supply and the

system. Nevertheless, mitigation measures are carried forward from the 2002 EIR. These are as follows:

2002 EIR Mitigation Measures

- WS-1** A 12-inch pipeline shall be installed from the main campus along El Rancho Drive to a new 12-inch service line off of De Soto Avenue or an 8-inch service line shall be installed at Victory Boulevard along the east edge of parking lot 7, a 12-inch main line shall be installed along the east edge of parking lot 7, and either a new 12-inch service line off of De Soto Avenue or a new main line along El Rancho Drive from the main campus shall be installed to provide adequate fire service to the proposed equestrian education center; and
- WS-2** Three new 12-inch distribution lines shall be installed to convey fire flows to the vicinity of the proposed new facilities while providing tie points to the existing distribution piping. (College to confirm whether WS-2 has been implemented already.)

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider that 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"/>

Less-than-Significant Impact. See response to impact 16(a). As stated above, the 2019 Master Plan Update would have less building square footage than anticipated in previous Master Plans and projects reduced student enrollment. Additionally, the 2019 Master Plan Update would follow the “green,” energy-efficient, sustainable design guidelines set forth under the LEED program. Pierce College has been implementing these design guidelines in existing buildings and would continue to apply such elements throughout the implementation process for the proposed 2019 Master Plan Update. High-efficiency wastewater fixtures would be installed on campus during construction and renovation. These fixtures would help to decrease the amount of sewage generated at the College. As such, impacts would be less than previously anticipated and would remain less than significant. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. The 2002 EIR found that the projected increases in solid waste that could occur under the plan would be negligible and that local area landfills would have adequate capacity to meet project demands. The 2002 EIR assumed an FTE enrollment of 15,960 under the 2010 buildout year. Currently, a 6,247 FTE fall quarter enrollment is projected for the buildout year of 2023. This would result in a decrease in FTE enrollment under the 2019 Master Plan Update. While, the 2019 Master Plan Update would not include the previously planned student housing or the science public/private partnerships that would contribute to solid waste generation, the 2019 Update proposes demolition/replacement of approximately 18 buildings on campus.; thereby contributing to construction, demolition and land clearing waste. As stated previously, the projects included under the 2019 Master Plan Update would follow “green,” energy- efficient, sustainable design guidelines as set forth under the LEED program. The College has, in fact, already started implementing these guidelines in existing buildings and has also implemented waste diversion practices. When appropriate, existing building equipment will be reused in the new and renovated facilities. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. The 2002 EIR found no impacts related to complying with federal, state, and local statutes or regulations pertaining to solid waste. Pierce College consistently diverts its solid waste (above the required 50% diversion rate) and will continue to do so throughout the master plan implementation process. Additionally, the 2019 Master Plan Update would follow “green,” energy-efficient, sustainable design guidelines as set forth under the LEED program. The College has, in fact, already started implementing these guidelines in existing buildings and has also implemented waste diversion practices. When appropriate, existing building equipment will be reused in the new and renovated facilities. Finally, a mitigation measure to prepare a construction waste management plan is proposed to recycle or salvage construction, demolition, and land clearing waste. As such, there would be no new impacts. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

18. MANDATORY FINDINGS OF SIGNIFICANCE.				
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, 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less-than-Significant Impact. The analysis in this addendum concluded that no new unavoidable significant impacts on the environment would occur. Applicable 2002 and 2010 mitigation measures would be adequate to mitigate any potential impacts related to the 2019 Master Plan Update. Mitigation measures would reduce impacts to less-than- significant levels. In addition, most of the impacts from the 2019 Master Plan Update projects would be construction related and therefore temporary and short term. Once constructed, new buildings would be more energy efficient than the existing buildings on campus, including the ones they would replace, resulting in long-term benefits in terms of energy conservation and efficiency. Therefore, implementation of the 2019 Master Plan Update is not anticipated to degrade the quality of the environment. This would be considered a less-than-significant impact. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

b) Does the project have impacts that are individually limited but cumulatively considerable? (“cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less-than-Significant Impact. A significant impact may occur if the 2019 Master Plan Update, in conjunction with related projects, would result in impacts that are less than significant when viewed separately but significant when viewed together. All potential impacts of the 2019 Master Plan Update have been identified, and mitigation measures have been prescribed, where applicable, to reduce potential impacts to less- than-significant levels. None of these potential impacts is considered cumulatively considerable, and implementation of the mitigation measures identified in this addendum would ensure that no cumulative impacts would occur as a result of the 2019 Master Plan Update.

All potential impacts of the 2019 Master Plan Update would be reduced to less-than-significant levels with implementation of the mitigation measures provided in the previous sections. None of these potential impacts is considered cumulatively considerable, and implementation of the mitigation measures identified in this addendum

would ensure that no significant cumulative impacts would occur as a result of the 2019 Master Plan Update. Cumulative impacts would be considered less than or similar to impacts determined in 2002. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

Issues	Potentially Significant	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Impact. All potential impacts of the 2019 Master Plan Update have been identified, and mitigation measures have been prescribed, where applicable, to reduce all potential impacts to less-than-significant levels. Upon implementation of mitigation measures, the 2019 Master Plan Update would not have the potential to result in substantial adverse impacts on human beings either directly or indirectly. Thus, no new or substantially increased significant impacts would occur under the Revised Project, and no new mitigation measures are proposed.

d) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No Impact. The Revised Project would result in long-term benefits by designing the buildings and campus improvements to current codes and sustainability standards. Additionally, with the greater emphasis on reduction of GHG emissions at the District level, more sustainable practices and features are included in the 2019 Master Plan Update than what existed in the 2002 Master Plan. The Revised Project is also more in line with the current and projected enrollment trends at the College and better responds to the needs of the College curriculum. The Revised Project would result in short-term disruptions due to construction activities on the campus, but in the long-term it would result in construction of energy-efficient and state-of-the-art facilities. Therefore, the 2019 Master Plan Update would not result in any long-term environmental harm at the cost of short-term gains.

The Revised Project would not result in new significant impacts or exacerbate previously identified significant impacts. Mitigation measures would reduce all potentially significant impacts to less than significant levels. None of the conditions described in Section 15162 requiring the preparation of a subsequent EIR have occurred. Therefore, this addendum is considered to be the appropriate environmental document for the proposed 2019 Master Plan Update. The revised project would not achieve short-term environmental goals to the disadvantage of long-term environmental goals.

REFERENCES

- ICF International, 2010. *Addendum to the 2002 Final EIR for Proposed Los Angeles Pierce College 2010 Master Plan Update of the 2002 Master Plan*
- Pierce College. 2010. *Pierce College 2010 Master Plan Update*.
- Pierce College. 2014. *Los Angeles Pierce College 2014 Facility Master Plan Update* (Power Point presentation to LACCD Board of Trustees, 7/9/14)
- ICF International. 2014. *Cultural Resources Technical Report for the 2014 Update of the Los Angeles Pierce College Facilities Master Plan*.
- Fehr & Peers. 2014. *Traffic Study for the Los Angeles Pierce College 2014 Facility Master Plan Update Addendum to the 2002 Final Environmental Impact Report*
- California Air Resources Board. 2008. *Climate Change Scoping Plan*. December.
- California Climate Action Team. 2006. *Final 2006 Climate Action Team Report to the Governor and Legislature*. March.
- California Department of Transportation. 1997. *Transportation Project-level Carbon Monoxide Protocol*.
- California Division of Mines and Geology. 1998. *Seismic Hazard Zone Map, Canoga Quadrangle*.
- California Division of Mines and Geology. 2001. *Seismic Hazard Zone Report for the Canoga 7.5-minute Quadrangle, Los Angeles County, California*. Seismic Hazard Zone Report 007.
- City of Los Angeles. 2019. *Zoning Information and Map Access System*.
- City of Los Angeles. n.d. *Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan*. Department of City Planning. Available: <http://cityplanning.lacity.org/complan/pdf/cpksumlu.pdf>
- Federal Transit Administration. 2006. *Transit Noise and Vibration Assessment*. Report No. FTA-VA-1003-06. May.
- Fehr and Peers. 2010. *Traffic and Parking Study for the Pierce College Facilities Master Plan Update Environmental Impact Report*. January.
- Governor's Office of Planning and Research. 2008. *Technical Advisory on CEQA and Climate Change*. June.
- Leymaster Environmental Consulting, LLC. 2005. *Supplemental Soil Sampling Report*. October 21.
- Los Angeles County. 2015. *Los Angeles County General Plan*.

About Pierce College. Available:

http://www.piercecollege.edu.pierce_about.asp Accessed: March 29, 2019

Myra L. Frank & Associates. 2002. *Los Angeles Pierce College Facilities Master Plan Final Environmental Impact Report.*

South Coast Air Quality Management District. 2019. *Air Quality Analysis Handbook.*

South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook.*

South Coast Air Quality Management District. 2019. *Localized Significance Thresholds.*

South Coast Air Quality Management District and Southern California Association of Governments. 2016. *Air Quality Management Plan.*

Southern California Association of Governments. 2016. *Regional Transportation Plan/Sustainable Communities Strategy.*

Winzler & Kelley Consulting Engineers. 2003. Hazardous materials survey reports (for various on-campus structures).

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Appendix A

Site Photos

Attachment A – Pierce College



Photo 1. Northwest View of Towards Parking Lot 8 and New Agricultural Education Building Site



Photo 2. Site of New Child Development Academic Facility



Photo 3. Site of New Industrial Tech Replacement Building



Photo 4. Industrial Technology Building (to be demolished)



Photo 5. Applied Technology Building, foreground (to be demolished)



Photo 6. Library Media Center (Site of New Multi-Purpose Academic & Workforce Housing Building)

Appendix B

Air Quality Data Sheets

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

**Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	13.58	1000sqft	0.31	13,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	226.00
tblConstructionPhase	NumDays	100.00	248.00
tblConstructionPhase	NumDays	5.00	248.00
tblConstructionPhase	PhaseEndDate	10/10/2019	7/1/2022
tblConstructionPhase	PhaseEndDate	9/26/2019	7/1/2022
tblConstructionPhase	PhaseEndDate	5/9/2019	7/21/2021
tblConstructionPhase	PhaseEndDate	10/3/2019	7/1/2022
tblConstructionPhase	PhaseEndDate	5/7/2019	7/19/2021
tblConstructionPhase	PhaseStartDate	10/4/2019	8/20/2021
tblConstructionPhase	PhaseStartDate	5/10/2019	7/21/2021
tblConstructionPhase	PhaseStartDate	5/8/2019	7/20/2021
tblConstructionPhase	PhaseStartDate	9/27/2019	7/21/2021
tblConstructionPhase	PhaseStartDate	5/7/2019	7/17/2021
tblEnergyUse	LightingElect	3.39	0.00
tblEnergyUse	NT24E	3.59	0.00
tblEnergyUse	NT24NG	0.59	0.00
tblEnergyUse	T24E	3.04	0.00
tblEnergyUse	T24NG	26.49	0.00

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tblSolidWaste	SolidWasteGenerationRate	17.65	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	666,085.86	0.00
tblWater	OutdoorWaterUseRate	1,041,826.60	0.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	4-23-2021	7-22-2021	0.0267	0.0184
10	7-23-2021	10-22-2021	0.5975	0.4395
11	10-23-2021	1-22-2022	0.6047	0.4619
12	1-23-2022	4-22-2022	0.5406	0.4478
13	4-23-2022	7-22-2022	0.4201	0.3480
		Highest	0.6047	0.4619

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0491	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0491	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0491	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0491	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/17/2021	7/19/2021	5	1	
2	Grading	Grading	7/20/2021	7/21/2021	5	2	
3	Building Construction	Building Construction	7/21/2021	7/1/2022	5	248	
4	Paving	Paving	7/21/2021	7/1/2022	5	248	
5	Architectural Coating	Architectural Coating	8/20/2021	7/1/2022	5	226	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 20,370; Non-Residential Outdoor: 6,790; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-004	3.9100e-003	2.0100e-003	0.0000		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	3.2000e-004	3.9100e-003	2.0100e-003	0.0000	2.7000e-004	1.5000e-004	4.2000e-004	3.0000e-005	1.4000e-004	1.7000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310

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3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-004	0.0000	1.0000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-004	2.4400e-003	2.9300e-003	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	1.2000e-004	2.4400e-003	2.9300e-003	0.0000	1.0000e-004	1.2000e-004	2.2000e-004	1.0000e-005	1.2000e-004	1.3000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0247	0.0247	0.0000	0.0000	0.0247

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005	7.5000e-004	4.1000e-004	1.1600e-003	4.1000e-004	3.9000e-004	8.0000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0989	0.0989	0.0000	0.0000	0.0990
Total	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0989	0.0989	0.0000	0.0000	0.0990

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9000e-004	0.0000	2.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005	2.9000e-004	4.0000e-004	6.9000e-004	1.6000e-004	4.0000e-004	5.6000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0989	0.0989	0.0000	0.0000	0.0990
Total	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0989	0.0989	0.0000	0.0000	0.0990

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0457	0.4711	0.4286	6.7000e-004		0.0264	0.0264		0.0243	0.0243	0.0000	59.0484	59.0484	0.0191	0.0000	59.5259
Total	0.0457	0.4711	0.4286	6.7000e-004		0.0264	0.0264		0.0243	0.0243	0.0000	59.0484	59.0484	0.0191	0.0000	59.5259

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7000e-004	0.0117	3.1600e-003	3.0000e-005	7.4000e-004	2.0000e-005	7.7000e-004	2.1000e-004	2.0000e-005	2.4000e-004	0.0000	2.9087	2.9087	1.8000e-004	0.0000	2.9131
Worker	1.5200e-003	1.1900e-003	0.0134	4.0000e-005	3.8800e-003	3.0000e-005	3.9100e-003	1.0300e-003	3.0000e-005	1.0600e-003	0.0000	3.5008	3.5008	1.0000e-004	0.0000	3.5033
Total	1.8900e-003	0.0128	0.0166	7.0000e-005	4.6200e-003	5.0000e-005	4.6800e-003	1.2400e-003	5.0000e-005	1.3000e-003	0.0000	6.4094	6.4094	2.8000e-004	0.0000	6.4165

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0165	0.3617	0.4698	6.7000e-004		0.0227	0.0227		0.0227	0.0227	0.0000	59.0483	59.0483	0.0191	0.0000	59.5258
Total	0.0165	0.3617	0.4698	6.7000e-004		0.0227	0.0227		0.0227	0.0227	0.0000	59.0483	59.0483	0.0191	0.0000	59.5258

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7000e-004	0.0117	3.1600e-003	3.0000e-005	5.3000e-004	2.0000e-005	5.6000e-004	1.6000e-004	2.0000e-005	1.9000e-004	0.0000	2.9087	2.9087	1.8000e-004	0.0000	2.9131
Worker	1.5200e-003	1.1900e-003	0.0134	4.0000e-005	2.5300e-003	3.0000e-005	2.5700e-003	7.0000e-004	3.0000e-005	7.3000e-004	0.0000	3.5008	3.5008	1.0000e-004	0.0000	3.5033
Total	1.8900e-003	0.0128	0.0166	7.0000e-005	3.0600e-003	5.0000e-005	3.1300e-003	8.6000e-004	5.0000e-005	9.2000e-004	0.0000	6.4094	6.4094	2.8000e-004	0.0000	6.4165

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0446	0.4567	0.4649	7.4000e-004		0.0242	0.0242		0.0222	0.0222	0.0000	65.0960	65.0960	0.0211	0.0000	65.6223
Total	0.0446	0.4567	0.4649	7.4000e-004		0.0242	0.0242		0.0222	0.0222	0.0000	65.0960	65.0960	0.0211	0.0000	65.6223

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-004	0.0122	3.2900e-003	3.0000e-005	8.2000e-004	2.0000e-005	8.4000e-004	2.4000e-004	2.0000e-005	2.6000e-004	0.0000	3.1763	3.1763	1.9000e-004	0.0000	3.1811
Worker	1.5700e-003	1.1800e-003	0.0136	4.0000e-005	4.2700e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1700e-003	0.0000	3.7212	3.7212	1.0000e-004	0.0000	3.7238
Total	1.9500e-003	0.0134	0.0169	7.0000e-005	5.0900e-003	5.0000e-005	5.1500e-003	1.3800e-003	5.0000e-005	1.4300e-003	0.0000	6.8975	6.8975	2.9000e-004	0.0000	6.9048

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0182	0.3984	0.5176	7.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	65.0959	65.0959	0.0211	0.0000	65.6223
Total	0.0182	0.3984	0.5176	7.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	65.0959	65.0959	0.0211	0.0000	65.6223

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-004	0.0122	3.2900e-003	3.0000e-005	5.9000e-004	2.0000e-005	6.1000e-004	1.8000e-004	2.0000e-005	2.0000e-004	0.0000	3.1763	3.1763	1.9000e-004	0.0000	3.1811
Worker	1.5700e-003	1.1800e-003	0.0136	4.0000e-005	2.7900e-003	3.0000e-005	2.8300e-003	7.7000e-004	3.0000e-005	8.0000e-004	0.0000	3.7212	3.7212	1.0000e-004	0.0000	3.7238
Total	1.9500e-003	0.0134	0.0169	7.0000e-005	3.3800e-003	5.0000e-005	3.4400e-003	9.5000e-004	5.0000e-005	1.0000e-003	0.0000	6.8975	6.8975	2.9000e-004	0.0000	6.9048

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.3964	0.4183	6.6000e-004		0.0209	0.0209		0.0194	0.0194	0.0000	55.4156	55.4156	0.0161	0.0000	55.8191
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0426	0.3964	0.4183	6.6000e-004		0.0209	0.0209		0.0194	0.0194	0.0000	55.4156	55.4156	0.0161	0.0000	55.8191

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5700e-003	3.5600e-003	0.0402	1.2000e-004	0.0116	1.0000e-004	0.0117	3.0900e-003	9.0000e-005	3.1800e-003	0.0000	10.5023	10.5023	3.1000e-004	0.0000	10.5100
Total	4.5700e-003	3.5600e-003	0.0402	1.2000e-004	0.0116	1.0000e-004	0.0117	3.0900e-003	9.0000e-005	3.1800e-003	0.0000	10.5023	10.5023	3.1000e-004	0.0000	10.5100

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0132	0.2807	0.4073	6.6000e-004		0.0172	0.0172		0.0172	0.0172	0.0000	55.4155	55.4155	0.0161	0.0000	55.8190
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0132	0.2807	0.4073	6.6000e-004		0.0172	0.0172		0.0172	0.0172	0.0000	55.4155	55.4155	0.0161	0.0000	55.8190

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5700e-003	3.5600e-003	0.0402	1.2000e-004	7.6000e-003	1.0000e-004	7.7000e-003	2.1000e-003	9.0000e-005	2.1900e-003	0.0000	10.5023	10.5023	3.1000e-004	0.0000	10.5100
Total	4.5700e-003	3.5600e-003	0.0402	1.2000e-004	7.6000e-003	1.0000e-004	7.7000e-003	2.1000e-003	9.0000e-005	2.1900e-003	0.0000	10.5023	10.5023	3.1000e-004	0.0000	10.5100

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0421	0.3846	0.4573	7.3000e-004		0.0192	0.0192		0.0179	0.0179	0.0000	61.0795	61.0795	0.0178	0.0000	61.5243
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0421	0.3846	0.4573	7.3000e-004		0.0192	0.0192		0.0179	0.0179	0.0000	61.0795	61.0795	0.0178	0.0000	61.5243

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7200e-003	3.5400e-003	0.0408	1.2000e-004	0.0128	1.0000e-004	0.0129	3.4100e-003	9.0000e-005	3.5000e-003	0.0000	11.1636	11.1636	3.1000e-004	0.0000	11.1713
Total	4.7200e-003	3.5400e-003	0.0408	1.2000e-004	0.0128	1.0000e-004	0.0129	3.4100e-003	9.0000e-005	3.5000e-003	0.0000	11.1636	11.1636	3.1000e-004	0.0000	11.1713

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0146	0.3093	0.4487	7.3000e-004		0.0189	0.0189		0.0189	0.0189	0.0000	61.0794	61.0794	0.0178	0.0000	61.5242
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0146	0.3093	0.4487	7.3000e-004		0.0189	0.0189		0.0189	0.0189	0.0000	61.0794	61.0794	0.0178	0.0000	61.5242

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7200e-003	3.5400e-003	0.0408	1.2000e-004	8.3800e-003	1.0000e-004	8.4800e-003	2.3100e-003	9.0000e-005	2.4100e-003	0.0000	11.1636	11.1636	3.1000e-004	0.0000	11.1713
Total	4.7200e-003	3.5400e-003	0.0408	1.2000e-004	8.3800e-003	1.0000e-004	8.4800e-003	2.3100e-003	9.0000e-005	2.4100e-003	0.0000	11.1636	11.1636	3.1000e-004	0.0000	11.1713

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0267					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0733	0.0872	1.4000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003	0.0000	12.2556	12.2556	8.4000e-004	0.0000	12.2766
Total	0.0373	0.0733	0.0872	1.4000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003	0.0000	12.2556	12.2556	8.4000e-004	0.0000	12.2766

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	1.8200e-003	1.0000e-005	5.3000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4747	0.4747	1.0000e-005	0.0000	0.4750
Total	2.1000e-004	1.6000e-004	1.8200e-003	1.0000e-005	5.3000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4747	0.4747	1.0000e-005	0.0000	0.4750

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0267					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0733	0.0872	1.4000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003	0.0000	12.2556	12.2556	8.4000e-004	0.0000	12.2766
Total	0.0373	0.0733	0.0872	1.4000e-004		4.5200e-003	4.5200e-003		4.5200e-003	4.5200e-003	0.0000	12.2556	12.2556	8.4000e-004	0.0000	12.2766

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	1.8200e-003	1.0000e-005	3.4000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.4747	0.4747	1.0000e-005	0.0000	0.4750
Total	2.1000e-004	1.6000e-004	1.8200e-003	1.0000e-005	3.4000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.4747	0.4747	1.0000e-005	0.0000	0.4750

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.0916	0.1179	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003	0.0000	16.5962	16.5962	1.0800e-003	0.0000	16.6232
Total	0.0495	0.0916	0.1179	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003	0.0000	16.5962	16.5962	1.0800e-003	0.0000	16.6232

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	2.2600e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6202	0.6202	2.0000e-005	0.0000	0.6206
Total	2.6000e-004	2.0000e-004	2.2600e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6202	0.6202	2.0000e-005	0.0000	0.6206

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.0916	0.1179	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003	0.0000	16.5961	16.5961	1.0800e-003	0.0000	16.6231
Total	0.0495	0.0916	0.1179	1.9000e-004		5.3100e-003	5.3100e-003		5.3100e-003	5.3100e-003	0.0000	16.5961	16.5961	1.0800e-003	0.0000	16.6231

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	2.0000e-004	2.2600e-003	1.0000e-005	4.7000e-004	1.0000e-005	4.7000e-004	1.3000e-004	1.0000e-005	1.3000e-004	0.0000	0.6202	0.6202	2.0000e-005	0.0000	0.6206
Total	2.6000e-004	2.0000e-004	2.2600e-003	1.0000e-005	4.7000e-004	1.0000e-005	4.7000e-004	1.3000e-004	1.0000e-005	1.3000e-004	0.0000	0.6202	0.6202	2.0000e-005	0.0000	0.6206

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0491	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Unmitigated	0.0491	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0491					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0491	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0491					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004
Total	0.0491	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.4000e-004	3.4000e-004	0.0000	0.0000	3.6000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - AG Education Building Construction & Demolition - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

**Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	76.00	1000sqft	1.74	76,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Completion of Multi-Purpose Academic & Workforce Education Building per LACCD. Building construction, paving, and painting assumed to occur simultaneously

Demolition -

Vehicle Trips - Construction model only

Energy Use - Construction model only

Water And Wastewater - Construction model only

Solid Waste - Construction model only

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 & EIR Mitigation measure AQ-2

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	525.00
tblConstructionPhase	NumDays	200.00	525.00

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	525.00
tblConstructionPhase	PhaseEndDate	4/15/2020	3/14/2025
tblConstructionPhase	PhaseEndDate	3/18/2020	3/15/2025
tblConstructionPhase	PhaseEndDate	6/4/2019	10/26/2022
tblConstructionPhase	PhaseEndDate	6/12/2019	11/3/2022
tblConstructionPhase	PhaseEndDate	4/1/2020	3/15/2025
tblConstructionPhase	PhaseEndDate	6/6/2019	10/28/2022
tblConstructionPhase	PhaseStartDate	4/2/2020	3/13/2023
tblConstructionPhase	PhaseStartDate	6/13/2019	3/13/2023
tblConstructionPhase	PhaseStartDate	5/8/2019	9/1/2022
tblConstructionPhase	PhaseStartDate	6/7/2019	10/29/2022
tblConstructionPhase	PhaseStartDate	3/19/2020	3/13/2023
tblConstructionPhase	PhaseStartDate	6/5/2019	10/27/2022
tblEnergyUse	LightingElect	3.39	0.00
tblEnergyUse	NT24E	3.59	0.00
tblEnergyUse	NT24NG	0.59	0.00
tblEnergyUse	T24E	3.04	0.00
tblEnergyUse	T24NG	26.49	0.00
tblSolidWaste	SolidWasteGenerationRate	98.80	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

tblWater	IndoorWaterUseRate	3,727,726.47	0.00
tblWater	OutdoorWaterUseRate	5,830,546.53	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0405	0.4377	0.3244	7.5000e-004	0.0785	0.0186	0.0971	0.0184	0.0174	0.0358	0.0000	68.1357	68.1357	0.0134	0.0000	68.4717
2023	0.4117	2.1251	2.6388	4.9000e-003	0.0666	0.0944	0.1610	0.0179	0.0900	0.1079	0.0000	420.1460	420.1460	0.0761	0.0000	422.0475
2024	0.4938	2.5044	3.2669	6.0900e-003	0.0831	0.1045	0.1876	0.0223	0.0996	0.1219	0.0000	522.1671	522.1671	0.0939	0.0000	524.5133
2025	0.0957	0.4728	0.6549	1.2300e-003	0.0168	0.0184	0.0353	4.5100e-003	0.0176	0.0221	0.0000	105.1264	105.1264	0.0188	0.0000	105.5960
Maximum	0.4938	2.5044	3.2669	6.0900e-003	0.0831	0.1045	0.1876	0.0223	0.0996	0.1219	0.0000	522.1671	522.1671	0.0939	0.0000	524.5133

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0156	0.3309	0.3605	7.5000e-004	0.0328	0.0156	0.0484	7.8400e-003	0.0156	0.0234	0.0000	68.1357	68.1357	0.0134	0.0000	68.4717
2023	0.3317	2.1210	2.8970	4.9000e-003	0.0440	0.1105	0.1546	0.0123	0.1105	0.1228	0.0000	420.1456	420.1456	0.0761	0.0000	422.0471
2024	0.4037	2.6175	3.5928	6.0900e-003	0.0549	0.1336	0.1885	0.0154	0.1335	0.1489	0.0000	522.1666	522.1666	0.0939	0.0000	524.5127
2025	0.0799	0.5240	0.7227	1.2300e-003	0.0111	0.0263	0.0374	3.1100e-003	0.0262	0.0294	0.0000	105.1263	105.1263	0.0188	0.0000	105.5959
Maximum	0.4037	2.6175	3.5928	6.0900e-003	0.0549	0.1336	0.1885	0.0154	0.1335	0.1489	0.0000	522.1666	522.1666	0.0939	0.0000	524.5127

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	20.24	-0.96	-9.99	0.00	41.70	-21.19	10.85	38.74	-27.32	-12.82	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
14	8-8-2022	11-7-2022	0.4738	0.3433
16	2-8-2023	5-7-2023	0.4829	0.4668
17	5-8-2023	8-7-2023	0.7929	0.7666
18	8-8-2023	11-7-2023	0.7934	0.7670
19	11-8-2023	2-7-2024	0.7767	0.7637
20	2-8-2024	5-7-2024	0.7354	0.7410
21	5-8-2024	8-7-2024	0.7511	0.7569
22	8-8-2024	11-7-2024	0.7516	0.7573

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

23	11-8-2024	2-7-2025	0.7327	0.7542
24	2-8-2025	5-7-2025	0.2749	0.2921
		Highest	0.7934	0.7670

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3099	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3099	1.0000e-005	9.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3099	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3099	1.0000e-005	9.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	10/26/2022	5	40	
2	Site Preparation	Site Preparation	10/27/2022	10/28/2022	5	2	
3	Grading	Grading	10/29/2022	11/3/2022	5	4	
4	Building Construction	Building Construction	3/13/2023	3/15/2025	5	525	
5	Paving	Paving	3/13/2023	3/15/2025	5	525	
6	Architectural Coating	Architectural Coating	3/13/2023	3/14/2025	5	525	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 114,000; Non-Residential Outdoor: 38,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	512.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	32.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0554	0.0000	0.0554	8.3800e-003	0.0000	8.3800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0338	0.3324	0.2792	4.8000e-004		0.0168	0.0168		0.0157	0.0157	0.0000	42.1554	42.1554	0.0107	0.0000	42.4239
Total	0.0338	0.3324	0.2792	4.8000e-004	0.0554	0.0168	0.0721	8.3800e-003	0.0157	0.0240	0.0000	42.1554	42.1554	0.0107	0.0000	42.4239

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0500e-003	0.0658	0.0163	2.0000e-004	4.4000e-003	1.8000e-004	4.5800e-003	1.2100e-003	1.8000e-004	1.3800e-003	0.0000	19.2827	19.2827	1.3300e-003	0.0000	19.3161
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.9000e-004	9.0600e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.4808	2.4808	7.0000e-005	0.0000	2.4825
Total	3.1000e-003	0.0666	0.0254	2.3000e-004	7.2500e-003	2.0000e-004	7.4500e-003	1.9700e-003	2.0000e-004	2.1600e-003	0.0000	21.7635	21.7635	1.4000e-003	0.0000	21.7986

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0216	0.0000	0.0216	3.2700e-003	0.0000	3.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.2421	0.3083	4.8000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	42.1553	42.1553	0.0107	0.0000	42.4239
Total	0.0112	0.2421	0.3083	4.8000e-004	0.0216	0.0144	0.0360	3.2700e-003	0.0144	0.0176	0.0000	42.1553	42.1553	0.0107	0.0000	42.4239

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0500e-003	0.0658	0.0163	2.0000e-004	3.0800e-003	1.8000e-004	3.2600e-003	8.8000e-004	1.8000e-004	1.0600e-003	0.0000	19.2827	19.2827	1.3300e-003	0.0000	19.3161
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	7.9000e-004	9.0600e-003	3.0000e-005	1.8600e-003	2.0000e-005	1.8800e-003	5.1000e-004	2.0000e-005	5.4000e-004	0.0000	2.4808	2.4808	7.0000e-005	0.0000	2.4825
Total	3.1000e-003	0.0666	0.0254	2.3000e-004	4.9400e-003	2.0000e-004	5.1400e-003	1.3900e-003	2.0000e-004	1.6000e-003	0.0000	21.7635	21.7635	1.4000e-003	0.0000	21.7986

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0146	7.0900e-003	2.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	1.3100e-003	0.0146	7.0900e-003	2.0000e-005	5.8000e-003	6.2000e-004	6.4200e-003	2.9500e-003	5.7000e-004	3.5200e-003	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0763	0.0763	0.0000	0.0000	0.0764
Total	3.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0763	0.0763	0.0000	0.0000	0.0764

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2600e-003	0.0000	2.2600e-003	1.1500e-003	0.0000	1.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	8.4100e-003	9.8200e-003	2.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	4.2000e-004	8.4100e-003	9.8200e-003	2.0000e-005	2.2600e-003	3.7000e-004	2.6300e-003	1.1500e-003	3.7000e-004	1.5200e-003	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0763	0.0763	0.0000	0.0000	0.0764
Total	3.0000e-005	2.0000e-005	2.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0763	0.0763	0.0000	0.0000	0.0764

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1700e-003	0.0240	0.0119	3.0000e-005		1.0300e-003	1.0300e-003		9.5000e-004	9.5000e-004	0.0000	2.4763	2.4763	8.0000e-004	0.0000	2.4963
Total	2.1700e-003	0.0240	0.0119	3.0000e-005	9.8300e-003	1.0300e-003	0.0109	5.0500e-003	9.5000e-004	6.0000e-003	0.0000	2.4763	2.4763	8.0000e-004	0.0000	2.4963

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	5.0000e-005	5.6000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1527	0.1527	0.0000	0.0000	0.1528
Total	6.0000e-005	5.0000e-005	5.6000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1527	0.1527	0.0000	0.0000	0.1528

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8300e-003	0.0000	3.8300e-003	1.9700e-003	0.0000	1.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9000e-004	0.0138	0.0162	3.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	2.4763	2.4763	8.0000e-004	0.0000	2.4963
Total	6.9000e-004	0.0138	0.0162	3.0000e-005	3.8300e-003	6.2000e-004	4.4500e-003	1.9700e-003	6.2000e-004	2.5900e-003	0.0000	2.4763	2.4763	8.0000e-004	0.0000	2.4963

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	5.0000e-005	5.6000e-004	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1527	0.1527	0.0000	0.0000	0.1528
Total	6.0000e-005	5.0000e-005	5.6000e-004	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1527	0.1527	0.0000	0.0000	0.1528

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1599	1.2296	1.3242	2.3200e-003		0.0540	0.0540		0.0522	0.0522	0.0000	190.6791	190.6791	0.0324	0.0000	191.4886
Total	0.1599	1.2296	1.3242	2.3200e-003		0.0540	0.0540		0.0522	0.0522	0.0000	190.6791	190.6791	0.0324	0.0000	191.4886

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7300e-003	0.0893	0.0286	3.1000e-004	7.9400e-003	1.0000e-004	8.0400e-003	2.2900e-003	1.0000e-004	2.3900e-003	0.0000	29.8220	29.8220	1.6200e-003	0.0000	29.8626
Worker	0.0128	9.2000e-003	0.1077	3.4000e-004	0.0368	2.9000e-004	0.0371	9.7800e-003	2.6000e-004	0.0100	0.0000	30.8865	30.8865	8.0000e-004	0.0000	30.9063
Total	0.0155	0.0985	0.1363	6.5000e-004	0.0448	3.9000e-004	0.0451	0.0121	3.6000e-004	0.0124	0.0000	60.7084	60.7084	2.4200e-003	0.0000	60.7689

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1141	1.1831	1.4723	2.3200e-003		0.0620	0.0620		0.0620	0.0620	0.0000	190.6789	190.6789	0.0324	0.0000	191.4883
Total	0.1141	1.1831	1.4723	2.3200e-003		0.0620	0.0620		0.0620	0.0620	0.0000	190.6789	190.6789	0.0324	0.0000	191.4883

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7300e-003	0.0893	0.0286	3.1000e-004	5.6900e-003	1.0000e-004	5.7900e-003	1.7400e-003	1.0000e-004	1.8400e-003	0.0000	29.8220	29.8220	1.6200e-003	0.0000	29.8626
Worker	0.0128	9.2000e-003	0.1077	3.4000e-004	0.0241	2.9000e-004	0.0243	6.6500e-003	2.6000e-004	6.9100e-003	0.0000	30.8865	30.8865	8.0000e-004	0.0000	30.9063
Total	0.0155	0.0985	0.1363	6.5000e-004	0.0297	3.9000e-004	0.0301	8.3900e-003	3.6000e-004	8.7500e-003	0.0000	60.7084	60.7084	2.4200e-003	0.0000	60.7689

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9108	237.9108	0.0396	0.0000	238.9013
Total	0.1860	1.4494	1.6398	2.8900e-003		0.0590	0.0590		0.0570	0.0570	0.0000	237.9108	237.9108	0.0396	0.0000	238.9013

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.1109	0.0346	3.8000e-004	9.9000e-003	1.3000e-004	0.0100	2.8600e-003	1.2000e-004	2.9800e-003	0.0000	37.0583	37.0583	2.0000e-003	0.0000	37.1082
Worker	0.0151	0.0105	0.1251	4.1000e-004	0.0459	3.5000e-004	0.0463	0.0122	3.2000e-004	0.0125	0.0000	37.3397	37.3397	9.1000e-004	0.0000	37.3625
Total	0.0184	0.1214	0.1597	7.9000e-004	0.0558	4.8000e-004	0.0563	0.0151	4.4000e-004	0.0155	0.0000	74.3980	74.3980	2.9100e-003	0.0000	74.4706

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1350	1.4604	1.8313	2.8900e-003		0.0743	0.0743		0.0743	0.0743	0.0000	237.9105	237.9105	0.0396	0.0000	238.9010
Total	0.1350	1.4604	1.8313	2.8900e-003		0.0743	0.0743		0.0743	0.0743	0.0000	237.9105	237.9105	0.0396	0.0000	238.9010

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.1109	0.0346	3.8000e-004	7.1000e-003	1.3000e-004	7.2300e-003	2.1700e-003	1.2000e-004	2.2900e-003	0.0000	37.0583	37.0583	2.0000e-003	0.0000	37.1082
Worker	0.0151	0.0105	0.1251	4.1000e-004	0.0300	3.5000e-004	0.0304	8.2900e-003	3.2000e-004	8.6100e-003	0.0000	37.3397	37.3397	9.1000e-004	0.0000	37.3625
Total	0.0184	0.1214	0.1597	7.9000e-004	0.0371	4.8000e-004	0.0376	0.0105	4.4000e-004	0.0109	0.0000	74.3980	74.3980	2.9100e-003	0.0000	74.4706

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.2759	0.3296	5.8000e-004		0.0104	0.0104		0.0100	0.0100	0.0000	48.1325	48.1325	7.8600e-003	0.0000	48.3290
Total	0.0351	0.2759	0.3296	5.8000e-004		0.0104	0.0104		0.0100	0.0100	0.0000	48.1325	48.1325	7.8600e-003	0.0000	48.3290

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0223	6.8200e-003	8.0000e-005	2.0000e-003	3.0000e-005	2.0300e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	7.4557	7.4557	4.0000e-004	0.0000	7.4656
Worker	2.9000e-003	1.9400e-003	0.0235	8.0000e-005	9.2900e-003	7.0000e-005	9.3600e-003	2.4700e-003	6.0000e-005	2.5300e-003	0.0000	7.2610	7.2610	1.7000e-004	0.0000	7.2652
Total	3.5500e-003	0.0242	0.0303	1.6000e-004	0.0113	1.0000e-004	0.0114	3.0500e-003	8.0000e-005	3.1300e-003	0.0000	14.7167	14.7167	5.7000e-004	0.0000	14.7308

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2923	0.3695	5.8000e-004		0.0145	0.0145		0.0145	0.0145	0.0000	48.1325	48.1325	7.8600e-003	0.0000	48.3290
Total	0.0260	0.2923	0.3695	5.8000e-004		0.0145	0.0145		0.0145	0.0145	0.0000	48.1325	48.1325	7.8600e-003	0.0000	48.3290

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0223	6.8200e-003	8.0000e-005	1.4400e-003	3.0000e-005	1.4600e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	7.4557	7.4557	4.0000e-004	0.0000	7.4656
Worker	2.9000e-003	1.9400e-003	0.0235	8.0000e-005	6.0700e-003	7.0000e-005	6.1400e-003	1.6800e-003	6.0000e-005	1.7400e-003	0.0000	7.2610	7.2610	1.7000e-004	0.0000	7.2652
Total	3.5500e-003	0.0242	0.0303	1.6000e-004	7.5100e-003	1.0000e-004	7.6000e-003	2.1200e-003	8.0000e-005	2.2000e-003	0.0000	14.7167	14.7167	5.7000e-004	0.0000	14.7308

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6548	0.9243	1.4200e-003		0.0324	0.0324		0.0299	0.0299	0.0000	123.6105	123.6105	0.0392	0.0000	124.5901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0677	0.6548	0.9243	1.4200e-003		0.0324	0.0324		0.0299	0.0299	0.0000	123.6105	123.6105	0.0392	0.0000	124.5901

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1800e-003	3.7400e-003	0.0437	1.4000e-004	0.0150	1.2000e-004	0.0151	3.9700e-003	1.1000e-004	4.0800e-003	0.0000	12.5476	12.5476	3.2000e-004	0.0000	12.5557
Total	5.1800e-003	3.7400e-003	0.0437	1.4000e-004	0.0150	1.2000e-004	0.0151	3.9700e-003	1.1000e-004	4.0800e-003	0.0000	12.5476	12.5476	3.2000e-004	0.0000	12.5557

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0336	0.6972	1.0344	1.4200e-003		0.0406	0.0406		0.0406	0.0406	0.0000	123.6103	123.6103	0.0392	0.0000	124.5900
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0336	0.6972	1.0344	1.4200e-003		0.0406	0.0406		0.0406	0.0406	0.0000	123.6103	123.6103	0.0392	0.0000	124.5900

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1800e-003	3.7400e-003	0.0437	1.4000e-004	9.7700e-003	1.2000e-004	9.8900e-003	2.7000e-003	1.1000e-004	2.8100e-003	0.0000	12.5476	12.5476	3.2000e-004	0.0000	12.5557
Total	5.1800e-003	3.7400e-003	0.0437	1.4000e-004	9.7700e-003	1.2000e-004	9.8900e-003	2.7000e-003	1.1000e-004	2.8100e-003	0.0000	12.5476	12.5476	3.2000e-004	0.0000	12.5557

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0810	0.7678	1.1561	1.7700e-003		0.0368	0.0368		0.0340	0.0340	0.0000	154.2403	154.2403	0.0489	0.0000	155.4627
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0810	0.7678	1.1561	1.7700e-003		0.0368	0.0368		0.0340	0.0340	0.0000	154.2403	154.2403	0.0489	0.0000	155.4627

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1200e-003	4.2500e-003	0.0508	1.7000e-004	0.0187	1.4000e-004	0.0188	4.9600e-003	1.3000e-004	5.0900e-003	0.0000	15.1693	15.1693	3.7000e-004	0.0000	15.1785
Total	6.1200e-003	4.2500e-003	0.0508	1.7000e-004	0.0187	1.4000e-004	0.0188	4.9600e-003	1.3000e-004	5.0900e-003	0.0000	15.1693	15.1693	3.7000e-004	0.0000	15.1785

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0419	0.8698	1.2905	1.7700e-003		0.0506	0.0506		0.0506	0.0506	0.0000	154.2401	154.2401	0.0489	0.0000	155.4625
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0419	0.8698	1.2905	1.7700e-003		0.0506	0.0506		0.0506	0.0506	0.0000	154.2401	154.2401	0.0489	0.0000	155.4625

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1200e-003	4.2500e-003	0.0508	1.7000e-004	0.0122	1.4000e-004	0.0123	3.3700e-003	1.3000e-004	3.5000e-003	0.0000	15.1693	15.1693	3.7000e-004	0.0000	15.1785
Total	6.1200e-003	4.2500e-003	0.0508	1.7000e-004	0.0122	1.4000e-004	0.0123	3.3700e-003	1.3000e-004	3.5000e-003	0.0000	15.1693	15.1693	3.7000e-004	0.0000	15.1785

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0152	0.1411	0.2331	3.6000e-004		6.5300e-003	6.5300e-003		6.0300e-003	6.0300e-003	0.0000	31.1999	31.1999	9.8900e-003	0.0000	31.4471
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0152	0.1411	0.2331	3.6000e-004		6.5300e-003	6.5300e-003		6.0300e-003	6.0300e-003	0.0000	31.1999	31.1999	9.8900e-003	0.0000	31.4471

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	7.9000e-004	9.5400e-003	3.0000e-005	3.7800e-003	3.0000e-005	3.8000e-003	1.0000e-003	3.0000e-005	1.0300e-003	0.0000	2.9498	2.9498	7.0000e-005	0.0000	2.9515
Total	1.1800e-003	7.9000e-004	9.5400e-003	3.0000e-005	3.7800e-003	3.0000e-005	3.8000e-003	1.0000e-003	3.0000e-005	1.0300e-003	0.0000	2.9498	2.9498	7.0000e-005	0.0000	2.9515

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4700e-003	0.1760	0.2611	3.6000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	31.1998	31.1998	9.8900e-003	0.0000	31.4471
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.4700e-003	0.1760	0.2611	3.6000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	31.1998	31.1998	9.8900e-003	0.0000	31.4471

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	7.9000e-004	9.5400e-003	3.0000e-005	2.4700e-003	3.0000e-005	2.4900e-003	6.8000e-004	3.0000e-005	7.1000e-004	0.0000	2.9498	2.9498	7.0000e-005	0.0000	2.9515
Total	1.1800e-003	7.9000e-004	9.5400e-003	3.0000e-005	2.4700e-003	3.0000e-005	2.4900e-003	6.8000e-004	3.0000e-005	7.1000e-004	0.0000	2.9498	2.9498	7.0000e-005	0.0000	2.9515

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1409					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0201	0.1368	0.1902	3.1000e-004		7.4400e-003	7.4400e-003		7.4400e-003	7.4400e-003	0.0000	26.8092	26.8092	1.6000e-003	0.0000	26.8493
Total	0.1610	0.1368	0.1902	3.1000e-004		7.4400e-003	7.4400e-003		7.4400e-003	7.4400e-003	0.0000	26.8092	26.8092	1.6000e-003	0.0000	26.8493

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.7200e-003	0.0202	6.0000e-005	6.9000e-003	5.0000e-005	6.9600e-003	1.8300e-003	5.0000e-005	1.8800e-003	0.0000	5.7912	5.7912	1.5000e-004	0.0000	5.7949
Total	2.3900e-003	1.7200e-003	0.0202	6.0000e-005	6.9000e-003	5.0000e-005	6.9600e-003	1.8300e-003	5.0000e-005	1.8800e-003	0.0000	5.7912	5.7912	1.5000e-004	0.0000	5.7949

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1409					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0201	0.1368	0.1902	3.1000e-004		7.4400e-003	7.4400e-003		7.4400e-003	7.4400e-003	0.0000	26.8091	26.8091	1.6000e-003	0.0000	26.8492
Total	0.1610	0.1368	0.1902	3.1000e-004		7.4400e-003	7.4400e-003		7.4400e-003	7.4400e-003	0.0000	26.8091	26.8091	1.6000e-003	0.0000	26.8492

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.7200e-003	0.0202	6.0000e-005	4.5100e-003	5.0000e-005	4.5600e-003	1.2500e-003	5.0000e-005	1.3000e-003	0.0000	5.7912	5.7912	1.5000e-004	0.0000	5.7949
Total	2.3900e-003	1.7200e-003	0.0202	6.0000e-005	4.5100e-003	5.0000e-005	4.5600e-003	1.2500e-003	5.0000e-005	1.3000e-003	0.0000	5.7912	5.7912	1.5000e-004	0.0000	5.7949

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1758					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947
Total	0.1995	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8200e-003	1.9600e-003	0.0235	8.0000e-005	8.6100e-003	7.0000e-005	8.6800e-003	2.2900e-003	6.0000e-005	2.3500e-003	0.0000	7.0012	7.0012	1.7000e-004	0.0000	7.0055
Total	2.8200e-003	1.9600e-003	0.0235	8.0000e-005	8.6100e-003	7.0000e-005	8.6800e-003	2.2900e-003	6.0000e-005	2.3500e-003	0.0000	7.0012	7.0012	1.7000e-004	0.0000	7.0055

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1758					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947
Total	0.1995	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8200e-003	1.9600e-003	0.0235	8.0000e-005	5.6300e-003	7.0000e-005	5.6900e-003	1.5500e-003	6.0000e-005	1.6200e-003	0.0000	7.0012	7.0012	1.7000e-004	0.0000	7.0055
Total	2.8200e-003	1.9600e-003	0.0235	8.0000e-005	5.6300e-003	7.0000e-005	5.6900e-003	1.5500e-003	6.0000e-005	1.6200e-003	0.0000	7.0012	7.0012	1.7000e-004	0.0000	7.0055

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0356					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5300e-003	0.0304	0.0479	8.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	6.7661	6.7661	3.7000e-004	0.0000	6.7754
Total	0.0401	0.0304	0.0479	8.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	6.7661	6.7661	3.7000e-004	0.0000	6.7754

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.6000e-004	4.4000e-003	2.0000e-005	1.7400e-003	1.0000e-005	1.7600e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3614	1.3614	3.0000e-005	0.0000	1.3622
Total	5.4000e-004	3.6000e-004	4.4000e-003	2.0000e-005	1.7400e-003	1.0000e-005	1.7600e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3614	1.3614	3.0000e-005	0.0000	1.3622

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0356					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5300e-003	0.0304	0.0479	8.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	6.7661	6.7661	3.7000e-004	0.0000	6.7753
Total	0.0401	0.0304	0.0479	8.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	6.7661	6.7661	3.7000e-004	0.0000	6.7753

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.6000e-004	4.4000e-003	2.0000e-005	1.1400e-003	1.0000e-005	1.1500e-003	3.1000e-004	1.0000e-005	3.3000e-004	0.0000	1.3614	1.3614	3.0000e-005	0.0000	1.3622
Total	5.4000e-004	3.6000e-004	4.4000e-003	2.0000e-005	1.1400e-003	1.0000e-005	1.1500e-003	3.1000e-004	1.0000e-005	3.3000e-004	0.0000	1.3614	1.3614	3.0000e-005	0.0000	1.3622

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.544880	0.044491	0.207704	0.117752	0.014693	0.006272	0.020732	0.032141	0.002572	0.001984	0.005239	0.000700	0.000841

5.0 Energy Detail

Historical Energy Use: N

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3099	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003
Unmitigated	0.3099	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0352					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003
Total	0.3100	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0352					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003
Total	0.3100	1.0000e-005	9.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8900e-003	1.8900e-003	0.0000	0.0000	2.0100e-003

7.0 Water Detail

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Pierce College 2018 Master Plan Update - Multi-Purpose Academic & Workforce Building - Los Angeles-South Coast County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

Pierce College 2018 Master Plan Update - Industrial Tech Building
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	46.00	1000sqft	1.06	46,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Completion of the Industrial Tech Building per LACCD. Building construction, paving, and painting assumed to occur simultaneously

Demolition -

Vehicle Trips - Construction model only

Energy Use - Construction model only

Water And Wastewater - Construction model only

Solid Waste - Construction model only

Construction Off-road Equipment Mitigation - SCAQMD 403 & EIR Mitigation measure AQ-2

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	275.00
tblConstructionPhase	NumDays	200.00	275.00

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

tblConstructionPhase	NumDays	10.00	275.00
tblConstructionPhase	PhaseEndDate	4/15/2020	4/1/2024
tblConstructionPhase	PhaseEndDate	3/18/2020	4/1/2024
tblConstructionPhase	PhaseEndDate	6/4/2019	12/5/2022
tblConstructionPhase	PhaseEndDate	6/12/2019	3/13/2023
tblConstructionPhase	PhaseEndDate	4/1/2020	4/1/2024
tblConstructionPhase	PhaseEndDate	6/6/2019	3/7/2023
tblConstructionPhase	PhaseStartDate	4/2/2020	3/14/2023
tblConstructionPhase	PhaseStartDate	6/13/2019	3/14/2023
tblConstructionPhase	PhaseStartDate	5/8/2019	11/8/2022
tblConstructionPhase	PhaseStartDate	6/7/2019	3/8/2023
tblConstructionPhase	PhaseStartDate	3/19/2020	3/14/2023
tblConstructionPhase	PhaseStartDate	6/5/2019	3/5/2023
tblEnergyUse	LightingElect	3.39	0.00
tblEnergyUse	NT24E	3.59	0.00
tblEnergyUse	NT24NG	0.59	0.00
tblEnergyUse	T24E	3.04	0.00
tblEnergyUse	T24NG	26.49	0.00
tblSolidWaste	SolidWasteGenerationRate	59.80	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	2,256,255.50	0.00

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tblWater	OutdoorWaterUseRate	3,529,015.00	0.00
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2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0183	0.1958	0.1514	3.4000e-004	0.0280	8.4700e-003	0.0365	4.6400e-003	7.9200e-003	0.0126	0.0000	30.8673	30.8673	6.0000e-003	0.0000	31.0172
2023	0.4278	2.1139	2.5850	4.6600e-003	0.0624	0.0951	0.1575	0.0205	0.0907	0.1112	0.0000	398.0511	398.0511	0.0761	0.0000	399.9532
2024	0.1292	0.6203	0.8053	1.4500e-003	0.0147	0.0263	0.0410	3.9400e-003	0.0250	0.0290	0.0000	124.0174	124.0174	0.0234	0.0000	124.6015
Maximum	0.4278	2.1139	2.5850	4.6600e-003	0.0624	0.0951	0.1575	0.0205	0.0907	0.1112	0.0000	398.0511	398.0511	0.0761	0.0000	399.9532

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	7.0600e-003	0.1506	0.1659	3.4000e-004	0.0119	7.2700e-003	0.0192	2.1000e-003	7.2700e-003	9.3700e-003	0.0000	30.8672	30.8672	6.0000e-003	0.0000	31.0172
2023	0.3463	2.0993	2.8503	4.6600e-003	0.0370	0.1108	0.1478	0.0118	0.1108	0.1226	0.0000	398.0507	398.0507	0.0761	0.0000	399.9528
2024	0.1065	0.6488	0.8874	1.4500e-003	9.7000e-003	0.0336	0.0433	2.7100e-003	0.0336	0.0363	0.0000	124.0172	124.0172	0.0234	0.0000	124.6014
Maximum	0.3463	2.0993	2.8503	4.6600e-003	0.0370	0.1108	0.1478	0.0118	0.1108	0.1226	0.0000	398.0507	398.0507	0.0761	0.0000	399.9528

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	20.07	1.07	-10.22	0.00	44.25	-16.82	10.50	43.10	-22.70	-10.15	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
15	11-8-2022	2-7-2023	0.2136	0.1571
16	2-8-2023	5-7-2023	0.5093	0.4802
17	5-8-2023	8-7-2023	0.7872	0.7609
18	8-8-2023	11-7-2023	0.7875	0.7612
19	11-8-2023	2-7-2024	0.7708	0.7578
20	2-8-2024	5-7-2024	0.4381	0.4415
		Highest	0.7875	0.7612

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1876	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1876	1.0000e-005	5.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1876	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1876	1.0000e-005	5.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/8/2022	12/5/2022	5	20	
2	Site Preparation	Site Preparation	3/5/2023	3/7/2023	5	2	
3	Grading	Grading	3/8/2023	3/13/2023	5	4	
4	Building Construction	Building Construction	3/14/2023	4/1/2024	5	275	
5	Paving	Paving	3/14/2023	4/1/2024	5	275	
6	Architectural Coating	Architectural Coating	3/14/2023	4/1/2024	5	275	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 69,000; Non-Residential Outdoor: 23,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	227.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	19.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0246	0.0000	0.0246	3.7300e-003	0.0000	3.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
Total	0.0169	0.1662	0.1396	2.4000e-004	0.0246	8.3800e-003	0.0330	3.7300e-003	7.8300e-003	0.0116	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.1000e-004	0.0292	7.2400e-003	9.0000e-005	1.9500e-003	8.0000e-005	2.0300e-003	5.4000e-004	8.0000e-005	6.1000e-004	0.0000	8.5492	8.5492	5.9000e-004	0.0000	8.5640
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.9000e-004	4.5300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2404	1.2404	3.0000e-005	0.0000	1.2413
Total	1.4300e-003	0.0296	0.0118	1.0000e-004	3.3700e-003	9.0000e-005	3.4700e-003	9.2000e-004	9.0000e-005	1.0000e-003	0.0000	9.7896	9.7896	6.2000e-004	0.0000	9.8052

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.6000e-003	0.0000	9.6000e-003	1.4500e-003	0.0000	1.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.1210	0.1542	2.4000e-004		7.1800e-003	7.1800e-003		7.1800e-003	7.1800e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119
Total	5.6200e-003	0.1210	0.1542	2.4000e-004	9.6000e-003	7.1800e-003	0.0168	1.4500e-003	7.1800e-003	8.6300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.1000e-004	0.0292	7.2400e-003	9.0000e-005	1.3600e-003	8.0000e-005	1.4500e-003	3.9000e-004	8.0000e-005	4.7000e-004	0.0000	8.5492	8.5492	5.9000e-004	0.0000	8.5640
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.9000e-004	4.5300e-003	1.0000e-005	9.3000e-004	1.0000e-005	9.4000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	1.2404	1.2404	3.0000e-005	0.0000	1.2413
Total	1.4300e-003	0.0296	0.0118	1.0000e-004	2.2900e-003	9.0000e-005	2.3900e-003	6.5000e-004	9.0000e-005	7.4000e-004	0.0000	9.7896	9.7896	6.2000e-004	0.0000	9.8052

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	5.8000e-003	5.1000e-004	6.3100e-003	2.9500e-003	4.7000e-004	3.4200e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0735	0.0735	0.0000	0.0000	0.0736
Total	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0735	0.0735	0.0000	0.0000	0.0736

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2600e-003	0.0000	2.2600e-003	1.1500e-003	0.0000	1.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	8.4100e-003	9.8200e-003	2.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	4.2000e-004	8.4100e-003	9.8200e-003	2.0000e-005	2.2600e-003	3.7000e-004	2.6300e-003	1.1500e-003	3.7000e-004	1.5200e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0735	0.0735	0.0000	0.0000	0.0736
Total	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0735	0.0735	0.0000	0.0000	0.0736

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8700e-003	0.0204	0.0111	3.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	2.4762	2.4762	8.0000e-004	0.0000	2.4962
Total	1.8700e-003	0.0204	0.0111	3.0000e-005	9.8300e-003	8.4000e-004	0.0107	5.0500e-003	7.7000e-004	5.8200e-003	0.0000	2.4762	2.4762	8.0000e-004	0.0000	2.4962

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.1000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1471	0.1471	0.0000	0.0000	0.1472
Total	6.0000e-005	4.0000e-005	5.1000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1471	0.1471	0.0000	0.0000	0.1472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8300e-003	0.0000	3.8300e-003	1.9700e-003	0.0000	1.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9000e-004	0.0138	0.0162	3.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	2.4762	2.4762	8.0000e-004	0.0000	2.4962
Total	6.9000e-004	0.0138	0.0162	3.0000e-005	3.8300e-003	6.2000e-004	4.4500e-003	1.9700e-003	6.2000e-004	2.5900e-003	0.0000	2.4762	2.4762	8.0000e-004	0.0000	2.4962

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1471	0.1471	0.0000	0.0000	0.1472
Total	6.0000e-005	4.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1471	0.1471	0.0000	0.0000	0.1472

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1592	1.2237	1.3179	2.3000e-003		0.0538	0.0538		0.0519	0.0519	0.0000	189.7711	189.7711	0.0322	0.0000	190.5767
Total	0.1592	1.2237	1.3179	2.3000e-003		0.0538	0.0538		0.0519	0.0519	0.0000	189.7711	189.7711	0.0322	0.0000	190.5767

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8100e-003	0.0592	0.0190	2.0000e-004	5.2700e-003	7.0000e-005	5.3400e-003	1.5200e-003	7.0000e-005	1.5900e-003	0.0000	19.7867	19.7867	1.0800e-003	0.0000	19.8136
Worker	7.5300e-003	5.4300e-003	0.0636	2.0000e-004	0.0218	1.7000e-004	0.0219	5.7800e-003	1.6000e-004	5.9300e-003	0.0000	18.2515	18.2515	4.7000e-004	0.0000	18.2633
Total	9.3400e-003	0.0647	0.0826	4.0000e-004	0.0270	2.4000e-004	0.0273	7.3000e-003	2.3000e-004	7.5200e-003	0.0000	38.0382	38.0382	1.5500e-003	0.0000	38.0769

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1135	1.1774	1.4653	2.3000e-003		0.0617	0.0617		0.0617	0.0617	0.0000	189.7709	189.7709	0.0322	0.0000	190.5765
Total	0.1135	1.1774	1.4653	2.3000e-003		0.0617	0.0617		0.0617	0.0617	0.0000	189.7709	189.7709	0.0322	0.0000	190.5765

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8100e-003	0.0592	0.0190	2.0000e-004	3.7800e-003	7.0000e-005	3.8400e-003	1.1500e-003	7.0000e-005	1.2200e-003	0.0000	19.7867	19.7867	1.0800e-003	0.0000	19.8136
Worker	7.5300e-003	5.4300e-003	0.0636	2.0000e-004	0.0142	1.7000e-004	0.0144	3.9300e-003	1.6000e-004	4.0800e-003	0.0000	18.2515	18.2515	4.7000e-004	0.0000	18.2633
Total	9.3400e-003	0.0647	0.0826	4.0000e-004	0.0180	2.4000e-004	0.0182	5.0800e-003	2.3000e-004	5.3000e-003	0.0000	38.0382	38.0382	1.5500e-003	0.0000	38.0769

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0469	0.3651	0.4131	7.3000e-004		0.0149	0.0149		0.0144	0.0144	0.0000	59.9317	59.9317	9.9800e-003	0.0000	60.1812
Total	0.0469	0.3651	0.4131	7.3000e-004		0.0149	0.0149		0.0144	0.0144	0.0000	59.9317	59.9317	9.9800e-003	0.0000	60.1812

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0186	5.8100e-003	6.0000e-005	1.6600e-003	2.0000e-005	1.6800e-003	4.8000e-004	2.0000e-005	5.0000e-004	0.0000	6.2235	6.2235	3.4000e-004	0.0000	6.2319
Worker	2.2500e-003	1.5600e-003	0.0187	6.0000e-005	6.8700e-003	5.0000e-005	6.9200e-003	1.8200e-003	5.0000e-005	1.8700e-003	0.0000	5.5849	5.5849	1.4000e-004	0.0000	5.5883
Total	2.8100e-003	0.0202	0.0245	1.2000e-004	8.5300e-003	7.0000e-005	8.6000e-003	2.3000e-003	7.0000e-005	2.3700e-003	0.0000	11.8084	11.8084	4.8000e-004	0.0000	11.8202

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0340	0.3679	0.4613	7.3000e-004		0.0187	0.0187		0.0187	0.0187	0.0000	59.9316	59.9316	9.9800e-003	0.0000	60.1812
Total	0.0340	0.3679	0.4613	7.3000e-004		0.0187	0.0187		0.0187	0.0187	0.0000	59.9316	59.9316	9.9800e-003	0.0000	60.1812

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0186	5.8100e-003	6.0000e-005	1.1900e-003	2.0000e-005	1.2100e-003	3.6000e-004	2.0000e-005	3.8000e-004	0.0000	6.2235	6.2235	3.4000e-004	0.0000	6.2319
Worker	2.2500e-003	1.5600e-003	0.0187	6.0000e-005	4.4900e-003	5.0000e-005	4.5400e-003	1.2400e-003	5.0000e-005	1.2900e-003	0.0000	5.5849	5.5849	1.4000e-004	0.0000	5.5883
Total	2.8100e-003	0.0202	0.0245	1.2000e-004	5.6800e-003	7.0000e-005	5.7500e-003	1.6000e-003	7.0000e-005	1.6700e-003	0.0000	11.8084	11.8084	4.8000e-004	0.0000	11.8202

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0674	0.6516	0.9199	1.4200e-003		0.0322	0.0322		0.0297	0.0297	0.0000	123.0219	123.0219	0.0390	0.0000	123.9968
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0674	0.6516	0.9199	1.4200e-003		0.0322	0.0322		0.0297	0.0297	0.0000	123.0219	123.0219	0.0390	0.0000	123.9968

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1500e-003	3.7200e-003	0.0435	1.4000e-004	0.0149	1.2000e-004	0.0150	3.9500e-003	1.1000e-004	4.0600e-003	0.0000	12.4879	12.4879	3.2000e-004	0.0000	12.4959
Total	5.1500e-003	3.7200e-003	0.0435	1.4000e-004	0.0149	1.2000e-004	0.0150	3.9500e-003	1.1000e-004	4.0600e-003	0.0000	12.4879	12.4879	3.2000e-004	0.0000	12.4959

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0334	0.6939	1.0295	1.4200e-003		0.0404	0.0404		0.0404	0.0404	0.0000	123.0217	123.0217	0.0390	0.0000	123.9967
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0334	0.6939	1.0295	1.4200e-003		0.0404	0.0404		0.0404	0.0404	0.0000	123.0217	123.0217	0.0390	0.0000	123.9967

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1500e-003	3.7200e-003	0.0435	1.4000e-004	9.7300e-003	1.2000e-004	9.8400e-003	2.6900e-003	1.1000e-004	2.7900e-003	0.0000	12.4879	12.4879	3.2000e-004	0.0000	12.4959
Total	5.1500e-003	3.7200e-003	0.0435	1.4000e-004	9.7300e-003	1.2000e-004	9.8400e-003	2.6900e-003	1.1000e-004	2.7900e-003	0.0000	12.4879	12.4879	3.2000e-004	0.0000	12.4959

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0204	0.1934	0.2912	4.5000e-004		9.2700e-003	9.2700e-003		8.5600e-003	8.5600e-003	0.0000	38.8544	38.8544	0.0123	0.0000	39.1624
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0204	0.1934	0.2912	4.5000e-004		9.2700e-003	9.2700e-003		8.5600e-003	8.5600e-003	0.0000	38.8544	38.8544	0.0123	0.0000	39.1624

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5400e-003	1.0700e-003	0.0128	4.0000e-005	4.7000e-003	4.0000e-005	4.7400e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	3.8213	3.8213	9.0000e-005	0.0000	3.8236
Total	1.5400e-003	1.0700e-003	0.0128	4.0000e-005	4.7000e-003	4.0000e-005	4.7400e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	3.8213	3.8213	9.0000e-005	0.0000	3.8236

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0105	0.2191	0.3251	4.5000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	38.8544	38.8544	0.0123	0.0000	39.1623
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0105	0.2191	0.3251	4.5000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	38.8544	38.8544	0.0123	0.0000	39.1623

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5400e-003	1.0700e-003	0.0128	4.0000e-005	3.0700e-003	4.0000e-005	3.1100e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	3.8213	3.8213	9.0000e-005	0.0000	3.8236
Total	1.5400e-003	1.0700e-003	0.0128	4.0000e-005	3.0700e-003	4.0000e-005	3.1100e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	3.8213	3.8213	9.0000e-005	0.0000	3.8236

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1620					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0200	0.1362	0.1893	3.1000e-004		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	26.6815	26.6815	1.6000e-003	0.0000	26.7214
Total	0.1821	0.1362	0.1893	3.1000e-004		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	26.6815	26.6815	1.6000e-003	0.0000	26.7214

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.1400e-003	0.0134	4.0000e-005	4.5800e-003	4.0000e-005	4.6200e-003	1.2200e-003	3.0000e-005	1.2500e-003	0.0000	3.8424	3.8424	1.0000e-004	0.0000	3.8449
Total	1.5900e-003	1.1400e-003	0.0134	4.0000e-005	4.5800e-003	4.0000e-005	4.6200e-003	1.2200e-003	3.0000e-005	1.2500e-003	0.0000	3.8424	3.8424	1.0000e-004	0.0000	3.8449

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1620					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0200	0.1362	0.1893	3.1000e-004		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	26.6815	26.6815	1.6000e-003	0.0000	26.7214
Total	0.1821	0.1362	0.1893	3.1000e-004		7.4000e-003	7.4000e-003		7.4000e-003	7.4000e-003	0.0000	26.6815	26.6815	1.6000e-003	0.0000	26.7214

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.1400e-003	0.0134	4.0000e-005	2.9900e-003	4.0000e-005	3.0300e-003	8.3000e-004	3.0000e-005	8.6000e-004	0.0000	3.8424	3.8424	1.0000e-004	0.0000	3.8449
Total	1.5900e-003	1.1400e-003	0.0134	4.0000e-005	2.9900e-003	4.0000e-005	3.0300e-003	8.3000e-004	3.0000e-005	8.6000e-004	0.0000	3.8424	3.8424	1.0000e-004	0.0000	3.8449

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9700e-003	0.0402	0.0597	1.0000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	8.4257	8.4257	4.7000e-004	0.0000	8.4376
Total	0.0571	0.0402	0.0597	1.0000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	8.4257	8.4257	4.7000e-004	0.0000	8.4376

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.3000e-004	3.9400e-003	1.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1758	1.1758	3.0000e-005	0.0000	1.1765
Total	4.7000e-004	3.3000e-004	3.9400e-003	1.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1758	1.1758	3.0000e-005	0.0000	1.1765

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9700e-003	0.0402	0.0597	1.0000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	8.4257	8.4257	4.7000e-004	0.0000	8.4376
Total	0.0571	0.0402	0.0597	1.0000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	8.4257	8.4257	4.7000e-004	0.0000	8.4376

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.3000e-004	3.9400e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.6000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	1.1758	1.1758	3.0000e-005	0.0000	1.1765
Total	4.7000e-004	3.3000e-004	3.9400e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.6000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	1.1758	1.1758	3.0000e-005	0.0000	1.1765

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850

5.0 Energy Detail

Historical Energy Use: N

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1876	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003
Unmitigated	0.1876	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1662					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003
Total	0.1876	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1662					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003
Total	0.1876	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2200e-003

7.0 Water Detail

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Pierce College 2018 Master Plan Update - Industrial Tech Building - Los Angeles-South Coast County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

**Pierce College 2018 Master Plan Update - Child Development Academic Facility
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	10.50	1000sqft	0.24	10,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Completion of Child Development Facility per LAACD. Building construction, paving, and painting assumed to occur simultaneously

Demolition -

Vehicle Trips - Construction model only

Energy Use - Construction model only

Water And Wastewater - Construction model only

Solid Waste - Construction model only

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 & EIR Mitigation measure AQ-2

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	158.00
tblConstructionPhase	NumDays	100.00	158.00
tblConstructionPhase	NumDays	5.00	158.00
tblConstructionPhase	PhaseEndDate	10/25/2019	10/8/2024
tblConstructionPhase	PhaseEndDate	10/11/2019	10/8/2024
tblConstructionPhase	PhaseEndDate	5/21/2019	10/20/2023

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

tblConstructionPhase	PhaseEndDate	5/24/2019	10/25/2023
tblConstructionPhase	PhaseEndDate	10/18/2019	10/8/2024
tblConstructionPhase	PhaseEndDate	5/22/2019	10/23/2023
tblConstructionPhase	PhaseStartDate	10/19/2019	3/1/2024
tblConstructionPhase	PhaseStartDate	5/25/2019	3/1/2024
tblConstructionPhase	PhaseStartDate	5/8/2019	10/8/2023
tblConstructionPhase	PhaseStartDate	5/23/2019	10/24/2023
tblConstructionPhase	PhaseStartDate	10/12/2019	3/1/2024
tblConstructionPhase	PhaseStartDate	5/22/2019	10/21/2023
tblEnergyUse	LightingElect	3.39	0.00
tblEnergyUse	NT24E	3.59	0.00
tblEnergyUse	NT24NG	0.59	0.00
tblEnergyUse	T24E	3.04	0.00
tblEnergyUse	T24NG	26.49	0.00
tblSolidWaste	SolidWasteGenerationRate	13.65	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	515,014.84	0.00
tblWater	OutdoorWaterUseRate	805,536.03	0.00

2.0 Emissions Summary

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
18	8-8-2023	11-7-2023	0.0447	0.0420
20	2-8-2024	5-7-2024	0.3567	0.3325
21	5-8-2024	8-7-2024	0.4824	0.4496
22	8-8-2024	9-30-2024	0.2831	0.2639
		Highest	0.4824	0.4496

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0428	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0428	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0428	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0428	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/8/2023	10/20/2023	5	10	
2	Site Preparation	Site Preparation	10/21/2023	10/23/2023	5	1	
3	Grading	Grading	10/24/2023	10/25/2023	5	2	
4	Building Construction	Building Construction	3/1/2024	10/8/2024	5	158	
5	Paving	Paving	3/1/2024	10/8/2024	5	158	
6	Architectural Coating	Architectural Coating	3/1/2024	10/8/2024	5	158	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 15,750; Non-Residential Outdoor: 5,250; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	34.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	4.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6600e-003	0.0000	3.6600e-003	5.5000e-004	0.0000	5.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003		1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	3.2300e-003	0.0289	0.0370	6.0000e-005	3.6600e-003	1.4100e-003	5.0700e-003	5.5000e-004	1.3500e-003	1.9000e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.8700e-003	9.8000e-004	1.0000e-005	2.9000e-004	1.0000e-005	3.0000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	1.2272	1.2272	8.0000e-005	0.0000	1.2292
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.6000e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4596	0.4596	1.0000e-005	0.0000	0.4599
Total	2.8000e-004	3.0100e-003	2.5800e-003	2.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	1.6868	1.6868	9.0000e-005	0.0000	1.6891

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4300e-003	0.0000	1.4300e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	0.0298	0.0397	6.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	1.3300e-003	0.0298	0.0397	6.0000e-005	1.4300e-003	2.0100e-003	3.4400e-003	2.2000e-004	2.0100e-003	2.2300e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.8700e-003	9.8000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	1.2272	1.2272	8.0000e-005	0.0000	1.2292
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.6000e-003	1.0000e-005	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.4596	0.4596	1.0000e-005	0.0000	0.4599
Total	2.8000e-004	3.0100e-003	2.5800e-003	2.0000e-005	5.6000e-004	1.0000e-005	5.7000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	1.6868	1.6868	9.0000e-005	0.0000	1.6891

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	2.7000e-004	3.0900e-003	1.9600e-003	0.0000	2.7000e-004	1.1000e-004	3.8000e-004	3.0000e-005	1.0000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0230	0.0230	0.0000	0.0000	0.0230
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0230	0.0230	0.0000	0.0000	0.0230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-004	0.0000	1.0000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-004	2.4400e-003	2.9300e-003	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	1.2000e-004	2.4400e-003	2.9300e-003	0.0000	1.0000e-004	1.2000e-004	2.2000e-004	1.0000e-005	1.2000e-004	1.3000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0230	0.0230	0.0000	0.0000	0.0230
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0230	0.0230	0.0000	0.0000	0.0230

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-004	5.7800e-003	7.3900e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.7000e-004	2.7000e-004	0.0000	1.0418	1.0418	1.9000e-004	0.0000	1.0466
Total	6.5000e-004	5.7800e-003	7.3900e-003	1.0000e-005	7.5000e-004	2.8000e-004	1.0300e-003	4.1000e-004	2.7000e-004	6.8000e-004	0.0000	1.0418	1.0418	1.9000e-004	0.0000	1.0466

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0920
Total	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0920

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9000e-004	0.0000	2.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	1.0418	1.0418	1.9000e-004	0.0000	1.0466
Total	2.7000e-004	5.9600e-003	7.9400e-003	1.0000e-005	2.9000e-004	4.0000e-004	6.9000e-004	1.6000e-004	4.0000e-004	5.6000e-004	0.0000	1.0418	1.0418	1.9000e-004	0.0000	1.0466

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0920
Total	4.0000e-005	3.0000e-005	3.2000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0920

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0470	0.4719	0.5583	9.0000e-004		0.0223	0.0223		0.0205	0.0205	0.0000	79.1915	79.1915	0.0256	0.0000	79.8318
Total	0.0470	0.4719	0.5583	9.0000e-004		0.0223	0.0223		0.0205	0.0205	0.0000	79.1915	79.1915	0.0256	0.0000	79.8318

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0112	3.4800e-003	4.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	3.7247	3.7247	2.0000e-004	0.0000	3.7297
Worker	1.1400e-003	7.9000e-004	9.4300e-003	3.0000e-005	3.4600e-003	3.0000e-005	3.4900e-003	9.2000e-004	2.0000e-005	9.4000e-004	0.0000	2.8147	2.8147	7.0000e-005	0.0000	2.8164
Total	1.4700e-003	0.0119	0.0129	7.0000e-005	4.4600e-003	4.0000e-005	4.5000e-003	1.2100e-003	3.0000e-005	1.2400e-003	0.0000	6.5394	6.5394	2.7000e-004	0.0000	6.5461

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0221	0.4842	0.6290	9.0000e-004		0.0305	0.0305		0.0305	0.0305	0.0000	79.1914	79.1914	0.0256	0.0000	79.8317
Total	0.0221	0.4842	0.6290	9.0000e-004		0.0305	0.0305		0.0305	0.0305	0.0000	79.1914	79.1914	0.0256	0.0000	79.8317

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3000e-004	0.0112	3.4800e-003	4.0000e-005	7.1000e-004	1.0000e-005	7.3000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	3.7247	3.7247	2.0000e-004	0.0000	3.7297
Worker	1.1400e-003	7.9000e-004	9.4300e-003	3.0000e-005	2.2600e-003	3.0000e-005	2.2900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.8147	2.8147	7.0000e-005	0.0000	2.8164
Total	1.4700e-003	0.0119	0.0129	7.0000e-005	2.9700e-003	4.0000e-005	3.0200e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	6.5394	6.5394	2.7000e-004	0.0000	6.5461

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0466	0.4131	0.5555	8.9000e-004		0.0192	0.0192		0.0179	0.0179	0.0000	74.2648	74.2648	0.0216	0.0000	74.8056
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0466	0.4131	0.5555	8.9000e-004		0.0192	0.0192		0.0179	0.0179	0.0000	74.2648	74.2648	0.0216	0.0000	74.8056

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1100e-003	3.5500e-003	0.0424	1.4000e-004	0.0156	1.2000e-004	0.0157	4.1400e-003	1.1000e-004	4.2500e-003	0.0000	12.6663	12.6663	3.1000e-004	0.0000	12.6740
Total	5.1100e-003	3.5500e-003	0.0424	1.4000e-004	0.0156	1.2000e-004	0.0157	4.1400e-003	1.1000e-004	4.2500e-003	0.0000	12.6663	12.6663	3.1000e-004	0.0000	12.6740

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0177	0.3759	0.5453	8.9000e-004		0.0230	0.0230		0.0230	0.0230	0.0000	74.2647	74.2647	0.0216	0.0000	74.8055
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0177	0.3759	0.5453	8.9000e-004		0.0230	0.0230		0.0230	0.0230	0.0000	74.2647	74.2647	0.0216	0.0000	74.8055

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1100e-003	3.5500e-003	0.0424	1.4000e-004	0.0102	1.2000e-004	0.0103	2.8100e-003	1.1000e-004	2.9200e-003	0.0000	12.6663	12.6663	3.1000e-004	0.0000	12.6740
Total	5.1100e-003	3.5500e-003	0.0424	1.4000e-004	0.0102	1.2000e-004	0.0103	2.8100e-003	1.1000e-004	2.9200e-003	0.0000	12.6663	12.6663	3.1000e-004	0.0000	12.6740

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0143	0.0963	0.1430	2.3000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	20.1707	20.1707	1.1400e-003	0.0000	20.1991
Total	0.0630	0.0963	0.1430	2.3000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	20.1707	20.1707	1.1400e-003	0.0000	20.1991

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.0000e-004	2.3600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7037	0.7037	2.0000e-005	0.0000	0.7041
Total	2.8000e-004	2.0000e-004	2.3600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7037	0.7037	2.0000e-005	0.0000	0.7041

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0143	0.0963	0.1430	2.3000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	20.1707	20.1707	1.1400e-003	0.0000	20.1991
Total	0.0630	0.0963	0.1430	2.3000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	20.1707	20.1707	1.1400e-003	0.0000	20.1991

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.0000e-004	2.3600e-003	1.0000e-005	5.7000e-004	1.0000e-005	5.7000e-004	1.6000e-004	1.0000e-005	1.6000e-004	0.0000	0.7037	0.7037	2.0000e-005	0.0000	0.7041
Total	2.8000e-004	2.0000e-004	2.3600e-003	1.0000e-005	5.7000e-004	1.0000e-005	5.7000e-004	1.6000e-004	1.0000e-005	1.6000e-004	0.0000	0.7037	0.7037	2.0000e-005	0.0000	0.7041

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850

5.0 Energy Detail

Historical Energy Use: N

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0428	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004
Unmitigated	0.0428	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0379					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004
Total	0.0428	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0379					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004
Total	0.0428	0.0000	1.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e-004	2.6000e-004	0.0000	0.0000	2.8000e-004

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Pierce College 2018 Master Plan Update - Child Development Academic Facility - Los Angeles-South Coast County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation
