

BID AND CONTRACT DOCUMENTS

FOR

BID No. 2022PW01

**CHAFFEY COMMUNITY COLLEGE DISTRICT
Chino Instructional Building**

January 11, 2022



Chaffey College

CHAFFEY COMMUNITY COLLEGE DISTRICT
5885 Haven Avenue
Rancho Cucamonga, CA 91737

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* All documents are included in the Contract with the OWNER.

2. PROJECT DIRECTORY

REQUESTS FOR CLARIFICATION/ INTERPRETATION:

Measure P Bond Team
CHAFFEY COMMUNITY COLLEGE DISTRICT
5885 Haven Avenue
Rancho Cucamonga, CA 91737
Phone: (909) 652-6171

Contact: Samir Shah/Bond Program Manager

**** See PlanetBids for RFC/I submission****

OWNER:

CHAFFEY COMMUNITY COLLEGE DISTRICT
5885 Haven Avenue
Rancho Cucamonga, CA 91737
Phone: (909) 652-6021
Fax: (909) 652-6704

Contact: Kim Erickson,
Executive Director, Business Services

PROJECT MANAGER/ CONSTRUCTION MANAGER:

Measure P Bond Team
CHAFFEY COMMUNITY COLLEGE DISTRICT
5885 Haven Avenue
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Phone: 909-652-6171

Contact: Rafael Quezon,
Sr. Construction Manager

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Project Manager

LANDSCAPE
ARCHITECT - EPT DESIGN
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Pasadena, CA 91101
Telephone: (626) 795-2008

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Project Manager

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ENGINEER - SAILFUL/BOUQUET
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Pasadena, CA 91101
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ENGINEER -

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15760 Ventura Blvd., Suite 1902
Encino, CA 91736
Telephone: (323) 825-9955

Ehsan Daryaram
Associate

ELECTRICAL
ENGINEER -

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15760 Ventura Blvd., Suite 1902
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Ehsan Daryaram
Associate

FIRE
PROTECTION -

PACIFIC FIRE ENGINEERING
4214 Floyd St.,
Corona, CA 92883
Telephone: (951) 427-3781

Stephen Bishop
Project Manager

AV/IT -

WAVEGUIDE, LLC
6060 Center Dr., Ste 870
Los Angeles, CA 90045
Telephone: (310) 213-0112

Brandon Mosst
Project Manager

SECURITY - SIEMENS INDUSTRY, INC.
6141 Katella Ave.,
Cypress, CA 90630
Telephone: (657) 298-0112

Gregory Binder
Senior Account Executive

3. NOTICE INVITING BIDS

The **Chaffey Community College District** ("OWNER") will receive sealed bids for its **Bid No. 2022PW01, Project - Chino Instructional Building**. The Project involves an approximate 35,000 GSF building ("Instructional Building 1") to be used primarily for classroom instruction and faculty offices as well as restrooms, staff break room and a mother's room. The building will have a footprint of approximately 23,540 square feet and includes two stories. The ground floor will have a library that includes student meeting rooms and a large study area, 3,000 square foot meeting room, and restroom facilities. The second floor will have additional classrooms, conference room, staff lounge/break room and faculty offices. Outdoor amenities include pedestrian walkways and bicycle racks as well as installation of a signagewall, landscape, two bio-retention basins, security lighting, and infrastructure improvements, and is located in the **city of Chino, County of San Bernardino, California**. The Project must be completed within the Completion Time, as provided in the Bid and Contract Documents. Bidders are strongly encouraged to review the Bid and Contract Documents for more complete information regarding the Project and construction cost. The architect/engineer's estimate for this Work is Twenty-Five Million dollars (\$25M).

Bid and Contract Documents will be available through OWNER's PlanetBids Vendor Portal beginning January 11, 2022. OWNER's PlanetBids Vendor Portal can be accessed on the OWNER's webpage at <https://www.chaffey.edu/purchasing/bids/index.php> or directly at <https://www.planetbids.com/portal/portal.cfm?CompanyID=43704>. Bidders must be registered through PlanetBids to view and download the documents. Bidders are responsible for ensuring that they have viewed/downloaded all documentation including any addenda. There is no charge to register with PlanetBids.

A mandatory pre-bid meeting and job walk for prime contractors will be held on **January 20, 2022, at 10:00 AM, at Chaffey College, Chino Campus, 5897 College Park Ave., Chino, CA 91710**. Please email Donna Sandoval at donna.sandoval@chaffey.edu in advance for directions and a temporary parking permit.

Bids must be electronically submitted through PlanetBids on the Bid Forms available on the PlanetBids portal. **All Bids must be submitted no later than 2:00 PM on February 22, 2022 (the Bid SUBMISSION Deadline), through OWNER's PlanetBids Vendor Portal(see above for links to web address)**. Any bidder who fails to submit its documentation by the above date and time or in any manner other than through OWNER's PlanetBids Vendor Portal shall have its bid rejected. OWNER reserves the right to reject any or all bids, to waive any informality or irregularity in any bid received, and to be the sole judge of the merits of all bids received. Bidder is solely responsible for familiarizing itself with all the necessary steps to ensure that its bid is uploaded, transmitted and submitted electronically correctly within the stipulated deadline for submission of bids. **OWNER bears no responsibility for bids that do not arrive in a timely manner, pursuant to the requirements of the Bid and Contract Documents, no matter what the reason including, without limitation, technical difficulties in uploading the bid to Owner's PlanetBids Vendor Portal.**

Bids shall be valid for **sixty (60) days** after the Bid Opening Deadline. Bids must be accompanied by cash, a certified or cashier's check, or a Bid Bond in favor of the OWNER in an amount not less than ten percent (10%) of the submitted Total Bid Price. Prior to award of the Contract, the successful bidder will be required to furnish a Performance Bond and a Payment Bond, each in the amount of one hundred percent (100%) of the Total Bid Price, on the forms provided and, in the manner, described in the Bid and Contract Documents. Bidders shall comply with California Public Contract Code Section 4108 with respect to subcontractor bond requirements.

Pursuant to California Business and Professions Code Section 7028.15 and Public Contract Code Section 3300, bidders shall possess one or more of the following California Contractor's license(s) at the time of the Bid Opening in order to perform the Work: **B**. Subcontractors must possess the appropriate licenses for each specialty subcontracted.

Pursuant to Labor Code Section 1773, OWNER has obtained the prevailing rate of per diem wages and the prevailing wage rate for holiday and overtime work applicable in San Bernardino County from the Director of the Department of Industrial Relations for each craft, classification, or type of worker needed to execute this contract. A copy of these prevailing wage rates may be obtained via the internet at: www.dir.ca.gov/dlsr/. In addition, a copy of the prevailing rate of per diem wages is available at the OWNER's Purchasing Services Office and shall be made available to interested parties upon request. The successful Bidder shall post a copy of the prevailing wage rates at each job site. It shall be mandatory upon the Bidder to whom the Contract is awarded, and upon any subcontractors, to comply with all Labor Code provisions, which include but are not limited to the payment of not less than the said specified prevailing wage rates to all workers employed by them in the execution of the Contract, employment of apprentices, hours of labor and debarment of contractors and subcontractors.

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No Bid will be accepted, nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this Project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its Bid.

Substitution requests shall be made within 5 calendar days after notice of award of the contract has been sent to the successful Bidder. Pursuant to Public Contract Code Section 3400(b), the OWNER may make findings designating that certain additional materials, methods or services by specific brand or trade name other than those listed in the standard specifications be used for the Project. Such findings, if any, as well as the materials, methods or services and their specific brand or trade names that must be used for the Project may be found in the Special Conditions.

Pursuant to Public Contract Code section 7201, the OWNER has made a determination that the project described herein is substantially complex, and therefore a retention of (five) 5 % will be withheld from payment until after the work is complete.

The OWNER has prequalified general contractors for this Project. Bids will only be accepted from contractor's included on the OWNER's Approved Bidders List as listed below. If a bid is submitted by a contractor other than the prequalified contractors listed below, the bid will be automatically rejected and returned without review. The following contractors have been prequalified by the OWNER:

AMG & Associates

Erickson Hall Construction

Icon West Inc.

McCarthy Building Co.

Neff Construction

PCL Construction

Pinner Construction

SJ Amoroso

Skanska

Swinerton Construction

W.E. O'Neil Construction

OWNER shall award the contract for the Project to the lowest responsible Bidder submitting a responsive bid as determined by the OWNER from the BASEBID ALONE. OWNER reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

By submitting a bid, the Bidder acknowledges and agrees it is aware of and taken such into account in preparing its bid. Any conditions, caveats, or force majeure notices submitted with a bid will not be accepted and may result in a determination that the bid is non-responsive. Any such conditions, caveats, or notices submitted after award may result in the forfeiture of Bidder's bid security and award to the next lowest responsible bidder submitting a responsive bid. Bidders shall comply with all local, state and federal requirements and best practices associated with the COVID-19 pandemic, including but not limited to orders and guidance of the California Department of Public Health, orders and guidelines of Cal/OSHA, orders of the public health officer of the County of San Bernardino and requirements promulgated under federal laws, rules and regulations. The

costs of adhering to and complying with such COVID-19 safety measures shall be the responsibility of each Bidder and shall be included and incorporated into their respective bids. No separate payment is owed or will be made by OWNER to the successful Bidder for costs associated the foregoing.

Pursuant to California Public Contract Code Section 22300, the successful Bidder, at its request and expense, may substitute securities equivalent to monies withheld by OWNER.

**CHAFFEY COMMUNITY COLLEGE DISTRICT
RANCHO CUCAMONGA, CALIFORNIA**

By: Kim Erickson, Executive Director, Business Services

Published: January 11, 2022

4. INSTRUCTIONS TO BIDDERS

All Bids must be made in accordance with these Instructions to Bidders ("ITB"). Unless specifically noted, capitalized terms are used as defined in the General Conditions, found in the Contract Appendix. All terms defined in the General Conditions which occur in the Bid and Contract Documents shall have meanings as defined therein.

1. AVAILABILITY OF BID DOCUMENTS

Bids must be submitted to the Chaffey Community College District (hereinafter referred to as the "OWNER") on the Bid Forms which are a part of the Bid and Contract Documents for the Project. All bids must be submitted **electronically** by no later than the submission deadline set forth in the Notice Inviting Bids via the OWNER's PlanetBids Vendor Portal (see Notice Inviting Bids for access instructions). Prospective bidders may obtain sets of Bid and Contract Documents as specified in the Notice Inviting Bids.

2. EXAMINATION OF BID DOCUMENTS

The OWNER has made copies of the Bid and Contract Documents available, as indicated above. Bidders shall be solely responsible for examining the Project Site and the Bid and Contract Documents, including any Addenda issued during the bidding period, and for informing itself with respect to local labor availability, means of transportation, necessity for security, laws and codes, local permit requirements, wage scales, local tax structure, contractors' licensing requirements, availability of required insurance, and other factors that could affect the Work. Bidders are responsible for consulting the standards referenced in the Contract, including Subpart "M" of the Contract Appendix, entitled Specifications. Failure of Bidder to so examine and inform itself shall be at its sole risk, and no relief for error or omission will be given except as required under State law.

3. INTERPRETATION OF BID DOCUMENTS

The DEADLINE to submit requests for interpretation or clarification for responses to be included in the final addendum is 2:00 PM on February 4, 2022.

Any request for an interpretation or clarification of the Bid and Contract Documents must be submitted electronically via the "Q&A" function accessible through OWNER's PlanetBids Vendor Portal. Responses and/or Addenda from the OWNER will be posted on the OWNER's PlanetBids Vendor Portal. OWNER reserves the right to respond to all written/faxed Bidders' inquiries received at least seventy two (72) hours before the scheduled bid opening date for which, in its sole judgment, a response is in the best interest of the OWNER. Where such interpretation or clarification requires a change in the Bid and Contract Documents, the OWNER will prepare and issue an Addendum to the Bid and Contract Documents. The OWNER shall not be bound by, and Bidder shall not rely upon, any oral interpretation or clarification of the Bid and Contract Documents.

4. INSPECTION OF SITE; PRE-BID CONFERENCE AND JOB WALK

Each prospective bidder is responsible for fully acquainting himself with the conditions of the Project Site, as well as those relating to the construction

and labor of the Project, to fully understand the facilities, difficulties and restrictions which may impact the total and adequate completion of the Project. To this end, a Pre-Bid Meeting and Job Walk will be held on the date(s) and time(s) indicated in the Notice Inviting Bids. One or more additional job walks may be arranged on other date(s), but bidders should attend on the scheduled date, since there is no guarantee that additional job walks will be scheduled. Prospective bidders shall not visit the Site without making arrangements through OWNER'S Purchasing Services Office.

The OWNER expects that each contractor submitting a bid for this Project (a) is satisfied as to the conditions affecting the work, (b) has taken whatever measurements and/or gathered all information sufficient to properly bid the Project, (c) understands the facilities, difficulties and restrictions which may impact the total and adequate completion of the Project, and (d) receives clarification on any bidding and contracting requirements applicable to this Project. No allowance for lack of knowledge of existing conditions will be made after opening of the bids

5. ADDENDA

The OWNER reserves the right to revise the Bid and Contract Documents prior to the bid opening date. Revisions, if any, shall be made by written Addenda. Pursuant to Public Contract Code Section 4104.5, if the OWNER issues an Addendum later than 72 hours prior to the deadline for submission of bids, and the Addendum requires material changes, additions or deletions to the description of the work to be performed or the content, form or manner of submission of bids, the OWNER will extend the deadline for submission of bids by at least 72 hours. Otherwise, the OWNER may determine, in its sole discretion, whether an Addendum requires that the date set for opening bids be postponed. The announcement of the new date, if any, shall be made by Addenda. Any and all Addenda will be posted on the OWNER's PlanetBids Vendor Portal. **Please Note: Bidders are primarily and ultimately responsible for ensuring that they have received and reviewed any and all Addenda.** To this end, each Bidder should access the **OWNER's Planet Bids Vendor Portal** to verify that it has received and reviewed all Addenda issued, if any.

Bidders must acknowledge receipt of all Addenda, if any, in its Bid Form. Failure to acknowledge receipt of all Addenda may cause its Bid to be deemed incomplete and nonresponsive.

6. PREPARATION OF BIDS

Bids shall be prepared only using copies of the Bid Forms provided with the Bid and Contract Documents. The use of substitute bid forms other than clear and correct photocopies of those provided by the OWNER will not be permitted and may result in the Bid being declared nonresponsive. Bid Forms shall be executed and electronically submitted by an authorized signatory as described in elsewhere in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable). Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon.

7. ALTERNATE BIDS

The term "Alternate" means a proposed change described in the Bid and Contract Documents that may result in a change to the Contract Sum or the Completion Time, or both, but only if accepted by the OWNER in writing.

If alternate bid items are called for in the Bid and Contract Documents, the lowest bid will be determined pursuant to the basis specified in the Notice Inviting Bids. However, the OWNER may choose to award the contract for the base bid alone or the base bid and any alternate or combination of alternates, as specified in the Supplementary General Conditions. Since the time for the alternate bid items has already been factored into the Completion Time, no additional Completion Time will be awarded for any of the alternate bid items. Because the OWNER may elect to include one or more of the alternate bid items, or to otherwise remove certain bid items from the Project scope of work, each Bidder must ensure that each bid item contains a proportionate share of profit, overhead and other costs or expenses which will be incurred by the Bidder. Bidders shall not unevenly weight or allocate their overhead and profit to one or more particular bid items.

8. MODIFICATIONS OF BIDS

Each Bidder shall submit its Bid in strict conformity with the requirements of the Bid and Contract Documents. Each Bid prepared by Bidder shall be complete in itself and shall be submitted electronically in accordance with the instructions herein.

Unauthorized conditions, limitations, exclusions or provisions attached to a Bid will render it nonresponsive and cause its rejection. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms, nor make substitutions thereon. **ORAL, TELEPHONIC AND FACSIMILE BIDS OR MODIFICATIONS WILL NOT BE CONSIDERED.**

9. SIGNING OF BIDS

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders will be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it will be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

10. BID GUARANTEE (BOND)

Each bid proposal shall be accompanied by cash, a certified or cashier's check, bid bond (the form included in these Bid and Contract Documents) or equivalent substitution in lieu of a bond, as authorized by Code of Civil Procedure Section 995.710, in an amount not less than 10% of the Total Bid Price. Any check, bond, or other substitute must be made payable to the OWNER, and shall be given as a guarantee that the Bidder will enter into the Contract described in the Bid and Contract Documents if awarded the work and will provide a satisfactory Performance Bond,

Payment Bond, the required insurance certificates and endorsements, and any other certifications as may be required by the Contract. By submitting a proposal, each bidder agrees that its failure to enter the Contract if awarded the work or to provide the Bonds and other information or documentation described above would result in damage to the OWNER, and that it would be impracticable or extremely difficult to ascertain the actual amount of that damage. For this reason, each bidder agrees that the OWNER may retain the bid proposal guarantee as liquidated damages if the bidder is awarded the Work but fails or refuses to timely enter into the Contract or to provide the Bonds and other information or documentation described above, except as may otherwise be required by California law.

If electing to provide a Bid Bond, as set forth above, each Bidder must obtain such a bond from an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the OWNER. In addition, the Bid Bond must be submitted on the form furnished by the OWNER, or one substantially in conformance with the OWNER's form if previously approved in writing by the OWNER. An electronic copy of the completed Bid Bond must be included with the electronic Bid submission. The original bond must be retained by the bidder and made available to the OWNER upon request.

Certified or cashier's checks must be drawn on a solvent state bank or a California branch of a solvent national bank.

If the Bidder's security is in the form of cash, certified or cashier's check, the cash proceeds or certified/cashiers check must be submitted and received by the OWNERS Purchasing Department prior to the Bid closing date and time. Cash or certified or cashier's check received after the Bid closing date and time will result in the rejection of Bidder's Bid Proposal for non-responsiveness. The cash, certified or cashier's check may be hand delivered or **mailed with tracking** by the Bidder to the Purchasing Services Department in a sealed envelope clearly marked with the Bidder's name, Project Name and Bid Number. The envelope should be mailed to:

Chaffey Community College District
Purchasing Services Department
5885 Haven Avenue
Rancho Cucamonga, CA 91737

Hand deliveries should be delivered to the Warehouse at the address listed above.

After the OWNER has made an award to the successful Bidder, and the Bidder has signed a Contract, submitted the necessary bonds, original insurance documents, and any other certifications as may be required by the Contract, the remaining Bid guarantees shall be returned to each particular bidder within sixty (60) days from the date of award, or sooner if requested by that bidder. If the OWNER rejects all Bids, it will promptly return to all Bidders their Bid guarantees.

11. SUBMISSION OF SEALED BIDS

The Bidder must enter pricing in the electronic Bid form for any and all line items or a lump sum bid amount, as required. The pricing provided in the electronic Bid form will be the only valid bid pricing for determination of the low bid. The Bidder must attach a pfd file(s) to the electronic bid

submission containing all the completed and signed Bid Documents. Bidders experiencing any technical difficulties with the bid submission process may contact PlanetBids System Support at 818-992-1771. Neither the OWNER nor PlanetBids make any guarantee as to the timely availability of assistance, or assurance that any given problem will be resolved by the bid submission date and/or time. It is the Bidder's sole responsibility to ensure timely submission of its Bid (including the bid security required herein)

The Bidder will not be able to submit a Bid beyond the deadline for Bid submission.

12. DELIVERY AND OPENING OF BIDS

Bids will be received by the OWNER as described in the Notice Inviting Bids up to the date and time shown therein. It is the Bidder's sole responsibility to ensure that its Bid is received as stipulated. Bids may be submitted earlier than the dates(s) and time(s) indicated.

A summary of bids will be immediately available following the bid closing.

13. WITHDRAWAL OF BID

Prior to the bid opening date, an electronic Bid may be withdrawn by the Bidder via the OWNER's PlanetBids Vendor Portal at any time prior to the scheduled bid submission deadline. If a Bidder to whom the award is made fails or refuses to sign a Contract, or to furnish the bonds, certificates and endorsements required below within the time specified in these Instructions to Bidders below, the funds represented by the Bid Guarantee (cash, cashiers' check or Bid bond described above) shall be forfeited and become and remain the property of the OWNER; the amount thereof being previously agreed to by the Bidder and the surety to be due the OWNER because of the damage resulting from the delay in the execution of the Contract and in the performance of Work thereunder.

14. AWARD PROCESS

Once all the Bids are opened, they will be reviewed by the OWNER against the bid requirements per the contract documents. The Bid that meets all the requirements of the contract, including the lowest base price, shall be determined to be the lowest responsive and responsible bidder.

Once the apparent lowest responsive and responsible bidder is identified, the determination of award shall be sent first to the State Chancellor's office for approval. After State approval, the lowest responsive and responsible bid determination shall be forwarded to the Chaffey College Governing Board for approval.

The apparent lowest and responsive bidder should at this point begin to prepare the following documents:

- (1) the Contract Form;
- (2) the Performance Bond;
- (3) the Payment Bond;
- (4) certification from the County Clerk verifying, Pursuant to Code of Civil Procedure Section 995.660, that the Payment Bond surety's certificate of authority has not been surrendered, revoked, canceled, annulled or suspended or, in the event that it has been suspended, that it has been renewed;

- (5) the required insurance documents/certificates;
- (6) the Drug-Free Workplace Certification;
- (7) the Recycled Content Certification;
- (8) the Asbestos-Free Materials Certification;
- (9) a Cost Breakdown of the Base Bid Price with all alternates, if any, providing the information required per Article 9 of the General Conditions;
- (10) a preliminary Construction Schedule in accordance with Division 1 of the Specifications.

Upon both the State Chancellor's office and the Chaffey governing Board approval of the bid and a determination of award, OWNER shall issue a Notice of Award letter to the lowest responsive and responsible Bidder. The Bidder will have ten (10) calendar days from the date of receipt of the Notice of Award letter to supply the OWNER with all of the required documents and certifications. If the Bidder fails to sign and return all of the above items as required, OWNER may reject the Bidder's Bid and select the next apparent lowest responsive and responsible bidder until all bids have been exhausted or may reject all bids. The Bidders whose Bid is rejected for such failure shall be liable for all forfeit to OWNER the amount of Bidder's Bid Security.

The Completion Time will begin to run from the commencement date specified in the Notice to Proceed letter, but not sooner than ten (10) calendar days after receipt of the Notice of Award. Once the OWNER receives all of the properly drafted and executed documents and certifications from the successful Bidder, the OWNER shall issue a Notice to Proceed to that successful Bidder. Upon an award to the lowest Bidder, the security of an unsuccessful bidder shall be returned within Sixty (60) days from the time the award is made.

15. DESIGNATION OF SUBCONTRACTORS

Pursuant to state law, the Bidders must designate the name and location of each subcontractor who will perform work or render services for the prime Bidder in an amount that exceeds one-half of one percent (0.5%) of the Bidder's Total Bid Price, as well as the portion of work each such subcontractor will perform. Bidders must make these designations, as well as any others requested by the OWNER, on the document titled "List of Proposed Subcontractors" which has

been included with the Bid Forms. Pursuant to Public Contract Code Section 4104, the OWNER has determined that it will allow Bidders twenty-four (24) additional hours after the deadline for submission of bids to submit the additional information requested by the OWNER about each subcontractor, other than the name and location of each subcontractor.

16. DISABLED VETERANS BUSINESS ENTERPRISE GOAL REQUIREMENTS

In accordance with Education Code Section 71028, the OWNER has a participation goal for Disabled Veteran Business Enterprises ("DVBE") of at least three percent (3%) of the total dollar amount of contracts awarded. Although not specifically required, Bidders are encouraged to seek and include DVBE subcontractor and supplier participation in their bid for the Project. In addition, you are encouraged to note in the Expanded List of Proposed Subcontractors those who qualify as DVBE's. Prior to, and as a condition precedent for, final payment under this Contract, the successful bidder will be required to provide documentation to the OWNER identifying the amounts paid to DVBE's in conjunction with this Contract so that the OWNER can assess its success at meeting its DVBE participation goal.

17. LICENSING REQUIREMENTS

Pursuant to Section 7028.15 of the Business and Professions Code and Section 3300 of the Public Contract Code, all bidders must possess proper licenses for performance of this Contract. Contractors shall meet the California Contractor's license requirements set forth in the Notice Inviting Bids in order to perform each specific Bid Category for which they wish to submit a bid. Contractors who wish to submit combination bids must meet the requirements for each Bid Category, as specified by state law. Subcontractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Section 7028.5 of the Business and Professions Code, the OWNER shall consider any bid submitted by a contractor not currently licensed in accordance with state law and pursuant to the requirements found in the Bid and Contract Documents to be nonresponsive, and the OWNER shall reject the Bid. The OWNER shall have the right to request, and the Bidders shall provide within five (5) Calendar Days, evidence satisfactory to the OWNER of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract.

18. DISQUALIFICATION OF BIDDERS; INTEREST IN MORE THAN ONE BID

No bidder shall be allowed to make, submit or be interested in more than one bid for the same Project Category. However, a person, firm, corporation or other entity that has submitted a subproposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a subproposal or quoting prices to other bidders submitting a bid to the OWNER.

19. INSURANCE REQUIREMENTS

All bidders must meet certain minimum standards as more fully described in the General Conditions to participate on this Project.

20. REQUIRED BIDDER CERTIFICATIONS

Bidders must comply with the following:

A. **BID FORMS:** Within the Bid and Contract Documents the bidder must certify to various information, including but not limited to, the accuracy of the representations made in the Bid Forms.

B. **NON-COLLUSION DECLARATION:** Pursuant to Public Contract Code Section 7106, each Bidder must execute and submit with its bid the statutorily mandated non-collusion declaration included in the Bid Forms.

C. **DRUG-FREE WORKPLACE:** Pursuant to Government Code Section 8350 et seq., the successful bidder will be required to certify to the OWNER, in writing and under penalty of perjury, that the bidder will comply with the requirements of the Drug-Free Workplace Act of 1990. The successful bidder will be required to sign and file the certification with the OWNER prior to performing any work on the Project. A certification form for this purpose is furnished in the Contract Appendix.

D. **CERTIFICATION OF RECYCLED CONTENT:** In accordance with provisions of the Public Contract Code Section 12213, the successful bidder will be required to certify to the OWNER, in writing and under penalty of perjury, the minimum (if not exact) percentage of recycled

content in materials, goods, or supplies offered or products used in the performance of the contract, regardless of whether the product meets the required recycled product percentage as defined in Public Contract Code Sections 12161 and 12200. The recycled content shall include both post-consumer materials and secondary material as defined in Public Contract Code Sections 12161 and 12200. The successful bidder may certify that the product contains zero recycled content. The successful bidder will be required to sign and file the certification with the OWNER prior to performing any work on the Project. A certification form for this purpose is furnished in the Contract Appendix.

E. CERTIFICATION OF ASBESTOS-FREE MATERIALS: No materials furnished, installed or incorporated in the Project shall contain asbestos or any other material deemed to be hazardous by the state or federal government. To this end, the successful bidder shall be required to certify to the OWNER, in writing that, to the best of his knowledge, information and belief, no material furnished, installed or incorporated into the Project will contain asbestos or any other material deemed to be hazardous by the state or federal government. A certification form for this purpose is furnished in the Contract Appendix.

F. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION: Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public works must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a Contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided in the Bid Forms, attesting to the facts contained therein. Failure to submit this form may render the Bid non-responsive. In addition, each Bidder shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors Form.

G. IRAN CONTRACTING ACT CERTIFICATION: In accordance with Public Contract Code Section 2200 et seq., the OWNER requires that any person that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the OWNER with respect to goods or services of one million dollars (\$1,000,000) or more, certify at the time the bid is submitted or the contract is renewed, that the person is not identified on a list created pursuant to subdivision (b) of Public Contract Code Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code Section 2202.5, or as a person described in subdivision (b) of Public Contract Code Section 2202.5, as applicable. The form of such Iran Contracting Certificate is included with the Bid Forms and must be signed and dated under penalty of perjury.

21. BASIS OF AWARD; BALANCED BIDS

The OWNER shall award Contracts to only the lowest responsible Bidders submitting responsive Bids, as required by California Public Contract Code Section 20651. The OWNER reserves the right to reject any or all Bids. The OWNER may reject any Bid which, in its opinion when compared to other bids received or to the OWNER's internal estimates, does not accurately reflect the cost to perform the Work. In addition, because the OWNER may elect to include or exclude any of the bid items and alternate bid items at its sole and absolute discretion, each Bidder must ensure that

each bid item contains a proportionate share of profit, overhead and other costs or expenses which will be incurred by the Bidder. The OWNER may reject as non-responsive any bid which unevenly weights or allocates overhead and profit to one or more particular bid items.

The OWNER will not discriminate against any person or firm interested in providing goods and services to the OWNER on the basis of race, color, religion, sex or sexual orientation, marital status, national origin, age, veterans' status or handicap.

22. FILING OF BID PROTESTS

Bidders may file a "protest" of a contract award with the OWNER's Executive Director of Business Services. In order for a Bidder's protest to be considered valid, the protest must:

- Be filed timely and in writing (as detailed in this Section).
- Clearly identify the specific accusation involved.
- Clearly identify the specific OWNER Staff/Board recommendation being protested.
- Specify, in detail, the grounds of the protest and the facts supporting the protest.
- Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each and every one of these requirements, it will be rejected as invalid.

A protest regarding the recommended award of a contract solicited by the Notice Inviting Bids must be filed in writing with the OWNER within five (5) Calendar Days after the bid opening date.

If the protest is valid, the OWNER's Executive Director of Business Services, or other designated OWNER staff member, shall review the basis of the protest and all relevant information. The Executive Director of Business Services will deny or concur with the protest and provide a written decision to the protestor. The protestor may appeal the decision of the Executive Director of Business Services to the Associate Superintendent of Business Services and Economic Development within 3 days of Notification thereof.

23. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS

Within the time specified in these Instructions to Bidders above, the Bidder to whom a Contract is awarded shall deliver to the OWNER two identical counterparts of the Performance Bond and Payment Bond in the form supplied by the OWNER and included in the Bid and Contract Documents. Failure to do so may, in the sole discretion of OWNER, result in the forfeiture of the Bid Guarantee. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the OWNER.

The Performance Bond shall be for one hundred percent (100%) of the Total Bid Price, and the Payment Bond shall also be for one hundred percent (100%) of the Total Bid Price.

Pursuant to Code of Civil Procedure Section 995.660, as required in the Notice of Award for the Contract, Contractor shall provide OWNER with a certificate from the County Clerk verifying that the Payment Bond surety's certificate of authority has not been surrendered, revoked, canceled, annulled or suspended or, in the event that it has been suspended, that it has been renewed.

Subcontractor bond requirements are in the General Conditions.

24. EXPERIENCE AND TECHNICAL REQUIREMENTS

Bidders are required to provide the experience and qualification information required as part of the Bid Forms. The purpose of this data is to provide the information necessary for the OWNER to determine whether Bidders have the necessary experience in order to responsibly carry out the Work. Each Bidder shall answer all questions and provide information requested by the Bid Forms. Failure to respond or to complete all requested information may result in the bid being rejected as nonresponsive. See the Supplementary General Conditions for minimum experience and technical requirements.

25. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES

Contractor and its subcontractors performing work under this Contract will be required to pay California sales and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the work will be located, unless otherwise expressly provided by the Bid and Contract Documents.

26. EXECUTION OF CONTRACT

The Bidder to whom an award is made shall execute the Contract in the amount of its Total Bid Price and furnish the required insurance certificates and endorsements, as well as Performance and Payment Bonds, in a timely manner. The OWNER may require appropriate evidence that the persons executing the Contract and the bonds for both the Bidder and its surety or sureties are duly empowered to do so.

27. OWNER RIGHTS

The OWNER may investigate the qualifications of any Bidder under consideration, require confirmation of information furnished by a Bidder, and require additional evidence of qualifications to perform the work described in these Bid and Contract Documents. The OWNER reserves the right to:

- Reject any or all of the Bids if such action is in the best interest of the OWNER.
- Issue subsequent notice inviting bids.
- Cancel this entire bidding process.
- Appoint evaluation committees to review any or all Bids.
- Seek the assistance of outside technical experts to validate the Bid(s).
- Approve or disapprove the use of particular subcontractors.
- Waive informalities and irregularities in Bids.

The issuance of the Notice Inviting Bids does not commit the OWNER to enter into a contract, nor does it obligate the OWNER to pay any costs incurred in preparation and submission of Bids or in anticipation of a contract.

28. BIDDER'S RESPONSIVENESS

The OWNER will evaluate Bids for responsiveness at the time of Bid opening and before award is made. A Bid must be in strict compliance with the commercial and technical specifications, without exception. Only Bids which conform in all material respects to the Bid and Contract Documents can be eligible for award. A Bid not meeting the requirements of the responsiveness checklist may be rejected immediately upon opening, and returned to the Bidder's representative.

29. BIDDER'S RESPONSIVENESS CHECKLIST

The OWNER's initial responsiveness evaluation will consider the following:

- Bid amount through electronic submission
- Acknowledge all addenda in PlanetBids
- Submit electronic copy of Bid Bond, mail or hand delivery original
- Submit electronic List of Proposed Subcontractors
- Submit electronic copy of properly executed Non-Collusion Declaration;
- Submit electronic copies of completed and properly executed Bidder Information Forms; and
- Submit any other required Bid Forms

If the Bidder is a joint venture, each joint venturer shall prepare and submit a separate form. Extra forms, if needed, can be obtained from the OWNER, or photocopied by the Bidder, if necessary.

30. BID FORMS; LISTS OF SUBCONTRACTORS

a. Bid Forms.

The Bid Forms must be completed as set forth below.

- i. The Bid Forms must be prepared using ink, indelible pencil or a typewriter.
- ii. The Bid Form must be signed by the Bidder or on its behalf by the person or persons having the authority to do so. Proof of the authority to act on behalf of the firm must be submitted when requested. The proof shall be in the form of a certified copy of an appropriate corporate resolution, certificate of partnership or joint venture, or another appropriate document. If Bidder is an entity made up of multiple parties and no person or persons are designated to act on its behalf, all parties shall execute the Bid.
- iii. Addenda - Receipt of addenda must be acknowledged in PlanetBids.
- iv. The Bidder shall not delete, modify, supplement or make substitutions thereof, on the printed matter of the Bid Forms.
- v. Corrections shall be initialed by the person who signs the Bid Form.

- vi. Exceptions or qualifications to the Bid and Contract Documents are strictly forbidden. Any comment by the Bidder which the OWNER determines can be construed as altering the requirements of the Project Manual or the terms and conditions of the Contract will render the Bid nonresponsive and disqualify the Bidder from consideration for award.

b. List of Proposed Subcontractors (Forms).

Each submitted bid must also be accompanied by a listing of proposed subcontractors as required by California Public Contract Code, Section 4100 et. seq. State law prohibits substitution of subcontractors listed in the original Bid except as otherwise provided in Sections 4107 and 4107.5 of the California Public Contract Code. Bidders are required to list all Subcontractors whose participation in the Contract will exceed one-half of one percent (0.5%) of the Total Bid Price. The List of Proposed Subcontractors Forms must be completed as set forth below.

- i. Name. List the name of Subcontractors who will perform work in excess of one half of one percent (0.5%) of the Total Bid Price.
- ii. Location. For listed Subcontractors, identify the location of its place of business (City and State).
- iii. Work. For listed Subcontractors, identify the type/portion of work to be performed in the Contract.
- iv. CSLB Contractor License Number. For listed Subcontractors, list their California State Licensing Board Contractor License Number.
- v. DIR Registration Number. For listed Subcontractors, list their Department of Industrial Relations Registration Number.

Pursuant to Public Contract Code Section 4104, the OWNER has determined that it will allow Bidders twenty-four (24) additional hours after the deadline for submission of bids to submit information requested by the OWNER in the Expanded List of Subcontractors form (Contract Appendix, Subpart D) about each subcontractor, other than the name and location of each subcontractor.

31. RESPONSIBILITY CRITERIA

Responsibility is the apparent ability of the Bidder to meet and complete successfully the requirements of the Contract. The OWNER reserves the right to consider the financial responsibility and general competency of each bidder, as well as its reputation within the industry. OWNER may request, and apparent low bidder shall provide, a financial statement, audited if necessary, including the Bidder's latest balance sheet and income statement. OWNER expects that each Bidder will fully and truthfully disclose all information required of the Bidder by the Bid and Contract Documents. The prospective contractor, in order to be evaluated by the OWNER as being a responsible contractor, must complete Section 4 of the Bid Forms to determine that it:

- A. Has or can secure adequate financial resources to perform the contract;
- B. Is able to meet the performance or delivery schedule of the contract, taking into consideration other business commitments; and

- C. Has a satisfactory record of performance. A contractor seriously deficient in current contract performance, considering the number of contracts and extent of the deficiencies, is presumed not to meet this requirement unless the deficiencies are beyond its control or there is evidence to establish its responsibility notwithstanding the deficiencies. Evidence of such satisfactory performance record should show that the contractor:
- (1) Has a satisfactory record of integrity in its dealings with government agencies and with subcontractors, and is otherwise qualified to receive an award under applicable laws and regulations; has the necessary organization, experience, satisfactory safety record, accounting and operational controls and technical skills or the ability to obtain them; and
 - (2) Has the necessary production, construction, and technical equipment and facilities or the ability to obtain them.

END OF INSTRUCTIONS TO BIDDERS

5. BID FORMS

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Bidder Name: _____

SECTION 1 – BID FORM

Honorable President and Members of the Governing
Board of the Chaffey Community College District
c/o Kim Erickson, Executive Director, Business Services
5885 Haven Avenue
Rancho Cucamonga, California 91737

In response to the Notice Inviting Bids dated **January 11, 2022, for:**

CHAFFEY COMMUNITY COLLEGE DISTRICT
BID No. 2022PW01
CHINO INSTRUCTIONAL BUILDING

The Work to be performed under this Contract includes, but is not limited to, an approximate 35,000 GSF building ("Instructional Building 1") to be used primarily for classroom instruction and faculty offices as well as restrooms, staff break room and a mother's room. The building will have a footprint of approximately 23,540 square feet and includes two stories. The ground floor will have a library that includes student meeting rooms and a large study area, 3,000 square foot meeting room, and restroom facilities. The second floor will have additional classrooms, conference room, staff lounge/break room and faculty offices. Outdoor amenities include pedestrian walkways and bicycle racks as well as installation of a signage wall, landscape, two bio-retention basins, security lighting, and infrastructure improvements, as is more fully described in the Bid and Contract Documents. All capitalized terms shall have the meanings ascribed to them in the General Conditions.

We, the undersigned, hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Bid Documents, including all plans, specifications, and all addenda, if any. We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the "Work."

The daily rate shown above will be the total amount of entitlement for each day of Compensable Delay caused by OWNER at any time during the performance of the Work and shall constitute payment in full for all daily delay costs, direct and indirect (including, without limitation, compensation for all extended home office overhead and extended general conditions), of the bidder and all subcontractors, suppliers, persons, and entities under or claiming through Bidder on the Project. OWNER will pay the daily rate of compensation only for the actual number of days of Compensable Delay, as defined in the Bid and Contract Documents.

The undersigned agrees that these Bid Forms constitute a firm offer to the OWNER which cannot be withdrawn for the number of Calendar Days indicated in the Notice Inviting Bids from and after the bid opening deadline, or until a Contract for the Work is fully executed by the OWNER and a third party, whichever is earlier. The undersigned also agrees that if there is a discrepancy between any written amount and the numerical amount, the written amount shall govern.

Bidder Name: _____

Attached hereto is a certified check, a cashier's check or a bid bond in the amount of _____ Dollars (\$ _____) **said amount being not less than ten**

percent (10%) of the Total Bid Price including alternates. The undersigned agrees that said amount shall be retained by the OWNER if, upon award, we fail or refuse to execute the Contract and furnish the required bonds, certificates and endorsements of insurance and other certifications within the time provided.

If awarded the Contract, the undersigned agrees to execute the Contract prepared by the OWNER and to return the Contract with the required documents per the Instructions to Bidders.

The undersigned offers and agrees that if its bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 of Part 2 of Division 7 of the Business and Professional Code), arising from purchases of goods, materials or services by the Bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the Contractor.

Bidder understands and agrees that, when requested by OWNER, he shall provide: (1) evidence satisfactory to the OWNER of Bidder's California contractor's license(s) in good standing at the time of bid submission; (2) evidence that the person signing this Bid is authorized to bind Bidder to this Bid and to a contract resulting therefrom; and (3) any other information and documentation, financial or otherwise, needed by OWNER to award a Contract to the lowest responsible and responsive bidder.

Bidder understands and agrees that liquidated damages shall apply to this Contract in the amounts and subject to the terms and conditions described in the Contract Form and the Contract Documents.

Attached to this Bid Form and by this reference incorporated herein and made a part of these completed Bid Forms are Section 2 - Bid Data Forms, Section 3 - Non-Collusion Declaration, Section 4 - Bidder Information Form, Section 5 - Notice of Pre-Bid Meeting and Job Walk, Section 6 - DVBE Requirements, Section 7 – Public Works Contractor Registration Certification, Section 8 – Iran Contracting Act Certification, and Section 9 – Siemens Industry, Inc. and Quark Communications, Inc. Acknowledgement.

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents.

Addenda Nos. _____

The Bidder understands and agrees that the Total Bid Price is inclusive of all labor, materials, and equipment or supplies necessary to complete the Work as described in the Bid Documents. If this bid is accepted, the undersigned Bidder agrees to enter into and execute the Contract with the necessary bonds and accept the Total Bid Price as compensation in full for all Work under the contract.

Partners or Joint Venturers: _____

NOTES:

- 1) By its signature on this Bid, the Bidder certifies under penalty of perjury the accuracy of the representations made on the Bid Forms. Per the Instructions to Bidders, Bidder can provide evidence that the person signing on behalf of the corporation, partnership or joint venture has the authority to do so.
- 2) If Bidder is a corporation, enter State of Incorporation in addition to Business Address.
- 3) If Bidder is a partnership or joint venture, give full names of all partners or joint venturers.

Bidder Name: _____

SECTION 2 – BID DATA FORMS

Bidder shall submit its Bid data in accordance with the format shown on each of the following Bid Data Forms. Bidders shall prepare and use as many sheets as are necessary to adequately provide the information required. Bidder shall ensure that every page of its Bid Data Forms is properly identified with the Bidder's name and page number.

SECTION 2.A – LIST OF PROPOSED SUBCONTRACTORS

In compliance with the "Subletting and Subcontracting Fair Practices Act," Sections 4100 through 4114 of the California Public Contract Code, and any amendments thereto, each Bidder shall provide the information requested below for each subcontractor who will perform work, labor or render service to Bidder in or about the construction of the Work in an amount in excess of one-half of one percent (greater than 0.5 %) of the Bidder's Total Bid Price, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Contractor's total bid or ten thousand dollars (\$10,000), whichever is greater, and shall further set forth the portion of the Work which will be done by each subcontractor. Bidder shall list only one subcontractor for any one portion of the Work.

Pursuant to Public Contract Code Section 4104, the OWNER has determined that it will allow Bidders twenty-four (24) additional hours after the deadline for submission of bids to submit the information requested by the OWNER about each subcontractor on the Expanded List of Subcontractors Form provided, other than the name and location of each subcontractor.

If the Bidder fails to specify a subcontractor for any portion of the Work to be performed under the Contract, it shall be deemed to have agreed to perform such portion itself, and shall not be permitted to subcontract that portion of the Work except under the conditions hereinafter set forth below.

Subletting or subcontracting of any portion of the Work in excess of one half of one percent (greater than 0.5%) of the Total Bid Price or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Contractor's total bid or ten thousand dollars (\$10,000), whichever is greater, for which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after OWNER approval.

Bidder Name: _____

2.A LIST OF PROPOSED SUBCONTRACTORS (continued)

[Duplicate this page if needed for listing additional subcontractors.]

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License Number	DIR Registration Number

Bidder Name: _____

LIST OF CHANGES IN PROPOSED SUBCONTRACTORS DUE TO ALTERNATES

[Duplicate this page if needed for listing additional subcontractors.]

The information below must be provided for all changes in first-tier Subcontractors if OWNER selects Alternates. List changes in Subcontractors only for those portions of the Work valued in excess of ½ of 1% of Bidder's Total Bid Price.

Alt. #	Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License Number	DIR Registration Number

SECTION 2.B – BID BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT _____, as Principal,
and _____, as Surety, are held firmly bound unto the **CHAFFEY COMMUNITY COLLEGE DISTRICT** (hereinafter called the DISTRICT) in the sum of _____ DOLLARS (\$ _____), being not less than ten percent (10%) of the Total Bid Price; for the payment of which sum will and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has submitted a bid to the DISTRICT to perform all Work required for the construction of the Bid No. **2022PW01, CHINO INSTRUCTIONAL BUILDING** as set forth in the Notice Inviting Bids and accompanying Bid Documents, dated January 11, 2022.

NOW, THEREFORE, if said Principal is awarded a Contract for the Work by the DISTRICT and, within the time and in the manner required by the above- referenced Bid Documents, enters into the written form of Contract bound with said Bid Documents, furnishes the required bonds (one to guarantee faithful performance and the other to guarantee payment for labor and materials) furnishes the required insurance certificates and endorsements, and furnishes any other certifications as may be required by the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by the DISTRICT and judgment is recovered, said Surety shall pay all costs incurred by the DISTRICT in such suit, including reasonable attorneys' fees to be fixed by the court.

SIGNED AND SEALED, this _____ day of _____, 20____.

PRINCIPAL: _____ SURETY: _____
Name of Company *Name of Company*

By: _____ By: _____
Signature *Signature*

Print Name & Title *Print Name & Title*

Address for Notices:

Street Address

City, State & Zip Code

NOTE: Notary acknowledgement for Surety and Surety's Power of Attorney must be attached.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)	
<input type="checkbox"/> Partner(s)	<input type="checkbox"/> Limited
	<input type="checkbox"/> General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

- ☐ Individual
☐ Corporate Officer

DESCRIPTION OF ATTACHED DOCUMENT

Title(s)		Title or Type of Document
<input type="checkbox"/> Partner(s)	<input type="checkbox"/> Limited <input type="checkbox"/> General	Number of Pages
<input type="checkbox"/> Attorney-In-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Guardian/Conservator <input type="checkbox"/> Other:		Date of Document
Signer is representing: Name Of Person(s) Or Entity(ies)		Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF BID BOND

SECTION 3 – NON-COLLUSION DECLARATION

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Name of Bidder _____

Signature _____

Name _____

Title _____

SECTION 4 – BIDDER INFORMATION FORM

4.A INFORMATION ABOUT BIDDER

[Indicate not applicable ("N/A") where appropriate.]

NOTE: Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: _____

2.0 Type, if Entity: _____

3.0 Bidder Address: _____

Facsimile Number

Telephone Number

4.0 How many years has Bidder been in business under its current license number as a Contractor? _____

5.0 How many years has Bidder been in business under its present name? _____

5.1 Under what other names or business forms (e.g. sole proprietorship, corporation, etc.) has Bidder operated?

6.0 If Bidder's organization is a corporation, answer the following:

6.1 Date of Incorporation: _____

6.2 State of Incorporation: _____

6.3 President's Name: _____

6.4 Vice-President's Name(s): _____

6.5 Secretary's Name: _____

6.6 Treasurer's Name: _____

Bidder Name: _

7.0 If an individual or a partnership, answer the following:

7.1 Date of Organization: _____

7.2 Name and address of all partners (state whether general or limited partnership):

8.0 If other than a corporation or partnership, describe organization and name principals:

9.0 List other states in which Bidder's organization is legally qualified to do business.

10.0 What type of work does the Bidder normally perform with its own forces?

11.0 Has Bidder ever failed to complete any work awarded to it, either under its current name or any former name(s)? If so, note when, where, and why:

12.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

13.0 On a separate sheet, list the construction experience of the key individuals of Bidder's organization.

Bidder Name: _

14.0 List Trade References:

15.0 List Bank References (Bank, Branch Address, Account Number):

16.0 Name of Bonding Company and Name and Address of Agent:

Bidder Name: _

4.B LIST OF CURRENT PROJECTS (Capacity)

(Duplicate Page if needed for listing additional current projects.)

<u>Project</u>	<u>Client Name Contact Person, Address & Phone No.</u>	<u>Description of Bidder's Work</u>	<u>Completion Date</u>	<u>Estimated Magnitude (\$ m/hrs. etc.)</u>
----------------	--	---	----------------------------	---

Bidder Name: _____

4.C LIST OF COMPLETED PROJECTS

(Duplicate Page if needed for listing additional completed projects.)

List the projects completed by Bidder that demonstrate the experience and technical expertise required in the Supplementary General Conditions. ALL SPACES MUST BE COMPLETED.

Project 1:

Project Name & Location: _____

Client Name: _____

Client Contact Person: _____ Telephone Number(s): _____

Street Address: _____

City, State & Zip: _____

Description of Work: CA Public: ☐ School (K-12) ☐ Community College ☐ University DSA Project Number: _____

☐ City ☐ Municipality ☐ Public Entity _____

☐ DSA Structural ☐ DSA Fire/Life Safety ☐ DSA Accessibility

☐ DSA Project Inspector Name: _____ Phone: _____

Address: _____

☐ Two or more stories ☐ \$1,000 or more gross square feet ☐ Construction Cost of \$25 Million or more

☐ Design-Bid-Build Delivery (aka Traditional Delivery or "Hard Bid").

☐ Design-Bid-Build ☐ Design-Build ☐ CM-at-Risk ☐ Other _____

Original Contract Sum: _____ Final Contract Sum: _____

Start Date: _____ Original Completion Date: _____ Actual Completion Date: _____

Contractor started and completed this project under License Number: _____

Total Number of Change Orders: _____ Which included how many Owner Initiated Change Orders? _____

Bidder Name: _____

Project 2:

Project Name & Location: _____

Client Name: _____

Client Contact Person: _____ Telephone Number(s): _____

Street Address: _____

City, State & Zip: _____

Description of Work: CA Public: ☐ School (K-12) ☐ Community College ☐ University DSA Project Number: _____

☐ City ☐ Municipality ☐ Public entity _____

☐ DSA Structural ☐ DSA Fire/Life Safety ☐ DSA Accessibility

☐ DSA Project Inspector Name: _____ Phone: _____

Address: _____

☐ Two or more stories ☐ 50,000 or more gross square feet ☐ Construction Cost of \$25 Million or more

☐ Design-Bid-Build Delivery (aka Traditional Delivery or "Hard Bid").

☐ Design-Bid-Build ☐ Design-Build ☐ CM-at-Risk ☐ Other _____.

Original Contract Sum: _____ Final Contract Sum: _____

Start Date: _____ Original Completion Date: _____ Actual Completion Date: _____

Contractor started and completed this project under License Number: _____

Total Number of Change Orders: _____ Which included how many Owner Initiated Change Orders?

Bidder Name: _____

Project 3:

Project Name & Location: _____

Client Name: _____

Client Contact Person: _____ Telephone Number(s): _____

Street Address: _____

City, State & Zip: _____

Description of Work: CA Public: ☐ School (K-12) ☐ Community College ☐ University DSA Project Number: _____

☐ City ☐ Municipality ☐ Public entity _____

☐ DSA Structural ☐ DSA Fire/Life Safety ☐ DSA Accessibility

☐ DSA Project Inspector Name: _____ Phone: _____

Address: _____

☐ Two or more stories ☐ 50,000 or more gross square feet ☐ Construction Cost of \$25 Million or more

☐ Design-Bid-Build Delivery (aka Traditional Delivery or "Hard Bid").

☐ Design-Bid-Build ☐ Design-Build ☐ CM-at-Risk ☐ Other _____.

Original Contract Sum: _____ Final Contract Sum: _____

Start Date: _____ Original Completion Date: _____ Actual Completion Date: _____

Contractor started and completed this project under License Number: _____

Total Number of Change Orders: _____ Which included how many Owner Initiated Change Orders? _____

Bidder Name: _____

Project 4:

Project Name & Location: _____

Client Name: _____

Client Contact Person: _____ Telephone Number(s): _____

Street Address: _____

City, State & Zip: _____

Description of Work: CA Public: ☐ School (K-12) ☐ Community College ☐ University DSA Project Number: _____

☐ City ☐ Municipality ☐ Public entity _____

☐ DSA Structural ☐ DSA Fire/Life Safety ☐ DSA Accessibility
☐ _____ ☐ _____ ☐ _____

DSA Project Inspector Name: _____ Phone: _____
Address: _____

☐ Two or more stories ☐ 80,000 or more gross square feet ☐ Construction Cost of \$25 Million or more

☐ Design-Bid-Build Delivery (aka Traditional Delivery or "Hard Bid").

☐ Design-Bid-Build ☐ Design-Build ☐ CM-at-Risk ☐ Other _____

Original Contract Sum: _____ Final Contract Sum: _____

Start Date: _____ Original Completion Date: _____ Actual Completion Date: _____

Contractor started and completed this project under License Number: _____

Total Number of Change Orders: _____ Which included how many Owner Initiated Change Orders? _____

Bidder Name: _____

Project 5:

Project Name & Location: _____

Client Name: _____

Client Contact Person: _____ Telephone Number(s): _____

Street Address: _____

City, State & Zip: _____

Description of Work: CA Public: ☐ School (K-12) ☐ Community College ☐ University DSA Project Number: _____

☐ City ☐ Municipality ☐ Public entity _____

☐ DSA Structural ☐ DSA Fire/Life Safety ☐ DSA Accessibility
☐ _____ ☐ _____ ☐ _____

DSA Project Inspector Name: _____ Phone: _____
Address: _____

☐ Two or more stories ☐ 80,000 or more gross square feet ☐ Construction Cost of \$XXM or more

☐ Design-Bid-Build Delivery (aka Traditional Delivery or "Hard Bid").

☐ Design-Bid-Build ☐ Design-Build ☐ CM-at-Risk ☐ Other _____

Original Contract Sum: _____ Final Contract Sum: _____

Start Date: _____ Original Completion Date: _____ Actual Completion Date: _____

Contractor started and completed this project under License Number: _____

Total Number of Change Orders: _____ Which included how many Owner Initiated Change Orders? _____

Bidder Name: _____

4.D EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE

Personnel:

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

2. Summarize each person's specialized education:

3. List each person's years of construction experience relevant to the project:

4. Summarize such experience:

5. FOR DAS 13 FORM INFORMATION FILED BY OWNER, LIST CLASSIFICATION(S) OR TYPE(S) OF WORKER(S) (CARPENTER, PLUMBER, ETC.), NOT SUBCONTRACTOR(S), THAT BIDDER WILL **EMPLOY** ON THIS PROJECT:

Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the OWNER.

Bidder Name: _____

Additional Bidder's Statements:

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

4.E VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Executed on this _____ day of _____, 20____.

By: _____

Type or Print Name

Signature

Title

Subscribed and sworn before me
this ____ day of _____, 20____.

(SEAL)

Notary Public in and for
the State of California

My Commission Expires: _____

SECTION 5 – NOTICE OF PRE-BID MEETING & JOB WALK

CHAFFEY COMMUNITY COLLEGE DISTRICT CHINO INSTRUCTIONAL BUILDING BID NUMBER 2022PW01

Each prospective bidder is responsible for fully acquainting himself with the conditions of the Project Site (which may include more than one site), as well as those relating to the construction and labor of the Project, to fully understand the facilities, difficulties and restrictions which may impact the total and adequate completion of the Project. The full extent of the Project can only be determined by a job walk-through. Therefore, the OWNER requires that all contractors attend the Pre-Bid Conference and Job Walk. The purpose of the Pre-Bid Conference and Job Walk is to give all bidders the opportunity to visit the job site prior to the bid date and ask any questions or request an explanation regarding details about the specifications and scope of work.

The OWNER expects that each contractor submitting a bid for this Project (a) is satisfied as to the conditions affecting the work, (b) has taken whatever measurements and/or gathered all information sufficient to properly bid the Project, (c) understands the facilities, difficulties and restrictions which may impact the total and adequate completion of the Project, and (d) receives clarification on any bidding and contracting requirements applicable to this Project. No allowance for lack of knowledge of existing conditions will be made after opening of the bids.

TIME: 10:00 AM
DATE: January 20, 2022
PLACE: CHAFFEY COLLEGE – CHINO CAMPUS –
Chino Community Center
5897 COLLEGE PARK AVE, CHINO, CA 9171
(We will then proceed to the job site.)

CONTACT: CHAFFEY COLLEGE CONSTRUCTION MANAGER,
MEASURE P BOND PROGRAM
MOBILE (562) 266-6376

A sign-in sheet will be provided as proof of attendance. The Bid and Contract Documents provide the location of the Project site.

**** PLEASE SIGN THIS NOTICE AND RETURN WITH YOUR BID ****

Receipt Acknowledged By: _____
Company Name

Signature & Date

Type or Print Name

Title

SECTION 6 – DISABLED VETERANS BUSINESS ENTERPRISE REQUIREMENTS

In accordance with Education Code Section 71028, the OWNER has a participation goal for Disabled Veteran Business Enterprises (“DVBE”) of at least three percent (3%) of the total dollar amount of contracts awarded.

ENCOURAGED PARTICIPATION

Although not specifically required, Bidders are encouraged to seek and include DVBE subcontractor and supplier participation in your bids. In addition, you are encouraged to note in your Expanded List of Proposed Subcontractors (Part D of Contract Appendix below) those subcontractors who qualify as DVBEs.

REQUIRED DOCUMENTATION

Prior to, and as a condition precedent for, final payment under this Contract, the successful bidder will be required to provide documentation to the OWNER identifying the amounts paid to DVBEs in conjunction with this Contract so that the OWNER can assess its success at meeting its DVBE participation goal.

SECTION 7 – PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

If this bid is due on or after March 1, 2015, then pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.

Name of Bidder: _____

DIR Registration Number: _____

Bidder further acknowledges:

1. Bidder shall maintain a current DIR registration for the duration of the project.
2. Bidder shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
3. Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Bidder_____

Signature_____

Name and Title_____

Dated_____

SECTION 8 – IRAN CONTRACTING ACT CERTIFICATION

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

☐ The Contractor is not:

- (1) identified on the current list of person and entities engaged in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
- (2) a financial instruction that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

☐ The OWNER has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the OWNER will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

☐ The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signature: _____

Printed Name: _____

Title: _____

Firm Name: _____

Date: _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

SECTION 9 – SIEMENS INDUSTRY, INC. and QUARK COMMUNICATIONS, INC. ACKNOWLEDGEMENT

CHAFFEY COMMUNITY COLLEGE DISTRICT CHINO INSTRUCTIONAL BUILDING BID NUMBER 2022PW01

The OWNER has made Siemens Building Technologies, its design standard for fire alarm systems, and the Quark Communication's InetSupervisor for controls.

The OWNER expects that each contractor submitting a bid for the Project, (a) is satisfied as to the conditions affecting the work, (b), has reviewed the plans and specifications, (c) has coordinated with their subcontractors, and (d) has contacted and coordinated with Siemens Building Technologies and the Quark Communication's InetSupervisor as to the scope of work and cost that Siemens and the Quark Communication's InetSupervisor will provide to the Project for devices, equipment, controls, and installation.

The OWNER will only accept the Siemens fire alarm system, which includes the following but is not limited to: fire alarm control panels, remote annunciators, manual stations, smoke detectors, control modules, horns & strobes, and water flow switches. The Quark Communication's InetSupervisor system for controls, which includes the following, but is not limited to: BAS control panels, sensor actuators, control devices, outdoor lighting controllers, lighting automation controllers, switches, and sensors. All the scope of work will be as noted on the plan and specifications and the OWNER will NOT accept "or equal" for devices, equipment, and controls.

A copy of the sole source resolution for the devices, equipment, and controls from Siemens Building Technologies and Quark Communication's InetSupervisor adopted by the Owner's Governing Board is attached hereto and incorporated herein by this reference.

Siemens Building Technologies contact information:

Fire Alarm Systems: Greg Binder, cell # :657-298-0112 gregory.binder@Siemens.com

Quark Communication's InetSupervisor contact information:

Controls: Adam Guzik, cell #: 760-907-8736 adam@inetsupervisor.com

**** PLEASE SIGN THIS ACKNOWLEDGEMENT AND RETURN WITH YOUR BID ****

Receipt Acknowledged By: _____
Company Name

Signature & Date

Type or Print Name

Title

Chaffey Community College District
Measure P Bond Program

Chino Instructional Bldg.
Bid No. 2022PW01
January 11, 2022

Adopted Sole Source Resolutions for Siemens Building Technologies and
for the Quark Communication's InetSupervisor



Chaffey College

Governing Board

EXTRACT OF
OFFICIAL PROCEEDINGS
OF THE GOVERNING BOARD
CHAFFEY COMMUNITY COLLEGE DISTRICT

December 17, 2020

Members present: Ms. Brugger, Mr. Ovlitt, Mr. McDougal, Ms. McLeod,
Ms. Olivares-Lambert, Ms. Sanders (Student Trustee)

Members absent: None

BUSINESS/FISCAL AFFAIRS

The Governing Board adopted Resolution 121720, a resolution of the Governing Board of the District, designating proprietary Siemens products, bands and/or services for low voltage systems, as described herein and in the attached resolution, pursuant to California Public Contract Code Section 3400.

Yeas: Ms. Brugger, Mr. Ovlitt, Mr. McDougal, Ms. McLeod,
Ms. Olivares-Lambert, Ms. Sanders (advisory)

Nays: None

Certified to be a true and correct copy of the minutes.

Henry D. Shannon

Henry D. Shannon
Governing Board Secretary

jas-12/17/20

5385 Haven Avenue, Rancho Cucamonga, California 91737-5002 909/852-6102 Fax: 909/852-6104 www.chaffey.edu

RESOLUTION NO. 121720

**A RESOLUTION OF THE GOVERNING BOARD OF
CHAFFEY COMMUNITY COLLEGE DISTRICT
DESIGNATING CERTAIN PRODUCTS, BRANDS OR
SERVICES PURSUANT TO PUBLIC CONTRACT CODE
SECTION 3400**

WHEREAS, pursuant to Public Contract Code Section 3400(b) the Chaffey Community College District ("District") may make a finding(s) designating certain products, things, or services by specific brand or trade name for the statutorily enumerated purposes; and

WHEREAS, the District's Governing Board ("Board") has reviewed the District's current facilities, general contracts, plans, and specifications in order to evaluate the District's need to establish uniform, complete and compatible Fire Alarm and Security Systems ("Low Voltage Systems") District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District; and

WHEREAS, the Governing Board approved a similar resolution December 13, 2018 and this resolution would be to designate proprietary Siemens products, brands and/or services for low voltage systems for another two years; and

WHEREAS, the uniform Low Voltage Systems will allow the District to ensure that the Low Voltage Systems utilized on all future District facility projects match the Low Voltage Systems in use at other District facilities as permitted pursuant to Public Contract Code Section 3400(b)(2); and

WHEREAS, District staff will be trained in the maintenance, repair, and replacement of the Low Voltage Systems described in the Specification and will maintain a stock of the equipment needed for replacements and maintenance; and

WHEREAS, District staff have determined that proprietary Siemens security system products and services will permit centralized monitoring of security for all District facilities; and

WHEREAS, based on the Board's above described review and Public Contract Code Section 3400(b)(2), the Board has determined that District must require and specify the use of certain proprietary Siemens products, things, or services on District projects.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE CHAFFEY COMMUNITY COLLEGE DISTRICT AS FOLLOWS:

Section 1. The above recitals are true and correct.

Section 2. The District, pursuant to Public Contract Code Section 3400, intends to establish uniform, complete and compatible Low Voltage Systems specifications District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District.

Section 3. The District has found compatibility, cost, ease of maintenance, and utility of Low Voltage Systems problematic and believes it necessary to establish a uniform District Low Voltage Systems Specifications in order to avoid incompatibility issues, as well as durability and reliability issues, and costs associated with experimenting and replacing incompatible and useless Low Voltage Systems and to avoid the waste of District funds associated with addressing incompatible components.

Section 4. The District and its consultants have undertaken considerable research into the products/brands of Low Voltage Systems described in the Specification. District staff will be trained in the maintenance, replacement, and repair of the Low Voltage Systems described in the Specification and the District will maintain a stock of the equipment needed for replacements and maintenance.

Section 5. District staff has determined that the Low Voltage Systems has demonstrated their reliability, durability, and quality.

Section 6. Pursuant to Public Contract Code Section 3400(b)(2), the District's Board hereby designates the certain products/brands of Low Voltage Systems for the District's use in future projects so as to establish one complete uniform District-wide Low Voltage Systems system, thus, avoiding incompatibility of products, as well as replacement and maintenance problems.

Section 7. The designation of certain proprietary Siemens security system products and services of Low Voltage Electronic products shall be effective for 24 months from the date of this Resolution.

Section 8. At the end of the 24-month period, District staff will review the products/brands and evaluate whether re-adoption or discontinued use of the designated proprietary Siemens security system products and services is appropriate including presenting a recommendation to the Superintendent/President or his/her designee. The Superintendent/President or his/her designee shall then consider District staff's recommendations and either re-approve or discontinue the designation of the products/brands contained herein and/or approve additional/replacement products/brands.

Section 9. The Superintendent/President or his/her designee shall present changes, if any, for its ratification.

PASSED AND ADOPTED by the Governing Board of the Chaffey Community College District at Rancho Cucamonga, California, this 17th day of December 2020, at a regular meeting by the following vote:

I, Kathleen Brugger, Clerk of the Governing Board of the Chaffey Community College District of San Bernardino County, California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly adopted by said board at the regular meeting thereof at the date and place and by vote stated, which resolution is on file and of record in the office of said board.


Kathleen Brugger
Clerk, Governing Board



Chaffey College

Governing Board

EXTRACT OF
OFFICIAL PROCEEDINGS
OF THE GOVERNING BOARD
CHAFFEY COMMUNITY COLLEGE DISTRICT

June 22, 2017

Members present: Ms. Brugger, Mr. McDougal, Ms. McLeod, Mr. Ovitt,
Ms. Roberts, Ms. Contreras (Student Trustee)

Members absent: None

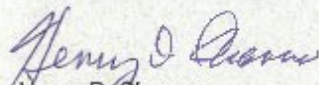
BUSINESS/FISCAL AFFAIRS

The Governing Board adopted Resolution 62217C, a resolution of the Governing Board of the District designating **InetSupervisor™** brands for designated campus building automation systems to be designated sole source and/or proprietary, as described herein and in the attached resolution, pursuant to California Public Contract Code, Section 3400.

Yeas: Ms. Brugger, Mr. McDougal, Ms. McLeod, Mr. Ovitt,
Ms. Roberts, Ms. Contreras (advisory)

Nays: None

Certified to be a true and correct copy of the minutes.


Henry D. Shannon
Governing Board Secretary

jas-6/22/17

5885 Haven Avenue, Rancho Cucamonga, California 91737-3602 909/852-6102 Fax: 909/852-6104 www.chaffey.edu

RESOLUTION NO. 62217C

**A RESOLUTION OF THE GOVERNING BOARD OF CHAFFEY
COMMUNITY COLLEGE DISTRICT DESIGNATING CERTAIN
PRODUCTS, BRANDS OR SERVICES PURSUANT TO PUBLIC
CONTRACT CODE SECTION 3400**

WHEREAS, pursuant to Public Contract Code Section 3400(c), the Chaffey Community College District ("District") may make a finding(s) designating certain products, things, or services by specific brand or trade name for the statutorily enumerated purposes; and

WHEREAS, the District's Governing Board ("Board") has reviewed the District's current facilities, general contracts, plans, and specifications in order to evaluate the District's need to establish uniform, complete and compatible campus building automation systems District-wide to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District; and

WHEREAS, the District has installed the Quark Communications Inc. manufactured, supplied, and installed InetSupervisor™ brand building automation systems in seven (7) Chaffey campus locations in place of the aging Andover Controls; and

WHEREAS, to continue the campus building retrofit program, it is essential to maintain campus-wide system continuity to achieve higher cost efficiencies associated with standardized building automation systems and controls as further described herein. It is also advantageous that these systems and controls are furnished exclusively by a proven regional vendor that is currently servicing and supporting our existing campus systems; and

WHEREAS, District staff has undertaken considerable research into these and other programs and services for building automation systems to determine the best options to optimize building energy and operating efficiencies and has determined the InetSupervisor™ programs have demonstrated reliability, durability, quality, and provide added energy efficiency; and

WHEREAS, the continued acquisition of InetSupervisor™ systems will allow the District to ensure that the building automation systems-related hardware and software which are operated and maintained on all future District facility projects match the existing InetSupervisor™ systems in use at the seven (7) previously updated District facilities as permitted pursuant to Public Contract Code Section 3400(c)(2); and

WHEREAS, District staff has been trained in the operation, programming, maintenance, and repair of the InetSupervisor™ systems and will maintain a stock of the equipment needed for replacements and maintenance; and

WHEREAS, District staff has determined that proprietary InetSupervisor™ system products and services will permit centralized computer monitoring of HVAC and lighting controls at all District facilities; and

WHEREAS, based on the Board's above-described review and Public Contract Code Section 3400(c)(2), the Board has determined that the District must require and specify the use of certain proprietary and sole source Quark Communications Inc. distributed InetSupervisor™ system products, things, or services on District projects.

RESOLUTION NO. 52217C (CONT.)

NOW, THEREFORE, BE IT RESOLVED BY CHAFFEY COMMUNITY COLLEGE DISTRICT AS FOLLOWS:

Section 1. The above recitals are true and correct.

Section 2. The District, pursuant to Public Contract Code Section 3400, intends to establish uniform, complete and compatible building automation system specifications District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District.

Section 3. The District has found that compatibility, cost efficiency, ease of operation and control, low maintenance, and utility of existing building automation systems is problematic. As such, the District believes it is essential to standardize its InetSupervisor™ District building automation control system specifications in order to avoid incompatibility issues. Such incompatibility issues include reduced building system reliability along with the operational, maintenance and training issues that add unnecessary costs associated with specifying multiple systems in new facilities or replacing unserviceable building automation systems in existing facilities. The goal is to avoid incompatible and non-conforming systems to gain building HVAC and lighting system operational efficiencies to provide greater occupant comfort and the associated energy savings without the added cost burden on limited District resources.

Section 4. The District and its consultants have undertaken considerable research into the products/brands of InetSupervisor™ systems described in the specification. District staff has been trained in the operation, maintenance, replacement, and repair of the InetSupervisor™ system described in the specification and the District will maintain a stock of the equipment needed for replacements and maintenance.

Section 5. District staff has determined that the subject InetSupervisor™ system products provided by Quark Communications Inc. have demonstrated their reliability, durability, and quality.

Section 6. Pursuant to Public Contract Code Section 3400(c)(2), the District's Board hereby designates that certain products/brands of Quark Communications Inc. InetSupervisor™ systems for the District's use in future projects so as to establish one complete uniform District-wide building automation system, thus, avoiding the incompatibility of non-standardized products, and thus to minimize the operational and control issues associated with related installation, computer control, maintenance, and training-related problems.

Section 7. The designation of certain proprietary and sole source InetSupervisor™ systems distributed by Quark Communications Inc., along with associated software programs, products, diagnostic services, repairs, and upgrades related to the InetSupervisor™ systems, shall be effective for sixty (60) months from the date of this Resolution.

Section 8. At the end of the sixty (60)-month period, District staff will review the subject products/brands and evaluate whether re-adoption or discontinued use of the designated proprietary and sole source InetSupervisor™ system products and services provided by Quark Communications Inc. is appropriate, including presenting a recommendation to the Superintendent/President or his/her designee. The Superintendent/President or his/her designee shall then consider District staff's recommendations and either re-approve or discontinue the designation of the products/brands contained herein and/or approve additional/replacement products/brands.

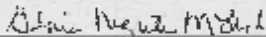
Section 9. The Superintendent/President or his/her designee shall present changes, if any, for its ratification.

RESOLUTION NO. 62217C (CONT.)

PASSED AND ADOPTED by the Governing Board of the Chaffey Community College District at Rancho Cucamonga, California, this 22nd day of June, 2017, at a regular meeting by the following vote:

Ayes: 5
Noes: 0
Abstentions:
Absent:

I, Gloria Negrete McLeod, Clerk of the Governing Board of the Chaffey College Community College District of San Bernardino County, California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly adopted by said Board at the regular meeting thereof at the date and place and by vote stated, which resolution is on file and of record in the office of said Board.



Gloria Negrete McLeod
Clerk, Governing Board

6. CONTRACT FORM (SAMPLE)

CONTRACT FOR THE CHAFFEY COMMUNITY COLLEGE DISTRICT

2022PW01 Chino Instructional Building

1. PARTIES AND DATE.

This Contract is made and entered into this _____ day of _____, 2022, by and between the **CHAFFEY COMMUNITY COLLEGE DISTRICT** (hereinafter called the "OWNER") and *****INSERT NAME***** (hereinafter called the "Contractor").

2. RECITALS.

2.1 The OWNER is a community college district organized under the laws of the State of California, with power to contract for services necessary to achieve its purpose;

2.2 Contractor, in response to a Notice Inviting Bids issued by OWNER on January 11, 2022, has submitted a bid proposal for construction of the Work necessary to complete 2022PW01 Chino Instructional Building Project described in the Contract.

2.3 OWNER has duly opened and considered the Contractor's bid proposal, and duly awarded the bid to Contractor in accordance with the Notice Inviting Bids and the other Bid Documents, and has given written Notice of Award to Contractor on *****INSERT DATE*****.

2.4 Contractor has obtained, and delivers concurrently herewith, Performance and Payment Bonds and evidences of insurance coverage as required by the Contract.

3. TERMS.

3.1 Incorporation of Documents.

This Contract includes and hereby incorporates in full by reference the following documents, including all exhibits, drawings, specifications and documents therein, and attachments and addenda thereto:

- Table of Contents
- Project Directory Notice
- Inviting Bids
- Instructions to Bidders
- Bid Forms
- Contract Form, Exhibit 1 Certification of Workers' Compensation & IRS Form W-9
- Contract Appendix
- Subpart A - General Conditions
- Subpart B - Supplementary General Conditions
- Subpart C - Special Conditions

- Subpart D - Expanded List of Subcontractors
- Subpart E - Performance Bond
- Subpart F - Payment Bond
- Subpart G - Escrow Agreement for Security Deposits (*optional*)
- Subpart H - Drug-Free Workplace Certification
- Subpart I - Recycled Content Certification
- Subpart J - Asbestos-Free Materials Certification
- Subpart K - Iran Contracting Act Certification
- Subpart L - Siemens Industry, Inc. and Quark Communications, Inc.
Acknowledgment
- Subpart M - List of Drawings (*Full-size sheets under separate cover.*)
- Subpart N - Specifications
- Subpart O - CEQA (EIR) Documents
- Subpart P - Geotechnical Investigation

ADDENDUM NO. _____ dated _____.

The above documents, including the General Conditions, are an integral part of the Contract Documents. By signing this Contract, Contractor acknowledges that he or she has read, understood and agrees with all of the terms of the Contract Documents, including, but not limited to, provisions of the General Conditions relating to indemnification, insurance, standards of performance, termination, compensation and time of the essence performance. Contractor shall not disclaim knowledge of the meaning and effect of any term or provision of the Contract Documents, and agrees to strictly abide by their meaning and intent.

3.2 Contractor's Basic Obligation.

Contractor promises and agrees, at its own cost and expense, to furnish to the OWNER all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately complete 2022PW01 Chino Instructional Building Project, including any alternates selected by the OWNER as specified in the Notice of Award, incorporated by reference herein, and all structures and facilities described in the Contract (the "Work"), for a total of _____ **DOLLARS** (\$ _____), as specified in the Bid Forms submitted by the Contractor in response to the above referenced Notice Inviting Bids. Such amount shall be subject to adjustment in accordance with the applicable terms of this Contract. All Work shall be subject to, and performed in accordance with the above referenced documents.

As further specified in the Bid Forms submitted by the Contractor in response to the above referenced Notice Inviting Bids, the following Unit Prices shall be incorporated into this Contract to be utilized at OWNER'S sole option for any additional work beyond the Base Bid and any OWNER accepted Alternates:

[LIST UNIT PRICES]

3.3 Standard of Performance.

Contractor shall perform all Work under this Contract in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in

the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling necessary to perform the Work. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them. Finally, Contractor further represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Work, and that such licenses and approvals shall be maintained throughout the term of this Contract.

3.4 Completion Time for the Work and Liquidated Damages.

Contractor shall perform and complete all Work under this Contract within **738** Calendar Days (the "Completion Time"), according to the phases and completion schedule within the Specifications, beginning on the commencement date specified in the Notice to Proceed and ending on the date of Substantial Completion. Contractor shall perform its Work in strict accordance with the approved Construction Schedule developed pursuant to the Contract Documents.

Contractor agrees that if such Work is not completed within the aforementioned Completion Time, liquidated damages will apply in the amount of **THREE THOUSAND DOLLARS (\$3,000) PER CALENDAR DAY** as provided by the applicable provisions of the General Conditions and Supplementary General Conditions, found in the Contract Appendix, for each and every calendar day after expiration of the Completion Time that the Work is not Substantially Complete. This provision shall not limit any right or remedy of OWNER in the event of any other default of Contractor other than failing to complete the Work within the Completion Time.

3.5 OWNER's Basic Obligation.

OWNER agrees to engage and does hereby engage Contractor as an independent contractor to furnish all materials and to perform all Work according to the terms and conditions herein contained for the sum set forth above. Except as otherwise provided in the Contract, the OWNER shall pay to Contractor, as full consideration for the satisfactory performance by the Contractor of the services and obligations required by this Contract, the above referenced compensation in accordance with compensation provisions set forth in the Contract.

3.6 Contractor's Certifications.

3.6.1 Labor Code. Contractor maintains that he is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Work. A certification form for this purpose is attached hereto as Exhibit "1" and incorporated herein by reference, and shall be executed simultaneously with this Contract.

3.7 Reserved

3.8 Successors.

The parties do for themselves, their heirs, executors, administrators, successors, and assigns agree to the full performance of all of the provisions contained in this Contract. Contractor may not either voluntarily or by action of law, assign any obligation assumed by Contractor hereunder without the prior written consent of the OWNER.

3.9 Notices.

All notices hereunder and communications regarding interpretation of the terms of the Agreement or changes thereto shall be provided by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

CONTRACTOR:

 Attn: _____

SURETY:

 Attn: _____

OWNER:

Chaffey Community College District
 5885 Haven Avenue
 Rancho Cucamonga, CA 91737-3002
 Attn: **Kim Erickson,**
Executive Director,
Business Services

COPIES TO PROJECT MANAGER:

5885 Haven Avenue
 Rancho Cucamonga, CA 91737
 Attn: _____

Any notice so given shall be considered received by the other party three (3) days after deposit in the U.S. Mail, first class postage prepaid, addressed to the party at the above address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.10 No State Liability.

As between the OWNER and the State of California, the Contractor agrees that the State of California, including the Community College Chancellor's Office, is not liable for any damages of any kind arising out of this Contract. The Contractor's sole remedy is against the OWNER or other third parties, and only the OWNER and those other third parties may be liable for any injury the Contractor may suffer under this Contract.

CONTRACTOR:

CHAFFEY COMMUNITY COLLEGE DISTRICT:

By: _____
Signature

By: _____
Signature

Typed or Printed Name & Title

Typed or Printed Name & Title

Contractor's License Class & Number

EXHIBIT "1"

CERTIFICATION OF WORKERS' COMPENSATION LABOR CODE - SECTION 1861

I, the undersigned Contractor, am aware of the provisions of Section 3700 et seq. of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the Code. I agree to and will comply with such provisions before commencing the Work governed by this Contract.

CONTRACTOR:

Company Name

By:

Signature

Typed or Printed Name & Title

Date

Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the
requester. Do not
send to the IRS.

Print or type. See Specific Instructions on page 3.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes. <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner. <input type="checkbox"/> Other (see instructions) ► _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
	5 Address (number, street, and apt. or suite no.) See instructions.	Requester's name and address (optional)
	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number											
				-				-			
or											
Employer identification number											
					-						

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ►	Date ►

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.

You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

***Note:** The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

CONTRACT APPENDIX, SUBPART A

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GENERAL CONDITIONS

ARTICLE 1 - GENERAL

1.1 BASIC DEFINITIONS

Unless specifically noted, wherever words defined below (or pronouns used in their stead) occur in any of the Contract Documents, they shall have the meanings provided for in this Section.

1.1.1 ACCEPTABLE

Acceptable, Acceptance or words of similar import shall be understood to be the acceptance of the Owner's Representative and/or the Construction Manager, as defined below.

1.1.3 APPROVAL

Approval means written authorization by Owner's Representative and/or Construction Manager, as defined below.

1.1.4 ARCHITECT

The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture with whom the OWNER has contracted for this Project, and is referred to throughout the Contract as if singular in number. The Architect shall have all powers in representing the OWNER as is consistent with applicable state laws, rules or regulations, as well as those provisions provided in this Contract and in the OWNER/Architect Agreement. The Contractor shall cooperate with the Architect and respond to any requests or directives authorized by the OWNER to be made or given by the Architect. The Contractor shall request clarification from the OWNER in writing if the Contractor should have any questions regarding the authority of the Architect. OWNER may also expand the Architect's authority at any time and may direct the Contractor, subcontractors or any other party to acknowledge the authority of the Architect in any situation. The term "Architect" means the Architect or the Architect's authorized representative.

1.1.5 CHANGE ORDER

A Change Order ("CO") is a Contract document, issued by the OWNER, and signed by the OWNER, the Contractor, and the Architect, stating their agreement, as applicable, to the following: (1) a change in the Work, if any; (2) the amount of the adjustment in the Contract Sum, if any; (3) the extent of the adjustment in the Completion Time, if any; (4) modification of any other Contract term or condition.

1.1.6 COLLEGE'S REPRESENTATIVE, OWNER'S REPRESENTATIVE OR REPRESENTATIVE

College's Representative, Owner's Representative or Representative means the member of the Construction Manager's staff designated as the Owner's Representative for the Project. In the event of a dispute between the Construction Manager and the College, the College shall have the unilateral authority to designate another party, including but not limited to, a third party consultant or member of College's staff to serve as the Owner's Representative. The Contractor shall abide by the College's

designation of the "Owner's Representative" for the Project. The parties acknowledge that while the Owner's Representative may act in a certain capacity on behalf of the College, ultimately the College retains the only authority to authorize change orders, payments to Contractor and the settlement of claims arising from the Project.

1.1.7 COMPLETION TIME

Unless otherwise provided, the "Completion Time" is the period of time, including authorized adjustments, allotted in the Contract for Substantial Completion of the Work. The Completion Time will begin to run on the commencement date specified in the Notice to Proceed.

1.1.8 CONTRACT DOCUMENTS

The Contract Documents consist of all documents listed in Section 3.1 of the Contract Form and constitute the Contract.

The Contract Documents comprising the Contract are complementary, and each obligation of the Contractor, Subcontractors, and material or equipment suppliers in any one shall be binding as if specified in all. The Contract represents the entire and integrated agreement between the parties hereto, and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written Modification. The Contract shall not be construed to create a contractual relationship of any kind between the Architect and Contractor, between the OWNER and any Subcontractor or Sub-subcontractor, or between any persons or entities other than the OWNER and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

The number of executed copies the successful CONTRACTOR shall provide of the Contract is 4 and the number of PERFORMANCE and PAYMENT BONDS is 4 each.

1.1.9 CONTRACTOR

The individual, firm, partnership, corporation, or combination thereof, private, municipal or public, including joint ventures, which, as an independent contractor, has entered into this Contract with the OWNER. The Contractor shall be referred to throughout the Contract by singular number and masculine gender. The term "Contractor" means the Contractor or the Contractor's Representative. To the extent that any portion of the Work is provided with the Contractor's own forces, any reference to Subcontractors shall be equally applicable to the Contractor.

1.1.10 CONTRACTOR'S REPRESENTATIVE

Contractor's executive representative (as specified in Article 3) who shall be present on the Work Site at all times during construction, and who shall be authorized to act on behalf of the Contractor for any and all reasons, including but not limited to, receiving and fulfilling instructions from the Construction Manager or the OWNER, and directing the construction activities of the Contractor. The term Superintendent as used in Article 3 shall mean the Contractor's Representative.

1.1.11 CONTRACT SUM

The Contract Sum is stated in the Contract and, including authorized adjustments pursuant to Change Orders, is the total amount payable by the OWNER to the Contractor for full completion of the Work under the Contract.

1.1.12 CONSTRUCTION MANAGER

The terms "Construction Manager," "Project Manager," and "Program Manager" mean the individual, firm, partnership, corporation or other entity providing construction management services for the Project. The "Construction Manager" and the Construction Manager's Representative, shall be referred to throughout the Contract as if singular in number.

Unless directed otherwise by OWNER, the Construction Manager shall have authority to act on behalf of OWNER for all purposes consistent with the Construction Manager's authority. The Contractor shall cooperate with the Construction Manager and respond to any requests or directives authorized by the OWNER to be made or given by the Construction Manager. The Contractor shall request clarification from OWNER in writing if the Contractor has any questions regarding the authority of the Construction Manager. OWNER may expand the Construction Manager's authority at any time and may direct the Contractor, subcontractors, Architect or any other party to acknowledge the authority of the Construction Manager in any situation.

1.1.13 CONSTRUCTION MANAGEMENT AGREEMENT

That document executed by and between the Construction Manager and the OWNER, or such other document executed by and between the OWNER and any other firm, partnership, corporation or other entity with whom the OWNER may contract for the provision of construction management services for the Project.

1.1.14 DAYS

Unless otherwise designated, the term "day" means calendar day.

1.1.15 DRAWINGS OR PLANS

Provisions applicable to this Contract provided by the OWNER as a separate document, and included in the Contract Appendix, which are graphic and pictorial portions of the Contract prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, character, dimensions, details and scope of the Work, generally including plans, profiles, typical cross-sections, general cross-sections, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect.

1.1.16 EMERGENCY

Any great public calamity, such as an extraordinary fire, flood, storm, epidemic, or other disaster, affecting the safety of life, the Work, or adjacent property.

1.1.17 ENERGY CONSERVATION MEASURE OR ECM

The equipment, devices and/ or materials as installed by Contractor at the Project Site for the purpose of improving the efficiency of utility consumption.

1.1.18 EQUAL/EQUIVALENT

A product, service, component or system which is demonstrated, through the submittal process, to the satisfaction and specific approval of the OWNER or its designee to be equal to the product, service, component or system specified as set forth in these Contract.

1.1.19 EQUIPMENT

A general term which refers to vehicles, systems, assemblies, sub-assemblies, products, material, fittings, devices, appliances, fixtures, apparatus, supplies and the like used in the performance of a specific function or functions or Contract obligation.

1.1.20 EXTRA WORK

Extra Work is work of which the performance or compensation thereof is not otherwise provided for in the Contract, but found by the OWNER to be necessary or desirable to the satisfactory completion of this Contract and within its intended scope.

1.1.21 FACILITY IMPROVEMENT MEASURES OR FIMS

The methods, techniques, application of know-how, installation of devices or otherwise, described in the Scope of Work (Appendix A), that are undertaken by Contractor as a result of this Contract with the intent of generating net savings or efficiencies at or in connection with the operation of the Project Site, including without limitation the ECMs and any other non-conservation related improvements, activities, means or methods.

1.1.22 INSTALL/INSTALLATION

Completely assembling, erecting and connecting material, parts, components, appliances, supplies and related equipment specified or required for the completion of the Work.

1.1.23 MATERIALS

Equipment, material, products, and articles incorporated in the Work.

1.1.24 MODIFICATIONS

A Modification is a written amendment to the Contract signed by both parties, in the form of a Change Order or a Construction Change Directive.

1.1.25 NOTICE TO PROCEED

Written notice from the OWNER to Contractor to proceed with the Work by a specified date.

1.1.26 OWNER

The Chaffey Community College District, which shall be referred to throughout the Contract as if singular in number. The term "OWNER" means the OWNER or the OWNER's Representative. The terms "OWNER", "College", and "District" as used herein shall all be deemed to mean the Chaffey Community College District and Chaffey College or its representatives and Governing Board.

1.1.27 OWNER'S REPRESENTATIVE

The Associate Superintendent, Administrative Services, or his or her designee(s), which shall be referred to throughout the Contract as if singular in number.

1.1.28 PERFORM

Perform shall mean that the Contractor, at Contractor's expense, shall take all actions necessary to complete the Work, including the furnishing of all necessary labor, materials, tools, equipment, and appurtenances required to complete the Work in strict accordance with the Contract Documents.

1.1.29 PROJECT

The term "Project" means the Work of the Contract and all other work, labor, equipment, and materials necessary to accomplish the total and satisfactory completion of the Project in accordance with the Contract. The Project may include construction by OWNER or by separate contractors.

1.1.30 PROJECT MANUAL

The "Project Manual" also means the Contract Documents.

1.1.31 PROJECT SITE

The "Project Site" or "Site" is all of the property and/or facilities of the OWNER where the Work will be performed pursuant to the Contract, as well as such adjacent lands as may be directly affected by the performance of the Work.

1.1.32 PROVIDE

In reference to Work to be performed by Contractor, to "provide complete in place." That is, to furnish, install, test and make ready for operation and use in accordance with the Contract.

1.1.33 REFERENCE STANDARDS

Standards for Material, Equipment, Work, procedures or workmanship established by reference to standards or procedures published in a described reference text. Referenced Standards shall have the same force and effect as if they are physically incorporated in the Contract.

1.1.34 REGULAR WORK DAY

This consists of eight hours as required under Section 1810 of the California Labor Code.

1.1.35 SCHEDULES: PROJECT – CONSTRUCTION

The "Construction Schedule" is the schedule developed by the Contractor as required in Division 1 of the Specifications. The Construction Schedule shall be a dynamic documentation of the progress of the Project.

1.1.36 SPECIAL CONDITIONS

Provisions applicable to this Contract provided by the OWNER and included in the Contract Appendix which may reinvoke, modify, or supplement any portion of the Contract Documents and which are incorporated into the Contract.

1.1.37 SPECIFICATIONS

Provisions applicable to this Contract provided by the OWNER and/or Architect, and included in the Project Manual, which contain the written directions, descriptions, requirements for material, equipment, construction systems, instructions, quality assurance standards, workmanship, and performance of related written directions necessary to complete the Work. Reference Standards, or

portions thereof, cited in the Project Manual by reference shall have the same force and effect as if included in the Contract physically.

1.1.38 SUBCONTRACTOR

Any person, firm, entity or corporation, other than the employees of Contractor, who contracts with Contractor to furnish labor or labor and materials in order to perform a portion of the Work at the Site. The term "Subcontractor" is referred to throughout the Contract as if singular in number, and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor of the OWNER or subcontractors of such a separate contractor. To the extent that the term Trade Contractor is utilized in the Contract, it shall have the same meaning as the term "Subcontractor".

1.1.39 SUB-SUBCONTRACTOR

A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to furnish labor, material or labor and materials in order to perform a portion of the Work at the Site. The term "Sub-subcontractor" is referred to throughout the Contract as if singular in number, and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

1.1.40 SUBSTANTIAL COMPLETION

"Substantial Completion" or "Substantially Complete" means the first to occur of the following: (i) that point in time when the Work, or any identifiable portion thereof, has been fully tested and OWNER has determined, in its reasonable discretion, that all such Work has been completed to a sufficient degree and quality, in strict accordance with the Contract, except only for completion of the Punch List as defined in 3.11.4.2, that OWNER will be able to realize from such Work substantially all of the practical benefits and functional operation of all building systems intended to be gained therefrom, or otherwise to employ the Work or the FIMs associated therewith for their intended purposes; or (ii) temporary, qualified or final certificates of occupancy, if required, have been issued with respect to such portions of the Work by the appropriate public authority. If the OWNER is not able to use the Work or such identifiable portion thereof for one or more of its intended purposes, no matter how small the purpose may be, expressly including but not limited to employment of any of the FIMs for their intended purposes, the Work is not Substantially Complete.

1.1.41 SUPPLIER

A person, firm, entity or corporation who contracts with the Contractor, a subcontractor or a sub-subcontractor to provide a tangible product, but who usually provides no services other than delivery. The term "Supplier" is referred to throughout the Contract as if singular in number, and means a Supplier or an authorized representative of the Supplier.

1.1.42 WORK

All construction, labor, materials, equipment and other contractual requirements necessary to fully and adequately complete the portion of the Project for which the Contractor has contracted with the OWNER. The Work shall include, but is not necessarily limited to, the following: (1) an initial obligation of any Contractor or Subcontractor who performs any portion of the Work to visit the Site of the proposed Work; (2) a continuing obligation of the Contractor and Subcontractors after the commencement of the Work to fully acquaint and familiarize themselves with the conditions as they exist and the character of the operations to be carried on under the Contract; and (3) a continuing obligation of the Contractor and Subcontractors to make such investigations as they may see fit so

that they shall fully understand the facilities, physical conditions, and restrictions attending the Work under the Contract. Each such Contractor or Subcontractor shall also thoroughly examine and become familiar with the Drawings, Specifications, and associated Contract Documents. The Work expressly includes completion of all FIMs for their intended purposes. The Contractor shall require its Subcontractors to comply with each and every provision of the Contract, including this Section. The Work shall be completed in accordance with the time specified in the Contract form.

1.1.44 WORKING DAYS

A Working Day is defined as any calendar day, except for Sundays and legal holidays. Hours of daily construction operation shall consist of Mondays through Fridays, 7:00 am to 7:00 pm. Saturdays from 8:00 am to 5:00 pm. For any work outside the hours of operation listed above the Contractor must submit a written request for permission to work to the OWNER a minimum of two weeks prior to the requested work. The OWNER's written permission to work outside the normal hours of operation may be granted at the OWNER's sole discretion, and OWNER's denial of Contractor's request shall not result in any liability of any kind to OWNER. The Contractor may work outside the hours listed above only with the OWNER's written permission.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 EXAMINATION OF CONTRACT DOCUMENTS

Before commencing any portion of the Work, Contractor shall again carefully examine all applicable Contract Documents, the Project Site and other information given to Contractor as to materials and methods of construction and other Project requirements, including the specifications drafted by the College's Commissioning Agent. Contractor shall immediately notify the Construction Manager of any potential error, inconsistency, ambiguity, conflict or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements.

1.2.2 CORRELATION AND INTENT

1.2.2.1 *Documents Complementary and Inclusive*

The documents which comprise the Contract are complementary, and each obligation of the Contractor, Subcontractors, and material or equipment suppliers in any one shall be binding as is specified in all. The Contract is intended to include all items required for the proper execution and completion of the Work. Any item of work mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both.

1.2.2.2 *Coverage of the Drawings and Specifications*

The Drawings and Specifications generally describe the work to be performed by Contractor. Generally, the Specifications describe work which cannot be readily indicated on the Drawings and indicate types, qualities, and methods of installation of the various materials and equipment required for the Work. It is not intended to mention every item of Work in the Specifications, which can be adequately shown on the Drawings, or to show on the Drawings all items of Work described or required by the Specifications even if they are of such nature that they could have been shown. All materials or labor for Work, which is shown on either by the Drawings or the

Specifications (or is reasonably inferable therefrom as being necessary to complete the Work), shall be provided by the Contractor whether or not the Work is expressly covered in either the Drawings and/or the Specifications. It is intended that the Work be of sound, quality construction, and the Contractor shall be responsible for the inclusion of adequate amounts to cover installation of all items indicated, described, or implied in the portion of the Work to be performed by them.

1.2.2.3 Conflicts

In the event there is a discrepancy between the documents which comprise the contract, the order of precedence specified in Section 1.2.5.1 shall control. Without limiting Contractor's obligation to identify conflicts for resolution by the Architect in accordance with Section 1.2.2.5, it is intended that the more stringent, higher quality and greater quantity of Work shall apply.

1.2.2.4 Conformance With Laws

Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon application of either party the Contract shall be amended in writing to make such insertion or correction.

Before commencing any portion of the Work, Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract. In the event Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with any such restrictions or special requirements of the Contract, Contractor shall immediately notify Architect in writing of same and shall cause to be corrected any such violation or inconsistency in the manner provided hereunder.

Contractor shall be responsible for familiarity with the Americans with Disabilities Act ("ADA") (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA regulations.

1.2.2.5 Ambiguity

Before commencing any portion of the Work, Contractor shall carefully examine all Drawings and Specifications, Contract, and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify OWNER and Architect of any perceived or alleged error, inconsistency, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. Neither the Contractor nor any Subcontractor shall take advantage of any apparent error or omission which may be found in the Drawings, Specifications or any of the Contract. If the Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract, which it knows or reasonably should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Sum or the Completion Time. In no case shall any Subcontractor proceed with the Work if uncertain without the Contractor's written direction and/or approval.

1.2.2.6 Corrections

The OWNER shall be entitled to order the making of such corrections and interpretations in the Drawings or Specifications as he may deem necessary for the fulfillment of their intent. Omission from the Drawings or Specifications, or the misdescription of details of Work which are manifestly necessary to carry out the intent of the Drawings and Specifications, or which are customarily performed, shall not relieve Contractor from performing such omitted Work (no matter how extensive) or misdescribed details of the Work and they shall be performed as if fully and correctly set forth and described in the Drawings and Specifications at no additional expense or delay to the OWNER.

1.2.2.7 *Verification of Governing Dimensions*

Before commencing work, Contractor shall, at no additional expense to the OWNER, verify all governing dimensions at the Project Site, and shall examine all adjoining work on which his Work is in any way dependent according to the Contract. Contractor shall notify the OWNER if any defective or non-conforming adjoining dimensions are observed before Contractor begins that part of the Work.

1.2.2.8 *Subsections*

References to Sections include Subsections under the Sections referenced and references to Subsections similarly include references to sub-Subsections.

1.2.2.9 *Severability*

In the event any article, section, subarticle, paragraph, sentence, clause or phrase contained in the Contract shall be determined, declared or adjudged invalid, illegal, unconstitutional or otherwise unenforceable, such determination, declaration or adjudication shall in no manner affect the other articles, sections, subarticles, paragraphs, sentences, clauses or phrases of the Contract, which shall remain of full force and effect as if the article, section, subarticle, paragraph, sentence, clause or phrase declared, determined or adjudged invalid, illegal, unconstitutional or otherwise unenforceable was not originally contained in the Contract.

1.2.2.10 *Headings*

The various headings contained in the Contract are inserted for convenience only and shall not affect the meaning or interpretation of the Contract or any provision thereof. The organization or arrangement of the Specifications into divisions, sections and articles, and the arrangement and titles of Contract Drawings shall not control Contractor in dividing the Work among Subcontractors nor in establishing the extent of Work to be performed by any trade.

1.2.2.11 *Plural*

Words in the singular shall include the plural whenever applicable or the context so indicates.

1.2.3 *ADDENDA AND DEFERRED APPROVALS*

1.2.3.1 *Addenda*

Addenda shall govern over all other Documents which comprise the Contract. Subsequent addenda issued shall govern over prior addenda only to the extent specified. In accordance with the applicable provisions of the California Code of Regulations (Titles 19 and 21), the California Building

Code (formerly Title 24 of the Code of Regulations), and the Uniform Building Code, addenda shall be approved by the DSA.

1.2.3.2 *Deferred Approvals*

The requirements approved by the DSA on any item submitted as a deferred approval in accordance with the applicable provisions of the California Code of (Titles 19 and 21), the California Building Code (formerly Title 24 of the Code of Regulations), and the Uniform Building Code, shall take precedence over any previously issued addenda, drawing or specification.

1.2.4 SPECIFICATION INTERPRETATION

1.2.4.1 *Titles*

The Specifications are separated into titled sections for convenience only and not to dictate or determine the trade or craft involved.

1.2.4.2 *As Shown, Etc.*

Where "as shown," "as indicated," "as detailed," or words of similar import are used, reference is made to the Drawings accompanying the Specifications unless otherwise stated. Where "as directed," "as required," "as permitted," "as authorized," "as accepted," "as selected," or words of similar import are used, the direction, requirement, permission, authorization, approval, acceptance, or selection by Architect is intended unless otherwise stated.

1.2.4.3 *General Conditions.*

The General Conditions and Supplementary General Conditions are a part of each and every section of the Project Manual.

1.2.4.4 *Abbreviations.*

In the interest of brevity, the Specifications are written in an abbreviated form and may not include complete sentences. Omission of words or phrases such as "Contractor shall," "shall be," etc., are intentional. Nevertheless, the requirements of the Specifications are mandatory. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.2.4.5 *Plural.*

Words in the singular shall include the plural whenever applicable or the context so indicates.

1.2.4.6 *Metric.*

The Specifications may indicate metric units of measurement as a supplement to U.S. customary units. When indicated thus: 1" (25 mm), the U. S. customary unit is specific, and the metric unit is nonspecific. When not shown with parentheses, the unit is specific. The metric units correspond to the "International System of Units" (SI) and generally follow ASTM E 380, "Standard for Metric Practice."

1.2.4.7 *Standard Specifications*

Any reference to standard specifications of any society, institute, association, or governmental authority is a reference to the organization's standard specifications, which are in effect at the date set for receipt of bids. If applicable specifications are revised prior to completion of any part of the Work, the Contractor may, if acceptable to Architect, perform such Work in accordance with the revised specifications. The standard specifications, except as modified in the Specifications for the Project, shall have full force and effect as though printed in the Specifications. Architect will furnish, upon request, information as to how copies of the standard specifications referred to may be obtained.

1.2.4.8 *Absence of Modifiers*

In the interest of brevity, the Contract frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.2.5 RULES OF DOCUMENT INTERPRETATION

1.2.5.1 *General Precedence of Documents Comprising the Contract*

Except as otherwise provided in the Supplementary General Conditions, the precedence of the documents comprising the Contract, in the event of an express conflict, is as follows:

- (1) Change Orders / Modifications
- (2) Addenda
- (3) Special Conditions
- (4) Specifications
- (5) Drawings
- (6) Contract Form
- (7) Supplementary General Conditions
- (8) General Conditions

1.2.5.2 *Drawings*

In the event of conflict within the drawings, the following rules shall apply:

- (1) Change Order Drawings / Addenda Drawings govern over Contract Drawings.
- (2) General Notes, when identified as such, shall be incorporated into other portions of Drawings.
- (3) Schedules, when identified as such, are complementary with other notes and other portions of Drawings including those identified as General Notes.
- (4) Larger scale drawings shall take precedence over smaller scale drawings. In the event of any discrepancy between any drawing and the figure written thereon, the figure shall govern.
- (5) Figured, derived, or numerical dimensions shall govern. At no time shall the Contractor base construction on scaled drawings.
- (6) Contract Drawings govern over Shop Drawings.

1.2.5.3 ***Specifications***

Specifications shall govern as to materials, workmanship, and installation procedures.

1.2.5.4 ***More Stringent and Higher Quality/Quantity***

In the case of disagreement or conflict between or within standards, specifications, and drawings, the more stringent, higher quality, and greater quantity of Work shall apply.

1.2.5.5 ***Contiguous Work***

Should the proper and accurate performance of the Work hereunder depend upon the proper and accurate performance of other work not covered by this Agreement, the Contractor shall carefully examine such other work, determine whether it is in fit, ready and suitable condition for the proper and accurate performance of the Work hereunder, use reasonable means necessary to discover any defects in such other work, and before proceeding with the Work hereunder, report promptly any such improper conditions and defects that it discovers to the College and Construction Manager in writing and allow the College a reasonable time to have such improper conditions and defects remedied.

1.2.5.6 ***Field Measurements***

Notwithstanding the dimensions on the Plans, Specifications and other Contract Documents it shall be the obligation and responsibility of the Contractor to take such measurements as will insure the proper matching and fitting of the Work covered by this Agreement with contiguous work.

1.3 **OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS**

The Drawings, Specifications, and other documents prepared on behalf of the OWNER are instruments of the services of the Architect and its consultants and are the property of the OWNER. The Contractor may retain one contract record set. Neither the Contractor nor any Subcontractor, Sub-subcontractor, or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by the Architect, and unless otherwise indicated the Architect shall be deemed the author of them. All copies of them, except the Contractor's record set, shall be returned or suitably accounted for to the Architect, upon request upon completion of the Work. The Drawings, Specifications, and other documents prepared by the Architect, and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor, Sub-subcontractor, or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the OWNER. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by the Architect appropriate to and for use in the execution of their Work under the Contract. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the OWNER's property interest or other reserved right.

1.4 **RELATIONSHIPS**

The Contract Documents shall not be construed to create a contractual relationship of any kind between the Construction Manager, Architect, Owner's Representative and/or the Contractor, or any

of its subcontractors or supplier. Notwithstanding the above, nothing contained herein shall be deemed to give the Contractor or any third party any claim or right of action against the Owner's Representative, the Construction Manager or the Architect which does not otherwise exist without regard to this Agreement. The Contractor and its subcontractors and suppliers shall not be deemed to be beneficiaries of any of the acts or services of the Construction Manager, the Architect or the Owner's Representative which are performed under separate agreements for the sole benefit of the College. Contractor shall forward all communications to the College and Architect through Construction Manager and hereby acknowledges and agrees that any instructions, reviews, advice, approvals, orders or directives that are rendered to it by Construction Manager are specifically authorized and directed by the College.

ARTICLE 2 – OWNER

2.1 DEFINITION

The term "OWNER" shall have the meaning provided in Article 1.

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

2.2.1 FINANCING AND FUNDING

At the request of the Contractor, the OWNER will, prior to execution of the Contract and promptly from time to time thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the OWNER's obligations under the Contract.

2.2.2 SITE SURVEY

When required by the scope of the Project, the OWNER may furnish, at its expense, a legal description and a land survey of the Site, giving, as applicable, grades and lines of streets, alleys, pavements, adjoining property, rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries, and contours of the Site. Surveys to determine locations of construction, grading, and site work (other than those provided in the Contract Drawings) shall be provided by the Contractor. The OWNER shall, at its expense, identify/establish existing control points and corner stakes of the property/project boundary. Site survey requirements of the Contractor are further discussed in the Project Manual.

When a soils investigation report for the Project site is available, such report shall not be a part of the Contract Documents. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever tests it deems appropriate to determine the underground condition of the soil.

2.2.3 SOILS

When required by the scope of the Project, the OWNER may furnish, at its expense, the services of geotechnical engineers or consultants when reasonably required and deemed necessary by the Architect or as required by local or state codes. Such services with reports and appropriate professional recommendations shall include test boring, test pits, soil bearing values, percolation tests, air and water pollution tests, and ground corrosion and resistivity tests, including necessary

operations for determining subsoil, air, and water conditions. When a soils investigation report for the Project site is available, such report shall be a part of the Contract Documents. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever tests it deems appropriate to determine the underground condition of the soil.

2.2.4 UTILITY SURVEY

When required by the scope of the Project, the OWNER will furnish, at its expense, all information regarding known existing utilities on or adjacent to the Project Site. The location, size inverts and depths of existing utilities shall be field verified by the Contractor. Utility survey requirements of the Contractor are further discussed in the Project Manual.

2.2.5 INFORMATION

Upon the request of the Contractor, OWNER will make available such existing information regarding utility services and Site features, including existing construction, related to the Project as is available from OWNER's records. The Contractor may not rely upon the accuracy of any such information, other than that provided under Sections 2.2.2 through 2.2.4 (except that the Contractor may not rely upon and must question in writing to the OWNER and the Architect any information which appears incorrect based upon Contractor's Site inspection, knowledge of the Project, and prior experience with school projects), unless specifically stated in writing that the Contractor may rely upon the designated information.

2.2.6 EXISTING UTILITIES AT THE WORK SITE; REMOVAL, RELOCATION

The College has endeavored to determine the existence of utilities at the Project Site from the records of the owners of known utilities in the vicinity of the Project. The positions of these utilities as derived from such records are shown on the Plans.

Unless indicated otherwise on the Plans and Specifications, no excavations or potholing was performed to verify the locations shown for underground utilities. The service connections to these utilities are not shown on the plans. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations and potholing, to determine the locations and type of service connections, prior to commencing Work which could result in damage to such utilities. The Contractor shall immediately notify the College in writing of any utility discovered in a different location than shown on the plans or which is not shown on the Plans.

If applicable, all water meters, water valves, fire hydrants, electrical utility vaults, telephone vaults, gas utility valves, and other subsurface structures shall be relocated or adjusted to final grade by the Contractor. Locations of existing utilities shown on the Plans are approximate and may not be complete. The Contractor shall be responsible for coordinating its Work with all utility companies during the construction of the Work.

Notwithstanding the above, pursuant to Section 4215 of the Government Code, the College has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the plans and specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the plans and specifications made a part of the Contract Documents, College shall assume the responsibility for their timely removal, relocation, or protection.

Contractor, except in an emergency, shall contact the appropriate regional notification center,

California Underground Service Alert at 811 or 1-800-227-2600 or on-line at www.digalert.org at least two working days prior to commencing any excavation if the excavation will be performed in an area which is known, or reasonably should have been known, to contain subsurface installations other than the underground facilities owned or operated by the College, and obtain an inquiry identification number from that notification center. No excavation shall be commenced or carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any Subcontractor and the College has been given the identification number by the Contractor.

2.2.7 EASEMENTS

OWNER shall secure and pay for easements for permanent structures or permanent changes in existing facilities, if any, unless otherwise specified in the Contract.

2.2.8 REASONABLE PROMPTNESS

Information or services under OWNER's control will be furnished by the OWNER with reasonable promptness to avoid delay in orderly progress of the Work.

2.2.9 COPIES FURNISHED

The Contractor will be furnished with the number of copies of Drawings and Project Manuals as are stated herein. OWNER shall establish vendors to provide reproduction of the Drawings and Project Manuals from the originals. Contractor is responsible for all reproductions costs beyond the initial sets furnished. The number of hard copies of Construction Documents furnished shall be **two (2)**. OWNER shall make the Drawings and Project Manuals available to Contractor in electronic format.

2.2.10 DUTIES CUMULATIVE

The foregoing are in addition to other duties and responsibilities of the OWNER enumerated herein, and especially those in Article 6 (Construction by OWNER or by Separate Contractors), Article 9 (Payments and Completion), and Article 11 (Insurance and Bonds).

2.3 OWNER'S RIGHT TO STOP THE WORK

If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract, as required by paragraph 12.2, or persistently fails to carry out Work in accordance with the Contract, the OWNER, after providing Notice pursuant to paragraph 12.2.4, by written order signed personally or by an agent specifically so empowered by the OWNER in writing, may order the Contractor to stop the Work or any portion thereof, until the cause for such order has been eliminated. The right of the OWNER to stop the Work shall not give rise to a duty on the part of the OWNER to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Article 6.

2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

If the Contractor, at any time during the process of construction, defaults or neglects to carry out the Work in accordance with the Contract, or fails or refuses to furnish enough materials and/or workers to properly prosecute the Work, unless prohibited from so doing by the OWNER or other authorized governmental bodies, the OWNER, after giving **Three (3) calendar days** written notice to the Contractor, may proceed to furnish the materials and/or workers necessary to proceed with and/or complete the Work, without prejudice to any other rights it may have. The OWNER may then deduct the cost thereof, with reasonable expenses arising from such procedure including compensation for

additional professional and internally generated services and expenses made necessary by the Contractor's actions, from any amounts then due or which may thereafter become due to the Contractor. In such cases, the Contractor will be invoiced for the amount of such costs and expenses, and the invoice amount shall be deducted from the next payment due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the OWNER.

2.5 NOTICE OF THIRD PARTY CLAIMS

Pursuant to Public Contract Code Section 9201, the OWNER shall provide Contractor with timely notification of the receipt of any third-party claim relating to the Contract. The OWNER is entitled to recover reasonable costs incurred in providing such notification.

ARTICLE 3 - THE CONTRACTOR

3.1 DEFINITION

The term "Contractor" shall have the meaning prescribed in Article 1.

3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

3.2.1 CONTRACTOR

The Contractor shall supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences of its Work necessary to meet the Construction Schedule, procedures, and coordinating all portions of the Work under the Contract to meet the Construction Schedule, unless the Contract gives other specific instructions concerning these matters. If any of the Work is performed by other contractors retained directly by the OWNER, Contractor shall be responsible for the coordination and sequencing of the Work of those other contractors so as to avoid any impact on the Construction Schedule pursuant to the requirements of Article 6. Specific duties of the Contractor shall be in accordance with the applicable provisions of the California Code of Regulations (Titles 19 and 21), the California Building Code (formerly Title 24 of the Code of Regulations), and the Uniform Building Code. Contractor shall fully comply with any and all reporting requirements of Education Code §§ 39151 and 81141 in the manner prescribed by the applicable provisions of the California Code of Regulations (Titles 19 and 21), the California Building Code (formerly Title 24 of the Code of Regulations), and the Uniform Building Code.

3.2.2 CONTRACTOR RESPONSIBILITY; INDEPENDENT CONTRACTOR

The Contractor shall be responsible to the OWNER for acts and omissions of the Contractor's employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of the Work under direct or indirect contract with the Contractor or any of its Subcontractors. OWNER retains Contractor on an independent contractor basis and Contractor is not an employee, agent or representative of the OWNER. Contractor represents that it is fully experienced and properly qualified to perform the class of Work provided for in this Contract and that it is properly licensed, equipped, organized, and financed to perform the Work. Contractor shall maintain complete control over its employees and its subcontractors and shall pay all wages, salaries and other amounts due such personnel in connection with their performance as required by

law. Contractor shall be responsible for all reports and obligations respecting such personnel, including but not limited to, social security taxes, income tax withholdings, unemployment insurance, and workers' compensation insurance.

3.2.3 OBLIGATIONS NOT CHANGED BY ARCHITECT'S ACTIONS

The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract either by activities or duties of the Architect in the Architect's administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the Contractor.

3.2.4 ACCEPTANCE/APPROVAL OF WORK

The Contractor shall be responsible to determine when any completed portions of the Work already performed under this Contract or provided pursuant to Article 6 are suitable to receive subsequent work thereon.

3.2.5 STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

3.3 SUPERINTENDENT

3.3.1 CONTRACTOR'S REPRESENTATIVE

The Contractor shall provide a competent Superintendent, as well as any assistants the Superintendent may need, who shall be in attendance at the Project site at all times that any Work is in progress and at any time that any employee or Subcontractor of Contractor is present at the Work Site. The Superintendent, who may also be referred to as the "Contractor's Representative," shall represent the Contractor, shall have the authority to act on behalf of the Contractor for all purposes of the Contract and shall be available to the OWNER, Architect and Inspector of Record at all reasonable times. Any communications given to the Contractor's Representative shall be as binding as if given to the Contractor. Superintendent must be able to proficiently speak, read and write in English. Arrangements for responsible supervision, acceptable to the OWNER, shall be made for emergency Work which may be required. Contractor's approved Contractor's Representative shall devote full time to the Project and will supervise all Work on site (not a working foreman). Should Contractor wish to reduce the level of Contractor's Representative effort to part-time, he may do so only with prior written approval of the OWNER and upon submission and approval of a Change Order granting applicable monetary credit to the OWNER.

Prior to the commencement of work on the Project, Contractor shall notify the OWNER of the person(s) who will act as the Contractor's Representative and staff for the Project. The OWNER and Architect shall review the resume(s) of the proposed Contractor's Representative and staff, and approve or reject the proposed Contractor's Representative and staff. Should the Contractor wish to remove the Contractor's Representative or any other staff member for any reason, Contractor may substitute another employee of at least equal competence only with the prior written approval of the OWNER. For any change in the Contractor's Representative, Contractor shall provide, at its sole cost and expense, at least ten (10) Working Days of on-site training and transitional guidance for the

new Contractor's Representative, with the prior Contractor's Representative if possible, otherwise with a person who is fully and adequately knowledgeable about the Project.

Contractor shall provide a project manager and assistants, as necessary, who shall administer and manage the Work. OWNER, in its reasonable discretion, can require increased percentage dedication and percentage presence on the Project Site with no extra cost to OWNER to the extent that such additional presence is required due to an accelerated schedule caused by Contractor delays.

3.3.2 STAFF

The Contractor and each Subcontractor shall: furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of its portion of the Work; organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and keep an adequate force of skilled and fit workers on the job to complete the Work in accordance with all requirements of the Contract.

The OWNER requires the Contractor to provide the following full time project personnel, at a minimum: 1 Superintendent, 1 Assistant Superintendent, 1 Project Administrator and 2 Project Engineers. All full-time personnel are subject to all the requirements established in Section 3.3.1. All other positions can be made or scheduled at the Contractor's discretion.

3.3.3 RIGHT TO REMOVE

OWNER shall have the right, but not the obligation, to require the removal from the Project of the Contractor's Representative, or any other superintendent, staff member, agent, or employee of any contractor, Subcontractor, material or equipment supplier, or any other entity working on the Project.

3.4 LABOR AND MATERIALS

3.4.1 CONTRACTOR TO PROVIDE

Unless otherwise provided in the Contract, the Contractor shall provide and pay for labor, material, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

3.4.2 QUALITY

Unless otherwise specified, all materials and equipment to be permanently installed in the Project shall be new and shall be of such quality as required to satisfy the standards of the Contract. The Contractor shall, if requested, furnish satisfactory evidence as to kind and quality of all materials and equipment. All labor shall be performed by workers skilled in their respective trades, and shall be of such quality so that work in accordance with the standards of construction set forth in Contract will result.

3.4.3 REPLACEMENT

Any work, materials, or equipment, which do not conform to these requirements or the standards set forth in the Contract, may be disapproved and condemned by the OWNER, in which case, they shall be removed and replaced by the Contractor.

3.4.4 DISCIPLINE

The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract in accordance with paragraph 5.5.1 including, but not limited to, Subcontractors, and material or equipment suppliers retained for the Project. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

3.4.4.1 WORKERS

Any person in the employ of the Contractor whom Construction Manager or the Owner's Representative may deem incompetent or unfit shall be dismissed from the Work and shall not be re-employed on this Project except with the written Approval of the Owner's Representative.

In the event that Contractor dismisses an employee pursuant to this provision, Contractor shall inform the OWNER of said dismissal in its incident report to the OWNER.

3.4.5 LABOR TO BE EMPLOYED

The Contractor shall not employ workers, means, materials or equipment which may cause strikes, work stoppages or any disturbances by workers employed by the Contractor, or other contractors or subcontractors on or in connection with the Work or the Project. The Contractor agrees that all disputes as to jurisdiction of trades shall be adjusted in accordance with any plan for the settlement of jurisdictional disputes which may be in effect either nationally or in the locality in which the Work is being performed and that it shall be bound and abide by all such adjustments and settlements of jurisdictional disputes, provided that the provisions of this Article shall not be in violation of or in conflict with any provisions of law applicable to the settlement of such disputes. Should the Contractor fail to carry out or comply with any of the foregoing provisions, the College shall have the right, in addition to any other rights and remedies provided by this Agreement or the Contract Documents or by law, after three (3) days written notice, to terminate this Agreement or any part thereof or the employment of the Contractor for all or any portion of the Work pursuant to the termination provisions set forth in the General Conditions.

3.5 WARRANTY

The Contractor warrants to the OWNER and Architect that material and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty does not cover damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The warranty/guarantee period begins on the day the OWNER files a Notice of Completion to the County Recorder per Section 9.9.2 hereof.

Immediately upon receipt of written notice from the OWNER, but in no event later than one (1) business day thereafter, the Contractor shall repair or replace, at its own expense, any defective material or Work which may be discovered before Notice of Completion or within the above guaranty period, any material or Work damaged thereby, and all adjacent material or Work which may be displaced in connection with the repair or replacement required hereunder. Inspection of or failure to inspect the Work or the Project by the OWNER shall not relieve the Contractor from these obligations. The Contractor shall notify the OWNER upon completion of the repairs.

If the Contractor fails to repair or replace the material or Work as indicated in the preceding paragraph within five (5) business day (or earlier if due to circumstances which could cause waste of resources or danger to life or property if such circumstances and time period is noted in written notice) from the date of receipt of a written notice from the OWNER notifying the Contractor of the defect, the OWNER, with its own forces or by contract, may proceed with the repair or replacement and assess the costs thereof against the Contractor, and which amount may be withheld or retained from any portion of the Contract Sum outstanding and otherwise owing to the Contractor. When necessary to keep school open or safely operating, the OWNER, with its own forces or by contract, may make such repairs or replacement without advance notice to the Contractor and assess the costs thereof against the Contractor. Such action by the OWNER will not relieve the Contractor of the guaranties provided in this Section or elsewhere in the Contract Documents. If Contractor fails to repair or replace any Work or material covered by any guaranty or warranty set forth in the Contract Documents within the applicable guaranty or warranty period, the OWNER may elect to initiate proceedings to declare the Contractor a non-responsible bidder on future OWNER projects per section 14.2.2.

Whether the Contractor or the OWNER actually repairs or replaces defective material or Work within the applicable guaranty period pursuant to either of the preceding two paragraphs, the warranty period shall begin anew from the date of completion of the repair or replacement. For example, if an item with a one year warranty requires repair or replacement during the guaranty period, then the guaranty for that item shall expire one (1) year after the completion of the repair or replacement of such item and not one (1) year after Notice of Completion.

Contractor further warrants that title to all Work, materials and equipment will pass to the OWNER upon receipt of payment by Contractor therefor, free and clear of all lien rights, stop notice rights, security interests or encumbrances (collectively referred to as liens). The Contractor shall also defend the OWNER, at the Contractor's sole cost and expense, against any and all actions, lawsuits or proceedings brought against the OWNER as a result of claims, liens or stop notices filed against the OWNER, the Project Site or otherwise. The Contractor hereby indemnifies, defends and holds harmless the OWNER against any and all such claims, liens and stop notices and agrees to pay any judgment, lien or stop notice claim against the OWNER or the OWNER's property resulting from any actions, lawsuits or proceedings brought to enforce such liens, stop notices or other claims.

This Section does not in any way limit the guaranty on any items for which a longer guaranty is specified, or on any items for which a manufacturer gives a guaranty for a longer period. Contractor shall furnish the OWNER all appropriate guaranty or warranty certificates immediately upon completion of the Project.

No payment by the OWNER, or any partial or entire use or occupancy of the Project by the OWNER, shall constitute an acceptance of any Work not performed in accordance with the Contract Documents and all applicable laws, rules and regulations.

3.6 TAXES AND CONTRIBUTIONS

The Contractor for the Contract Sum herein provided, hereby accepts and assumes exclusive liability for and shall indemnify, protect and hold harmless the College and the Construction Manager from and against the payment of:

1. All contributions, taxes or premiums (including interest and penalties thereon) which may be payable under the Unemployment Insurance Law of any State, Federal Social Security Act, Federal, State, County and/or Municipal Tax Withholding Laws, or any other law, measured upon the payroll of or required to be withheld from employees, by whomsoever employed, engaged in the Work to be performed and furnished under this Agreement.

2. All sales, use, personal property and other taxes (including interest and penalties thereon) required by any Federal, State, County, Municipal or other law to be paid or collected by the Contractor or any of its subcontractors or vendors or any other person or persons acting for, through or under it or any of them, by reason of the performance of the Work or the acquisition, ownership, furnishing or use of any materials, equipment, supplies, labor, services or other items for or in connection with the Work.

3. All pension, welfare, vacation, annuity and other union benefit contributions payable under or in connection with labor agreements with respect to all persons, by whomsoever employed, engaged in the Work to be performed and furnished under this Agreement.

In furtherance of, and in addition to the agreements, duties obligations and responsibilities of the Contractor with respect to the payment of sales, use, personal property and other taxes set forth herein, the Contractor agrees to reimburse and otherwise indemnify the College and Construction Manager for any expenses, including legal fees and litigation arising from, or related to the Contractor's failure to pay any sales, use, personal property or other taxes based upon labor, services, materials, equipment or other items acquired, performed, furnished or used for or in connection with the Work.

3.7 PERMITS, FEES AND NOTICES

3.7.1 PAYMENT

The Contractor shall secure and pay for all permits, including inspection costs and governmental and utility fees, and licenses which are (1) necessary for the proper execution and completion of the Work; (2) customarily secured after execution of the Contract; and (3) legally required by any authority having jurisdiction over the Project, except those required by the Division of the State Architect (DSA). Except as provided for herein, the OWNER will reimburse Contractor for the actual documented costs of such permits and governmental fees, and licenses, with no overhead or profit added. The Contractor shall be solely responsible for the costs of city business licenses and hauling permits, and the OWNER shall not reimburse Contractor for any such costs. OWNER shall be responsible for all testing and inspection as required by the DSA as set forth in paragraph 13.5.2.

3.7.2 COMPLIANCE

The Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work.

3.7.3 DOCUMENTS COMPRISING THE CONTRACT

If the Contractor observes that portions of the Contract are at variance with any applicable law, statute, ordinance, building code, rule or regulation, the Contractor shall promptly notify the Architect and OWNER in writing, and necessary changes shall be accomplished by appropriate modification.

3.7.4 RESPONSIBILITY

If the Contractor performs Work contrary to any law, statute, ordinance, building code, rule or regulation, the Contractor shall assume full responsibility for such Work and shall bear the attributable cost. Contractor assumes no responsibility of existing work or pre-existing conditions.

3.8 ALLOWANCES

3.8.1 DEFINITION

An allowance is an amount established in the Contract Documents for the cost of specific items not prescribed in detail, with the provision that any variation between the allowance amount and the final cost of the specified items, will be made by Change Order to adjust the Contract Sum. The un-spent balance of an allowance is returned to the OWNER via credit/deductive Change Order.

3.8.2 CONTRACT

The Contractor shall include in the Contract Sum all allowances stated in the Contract. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the OWNER may direct, but the Contractor shall not be required to employ persons or entities against whom the Contractor makes reasonable objection.

3.8.3 SCOPE

3.8.3.1 PROMPT SELECTION

Materials and equipment under an allowance shall be selected promptly by the OWNER to avoid delay to the Work.

3.8.3.2 COVERED ALLOWANCE COSTS

Allowances shall cover the cost to the Contractor of materials and equipment delivered at the Site and all required taxes, less applicable trade discounts, etc., as delineated in paragraph 7.7.4.

3.8.3.3 COST INCLUDED IN CONTRACT SUM

Contractor's costs for unloading and handling at the Site, storage, security, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum and not in the allowances.

3.8.3.4 CONTRACT SUM ADJUSTMENT

Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual cost and the allowances under paragraph 3.8.3.2 and the change in the Contractor's costs under paragraph 3.8.3.3.

3.9 CONTRACTOR'S CONSTRUCTION SCHEDULES

3.9.1 REQUIREMENTS

Refer to Specifications, Division 1.

3.9.2 FAILURE TO MEET REQUIREMENTS

Failure of the Contractor to provide proper schedules as required by this paragraph may, at the sole discretion of OWNER, constitute grounds to withhold, in whole or in part, progress payments to the Contractor provided all prior undisputed invoices are paid in full.

3.10 DOCUMENTS AND SAMPLES AT THE SITE

The Contractor shall maintain a record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Contractor shall maintain approved Shop Drawings, Product Data, Samples, and similar required submittals. These documents shall be available to the Construction Manager and Architect, and shall be delivered to the Construction Manager and Architect for delivery to the OWNER upon completion of the Work.

3.11 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

Paragraphs 3.11.1-3.11.3 pertain to shop drawing, product data, and sample submittals consistent with the requirements in the Specifications Divisions 2-16, not requests for substitutions. To request a material, product, thing or service substitution, use the procedure defined in paragraph 3.11.5, "Substitutions."

3.11.1 SUBMITTALS DEFINED

3.11.1.1 *Shop Drawings*

The term "shop drawings" means drawings, diagrams, schedules, and other data specially prepared by Contractor or a Subcontractor to illustrate some portion of the Work.

Shop drawings shall establish the actual detail of all manufactured or fabricated items, indicate proper connection and relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

3.11.1.2 *Product Data*

The term "Product data" means illustrations, standard schedules, performance charts, manufacturer specifications, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate or describe materials or equipment for some portion of the Work.

3.11.1.3 *Samples*

The term "samples" means physical examples that illustrate materials, equipment, or workmanship and establish standards by which the Work will be judged. All Work shall be in accordance with the approved samples.

3.11.1.4 *Contractor's Responsibility*

Contractor shall obtain and submit all shop drawings, product data and samples in accordance with the Construction Schedule as required in Division 1 of the Specifications with such promptness as to cause no delay in its own Work or in that of any other contractor or subcontractor, unless otherwise required in writing by the Construction Manager. No extensions of time will be granted to Contractor because of its failure to have shop drawings, product data and samples submitted on time as required.

By submitting shop drawings, product data, and samples, the Contractor or submitting party (if other than Contractor) represents that it has determined and verified all materials, field measurements, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the

information contained within such submittals with the requirements of the Work and of the Contract. Contractor and Subcontractors shall be solely responsible for any quantities, which may be shown on the shop drawings. At the time of submission, any deviation in the shop drawings, product data, or samples from the requirements of the Contract shall be narratively described in a transmittal accompanying the submittal. Review by OWNER and Architect shall not relieve the Contractor or any Subcontractor from its responsibility in preparing and submitting proper shop drawings, product data, and samples in accordance with the Contract. Any submission, which in Architect's opinion is incomplete, contains numerous errors, or has been checked only superficially, will be returned unreviewed by the Architect for resubmission by the Contractor.

The deadline by which Contractor must obtain and submit all shop drawings, product data and samples, is no later than **twenty-one (21) days after** Contractor receives the Notice of Award letter for the Project from OWNER OR is no later than the timeframes as stated within the Specifications.

3.11.1.5 ***Extent of Review***

Only submittals required to be submitted by the Contract shall be reviewed.

The Architect will review and approve shop drawings, product data, and samples for aesthetics and for conformance with the design concept of the Work and the information given in the Contract. The Architect will not verify dimensions and field conditions. The Architect's review shall neither be construed as a complete check nor relieve the Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract unless the Contractor has, in writing, called the Architect's attention to the deviations at the time of submission.

3.11.2 **SUBMITTAL PROCEDURE**

3.11.2.1 ***Transmittal Letter and Other Requirements***

Contractor shall submit all submittals to the Construction Manager, who will forward the submittals to the Architect for review.

Contractor shall stamp, sign, and date each submittal indicating its representation that the submittal meets all of the requirements of the Contract. All submittals must be accompanied by a Transmittal Letter with the following:

- A. Contractor's Name, address, and telephone number.
- B. Submittal sequence number, and date of submittal identifying whether initial or revised.
- C. Project Name.
- D. Name, address, and telephone number of subcontractor, supplier, or manufacturer.
- E. List of attachments and reference Specification Section number and Drawing Number, including detail number, for identification of each item.
- F. A narrative that either:
 - 1. Indicates that submittal conforms in all respects to the requirements in the Contract Documents, or
 - 2. Clearly states any qualifications, departures, or deviations from the Contract.
- G. A clear space for the stamps of Architect.

Submittals shall be numbered consecutively, and the numbering system shall be retained throughout all revisions.

A separate transmittal letter shall be used for each specific item or class of material or equipment for which a submittal is required. Contractor may use a single transmittal letter for submittal of various items (a "multiple-page submittal") only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency dictates a review of the items as a whole. A multiple-page submittal shall be collated into sets and each set shall be stapled or bound, as appropriate, when submitted.

3.11.2.2 **Copies Required**

Each submittal shall include **one (1) electronic copy** in AutoCAD (2000 or newer) and **three (3)** legible print copies (upon approval, one each will be retained by the Contractor, Construction Manager/Inspector and Architect) of each drawing, including fabrication, erection, layout and setting drawings, and such other drawings as required under the various sections of the Specifications until final acceptance thereof is obtained. Subcontractor shall submit copies, in an amount as requested by the Contractor, of: manufacturers' descriptive data for materials, equipment, and fixtures, including catalog sheets showing dimensions, performance, characteristics, and capacities; wiring diagrams and controls; schedules; all calculations; and other pertinent information as required. During the closeout of the Project, Contractor must provide **one (1) electronic copy of all** approved submittals in a format reasonably acceptable to OWNER.

3.11.2.3 **Corrections**

The Contractor shall make any corrections required by Architect and shall resubmit, as required by Architect pursuant to paragraph 3.11.2.4, corrected copies of shop drawings, product data or samples until approved. Contractor shall direct specific attention in writing on resubmitted submittals to revisions other than the corrections required by the Architect on previous submissions. Professional services required for more than **one (1) re-review** of required submittals of shop drawings, product data, or samples are subject to charge to the Contractor pursuant to paragraph 4.4.

3.11.2.4 **Review and Approval Prior to Commencement of Work**

The Architect shall review the submittals and return them **within five (5) calendar days** after receiving them to the Construction Manager, who will then forward them to the Contractor with one of these responses:

- A. APPROVED WITH NO EXCEPTIONS-PROCEED.
Construction Manager shall return **one (1) copy to the Contractor** and **one (1) copy to the DSA Inspector**, both with the Architect's stamp and signature applied thereto.
- B. APPROVED AS NOTED-PROCEED CONDITIONALLY:
Contractor shall make the required corrections and resubmit to Construction Manager **within five (5) calendar days** after Contractor's receipt of the returned submittal.
- C. REJECTED-RESUBMIT-DO NOT PROCEED:
Contractor must completely revise and resubmit the submittal to Construction

Manager **within five (5) calendar days** after Contractor's receipt of the returned submittal.

No portion of the Work requiring a submittal shall be commenced until the submission has been reviewed by OWNER and Architect, unless specifically directed in writing by the OWNER. All such portions of the Work shall be in accordance with Architect's approved response to the submittal.

3.11.3 **SAMPLE SUBMITTAL PROCEDURE**

In addition to the requirements in paragraph 3.11.2, Contractor shall:

- A. Submit samples in triplicate, unless otherwise required in the Specifications or a greater number is required to illustrate range. In case a considerable range of color, graining, texture, or other characteristics may be anticipated in finished products, **a sufficient number of samples** of the specified materials shall be furnished by the Contractor to indicate the full range of characteristics, which will be present in the finished products.
- B. Properly identify all samples with the name of the submitting party, date, submittal sequence number, the Project Name, and the purpose for which the samples are submitted.

Include a tag, label, or sticker with a clear space for the review stamp of Architect.

3.11.3.1 ***Labels and Instructions***

Samples of materials, which are generally furnished in containers bearing the manufacturers' descriptive labels and printed application instructions, shall, if not submitted in standard containers, be supplied with such labels and application instructions.

3.11.4 **SUBSTANTIAL COMPLETION SUBMITTAL PROCEDURE**

3.11.4.1 ***Inspection Request and Substantial Completion Submittals***

At least **15 calendar days** before the date the Contractor considers the Work, or a portion thereof, is substantially complete, the Contractor shall send a written inspection request, together with the Project Closeout Checklist and attachments, to the Construction Manager. Construction Manager shall forward copies of Contractor's inspection request, Project Closeout Checklist and attachments (collectively the "Substantial Completion Submittal") to the Architect, OWNER, and Inspector. Contractor will also provide the following submittals within the time period indicated above:

A. As-Built and Annotated Specifications

- .1 Contractor shall submit accurate, complete sets of final Drawings red lined with changes due to change orders, field orders and installed conditions showing the Contractor's Work "as built" which Contractor has prepared and maintained on a current basis throughout the progress of the Work. Contractor shall deliver the As-Built Drawings in an electronic format reasonably acceptable to OWNER and Annotated Specifications to OWNER, in accordance with the Construction Schedule, certifying them to be complete and accurately reflect the actual construction conditions of the Work.

- .2 The As Builts must clearly show all changes, revisions, and substitutions during construction, including without limitation, field changes and the final location of all mechanical equipment, utility lines, ducts, outlets, structural members, walls, partitions, and other significant features.
- .3 The Annotated Specifications must clearly show all changes, revisions, and substitutions during construction. The Annotations shall show which item(s) Contractor has furnished if a specification allows the Contractor to select one of several item brands, makes, or types of material or equipment.

B. "O & M" Manuals

- .1 Contractor shall obtain and furnish complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract, all warranties, and any additional data specifically requested under the various sections of the Specifications for each Division of the Work.
- .2 The manuals shall be arranged in the same order as the Specifications, indexed, and delivered in an electronic format reasonably acceptable to OWNER.
- .3 Contractor shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work.

3.11.4.2 ***Punch List and Certificate of Substantial Completion***

After receiving a substantial completion inspection request with a Project Closeout Check List, As-Builts, Annotated Specifications, and O&M Manuals duly completed and attached, Construction Manager shall notify Contractor of whether OWNER determined the Work (or designated portion) is substantially complete.

OWNER shall determine if the Work (or designated portion) is substantially complete with the assistance of the Construction Manager, Architect and Inspector. The OWNER, Construction Manager, Architect and Inspector shall conduct field reviews of the Work. The Construction Manager, Architect and Inspector shall make a recommendation to the OWNER concerning whether the Work is substantially complete.

Any review by the Architect, Construction Manager, Inspector or OWNER of Contractor's Substantial Completion Submittal shall not diminish or transfer any of Contractor's responsibilities or liabilities required by the Contract Documents.

A. OWNER Determines Work is not Substantially Complete

If the OWNER determines the Work (or designated portion) is **not** substantially complete, OWNER shall send written notice to the Contractor of the items requiring correction. **No extension of time shall be granted.**

- .1 Contractor shall then promptly complete the items noted by the OWNER necessary for Substantial Completion.
- .2 Contractor shall notify OWNER, Construction Manager and Architect when

finished and request another inspection per 3.11.4.1.

B. OWNER Determines Work is Substantially Complete

If the OWNER determines that the Work (or designated portion) is substantially complete and accepts Contractor's Substantial Completion Submittal, the Construction Manager shall call for a Substantial Completion inspection.

.1 Architect shall prepare the Punch List, and submit it to OWNER for approval. The Construction Manager and Inspector shall assist the OWNER in approving the Punch List.

(1) The Punch List is a comprehensive list of minor items to be completed or corrected within 30 calendar days after the date of issuance of the punch list.

(2) Failure to include an item on the Punch List shall not waive or otherwise alter the ultimate responsibility of the Contractor to complete all Work in strict accordance with the Contract Documents.

.2 Construction Manager and Architect shall submit the Certificate of Substantial Completion, with the Punch List attached, to the Contractor and then the OWNER for their written approval. The Certificate of Substantial Completion shall establish:

(1) the date Substantial Completion of the Work (or designated portion) occurred;

(2) the responsibilities of the OWNER and Contractor with respect to security, maintenance, heat, utilities, damage to the Work (or designated portion), and liability(ies);

C. If Substantial Completion, the Contractor fails to correct all "punch-list" items prior to the expiration of the 60 day period immediately following the issuance of the Certificate of Substantial Completion, the District shall withhold from the final payment, in addition to any other amounts that the District may be permitted to withhold pursuant to Sections 3.92 and 9.5.1 hereof, an amount equal to 150% of the Architect's estimated cost of the correction of all such items until the last of the items has been corrected. At the end of the 60 day period, if there are items remaining to be corrected, the District may request the Contractor in writing to make immediate correction of said items, and if the Contractor fails to make such correction within ten (10) days of the date of the written notice, the District may make the correction and deduct the costs incurred in connection therewith from the amount withheld therefore.

3.11.4.3 Warranties

Contractor's warranties for the Work (or designated portion) shall commence on the date of Substantial Completion, unless otherwise provided in the Certificate of Substantial Completion.

3.11.4.4 Payment After Substantial Completion

After issuing a Certificate of Substantial Completion and Punch List, and upon duly

submitted Application from the Contractor, the OWNER may, in its sole and absolute discretion, make payment reflecting adjustment in retainage as provided by State law and the Contract Documents.

Unless OWNER approves in writing releasing retainage in this manner, the OWNER's obligation to release the Contractor's retention shall not arise until the entire Project is fully complete, accepted and approved by the Governing Board per Paragraph 9.9.2.

3.11.4.5 *Delays After Substantial Completion*

Contractor claims for Compensable Delays shall not apply to any alleged delays occurring after Substantial Completion.

3.11.5 SUBSTITUTIONS

3.11.5.1 *One Product Specified*

Unless the Contract Documents state that no substitution is permitted, whenever in the Contract any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction is indicated or specified by name, make, trade name, or catalog number, with or without the words "or equal," such specification shall be deemed to be used for the purpose of facilitating description of material, process, or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer any material, process, or article, which shall be substantially equal or better in every respect to that so indicated or specified and will completely accomplish the purpose of the Contract.

3.11.5.2 *Two or More Products Specified; Substitution Requests*

When two or more acceptable products are specified for an item of the Work, along with the phrase "or equal", the choice between those two or more acceptable products will be up to the Contractor, unless the Contractor chooses to submit an "or equal" product to the OWNER for consideration. Contractor shall utilize the same product throughout the Project. If the Contractor wishes to request a substitution, he shall do so timely and in the manner specified below. If the required notice is not provided and an "or equal" substitution is requested, the OWNER, at its sole discretion, may refuse to consider the substitution unless the listed products specified are no longer commercially available. If the OWNER allows the substitution to be proposed despite the lack of proper notice, the Contractor will be invoiced by the OWNER for the professional fees incurred by the Architect or Architect's consultants in reviewing the proposed substitution.

3.11.5.3 *Substitution Request*

Requests for substitutions of products, materials, or processes other than those specified must be made in the format below. Any use of a product which is not specifically listed shall be deemed to be a substitution request, and shall comply with each and every provision of this paragraph 3.11.5.3.

All substitution requests shall be submitted **no later than the deadline specified stated below**. Any Requests submitted after such time will not be considered.

Each Substitution Request Form must be accompanied by evidence as to whether or not the proposed substitution:

- A. Is equal in quality and serviceability to the specified item;

- B. Will entail no changes in detail and construction of related work;
- C. Will be acceptable in consideration of the required design and artistic effect;
- D. Will provide no cost disadvantage to OWNER; and
- E. Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts.

The burden of proof of these facts shall be upon the Contractor. The Contractor shall furnish with its request all drawings, specifications, samples, performance data, calculations, and other information as may be required to assist the Architect and the OWNER in determining whether the proposed substitution is acceptable.

The final decision shall be the OWNER's. The written approval of the OWNER, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. OWNER may condition its approval of the substitution upon delivery to OWNER of an extended warranty or other assurances of adequate performance of the substitution.

The deadline by which Contractor must submit a request for substitution of products, materials or processes, is no later than **five (5) days after** OWNER sends the Notice of Award letter for the Project to Contractor.

3.11.5.4 *List of Manufacturers and Products Required*

Each Subcontractor shall prepare and submit to the Contractor within **thirty (30) days** of execution of its Subcontract, comprehensive lists, in quadruplicate, of the manufacturers and products proposed for the Project, including information on materials, equipment, and fixtures required by the Contract, as may be required for Contractor's or Architect's preliminary approval. Such lists shall not be construed as a request for substitution of products, materials or processes specified in the Contract Documents. Approval of such lists of products shall not be construed as a substitute for the shop drawings, manufacturer's descriptive data, and samples, which are required by the Contract, but rather as a base from which more detailed submittals shall be developed for the final review of the Contractor and the Architect.

3.11.6 DEFERRED APPROVALS

Deferred approvals shall be submitted and processed pursuant to the requirements of Division 1 of the Project Manual.

3.12 CUTTING AND PATCHING

3.12.1 SCOPE

The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.

3.12.2 CONSENT

The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the OWNER or separate contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the OWNER or a separate contractor except with written consent of the OWNER and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the OWNER or a separate contractor the Contractor's consent to cutting or otherwise

altering the Work. All cutting shall be done promptly, and all repairs shall be made as necessary.

3.12.3 STRUCTURAL MEMBERS

New or existing structural members and elements, including reinforcing bars and seismic bracing, shall not be cut, bored, or drilled except by written authority of the Architect. Work done contrary to such authority is at the Contractor's risk, subject to replacement at its own expense and without reimbursement under the Contract. Agency approvals shall be obtained by the Architect, not by the Contractor.

3.12.4 SUBSEQUENT REMOVAL

Permission to patch any areas or items of the Work shall not constitute a waiver of the OWNER's or the Architect's right to require complete removal and replacement of the areas or items of the Work if, in the opinion of the Architect or the OWNER, the patching does not satisfactorily restore quality and appearance of the Work or does not otherwise conform to the Contract.

3.13 CLEANING UP

3.13.1 CONTRACTOR'S RESPONSIBILITY

The Contractor shall keep the Site and surrounding area free from accumulation of waste material or rubbish caused by operations under the Contract. The Site shall be maintained in a neat and orderly condition. All crates, cartons, paper, and other flammable waste materials shall be removed from Work areas and properly disposed of at the end of each day. The Contractor shall remove from and about the Site the waste materials, rubbish, tools, construction equipment, machinery, and materials no longer required for the Work. Contractor shall also work with the OWNER's Monitoring Biologist to ensure that all construction made potential refugia (pipes, debris. Piles, etc.) for protected and sensitive species to nest are properly closed, covered or capped.

3.13.2 FAILURE TO CLEANUP

If the Contractor fails to clean up as provided in the Contract after 2 working days written notice to Contractor, the OWNER may do so, and the cost thereof shall be invoiced to the Contractor and deducted from the next progress payment. Each Subcontractor shall have the responsibility for the cleanup of its own Work. If the Subcontractor fails to clean up, the Contractor may do so and back-charge the Subcontractor.

3.13.3 CONSTRUCTION BUILDINGS

When directed by the OWNER or the Architect, Contractor and Subcontractor shall dismantle temporary structures, if any, and remove from the Site all construction and installation equipment, fences, scaffolding, surplus materials, rubbish, and supplies belonging to Contractor or Subcontractor. If the Contractor does not remove the tools, equipment, machinery, and materials within fifteen (15) days after completion of its Work, then they shall be deemed abandoned, and the OWNER can dispose of them for its own benefit in whatever way it deems appropriate. Any costs incurred for such services shall be the sole responsibility of the Contractor, which costs may be invoiced to the Contractor (less salvage value, if any) and deducted from the final payment.

3.14 ACCESS TO WORK

The Contractor shall provide the OWNER, the Architect, the Construction Manager and the Inspector, access to the Work in preparation and progress wherever located.

3.15 ROYALTIES AND PATENTS

3.15.1 PAYMENT AND INDEMNITY

The Contractor shall pay all royalties and license fees applicable to the Work. The Contractor shall defend suits or claims of infringement of patent rights arising out of the Work and shall hold the OWNER and the Architect harmless from loss on account thereof but shall not be responsible for such defense or loss when a particular design, process, or product of a particular manufacturer is required by the Contract. However, if the Contractor has reason to believe the required design, process, or product is an infringement of a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

3.15.2 REVIEW

The review by the Architect of any method of construction, invention, appliance, process, article, device, or material of any kind shall be for its adequacy for the Work and shall not be an approval for the use by the Contractor in violation of any patent or other rights of any person or entity.

3.16 INDEMNIFICATION

3.16.1 SCOPE: CONTRACTOR

To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the College, Construction Manager, the Owner's Representative, the Architect, and their respective officials, officers, agents, employees, and representatives ("Indemnitees") from any and all claims, demands, causes of action, costs, expenses, liabilities, losses, damages (including without limitation the payment of all reasonable attorneys' fees and other related costs and expenses) or injuries, in law or equity, regardless of whether the allegations are false, fraudulent, or groundless, to tangible property or persons (including wrongful death) arising out of or resulting from the performance of the Work or this Agreement (including claims made by subcontractors for nonpayment), to the extent that the acts, omissions or willful misconduct are caused by the Contractor or anyone employed directly or indirectly by any of them. Contractor shall defend, at Contractor's own cost, expense and risk, with legal counsel of Indemnitee's choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against College, Construction Manager, the Owner's Representative, the Architect, and their respective officials, officers, agents, employees and representatives. To the extent of its liability, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the College, Construction Manager, the Owner's Representative, the Architect, and their respective officials, officers, agents, employees, and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse the College, Construction Manager, the Owner's Representative, the Architect, and their respective officials, officers, agents, employees, and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code Section 2782.

Nothing contained herein shall be deemed to obligate the Contractor to defend, indemnify, and hold harmless Construction Manager, the Owner's Representative, the College or any of the other Indemnitees, against liability for damages or any other loss, damage or expense sustained, suffered or incurred on account of death or bodily injury to active persons or injury to property caused by the sole or active negligence or willful misconduct of the College, Construction Manager, the Owner's Representative or any of the other Indemnitees set forth herein. Therefore, if it is determined by legal proceedings or

agreement, that the Contractor has no direct contributory or incidental negligence or other obligation to Construction Manager, the Owner's Representative, the College, or any Indemnatee, and that the Contractor is in no way a proper party to a particular claim, then the Contractor shall not be obligated to hold Construction Manager, the College or any Indemnitees harmless with respect to said claim. However, until such determination is made by legal proceedings or agreement, or if the Contractor is found to have any degree of direct or contributory negligence or if it is determined that the Contractor is in any way or to any degree a proper party to said claim, then the Contractor's obligations under all of the terms and provisions shall remain in full force and effect.

Nothing in this provision, or elsewhere in this Agreement, shall be deemed to relieve the Contractor of its duty to defend Construction Manager, the Owner's Representative, the College, or any Indemnatee, as specified under this Article, pending a determination of the respective liabilities of the Contractor, Construction Manager, the Owner's Representative, the College, or any Indemnatee, by legal proceeding or agreement.

In furtherance to, but not in limitation of the indemnity provisions in this Agreement, Contractor hereby expressly and specifically agrees that its obligation to indemnify, defend and hold harmless as provided in this Agreement shall not in any way be affected or diminished by any statutory or constitutional immunity it enjoys from suits by its own employees or from limitations of liability or recovery under workers' compensation laws.

3.16.2 SCOPE: SUBCONTRACTORS

3.16.2.1 *Indemnity*

The Contractor shall require all Subcontractors to comply with the above indemnification requirements.

3.16.2.2 *Joint and Several Liability*

The provisions of the indemnity provided for herein shall not be construed to indemnify any Indemnatee for its own negligence if not permitted by law or to eliminate or reduce any other indemnification or right which any Indemnatee has by law or equity.

3.16.3 NO LIMITATION

The Contractor's and the Subcontractor's obligation to indemnify and defend the Indemnitees hereunder shall include, without limitation, any and all claims, damages, and costs: for injury to persons and property and death of any person; for breach of any warranty, express or implied; for failure of the Contractor or the Subcontractor to comply with any applicable governmental law, rule, regulation, or other requirement; and for products installed in or used in connection with the Work.

3.17 GATE USAGE FOR DELIVERIES

Contractor shall notify in writing, and assign its employees, material men and suppliers, to such gates or entrances as may be established for their use by the Construction Manager and in accordance with such conditions and at such times as may be imposed. Strict compliance with gate usage procedures shall be required by the Contractor, who shall be responsible for such gate usage by its employees, material men, suppliers, subcontractors, and their material men and suppliers.

Contractor shall schedule the work and the presence of its employees at the jobsite and any deliveries of supplies or materials by its materialmen and suppliers to the Site on such days, and at such times and

during such hours, as specified herein and as may be required by Construction Manager. Contractor shall assume responsibility for such schedule compliance not only for its employees for all its material men, suppliers and subcontractors, and their material men and suppliers.

Contractor shall indemnify and hold harmless the College, the Construction Manager, and the Owner's Representative from and against any liability, loss, damages, cost, claims, awards, judgments, fines, penalties, expenses, including attorneys' fees and costs, which may be incurred by as a result of Contractor's or its lower tier subcontractor's failure to fulfill the provisions stated above.

3.18 CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the College and the Construction Manager in order that proper steps may be taken to have the change reflected on the Contract.

ARTICLE 4 - ADMINISTRATION OF THE CONTRACT

4.1 ARCHITECT

4.1.1 DEFINITION

The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Contract, and is referred to throughout the Contract as if singular in number. The term "Architect" means the Architect or the Architect's authorized representative.

4.1.2 MODIFICATION

Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract shall not be restricted, modified, or extended without written consent of the OWNER and Architect. Consent shall not be unreasonably withheld.

4.1.3 TERMINATION

In the case of the termination of the Architect, the OWNER may appoint an architect or another construction professional or may perform such functions with its own licensed professional personnel. The status of the replacement Architect under the Contract shall be that of the former architect.

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT.

4.2.1 STATUS

The Architect will provide administration of the Contract as described in the Contract and will be the OWNER's representative during construction, until final payment is due, and during the one (1) year period following the commencement of any warranties. The Architect will advise and consult with the OWNER. The Architect will have authority to act on behalf of the OWNER only to the extent provided in the Contract, unless otherwise modified by in writing in accordance with other provisions of The OWNER/Architect Agreement. The Architect will have all responsibilities and power established by law, including the applicable provisions of the California Code of Regulations (Titles 19, 21 and/or 24).

4.2.2 SITE VISITS

The Architect will visit the Site at intervals necessary in the judgment of the Architect or as otherwise agreed by the OWNER and the Architect in writing to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check quality or quantity of the Work. On the basis of its on-Site observations, the Architect will keep the OWNER informed of the progress of the Work. The Contractor will provide the Architect access to all parts of the Work at any time.

4.2.3 LIMITATIONS OF CONSTRUCTION RESPONSIBILITY

The Architect shall not have control over, charge of, or be responsible for construction means, methods, techniques, schedules, sequences or procedures, fabrication, procurement, shipment, delivery, receipt, installation, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility under the Contract. The Architect shall not be responsible for the Contractor's, Subcontractors', material or equipment suppliers', or any other person's schedules or failure to carry out the Work in accordance with the Contract. The Architect shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, their agents or employees, or any other persons or entities performing or supplying portions of the Work. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections, or approvals required or performed by persons other than the Contractor. The Architect's duties shall not extend to the receipt, inspection, and acceptance on behalf of the OWNER of furniture, furnishings, and equipment at the time of their delivery to the premises and installation.

4.2.4 COMMUNICATIONS FACILITATING CONTRACT ADMINISTRATION

Except as otherwise provided in the Contract, or when direct communications have been specially authorized, the OWNER and Contractor shall communicate through the Construction Manager, and shall contemporaneously provide the same communications to the Architect. Communications by and with the Architects' consultants shall be through the Architect. Communications by and with Subcontractors and material or equipment suppliers shall be through the Contractor. Communications by and with other Contractors shall be through the Construction Manager, and shall be contemporaneously provided to the Architect.

4.2.5 PAYMENT APPLICATIONS

Pursuant to Article 9, based on the Architect's observations, the Contractor's Applications for Payment, and the Inspector's approval, the Architect will review and make recommendations to the OWNER regarding the amounts due the Contractor on the Certificates for Payment.

4.2.6 REJECTION OF WORK

In addition to the rights, duties, and obligations of the Inspector under this Article, the Architect may recommend to the OWNER that the OWNER reject Work which does not conform to the Contract. Whenever the Architect considers it necessary or advisable to achieve the intent of the Contract, the Architect may recommend to the OWNER that the OWNER require additional inspection or testing of the Work in accordance with paragraph 13.5.5, whether or not such Work is fabricated, installed, or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect

to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

4.2.7 CHANGE ORDERS

The Construction Manager will prepare Change Orders and Construction Change Directives. The Construction Manager may authorize minor or emergency changes in the Work as provided in paragraph 7.1.2. The Architect will review Change Order Requests and prepare drawings and specifications to incorporate the changes into the Work.

4.2.8 WARRANTIES UPON COMPLETION

Contractor warrants that all materials and equipment furnished under this Contract shall be new unless otherwise specified in the Contract Documents; and that all Work conforms to the Contract Document requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier. All warranty periods for the Work shall be one year commencing from the date of Substantial Completion, unless otherwise provided in the Certificate of Substantial Completion.

Without limiting the generality of the foregoing, the Contractor warrants to the College, the Architect and Construction Manager, and each of them, that all materials and equipment furnished under this Agreement will be new, unless otherwise required or permitted by the Contract Documents or College, that the Work performed pursuant to this Agreement will be free from defects and that the Work will strictly conform with the requirements of the Contract Documents. Work not conforming to such requirements, including substitutions not properly approved and authorized, shall be considered defective. All warranties contained in this Agreement and in the Contract, Documents shall be in addition to and not in limitation of all other warranties or remedies required and/or arising pursuant to applicable law.

Prior to final acceptance of the Project by Construction Manager and the College and Final Payment by the College, the Contractor shall furnish to Construction Manager, for the benefit of the College, all warranty and guarantee documents. Said warranties shall include the Contractor's one year warranty, as well as all warranties, express or implied, from subcontractors, manufacturers, or suppliers for Work performed and materials and equipment furnished under this Agreement. The Contractor shall: (i) Obtain for the College all warranties that would be given in normal commercial practice; (ii) Require all warranties to be executed, in writing, for the benefit of the College; (iii) assign a dedicated person who will be the single point of contact to the OWNER to resolve all warranty issues covered by any warranty period; and (iii) Enforce all warranties for the benefit of the College, unless otherwise directed in writing by the Construction Manager or the College.

After Project completion, the College shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within one (1) calendar days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect, or damage; the College shall have the right to replace, repair, or otherwise remedy the defect, or damage at the Contractor's expense.

In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract Documents, the College may undertake at Contractor's expense, and without prior notice, all Work necessary to correct such condition.

This Article shall not limit the College's rights under this Agreement or with respect to latent defects,

gross mistakes, or fraud. The College specifically reserves all rights related to defective work, including but not limited to the defect claims pursuant to Code of Civil Procedure Section 337.15.

4.2.9 INTERPRETATION

The Architect will interpret and decide matters concerning performance under and requirements of the Contract on written request of either the OWNER or the Contractor. The Architect's response to such request will be made with reasonable promptness, while allowing sufficient time in the Architect's professional judgment, to permit adequate review and evaluation of request.

4.2.10 ADDITIONAL INSTRUCTIONS

4.2.10.1 *Architect's Interpretations and Decisions*

Interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both the OWNER and the Contractor, will not show partiality to either. The Architect will not be liable for the result of interpretations or decisions so rendered in good faith. The Work shall be executed in conformity with, and the Contractor shall do no Work without, approved drawings, Architect's clarifying instructions, and/or submittals.

4.2.10.2 *Typical Parts and Sections*

Whenever typical parts or sections of the Work are completely detailed on the Drawings, and other parts or sections which are essentially of the same construction are shown in outline only, the complete details shall apply to the Work which is shown in outline.

4.2.10.3 *Dimensions*

Dimensions of Work shall not be determined by scale or rule. Figured dimensions shall be followed at all times. If figured dimensions are lacking on Drawings, Architect shall supply them on request. The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the Contract.

4.3 INSPECTOR OF RECORD

4.3.1 GENERAL

One or more project inspectors employed by the OWNER and approved by the Division of the State Architect will be assigned to the Work in accordance with the requirements of the applicable provisions of the California Code of Regulations (Titles 19, 21 and/or 24). The Inspector(s) duties will be as specifically defined in the California Code of Regulations.

Work done or covered up in the absence of specified or prescribed inspection may be required to be removed and replaced under proper inspection. Contractor shall bear the entire cost of performing all the Work and furnishing all the material necessary for the removal and its subsequent replacement irrespective of whether or not the Work is found to be defective. Whenever Contractor arranges to work at night, or at any time when the Work is not usually in progress, or to vary the period during which the Work is carried on each day, Contractor shall give the Owner forty-eight (48) hours prior notice so that proper inspection may be provided. Cost for off-hour work that has not originally been scheduled per the Contractor's baseline schedule will be assessed and invoiced by the OWNER to

the Contractor.

Contractor shall furnish the Inspector with reasonable facilities (including, without limitation, a fully functioning and furnished field office). Inspection of the Work shall not relieve the Contractor from any obligation to fulfill the Contract. The Inspector shall have the authority to stop Work whenever safety provisions of the Contract Documents are not being complied with, and Contractor shall instruct its subcontractors and employees accordingly.

4.3.2 INSPECTOR'S DUTIES

All Work shall be under the observation of or with the knowledge of the Inspector. The Inspector shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor's responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the drawings or specifications nor shall the Inspector's approval of the Work and methods relieve the Contractor of responsibility for the correction of subsequently discovered defects.

The Inspector will not be used as quality control for the Contractor. If the Contractor requests an inspection of areas or assemblies that are evidently or excessively incomplete, and/or if, in the reasonable opinion of the District, the Contractor is using the inspection as a means and way to define or determine a scope of Work or to accelerate the Work of a Subcontractor instead of a means to finally inspect a completed portion of the Work, then the Contractor shall be liable for all costs and expenses that the District may incur in connection with any such inspection, inclusive of, but not limited to, personnel salaries, wages, consultant fees, transportation costs, etc., which amounts the District may retain or withhold from the Contract Sum in accordance with Section 13.5.6 hereof.

4.3.3 INSPECTOR'S AUTHORITY TO REJECT OR STOP WORK

The Inspector shall have the authority to reject work that does not comply with the provisions of the Contract. In addition, the Inspector may stop any Work which poses a probable risk of harm to persons or property. The Contractor shall instruct its employees, Subcontractors, material and equipment suppliers, etc., accordingly.

4.3.4 INSPECTOR'S FACILITIES

The Contractor shall provide the temporary facilities for both the Inspector and the Construction Manager as provided in Division 1 of the Specifications.

4.4 RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE OWNER FOR PROFESSIONAL SERVICES

4.4.1 GENERAL

If at any time prior to the completion of the requirements under the Contract, through no fault of its own, the OWNER is required to provide or secure additional professional services for any reason by any act of the Contractor, the Contractor shall be invoiced by the OWNER for any costs incurred for any such additional services, which costs shall be deducted from the next progress payment. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the OWNER. Additional services shall include, but shall not be

limited to, the following:

- A. Services made necessary by the default of the Contractor.
- B. Services made necessary due to the defects or deficiencies in the Work of the Contractor.
- C. Services required by failure of the Contractor to perform according to any provision of the Contract.
- D. Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors proposed by the Contractor, and making subsequent revisions to drawings, specifications, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available).
- E. Services for evaluating and processing claims submitted by the Contractor in connection with the Work outside the established Change Order process.
- F. Services required by the failure of the Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.
- G. Services in conjunction with the testing, adjusting, balancing and start-up of equipment other than the normal amount customarily associated for the type of Work involved.
- H. Services in conjunction with more than one (1) re-review of required submittals of shop drawings, product data, and samples.
- I. The assessment of cost for additional services are as follows. The OWNER will assess such additional services by the hour, with a minimum of 1 (one) hour of time at the following rates (see Section 13.5.6 also):
 - 1. Inspector of Record, Special Inspectors, Construction Manager shall be invoiced at \$200 per hour.
 - 2. Project Engineer, Owner consultants and other Owner Representatives shall be invoiced at \$150 per hour.
 - 3. Project Architect or Design Engineer shall be invoiced at \$250 per hour.

4.4.2 ADDITIONAL CHARGES RELATED TO PUNCH LIST AND FIELD REVIEWS

The Architect will conduct a field review of the Contractor's comprehensive list of items to be completed or corrected (final punch list) and one (1) follow-up field review if required. The cost incurred by the OWNER for further field reviews or the preparation of further punch lists by the Architect shall be invoiced to the Contractor and deducted from the final payment per Section 4.4.1 above.

4.5 CLAIMS AND DISPUTES

4.5.1 DEFINITION

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the OWNER and the Contractor arising out of or relating to the Contract. Claims must be made by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.

4.5.2 DECISION OF CONSTRUCTION MANAGER

Claims shall be referred initially to the Construction Manager for action as provided in paragraph 4.6. A decision by the Construction Manager, as provided in paragraph 4.6.4, shall be required as a condition precedent to mediation of a Claim between the Contractor and the OWNER as to all such matters arising prior to the date final payment is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has been completed. The decision by the Construction Manager in response to a Claim shall not be a condition precedent to mediation in the event: the position of Construction Manager is vacant; the Construction Manager has not received evidence or has failed to render a decision within agreed time limit; the Construction Manager has failed to take action required under paragraph 4.6.4 within thirty (30) days after the Claim is made, forty-five (45) days have passed after the Claim has been referred to the Construction Manager; or the Claim relates to a Stop Payment Notice Claim.

4.5.3 TIME LIMIT ON CLAIMS

Except as otherwise specifically provided elsewhere, claims by either party must be made within Ten (10) calendar days after occurrence of the event giving rise to such Claim or within Ten (10) calendar days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be made by written notice. An additional Claim made after the initial Claim has been implemented by Change Order will not be considered.

4.5.4 CONTINUING CONTRACT PERFORMANCE

Pending final resolution of a Claim including mediation, arbitration, or litigation, unless otherwise agreed to in writing, the Contractor shall proceed diligently with performance of the Contract, and the OWNER shall continue to make payment in accordance with the Contract.

4.5.5 CLAIMS FOR CONCEALED OR UNKNOWN CONDITIONS

If conditions are encountered at the Site which are subsurface or otherwise concealed physical conditions, which differ materially from those indicated in the Contract, or unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than Ten (10) calendar days after first observance of the conditions. The Architect will promptly investigate such conditions, and if they differ materially and cause an increase or decrease in the Contractor's cost of, time required for, or performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum, Completion Time, or both. If the Architect determines that the conditions at the Site are not materially different from those indicated in the Contract and that no change in the terms of the Contract is justified, the Architect shall so notify the OWNER and the Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within ten (10) days after the Architect has given notice of the decision. If the OWNER and the Contractor cannot agree on an adjustment in the Contract Sum or the Completion Time, the adjustment shall be referred to the Architect for initial determination, subject

to other proceedings pursuant to paragraph 4.6.

4.5.6 CLAIMS FOR ADDITIONAL COST

If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Each Claim for additional cost must include any claim for additional time and its associated costs. Prior notice is not required for claims relating to an emergency endangering life or property arising under paragraph 10.4.1. If the Contractor believes additional cost is involved for reasons, including, but not limited to the following: a written interpretation from the Architect, an order by the OWNER to stop the Work where the Contractor was not at fault, a written order for a minor change in the Work issued by the Architect, failure of payment by the OWNER, termination of the Contract by the OWNER, the OWNER's suspension of the Work, or other reasonable grounds, a claim shall be filed in accordance with the procedure established herein.

4.5.7 CLAIMS FOR ADDITIONAL TIME

4.5.7.1 *Notice and Extent of Claim.*

If the Contractor wishes to make a claim for an increase in the Completion Time, written notice as provided herein shall be given. The Contractor's claim shall include the cost associated with the extension and effect of delay on progress of the Work. In the case of a continuing delay, only one (1) claim is necessary.

4.5.7.2 *Adverse Weather Claims*

If adverse weather conditions are the basis for a claim for additional time, such claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

4.5.7.3 *No Reservation Allowed*

In no event will the Contractor be allowed to reserve its rights to assert a claim for time extension later than as required by paragraph 4.5.3 unless the OWNER agrees in writing to allow such reservation.

4.5.8 INJURY OR DAMAGE TO PERSON OR PROPERTY

If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, any of the other party's employees or agents, or others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding Ten (10) calendar days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a claim for additional cost or time related to this claim is to be asserted, it shall be made as provided in paragraphs 4.5.6 or 4.5.7.

4.6 RESOLUTION OF CLAIMS AND DISPUTES

4.6.1 GENERAL

Contractor shall timely comply with all notices and requests for changes to Completion Time or Contract Sum, including but not limited to all requirements of Articles 7 and 8 as a prerequisite to

filing any claim governed by this Article. The failure to timely submit a notice of delay or notice of change, or to timely request a change to the Contract Sum or Completion Time, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the claim under the Contract or at law.

4.6.2 INTENT

Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Article is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Article shall be construed to be consistent with said statutes.

4.6.3 CLAIMS

For purposes of this Article, "Claim" means a separate demand by the Contractor, after a change order duly requested in accordance with the Contract Documents has been denied by the OWNER, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the OWNER. A "Claim" does not include any demand for payment for which the Contractor has failed to provide notice, request a change order, or otherwise failed to follow any procedures contained in the Contract Documents. Claims governed by this Article may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the procedures contained in Articles 7 and 8, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Article must be filed no later than fourteen (14) days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to the OWNER and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing herein is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

4.6.4 SUPPORTING DOCUMENTATION

The Contractor shall submit all claims in the following format:

1. Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made
2. List of documents relating to claim:
 - a. Specifications
 - b. Drawings
 - c. Clarifications (Requests for Information)
 - d. Schedules
 - e. Other
3. Chronology of events and correspondence
4. Analysis of claim merit
5. Analysis of claim cost

6. Time impact analysis in CPM format
7. If Contractor's claim is based in whole or in part on an allegation of errors or omissions in the Plans, Drawings or Specifications for the Project, Contractor shall provide a summary of the percentage of the claim subject to design errors or omissions and shall obtain a certificate of merit in support of the claim of design errors and omissions.
8. Cover letter and certification of validity of the claim, including any claims from subcontractors of any tier, in accordance with Government Code section 12650 et seq.

4.6.5 OWNER'S RESPONSE

Upon receipt of a claim pursuant to this Article, OWNER shall conduct a reasonable review of the claim and, within a period not to exceed 45 Days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 Days after the OWNER issues its written statement.

4.6.5.1 Authorization

If the OWNER needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the OWNER's governing body does not meet within the 45 Days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the OWNER shall have up to three Days following the next duly publicly noticed meeting of the OWNER's governing body after the 45-Day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

4.6.5.2 Request for Additional Information

Within 30 Days of receipt of a claim, the OWNER may request in writing additional documentation supporting the claim or relating to defenses or claims the OWNER may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of OWNER and the Contractor. The OWNER's written response to the claim, as further documented, shall be submitted to the Contractor within 30 Days (if the claim is less than \$15,000, within 15 Days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

4.6.6 MEET AND CONFER

If the Contractor disputes the OWNER's written response, or the OWNER fails to respond within the time prescribed, the Contractor may so notify the OWNER, in writing, either within 15 Days of receipt of the OWNER's response or within 15 Days of the OWNER's failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, the OWNER shall schedule a meet and confer conference within 30 Days for settlement of the dispute.

4.6.7 MEDIATION

Within 10 business Days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the OWNER shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 Days

after the OWNER issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the OWNER and the Contractor sharing the associated costs equally. The OWNER and Contractor shall mutually agree to a mediator within 10 business Days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

4.6.7.1 Mediator Selection

If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

4.6.7.2 Nonbinding Process

For purposes of this Article, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this Article.

4.6.7.3 Compliance With Public Contract Code

Unless otherwise agreed to by the OWNER and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has been commenced.

4.6.7.4 Mediation Schedule

The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.

4.6.8 PROCEDURES AFTER MEDIATION

If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code prior to initiating litigation. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference.

4.6.9 CIVIL ACTIONS

The following procedures are established for all civil actions filed to resolve claims of \$375,000 or less:

4.6.9.1 Non-Binding Judicially Mandated Mediation

Within 60 Days, but no earlier than 30 Days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this Contract. The mediation process shall provide for the

selection within 15 Days by both parties of a disinterested third person as mediator, shall be commenced within 30 Days of the submittal, and shall be concluded within 15 Days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

4.6.9.2 Judicial Arbitration

If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

4.6.5 GOVERNMENT CODE CLAIMS

In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra Work, disputed Work, construction claims and/or changed conditions, the Contractor must comply with the claim procedures set forth in Government Code Sections 900, et seq. prior to filing any lawsuit against the OWNER. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra Work, disputed Work, construction claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if the prerequisite contractual requirements are not satisfied, no action against the OWNER may be filed. A Government Code claim must be filed no earlier than the date the Work is completed or the date the Contractor last performs Work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.

4.6.6 NON-WAIVER

The OWNER's failure to respond to a claim from the Contractor within the time periods described in this Article or to otherwise meet the time requirements of this Article shall result in the claim being deemed rejected in its entirety.

4.7 RESERVED

4.8 RESERVED

4.9 RESERVED

4.10 CONSTRUCTION MANAGER

4.10.1 GENERAL RESPONSIBILITIES

The Construction Manager, in cooperation with the Architect, shall provide administration of the Contract with the Contractor, as well as the OWNER's contracts with each contractor on the Project, as set forth below and in the Construction Management Agreement. The Contractor shall recognize

any direction or authority provided to the Construction Manager by the OWNER, and shall work closely and cooperate fully with the Construction Manager.

4.10.2 EXAMPLES OF RESPONSIBILITIES

By way of example and not by limitation, the Construction Manager will be providing the following services in administration of the Contract. To the extent any provisions herein are in conflict with the Construction Management Agreement, the Construction Management Agreement shall control. The Contractor shall request clarification from the OWNER in writing if the Contractor should have any questions regarding the authority of the Construction Manager.

4.10.2.1 *Project Schedule*

Refer to Specification Section 01310 for schedule reviews.

4.10.2.2 *Coordination*

The Construction Manager shall provide administrative, management, and related services as required to coordinate the Work of the Contractor with the other contractors on the Project, as well as with the activities and responsibilities of the Construction Manager, the OWNER, and the Architect to complete the Project in accordance with the OWNER's objectives for cost, time and quality.

4.10.2.3 *Meetings*

Schedule and conduct preconstruction, construction and progress meetings as required by the Contract to discuss such matters as procedures, progress problems and scheduling. Prepare and promptly distribute minutes after each meeting.

4.10.2.4 *Quality of Work*

The Construction Manager shall determine whether the Work of the Contractor, as well as any other contractor on the Project, is being performed in accordance with the requirements of the Contract, and shall endeavor to guard the OWNER against defects and deficiencies in such Work. The Construction Manager shall make recommendations to the Architect regarding special inspection or testing of Work not in accordance with the provisions of the Contract, whether or not such work is then fabricated, installed or completed. The Construction Manager shall also inform the Architect of work that the Construction Manager believes does not conform to the requirements of the Contract and should be rejected by the Architect.

4.10.2.5 *Interpretation of Documents*

Consult with the Architect and OWNER if the Contractor or any other contractor on the Project requests interpretations of the meaning and intent of the Drawings and Specifications, and assist in the resolution of questions which may arise.

4.10.2.6 *Insurance Documents*

Receive Certificates of Insurance and endorsements from the Contractor and other contractors on the Project, review them for compliance with the Contract, and forward them to the OWNER's purchasing agent.

4.10.2.7 *Drawings, Data and Submittals*

The Construction Manager shall receive and review from the Contractor, as well as all other contractors on the Project, all Shop Drawings, Product Data, Samples and other submittals. The Construction Manager shall coordinate them with information contained in related documents and transmit to the Architect for review and approval. In collaboration with the Architect, the Construction Manager shall establish and implement procedures for expediting the processing and approval of Shop Drawings, Product Data, Samples and other submittals.

4.10.3 MEANS AND MANNER OF CONTRACTOR WORK

The Construction Manager shall not be responsible for construction means, methods, techniques, sequences and procedures employed by the Contractor, or any other contractor on the Project, in the performance of their contracts, and shall not be responsible for the failure of any Contractor to carry out Work in accordance with the Contract.

4.10.4 COMMUNICATION

Except as otherwise provided in the Contract or when direct communications have been specially authorized, the OWNER and Contractor shall communicate through the Construction Manager, and shall contemporaneously provide the same communications to the Architect. Communications by and with the Architects' consultants shall be through the Architect. Communications by and with Subcontractors and material or equipment suppliers shall be through the Contractor. Communications by and with other Contractors shall be through the Construction Manager, and shall be contemporaneously provided to the Architect. All communications shall be written.

ARTICLE 5 – SUBCONTRACTORS

5.1 DEFINITIONS

5.1.1 SUBCONTRACTOR

The term "Subcontractor" shall have the meaning prescribed in Article 1.

5.1.2 SUB-SUBCONTRACTOR

The term "Sub-subcontractor" shall have the meaning prescribed in Article 1.

5.1.3 SPECIALTY CONTRACTORS

If a Subcontractor is designated as a "Specialty Contractor" as defined in § 7058 of the Public Contract Code, all of the Work outside of that Subcontractor's specialty shall be performed in compliance with the Subletting and Subcontracting Fair Practices Act, Business and Professions Code § 4100, *et seq.*

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

5.2.1 ASSIGNMENT OR SUBSTITUTION - CONSENT OF OWNER

5.2.2 GROUNDS FOR SUBSTITUTION

All Sub-Contractor and Sub-subcontractor substitutions shall be made only with the Owner's consent, which may be granted or withheld in Owner's sole discretion.

5.2.2.1 No Change in Contract

Any substitutions of Subcontractors shall not result in any increase in the Contract Sum or result in the granting of any extension of Completion Time for the completion of the Project.

5.3 SUBCONTRACTUAL RELATIONS

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract, and to assume toward the Contractor all obligations and responsibilities, which the Contractor, by the Contract, assumes toward the OWNER and the Architect. Each subcontract agreement shall preserve and protect the rights of the OWNER and the Architect under the Contract with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract, has against the OWNER. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract to which the Subcontractor will be bound. Upon written request of the Subcontractor, the Contractor shall identify to the Subcontractor the terms and conditions of the proposed subcontract agreement which may be at variance with the Contract. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

Any subcontract agreement for a portion of the Work may be assigned by the Contractor to the OWNER provided that both of the following requirements are met:

- A. Assignment is effective only after termination of the Contract with the Contractor by the OWNER for cause pursuant to Article 14, and only for those subcontract agreements which the OWNER accepts by notifying the Subcontractor in writing; and
- B. Assignment is subject to the prior rights of the surety, if any, obligated under any bond relating to the Contract.

5.5 SUBCONTRACTOR'S RESPONSIBILITIES

Every Subcontractor is bound to the following provisions, subject to the limitations of paragraph 5.3 above.

5.5.1 SUPERVISION BY SUBCONTRACTORS

Subcontractors shall efficiently supervise their Work, using their best skill and attention. Each of them shall carefully study and compare all Drawings, Specifications, and other instructions, shall at once report to Contractor any error or omission which any of them may discover, and shall subsequently proceed with the Work in accordance with instructions from the Contractor concerning such error or omission. Each Subcontractor shall be fully responsible for and shall bear the full risk of loss of all of its property.

5.5.2 DISCIPLINE AND ORDER

Each Subcontractor shall at all times enforce strict discipline and good order among its Subcontractors, material or equipment suppliers, or their agents, employees, and invitees, and shall establish and maintain surveillance over the activities of each of the foregoing to minimize any disturbance, damage, pollution, or unsightly conditions relative to property areas adjacent to or in the vicinity of the Site. The Subcontractor shall not employ on the Work any unfit person or anyone not skilled in the task assigned. The Contractor shall have the right to remove from the Work any employee of a Subcontractor for any reason including, without limitation, incompetence or carelessness.

5.5.3 DEFECTS DISCOVERED

Should the proper and accurate performance of the Work depend upon the proper and accurate performance of other work not included in its Contract, each Subcontractor shall use reasonable necessary means to discover any defect in such other work and shall allow the Contractor, the Architect or other Subcontractors as Contractor elects a reasonable amount of time to remedy such defects. If the Subcontractor should proceed with its Work, it shall be considered to have accepted such other work, unless the Subcontractor shall have proceeded pursuant to instructions in writing by the Contractor over its written objection.

5.5.4 SUBCONTRACTOR INFORMATION

Each Subcontractor shall submit to the OWNER, the Contractor, or the Architect, as the case may be, promptly when requested by any of the foregoing, information with respect to the names, responsibilities, and titles of the principal members of its staff, the adequacy of the Subcontractor's equipment and the availability of necessary materials and supplies. Subcontractor shall fully cooperate with Contractor in its periodic review of the adequacy of Subcontractor's supervision, personnel, and equipment, and the availability of necessary materials and supplies and shall promptly comply with the requirements of the Contractor with respect thereto.

5.5.5 TEMPORARY STRUCTURES

Each Subcontractor shall furnish at its expense its own temporary facilities and storage except those specifically agreed to be furnished to it by the Contractor in the Subcontract Agreement. Subcontractor's material storage rooms and field offices, etc., will be placed in locations designated by the Contractor. When it becomes necessary due to the progress of the Project for the Subcontractor to relocate its field operations, it will do so in an expeditious manner and at no additional cost to Contractor or OWNER. The construction of material storage rooms and field offices, etc., will be of fire resistive material only, such as concrete or gypsum block, rated drywall, or sheet metal.

5.5.6 CHARGES TO SUBCONTRACTOR

Each Subcontractor may be subject to the Contractor's reasonable charges for hoisting, repair to other work caused by the fault or negligence of Subcontractor, removal of Subcontractor's rubbish, and clean-up occasioned by Subcontractor.

5.5.7 FINES IMPOSED

Subcontractor shall comply with and pay any fines or penalties imposed for violation of any applicable

law, ordinance, rule, regulation, Environmental Impact Report mitigation requirement, and lawful order of any public authority, including, without limitation, all OSHA and California OSHA requirements and those of other authorities having jurisdiction of the safety of persons or property.

5.5.8 PROJECT SIGNS

Each Subcontractor shall not display on or about the Project any sign, trademark, or other advertisement. The OWNER will permit a single Project sign, which shall be subject to the OWNER's prior and sole discretion and approval, as to all matters including, without limitation, size, location, material, colors, style and size of printing, logos and trademarks (if any), text, and selection of names to be displayed.

5.5.9 REMEDIES FOR FAILURE TO PERFORM

Without limitation of any other right or remedy available to Contractor under the Contract or at law, should the Subcontractor: (1) fail to perform its portion of the Work in a skilled and expeditious manner in accordance with the terms of the Contract with sufficient labor, materials, equipment, and facilities; (2) delay the progress of the job; (3) otherwise fail in any of its obligations; (4) have a receiver appointed for the Subcontractor; or (5) be declared bankrupt or insolvent, and such appointment, bankruptcy, or insolvency proceeding or declaration is not set aside within thirty (30) days, then the Contractor, upon three (3) days notice to the Subcontractor (subject to the requirements of Public Contracts Code § 4107), may provide such labor, materials, or perform such work and recover the cost plus profit and overhead from monies due or to become due thereafter to the Subcontractor. The Contractor may terminate the employment of the Subcontractor, taking possession of its tools, materials, and equipment related to the Work and cause the entire portion of the Subcontractor's Work to be finished either by another Subcontractor or through the Contractor's own forces.

5.5.10 DISPUTES NOT TO AFFECT WORK

In the event of any dispute as to whether or not any portion of the Work is within the scope of the Work to be performed by a Subcontractor, or any dispute as to whether or not the Subcontractor is entitled to a Change Order for any Work requested of it, the Subcontractor shall continue to proceed diligently with the performance as required by the Contractor. Regardless of the size or nature of the dispute, the Subcontractor shall not under any circumstances cease or delay performance of its portion of the Work during the existence of the dispute. The Contractor shall continue to pay the undisputed amounts called for under the Subcontract Agreement during the existence of the dispute. Any party stopping or delaying the progress of the Work because of a dispute shall be responsible in damages to the OWNER, the Architect, and the Contractor for any losses suffered as a result of the delay.

5.5.11 APPLICATION FOR PAYMENT

Contractor agrees to advise the Subcontractor if any documentation in connection with the Subcontractor's application for payment has not been accepted or is in any way unsatisfactory.

5.5.12 COMPLIANCE WITH PROCEDURES

Each Subcontractor shall comply with all procedures established by the Contractor for coordination among the OWNER, the OWNER's consultants, Architect, Contractor, and the various Subcontractors for coordination of the Work with all local municipal authorities, government agencies, utility companies, and any other agencies with jurisdiction over all or any portion of the Work. The Subcontractor shall cooperate fully with all of the foregoing parties and authorities.

5.5.13 ON-SITE RECORD KEEPING

Subcontractor shall comply with all on-Site record keeping systems established by the Contractor and shall, upon the request of the Contractor, provide the Contractor with such information and reports as the Contractor may deem appropriate. Without limitation of the foregoing, the Subcontractor shall assemble all required permits and certificates so that they are readily accessible at the Site.

5.5.14 NON-EXCLUSIVE OBLIGATIONS

The specific requirements of Article 5 are not intended to exclude the obligation of the Subcontractor to comply with any of the other provisions of the General Conditions and the other Contract which are relevant to the proper performance of its portion of the Work.

5.5.15 TIME FOR COMMENCEMENT BY SUBCONTRACTORS

Contractor shall require all Subcontractors to commence their Work within Two (2) Working Days after Contractor provides them with a notice to begin, and shall require all subcontractors to diligently prosecute their work in accordance with the Project Schedule, so as to allow the Project to be totally and adequately completed within the Completion Time.

ARTICLE 6 - CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

6.1.1 OWNER'S RIGHTS

The OWNER reserves the right to perform Work related to the Project with the OWNER's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the Site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. Upon the election to perform Work with its own forces or by separate contracts, the OWNER shall notify the Contractor. Notwithstanding anything to the contrary in the Contract Documents, Contractor shall have the absolute obligation to work cooperatively with the OWNER and all other contractors, subcontractors, suppliers and other entities working on any portion of the Project or performing any operations on or off the Site, including, but not limited to, those provided for in the Project Schedule.

The Project incorporates multiple trade contractors under a multi-prime delivery method. The Contractor acknowledges that all planned conditions and required interfaces have been reviewed and incorporated into the Contract Sum. The Contractor shall be solely responsible for any costs associated with Contractor's omission of required coordination with other contractors or tie-ins to existing work.

6.1.2 DESIGNATION AS CONTRACTOR

When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, the term "Contractor" in the Contract in each case shall mean the Contractor who executes each separate OWNER/Contractor Contract.

6.1.3 CONTRACTOR DUTIES

The Contractor shall have overall responsibility for coordination and scheduling of the activities of the OWNER's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the OWNER in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors, and the OWNER until subsequently revised.

6.1.4 OWNER OBLIGATIONS

Unless otherwise provided in the Contract, when the OWNER performs Work related to the Project with the OWNER's own forces, the OWNER shall be deemed to be subject to the same obligations, and to have the same rights, which apply to the Contractor under the General Conditions, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10, 11, and 12.

6.2 MUTUAL RESPONSIBILITY

6.2.1 DELIVERY AND STORAGE

The Contractor shall afford the OWNER and separate contractors' reasonable opportunity for delivery and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the separate contractors' construction and operations with theirs as required by the Contract.

6.2.2 NOTICE BY CONTRACTOR

If part of the Contractor's Work depends upon proper execution or results from work by the OWNER or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the OWNER's or separate contractors completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

6.2.3 COSTS INCURRED

Costs caused by delays, improperly timed activities, defective construction, or damages to another's Work shall be borne by the party responsible.

6.2.4 CORRECTION OF DAMAGE

The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the OWNER or separate contractors.

Contractor shall provide full cooperation with Construction Manager and all other contractors on the Project. Conflicting operations shall be resolved in the manner that minimizes impact to the Master Schedule and cost impacts to all contractors, as determined by the Construction Manager.

6.3 OWNER'S RIGHT TO CLEAN UP

If a dispute arises among the Contractor, separate contractors, and the OWNER as to the

responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in paragraph 3.13, the OWNER may clean up and allocate the cost among those responsible as the Architect determines to be just.

ARTICLE 7 - CHANGES IN THE WORK

7.1 CHANGES

7.1.1 NO CHANGES WITHOUT AUTHORIZATION

There shall be no change whatsoever in the Work without an executed Change Order or Construction Change Directive. Any Extra Work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications must be authorized by and the cost thereof approved in writing by both an executed Construction Change Directive and subsequently executed Change Order. No change in Completion Time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order. The provisions of the Contract shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications. Notwithstanding anything to the contrary in this Article 7, all Change Orders shall be reviewed by the Architect and issued by the Owner and shall become effective when executed by the OWNER, the Architect, and the Contractor. OWNER shall not be liable for the cost of any Extra Work performed without a Construction Change Directive or Change Order.

If a CO or CCD requires DSA approval, then no payment shall be made on such a CO or CCD until DSA issues its written approval of the changes in the Work.

7.1.2 CONSTRUCTION MANAGER AUTHORITY

The Construction Manager will have authority to order additions, deletions and other changes in the Work by Change Order or CCD without invalidating the Contract and without notice to sureties. Absence of such notice shall not relieve such sureties of any of their obligations to OWNER. The Construction Manager may issue an emergency CCD to correct a situation that poses an immediate danger to persons or damage to property. Such changes shall be affected by written Change Order and shall be binding on the OWNER and the Contractor. The Contractor shall carry out such written orders promptly.

7.1.3 OMITTED WORK

In the case of omitted work, the College shall have the right to withhold from payments due or to become due to the Contractor an amount which, in the College's or Construction Manager's opinion, is equal to the value of such work until such time as the value thereof is determined by agreement.

7.1.4 IMPACT COSTS

Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the change order for work. Under no circumstances shall Contractor be permitted to modify the Change Order Form, set forth as Exhibit "J," attached hereto and incorporated herein. In submitting its bid, Contractor shall be deemed to have reviewed and accepted the attached Change Order Form, including the terms and conditions set forth therein. No claims shall be allowed for impact, extended

overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications.

7.1.5 CHANGES ADDITIONS OMISSIONS

All changes, additions or omissions in the Work ordered in writing by the College or Construction Manager shall be deemed to be a part of the Work hereunder and shall be performed and furnished in strict accordance with all of the terms and provisions of this Agreement and the other Contract Documents. Contractor accepts the responsibility to keep its surety informed of all such modifications to its contract. The obligations of Contractor's surety shall not be reduced, waived or adversely affected by the issuance of such change orders, additions or deductions even if the College or Construction Manager fails to inform the surety of same and the College or Construction Manager shall not be required to obtain consent of the surety to such modifications.

7.2 CHANGE ORDERS ("CO")

Refer to Section 7.1.1.

OWNER may issue a CO unilaterally, without the Contractor's signature, signed only by OWNER and the Architect, for a change in the Work, in the event that Contractor refuses to sign the CO or no agreement is otherwise reached between Owner and Contractor with regard to such change in the Work. The Contract Sum and Completion Time shall be adjusted in accordance with the Contract Documents. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract Sum or the Contract Time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order. Should a dispute arise between the parties regarding the validity of a change or disagree upon the terms of original scope, Contractor is to proceed per the Construction Change Directive issued by the College. Under no circumstances shall Contractor be entitled to delay or additional compensation for failure to timely prosecute work contemplated under a Construction Change Directive.

7.3 CONSTRUCTION CHANGE DIRECTIVES ("CCD")

7.3.1 DEFINITION

A CCD is a written order prepared by the Construction Manager and reviewed by the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Completion Time, or both. The Construction Manager may by CCD, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within the Contract. A CCD does not require the agreement of the Contractor, and shall be valid with or without the Contractor's signature. The Contract Sum and Completion Time shall be adjusted in accordance with the Contract Documents.

7.3.2 USE TO DIRECT CHANGE

A CCD shall be used to direct the Contractor to proceed with a change in the absence of agreement on the terms.

7.4 REQUEST FOR INFORMATION ("RFI")

7.4.1 DEFINITION

An RFI is a written request prepared by the Contractor asking the Architect to provide additional information necessary to clarify an item which the Contractor feels is not clearly shown or called for in the drawings or specifications, or to address problems which have arisen under field conditions.

7.4.2 SCOPE

The RFI shall reference all the applicable Contract provisions, including specification section, detail, page numbers, drawing numbers, and sheet numbers, etc. The Contractor shall make suggestions and/or interpretations of the issue raised by the RFI. The DSA Inspector shall review and initial all RFI's prior to submission by Contractor to Architect. An RFI cannot modify the Contract Sum, Completion Time, or the Contract.

7.4.3 RESPONSE TIME

The Contractor shall provide its RFI to the Architect within one (1) day after occurrence of the event giving rise to such RFI, or within five (5) days after the Contractor first recognizes the condition giving rise to the RFI, whichever is later. The Architect must respond to an RFI within seven (7) days after receiving such request. If the Architect's response results in a change in the Work, then such change shall be affected by a written CO or CCD. If the Architect cannot respond to the RFI within seven (7) days, the Architect shall notify the Contractor, with a copy to the Inspector and the OWNER, of the amount of time that will be required to respond.

7.4.4 COSTS INCURRED

The Contractor shall be invoiced by the OWNER for any costs incurred for professional services, which shall be deducted from the next progress payment, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request.

7.5 REQUEST FOR PROPOSAL ("RFP")

7.5.1 DEFINITION

An RFP is a written request prepared by the Architect asking the Contractor to submit to the OWNER and the Architect an estimate of the effect of a proposed change on the Contract Sum or the Completion Time.

7.5.2 SCOPE

An RFP shall contain adequate information, including any necessary drawings and specifications, to enable Contractor to provide the cost breakdowns required by paragraph 7.7.

7.6 CHANGE ORDER REQUEST ("COR")

7.6.1 DEFINITION

A COR is a written request prepared by the Contractor asking the OWNER to incorporate a proposed change called for in an RFP or a claim per paragraph 7.7.6 into a CO. The Construction Manager shall provide a form for this purpose.

7.6.2 CHANGES IN PRICE

A COR shall include breakdowns per paragraph 7.7 to validate any change in Contract Sum due to

proposed change or claim.

7.6.3 CHANGES IN TIME

A COR shall also include any additional time requested to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule.

7.7 COST OF CHANGE ORDERS

7.7.1 TIME TO PROVIDE ESTIMATE

Within ten (10) days or such lesser period of time as may be required by OWNER after any request is made for a change that impacts the Contract Sum or the Completion Time, the Contractor shall provide to the OWNER and the Construction Manager in writing an estimate of the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, wage rates, required for the change, and the effect upon the Completion Time of such CO. Changes may be made by OWNER by an appropriate written CO, or, at the OWNER's option, such changes shall be implemented immediately upon the Contractor's receipt of an appropriate written CCD.

7.7.2 DETERMINATION OF COST FOR ESTIMATE SUBMITTED ON TIME

If Contractor submits a written estimate within the time specified in 7.7.1, then OWNER, without invalidating the Contract and as provided by law, may order Extra Work or make changes by altering, adding to, or deducting from work, the Contract Sum being adjusted accordingly. All such work shall be executed under conditions of the original Contract, except that any claim for extension of the Completion Time caused thereby shall be adjusted at the time of ordering such change. Contractor shall increase the amounts of his payment and performance bonds in proportion to any increase in the Contract Sum. In giving instructions, Construction Manager shall have authority to make minor changes in the work, not involving change in cost, and not inconsistent with the purpose of the Project.

The amount of the increase or decrease, if any, in the Contract Sum resulting from a CO or CCD shall be determined in one or more of the following ways as applicable to a specific situation and as determined in the sole and absolute discretion of the OWNER:

- A. By acceptance of a proposal from Contractor, properly itemized and supported by sufficient substantiating data to permit evaluation;
- B. By unit prices in the Contractor's original bid and incorporated in the Contract Documents or unit prices fixed by subsequent agreement between the OWNER and the Contractor;
- C. By cost of material and labor and percentage of overhead and profit, determined by the method below and in 7.7.3:

1. Daily Reports by Contractor

a) General: At the close of each Working Day, the Contractor shall submit a daily report to the Inspector, on forms approved by the OWNER, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that

day, the location of the Work, and for other services and expenditures when authorized concerning Extra Work items. An attempt shall be made to reconcile the report daily, and it shall be signed by the Inspector and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through the Contractor.

- b) Labor: Show names of workers, classifications, and hours worked.
- c) Materials: Describe and list quantities of materials used.
- d) Equipment: Show type of equipment, size, identification number, and hours of operation, including, if applicable, loading and transportation.
- e) Description/Location. Description and location of work being performed.
- f) Other Services and Expenditures: Describe in such detail as the OWNER may require.

2. Basis for Establishing Costs

a) Labor will be the actual cost for wages prevailing locally for each craft or type of workers at the time the Extra Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of a labor classification, which would increase the Extra Work cost, will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

b) Materials shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery.

The OWNER reserves the right to approve materials and sources of supply or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the OWNER.

c) Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of \$100 or less. Regardless of Ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the work is performed. The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Necessary loading and transportation costs for equipment used on the Extra Work shall be included. If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the OWNER than holding it at the work Site, it shall be returned unless the Contractor elects to keep it at the work Site at no expense to the OWNER.

All equipment shall be acceptable to the Inspector, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and modifications shall be used to classify equipment, and equipment shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

d) Other Items. The OWNER may authorize other items which may be required on the Extra Work. Such items include labor, services, material, and equipment which are different in their nature from those required by the Work, and which are of a type not ordinarily available from the Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment.

e) Invoices. Vendors' invoices for material, equipment rental and other expenditures shall be submitted with the COR. If the request for payment is not substantiated by invoices or other documentation, the OWNER may establish the cost of the item involved at the lowest price which was current at the time of the Daily Report.

f) Overhead. Overhead, including direct and indirect costs, is applicable to both additive and deductive COs and CCDs, and shall be submitted with the COR and include: home office overhead, off-Site supervision, CO and CCD preparation/negotiation/research, time delay costs, project interference and disruption, any travel and subsistence costs, additional as-built costs, additional guaranty and warranty durations, on-Site supervision (such as project managers or superintendents), additional temporary protection, additional temporary utilities, additional temporary facilities, additional material handling costs, and additional safety equipment costs.

g) Subcontractor Overhead & Profit Schedule.

Schedule 1: *Changes Totaling \$500 or Less:* not to exceed 10% of Line D Subtotal.

Schedule 2: *Changes Totaling More Than \$500 But Less Than Or Equal To \$7,500:* not to exceed 10% of Line D Subtotal.

Schedule 3: *Changes Totaling More Than \$7,500.* not to exceed 5% of Line D Subtotal.

h) Contractor Overhead & Profit Schedule.

Schedule 1: *Changes Totaling \$500 or Less:* not to exceed 15% of Line G or L.

Schedule 2: *Changes Totaling More Than \$500 But Less Than Or Equal To \$7,500:* not to exceed 10% of Line G or L.

Schedule 3: *Changes Totaling More Than \$7,500:* not to exceed 5% of Line G or L.

If the Contractor should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation obligates OWNER to pay additional compensation to the Contractor or to grant an extension of time for the completion of the Contract, he shall notify OWNER in writing, of such claim within the time specified in 4.5.3 from the date he has actual or constructive notice of the factual basis supporting the claim. The Contractor's failure to notify OWNER within such period shall be deemed a waiver and relinquishment of the claim against OWNER. If such notice be given within the specified time, the procedure for its consideration shall be as stated in the General Conditions. If the Contractor is delayed in completing the work by reason of any change made pursuant 7.7.2, the time for completion of the work shall be extended by Change Order for a period commensurate with such delay.

Changes in plans or specifications shall be made by addenda or change orders approved by DSA.

If Contractor **does not** submit a written estimate within the time specified in 7.7.1, then the amount of an increase or decrease, if any, in the Contract Sum resulting from a change in the Work shall be determined by OWNER. At OWNER'S sole option, OWNER shall set a reasonable price using one of the following methods: a Unit Price stated in the Contractor's bid, or the method specified in subparagraph C of 7.7.2, or an estimated price provided by the Architect. In such a case, Contractor agrees to accept the price set by OWNER and to execute the CO with respect thereto.

7.7.3 **FORMAT FOR PROPOSED COST CHANGE**

The following format shall be used, as determined in the sole and absolute discretion of the OWNER in accordance with 7.7.2, by the Contractor to communicate proposed additions and deductions to the Contract in order to determine the amount of increase or decrease, if any, in the Contract Sum.

1. **Work Performed by Subcontractor**

Use Subsections (A) through (G) for each Subcontractor. Insert the cumulative total for all Subcontractor(s) in Subsection (H).

	<u>EXTRA</u>	<u>CREDIT</u>
A. Material: (Attach receipts, invoices or itemized quantity and unit cost, plus sales tax and delivery. Enter Total as Material.)	_____	_____
B. Labor: (Attach itemized hours times rates in accordance with certified payroll records. Separately show dollar amount for employer-paid payroll taxes/insurance benefits. Enter Total as Labor.)	_____	_____
C. Equipment: (Attach receipts, tear tickets or invoices indicating unit costs and total		

	<u>EXTRA</u>	<u>CREDIT</u>
hours or loads charged. Enter Total as Equipment.)	_____	_____
D. SUBTOTAL (LINES A+B+C)	_____	_____
E. Subcontractor Overhead & Profit: See Subcontractor Overhead & Profit Schedule in Section 7.7.2 (C) (2) (g) above. (Insert _____ % x D)	_____	_____
F. Total Cost of Subcontractor Work: (Lines D + E)	_____	_____
G. General Contractor's Overhead and Profit (On Subcontractor's Work). See Contractor Overhead & Profit Schedule in Section 7.7.2 (C) (2) (h) above. (Insert _____ % x F)	_____	_____
H. Total Subcontractor(s) Cost (Credit). A cumulative total of all Subcontractors working on this Change. (Lines F + G for <u>ALL</u> Subcontractors)		

2. **Work Performed by Contractor.**

	<u>EXTRA</u>	<u>CREDIT</u>
I. Material: (Attach receipts, invoices or itemized quantity and unit cost, plus sales tax and delivery. Enter Total as Material.)	_____	_____
J. Labor: (Attach itemized hours times rates in accordance with certified payroll records. Separately show dollar amount for employer-paid payroll taxes/insurance benefits. Enter Total as Labor).	_____	_____
K. Equipment: (Attach receipts, tear tickets		

	<u>EXTRA</u>	<u>CREDIT</u>
or invoices indicating unit costs and total hours or loads charged. Enter Total as Equipment.)	_____	_____
L. SUBTOTAL (LINES I+J+K)	_____	_____
M. Contractor Overhead & Profit: See Contractor Overhead & Profit Schedule in Section 7.7.2 (C) (2) (h) above. (Insert _____ % x L)	_____	_____
N. Total Contractor Cost (Credit). (Lines L + M)		

3. **Total of Work Performed by Subcontractor(s) and the Contractor.**

	<u>EXTRA</u>	<u>CREDIT</u>
O. Total Subcontractor(s) Cost (Credit). (Line H)	_____	_____
P. Total Contractor Cost (Credit). (Line N)	_____	_____
Q. Subtotal Cost (Credit). (Lines O + P)	_____	_____
R. Bond Costs: Payment and Performance bond costs shall not exceed two percent (2%) of Q. (Insert _____ % x Q)	_____	_____
S. Grand Total of Cost (Credit). (Lines Q + R)		

It is expressly understood that the value of such extra work or changes, as determined by any of the aforementioned methods, expressly includes any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the project or resulting from delay to the project. When both additions and credits covering related work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any,

with respect to that change.

7.7.4 DISCOUNTS, REBATES, AND REFUNDS

For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to the Contractor, and the Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction of the Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein.

7.7.5 ACCOUNTING RECORDS

With respect to portions of the Work performed by COs and CCDs on a time-and-materials, unit-cost, or similar basis, the Contractor shall keep and maintain cost-accounting records satisfactory to the OWNER, which shall be available to the OWNER on the same terms as any other books and records the Contractor is required to maintain under the Contract.

7.7.6 NOTICE REQUIRED

If the Contractor desires to make a claim for an increase in the Contract Sum, or any extension in the Completion Time for completion, it shall give the OWNER written notice thereof within ten (10) calendar days after the occurrence of the event giving rise to the claim, together with detailed estimates of the impact on the Contract Sum and/or the Completion Time. This notice shall be given by the Contractor before proceeding with the Work, except in an emergency endangering life or property, in which case the Contractor shall proceed in accordance with paragraph 10.4 hereof. No claim shall be considered unless made in accordance with this Subparagraph; however, the mere presentation of such claim shall not establish the validity of the cause giving rise to such claim, or of the extension of the Completion Time, and/or the increase in the Contract Sum. Contractor shall proceed to execute the Work even though the adjustment has not been agreed upon. Any change in the Contract Sum or extension of the Completion Time resulting from such claim shall be authorized by a CO.

7.7.7 APPLICABILITY TO SUBCONTRACTORS

Any requirements under this Article 7 shall be equally applicable to COs or CCDs issued to Subcontractors by the Contractor to the same extent required of the Contractor.

ARTICLE 8 – TIME

8.1 DEFINITIONS

8.1.1 COMPLETION TIME

The term "Completion Time" shall have the meaning prescribed in Article 1.

8.1.2 NOTICE TO PROCEED

The term "Notice to Proceed" shall have the meaning prescribed in Article 1.

8.1.3 **DAYS**

The term "Day" shall have the meaning prescribed in Article 1.

8.2 **HOURS OF WORK**

8.2.1 **SUFFICIENT FORCES**

Contractors and Subcontractors shall furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule and in such a manner to allow for the full and adequate completion of the Project within the Completion Time. Lack of sufficient forces will subject the Contractor to withholding of payment per Section 9.5.1.

8.2.2 **PERFORMANCE DURING WORKING HOURS**

Work shall be performed during regular working hours, except that in the event of an emergency or when required to complete the Work in accordance with job progress, work may be performed outside of regular working hours with advance written permission of the OWNER.

8.2.3 **LABOR CODE APPLICATION**

In accordance with Section 1773.2 of the California Labor Code, the Contractor shall post a copy of the determination of prevailing wage rates at the job site. The schedule of per diem wages is based upon a work day of eight (8) hours and a working week of forty (40) hours, per Labor Code section 1810. The rate for overtime work shall be at not less than time and one-half, pursuant to Labor Code Section 1815. The Contractor shall pay to the OWNER a penalty of twenty-five dollars (\$25.00) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code.

As provided in Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the Contractor or by any Subcontractor on any subcontract under this Contract, upon the work or upon any part of the work contemplated by this Contract, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereinafter provided. Notwithstanding the provision hereinabove set forth, work performed by employees of Contractors in excess of eight (8) hours per day and forty (40) hours during any one week shall be permitted upon this public work compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

The Contractor and every subcontractor shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of the OWNER and to the Division of Labor Law Enforcement, Department of Industrial Relations of the State of California.

8.2.4 **COSTS FOR AFTER HOURS INSPECTIONS**

If the work done after hours is required by the Contract to be done outside the Contractor's or the Inspector's regular working hours, the costs of any inspections, if required to be done outside normal

working hours and not scheduled per the Construction Schedule, shall be borne by the Contractor.

8.2.5 DISRUPTION OF SCHOOL ACTIVITIES

No Work or other activities by or on behalf of the Contractor which presents a hazard or unreasonable disruption to the staff or students shall be allowed while school is in session. The determination as to whether Work or some other activity presents a hazard or constitutes an unreasonable disruption to the staff or students of any school shall be made by and pursuant to the sole discretion of the Construction Manager or a representative of the OWNER's Maintenance and Operations Department. All Work or other activities which could present a hazard or unreasonable disruption to the staff or students shall be performed before or after school is in session, on weekends, or on a school holiday. Neither the Contractor nor its subcontractors or anyone working on behalf of the Contractor or subcontractors shall be entitled to additional compensation or Completion Time for having to arrange their work schedule so as not to violate the provisions of this Section. The Contractor, subcontractors and persons working on behalf of the Contractor and subcontractors shall be expected to arrange such Work and other activities in advance so as to avoid creating monetary or time impacts.

8.3 PROGRESS AND COMPLETION

8.3.1 TIME OF THE ESSENCE

Time limits stated in the Contract are of the essence of the Contract. By executing the Contract, the Contractor confirms that the Completion Time and Project Schedule are a reasonable period for performing the Work.

8.3.2 NO COMMENCEMENT WITHOUT INSURANCE

The Contractor shall not knowingly, except by agreement or instruction of the OWNER in writing, commence operations on the Site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor. The date of commencement of the Work shall not be changed by the effective date of such insurance.

8.3.3 EXPEDITIOUS COMPLETION

The Contractor shall proceed expeditiously with adequate forces and shall achieve Completion within the Completion Time.

Should the progress of the Work or of the Project be delayed disrupted, hindered, obstructed, or interfered with by any fault or neglect or act or failure to act of the Contractor or any of its officers, agents, servants, employees, subcontractors or suppliers and not due to an Excusable Delay so as to cause any additional cost, expense, liability or damage to the College, Construction Manager, the Architect or the Owner's Representative, including legal fees and disbursements incurred by the College, Construction Manager, the Architect or the Owner's Representative, (whether incurred in defending claims arising from such delay or in seeking reimbursement and indemnity from the Contractor and its surety hereunder or otherwise) or any damages or additional costs or expenses for which College, Construction Manager, the Architect or the Owner's Representative, may or shall become liable, the Contractor and its surety shall and does hereby agree to compensate the College, Construction Manager, the Architect or the Owner's Representative, for and indemnify them against all such costs, expenses, damages and liability.

The College, at its sole discretion, if the College deems necessary, may direct the Contractor to work overtime and, if so directed, the Contractor shall work said overtime and, provided that the Contractor is not in default under any of the terms or provisions of this Agreement or of any of the other Contract Documents, the College will pay the Contractor for such actual additional wages paid, if any, at the prevailing wage rates plus taxes imposed by law on such additional wages, plus workers' compensation insurance, liability insurance and levies on such additional wages if required to be paid by the Contractor.

If, however, the progress of the Work or of the Project is delayed by any fault or neglect or act or failure to act of the Contractor or any of its officers, agents, servants, employees, subcontractors or suppliers, and not due to Excusable Delay, then the Contractor shall, in addition to all of the other obligations imposed by this Agreement upon the Contractor in such case, and at its own cost and expense, work such overtime as may be necessary to make up for all time lost in the completion of the Work and of the Project due to such delay. Should the Contractor fail to make up for the time lost by reason of such delay, the Construction Manager or College shall have the right to cause other contractors to work overtime and to take whatever other action it deems necessary to avoid delay in the completion of the Work and of the Project, and the cost and expense of such overtime and/or such other action shall be borne solely by the Contractor.

8.4 EXTENSIONS OF TIME - LIQUIDATED DAMAGES

8.4.1 [RESERVED]

8.4.2 EXCUSABLE DELAY

The Contractor shall not be liable for actual damages, as set forth in the Contract, because of any delays in completion of the Work due to unforeseeable causes beyond the control and without the fault or the negligence of Contractor, including, but not restricted to, acts of God, acts of public enemy, acts of Government, acts of the OWNER or anyone employed by it, acts of another contractor in performance of a contract (other than this Contract) with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, or delays of subcontractors due to such causes.

8.4.3 REQUIREMENTS FOR EXCUSABLE DELAY

The Completion Time will be extended for a delay, and the Completion Time adjusted, if and only if Contractor demonstrates that all of the following conditions are met:

- A. The delay, only occurring at or in the immediate vicinity of the site is caused by fire; or strikes, boycotts, or like obstructive actions by employees or labor organizations; or stormy or inclement weather; or Acts of God (As used herein, "Acts of God" shall include only earthquakes in excess of a magnitude of 5.0 on the Richter Scale and tidal waves); or a man-made (not naturally occurring) unforeseen site condition such as buried utility lines, pipes, and the like; or an error or omission in the Contract Documents; or OWNER'S decision to change the scope of the Work, where such decision is not the result of any default or misconduct of the Contractor; or OWNER'S decision to suspend the Work, where such decision is not the result of any default or misconduct of the Contractor; or the failure of OWNER or Construction Manager to timely perform any Contract obligation unless such failure is due to Contractor's default or misconduct.
- B. The delay is not caused by a naturally occurring unforeseen site condition (e.g.,

unanticipated naturally occurring rock or sand); or the financial inability, misconduct or default of the Contractor, a Subcontractor or supplier; or the unavailability of materials or parts.

- C. **Within 3 working days** of the date the Contractor discovers or reasonably should discover an act, error, event, omission or unforeseen condition causing the delay, (even if the Contractor has not been delayed when the Contractor discovers or reasonably should discover the act, error, event, omission or unforeseen condition giving rise to the delay) the Contractor submits a timely Change Order Request that meets the requirements in the General Conditions.
- D. When the event causing the delay commences, the Contractor has complied with all Contract requirements for maintaining, submitting, and updating the Construction Schedule.
- E. The delay is critical. A delay is critical if and only to the extent it delays a critical activity that cannot be delayed without delaying completion of the entire Project beyond the Completion Time.
 - 1. If the Construction Schedule shows completion of the entire Project before the contractually specified date for full completion of the Work, a delay is critical if and only to the extent the delay pushes completion of the entire Project to a date that is beyond the contractually specified date for full completion of the Project.
 - 2. When two or more delays occur concurrently, and each such concurrent delay by itself without consideration of the other delays would be critical, then all such concurrent delays shall be considered critical. For the purpose of determining whether and to what extent the Completion Time should be adjusted, such concurrent critical delays shall be treated as a single delay which commences at the start of the delay that begins first and terminates at the cessation of the delay that ends last.
- F. The delay is supported by the Construction Schedule (or, if appropriate, the Project Schedule) and a fragnet or Time Impact Analysis (TIA), current at the commencement of the event giving rise to the delay. A delay is supported only to the extent the Construction Schedule (or, if appropriate, the Project Schedule) and associated fragnet or TIA corroborates that it causes a delay to completion of the entire Project beyond the contractually specified date for full completion because it is critical. The requirement that a delay be supported will be excused if the event causing the delay commences before approval of the Construction Schedule, provided that the absence of an approved Construction Schedule is not due to the Contractor's failure to timely submit an acceptable Construction Schedule.

8.4.4 TIME – ACTUAL COSTS

Damages caused by College delay, including delays caused by items that are the responsibility of the College pursuant to Government Code Section 4215, shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

The term "Contract Sum" shall have the meaning prescribed in Article 1.

9.2 COST BREAKDOWN

9.2.1 REQUIRED INFORMATION

On forms approved by the OWNER, the Contractor shall furnish the following:

- A. Within ten (10) days of the award of the Contract, a detailed breakdown of the Contract Sum (Schedule of Values) for each Project or Site. The Contractor must ensure that each portion of the Work or separate activity on the Schedule of Values contains a proportionate share of profit, overhead and other costs or expenses which will be incurred by the Contractor as compared to the line item percentage of the Contract Sum for that portion of the Work or separate activity. Contractor shall not unevenly weight or allocate its overhead and profit to one or more particular portions of Work or separate activity on the Schedule of Values;
- B. Within ten (10) days of the award of the Contract, a schedule of estimated monthly payment requests (cash flow) due the Contractor showing the values and construction time of the various portions of the Work to be performed by it and by its Subcontractors or material and equipment suppliers containing such supporting evidence as to its correctness as the OWNER may require;
- C. Five (5) days prior to the submission of a pay request, an itemized breakdown of work done for the purpose of requesting partial payments;
- D. Within ten (10) days of the award of the Contract, the name, address, telephone number, fax number, license number, and classification of all of its Subcontractors and of all other parties furnishing labor, material, or equipment for its Contract, along with the amount of each such subcontract or the price of such labor, material, and equipment needed for its entire portion of the Work.
- E. Failure to provide the documents above within the time allotted will be grounds for the OWNER assessing a credit change order to the Contractor per Section 9.5.1. If after 30 days after award of the Contract, the Contractor has not provided the submittals specified above, the OWNER will back charge the Contractor the sum of \$1,000 per document via a credit change order to the Contract. Every 30 days past the award of the Contract in which the submittals are delinquent, the Owner will process this same credit amount until the Contractor has submitted the required documents.

9.2.2 OWNER APPROVAL REQUIRED

The OWNER shall review all submissions received pursuant to paragraph 9.2.1 in a timely manner. All submissions must be approved by the OWNER before becoming the basis of any payment.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 PROCEDURE

On or before the fifth (5th) day of each month, the Contractor shall submit to the Construction Manager an accurate, itemized Application for Payment for operations completed in accordance with the Schedule of Values. Contractor shall submit two (2) copies. Each Application for Payment copy must be reviewed and executed by the DSA Inspector for concurrence of Work completed. Each application copy shall be notarized, if required, and supported by the following or such portion thereof, at Contractor's sole expense, as Architect requires and/or at OWNER'S sole discretion:

- A. The amount paid to the date of the Application to the Contractor, to all its Subcontractors, including without limitation, Subcontractors as listed in Contractor's Expanded List of Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
- B. The amount being requested with the Application for Payment by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;
- C. The balance that will be due to each of such entities after said payment is made;
- D. A certification that the As-Built Drawings and Annotated Specifications are current;
- E. The additions to and subtractions from the Contract Sum and Completion Time (as approved in COs or CCDs);
- F. A summary of the retentions (each Application shall provide for retention, as set out in Article 9.6, of the amount due until completion of the Work of the Contractor and Final Acceptance thereof by OWNER);
- G. Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the OWNER may require from time to time;
- H. The percentage of completion of the Contractor's Work by line item;
- I. A statement showing all payments made by the Contractor for labor and materials on account of the Work covered in the preceding Application for Payment;
- K. Waiver and release forms must be submitted with each Application for Payment, and shall substantially comply with California Civil Code sections 8132, 8134, 8136 and 8138.
 - 1. Conditional Waiver and Release Upon Progress Payment forms must be submitted by Contractor from all first tier Subcontractors for the current month's Application for Payment.
 - 2. Unconditional Waiver and Release Upon Progress Payment forms must be submitted by Contractor from all first tier Subcontractors and from anyone who has filed a stop payment notice.
 - 3. Conditional Waiver and Release Upon Final Payment forms must be submitted by Contractor from all first tier Subcontractors for final Application for Payment,

in accordance with 9.9.3 PROCEDURES FOR APPLICATION FOR FINAL PAYMENT.

4. Unconditional Waiver and Release Upon Final Payment forms must be submitted by Contractor from all Subcontractors regardless of tier and from anyone who has filed a stop payment notice, within ten (10) calendar days upon receipt of payment for final Application for Payment;

- L. Certified Payroll Reports (CPR) from Contractor and any/all Contractor's first tier Subcontractors, including without limitation, Subcontractors listed on Contractor's Expanded List of Subcontractors.

9.3.2 PURCHASE OF MATERIALS AND EQUIPMENT

As the Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from OWNER, to assure that there will be no delays, payment by the OWNER for stored material shall be made only in unusual circumstances where the Architect specifically recommends, and OWNER specifically approves, the payment in writing. If payments are to be made on account of materials and equipment not incorporated in the Work, but delivered and suitably stored at the Site or at some other location agreed upon in writing by the OWNER, the payments shall be conditioned upon submission by the Contractor, Subcontractor, or vendor of bills of sale and such other documents satisfactory to the Architect and the OWNER to establish the OWNER's title to such materials or equipment free of all liens and encumbrances, and otherwise protect the OWNER's interest, including, without limitation, provision of applicable insurance and transportation to the Site. All stored items shall be inventoried, specified by identification numbers (if applicable), released to the OWNER by sureties of the Contractor and the Subcontractor and, if stored off-Site, stored only in a bonded warehouse.

9.3.3 WARRANTY OF TITLE

The Contractor warrants that title to all Work covered by an Application for Payment will pass to the OWNER no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the OWNER shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work.

9.4 REVIEW OF PROGRESS PAYMENT

9.4.1 OWNER APPROVAL

The Architect will, within seven (7) days after receipt of the Contractor's Application for Payment, either approve such payment or notify the Contractor in writing of the Architect's reasons for withholding approval in whole or in part as provided in paragraph 9.5.1.

9.4.2 ARCHITECT'S REVIEW

The review of the Contractor's Application for Payment by the Architect is based on the Architect's observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract. The foregoing representations are

subject to an evaluation of the Work for conformance with the Contract, to results of subsequent tests and inspections, to minor deviations from the Contract correctable prior to completion, and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the review by the Architect will not be a representation that the Architect has:

- A. Made exhaustive or continuous on-Site inspections to check the quality or quantity of the Work;
- B. Reviewed construction means, methods, techniques, sequences, or procedures;
- C. Reviewed copies of requisitions received from Subcontractors, material and equipment suppliers, and other data requested by the OWNER to substantiate the Contractor's right to payment; or
- D. Made an examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

9.5 DECISIONS TO WITHHOLD PAYMENT

9.5.1 REASONS TO WITHHOLD PAYMENT

The OWNER may decide to withhold payment in whole, or in part, to the extent reasonably necessary to protect the OWNER if, in the OWNER's opinion, the representations to the OWNER required by paragraph 9.4.2 cannot be made. Failure by OWNER to deduct any sums from a progress payment shall not constitute a waiver of the OWNER's right to such sums. The OWNER may keep any moneys which would otherwise be payable at any time hereunder and apply the same, or so much as may be necessary therefore, to the payment of any expenses, losses, or damages as determined by the OWNER, incurred by the OWNER for which Contractor is liable under the contract. For instance, the OWNER may withhold payment, in whole or in part, to such extent as may be necessary to protect the OWNER from loss because of:

- A. Failure to provide requested supporting documents, including those noted in 9.3;
- B. Defective Work not remedied;
- C. Stop Payment Notices. Provided Contractor has been paid for undisputed work performed, if any Stop Payment Notice or other lien is filed on the Project for labor, materials, supplies, equipment or any other thing of value claimed to have been furnished to or incorporated into the Work, or for other alleged contribution thereto, the OWNER shall retain from payments otherwise due Contractor, in addition to other amounts properly withheld under this Section or under other provisions of the Contract, an amount equal to 125 percent (125%) of the amount claimed under such Stop Payment Notice; provided, however, that the OWNER may release such funds upon receipt of evidence satisfactory to the OWNER to the effect that Contractor has resolved such claim, by settlement, Stop Payment Notice Release Bond or otherwise. All other provisions of state law with respect to stop payment notices shall also apply. The Contractor agrees to indemnify, protect and save harmless the College and the Construction Manager from and against any and all such stop payment notices and actions brought or judgments rendered thereon, and from and against any and all loss, damages, liability, costs and expenses, including legal fees and disbursements, which the College or Construction Manager may sustain or incur in connection therewith;

- D. Reasonable doubt that the Work can be completed for the unpaid balance of any Contract Sum or within the Completion Time;
- E. Damage to the OWNER, another contractor, or subcontractor, including any sums expended by or on behalf of the OWNER in performing any of the Contractor's obligations under the Contract which the Contractor has failed to perform or has performed inadequately;
- F. Failure to store and properly secure materials;
- G. Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract, including, without limitation, monthly progress schedules, shop drawings, submittal schedules, schedule of values, product data and samples, proposed product lists, executed change orders, and verified reports;
- H. Failure of the Contractor to maintain As-Built Drawings on a monthly basis;
- I. Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment;
- J. Unauthorized deviations from the Contract; or
- K. Failure of the Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates.
- L. All funds forfeited pursuant to California Labor Code Section 1727. The OWNER and shall retain and transfer those funds pursuant to California Labor Code Section 1730.

9.5.2 WRITTEN REASONS FOR WITHHOLDING PROVIDED

Provide notice within a reasonable time of withholding payment, the Contractor shall be given a written copy of OWNER's reasons for withholding payment.

9.5.3 PAYMENT AFTER CURE

When the grounds for declining approval are removed, payment shall be made for amounts properly withheld because of them. No interest shall be paid on any retainage or amounts withheld.

9.6 PROGRESS PAYMENTS

9.6.1 PAYMENTS TO CONTRACTOR

Within thirty (30) days after approval of the Request for Payment, Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of the Work performed up to the last day of the previous month, less the aggregate of previous payments. The value of the Work completed shall be an estimate only, no inaccuracy or error in said estimate shall operate to release the Contractor, or any bondsman, from damages arising from such Work or from enforcing each and every provision of this Contract, and the OWNER shall have the right subsequently to correct any error made in any estimate for payment.

The Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for work performed, so long as any lawful or proper direction given by the OWNER concerning the Work, or any portion thereof, remains uncomplished with.

9.6.2 PAYMENTS TO SUBCONTRACTORS

The Contractor shall pay its Subcontractors in accordance with their subcontracts and pursuant to Public Contract Code Section 10262. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

9.6.3 PERCENTAGE OF COMPLETION OR PAYMENT INFORMATION

The OWNER will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor, and action taken thereon by the OWNER, on account of portions of the Work done by such Subcontractor.

9.6.4 NO OBLIGATION OF OWNER FOR SUBCONTRACTOR PAYMENT

The OWNER shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

9.6.5 PAYMENT TO SUPPLIERS

Payment to material or equipment suppliers shall be treated in a manner similar to that provided in paragraphs 9.6.2, 9.6.3 and 9.6.4.

9.6.6 PAYMENT NOT CONSTITUTING APPROVAL OR ACCEPTANCE

An approved Request for Payment, a progress payment, or partial or entire use or occupancy of the Project by the OWNER shall not constitute acceptance of work not in accordance with the Contract.

9.6.7 JOINT CHECKS

OWNER shall have the right, if necessary for the protection of the OWNER, to issue joint checks made payable to the Contractor and Subcontractors and/or material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the OWNER and a Subcontractor of any tier, any obligation from the OWNER to such Subcontractor, or rights in such Subcontractor against the OWNER.

9.6.8 CERTIFICATION

Contractor shall certify under penalty of perjury, that all Payment Application requests accurately reflect the Work performed to date on the Project.

9.7 COMPLETION OF THE WORK – INTENTIONALLY OMITTED – See Article 9.9

9.8 PARTIAL OCCUPANCY OR USE

9.8.1 OWNER'S RIGHTS

The OWNER may occupy or use any completed or partially completed portion of the Work at any stage. The OWNER and the Contractor shall agree in writing to the condition of the Work (or designated portion), the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work (or designated portion), insurance, the period for correction of the Work (or designated portion), and the commencement of warranties for the Work (or designated portion) required by the Contract. When requested by the OWNER, the Contractor shall complete all Punch List items for the occupied portion of the Work.

9.8.2 INSPECTION PRIOR TO OCCUPANCY OR USE

Immediately prior to such partial occupancy or use, the OWNER, Contractor, Construction Manager, and the Architect shall jointly inspect the area of Work (or designated portion) to be occupied or used, in order to determine and document the condition of the Work and make the written agreement required by paragraph 9.8.1.

9.8.3 NO WAIVER

Unless otherwise agreed upon, partial completion, occupancy or use of a portion or portions of the Work shall not constitute Substantial Completion or final acceptance of the Work, shall not be deemed an approval of any portion or portions of the Work not in compliance with the requirements of the Contract, and shall not relieve the Contractor of any responsibility or obligation under the Contract, except as noted in the written agreement required under paragraph 9.8.1.

9.9 COMPLETION AND FINAL PAYMENT

9.9.1 CLOSEOUT PROCEDURES AND FINAL INSPECTION

9.9.1.1 Upon Substantial Completion, Contractor shall promptly complete the Punch List and all other remaining portions of the Work **within 30 calendar days after the date Substantial Completion occurred.**

9.9.1.2 Upon fully completing the Punch List, Contractor shall send a written Project Closeout request (1 original and 5 copies) to Construction Manager declaring the Work is fully complete, ready for final inspection and OWNER'S acceptance.

- A. Field Review and Inspection: After receiving Contractor's Project Closeout Request, Construction Manager, Architect, Inspector and OWNER will conduct a field review of the Contractor's Punch List work.

Construction Manager, Architect, and Inspector shall inspect the Work to determine if the Work is fully completed in compliance with the Contract Documents.

- .1 If the Punch List items and all other work are fully complete, the Construction Manager, Architect, and Inspector shall submit to Contractor and OWNER a Final Inspection Report with Project Closeout Check List attached, recommending that OWNER accepts the Work as fully complete in accordance with the Contract Documents.

If the OWNER finds the Work fully completed in accordance with the Contract Documents per the Final Inspection Report, OWNER shall notify Contractor to submit to its Final Application for Payment to the

Construction Manager.

.2 If any Punch List items or any other work is **incomplete**, the Construction Manager, Architect, and Inspector shall submit to Contractor and OWNER a Project Closeout Check List identifying the Punch List items or any other work required to complete the Work in accordance with the Contract Documents.

.3 Within 10 calendar days after receiving the Project Closeout Check List, Contractor shall fully complete all remaining work and re-submit a written Project Closeout Request.

B. Contractor's Liability for Additional Inspections: The costs incurred by the OWNER for any additional field reviews, or the preparation of additional Punch List, shall be invoiced to the Contractor and deducted from the Final Payment.

C. Final Application for Payment:

.1 Contractor shall submit a fully completed Final Application for Payment to Construction Manager.

.2 Upon both the Construction Manager's and Architect's approval of the Final Application for Payment, Architect shall transmit to OWNER a Final Certificate for Payment stating that to the best of its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the Architect in connection with the Work, such Work has been completed in accordance with the Contract.

.3 OWNER shall thereupon inspect such Work and either (1) accept the Work as complete with approval of the Governing Board, or (2) notify the Architect and the Contractor in writing of reasons why the Work is incomplete. If the OWNER notes any work remaining to be completed, Contractor shall promptly complete the work and then notify Construction Manager, Architect, and OWNER when it is fully complete. Any corrective work, additional inspection(s) or approvals shall not change Contractor's obligation to complete all Work within the Completion Time.

9.9.2 NOTICE OF COMPLETION AND RELEASE OF RETAINAGE

Upon acceptance of the Work as fully complete and within 10 calendar days after Governing Board approval, OWNER shall file a Notice of Completion with the County Recorder. The contract retainage shall be released and paid to Contractor, and Subcontractors if required, pursuant to Public Contract Code Section 7107. OWNER will release any retention owed to Contractor 35 days after the recordation of the Notice of Completion.

9.9.3 PROCEDURES FOR APPLICATION FOR FINAL PAYMENT

The Application for Final Payment shall be accompanied by the same details as set forth in paragraph 9.3, and in addition, the following conditions must be fulfilled:

- A. Contractor shall execute and deliver a full and final waiver of all liens in connection with the Work, on a form supplied by the OWNER, including a release of lien in recordable form. If requested by OWNER, the waiver and release of lien shall be submitted together with a fully executed copy of the full and final waiver of all liens in connection with the Work, on a form supplied by the OWNER, including a release of lien in recordable form, obtained by Contractor from each person to receive or that has received a payment under the Contract.
- B. The Contractor shall have made, or caused to have been made, all corrections to the Work which are required to remedy any defects therein, to obtain compliance with the Contract or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of OWNER required under the Contract.
- C. Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, and bonds required by the Contract for its portion of the Work.
- D. Contractor shall execute and deliver a warranty for its Work, as provided by the Contract, on a form supplied by the OWNER.
- E. Architect shall have issued a Final Certificate for Payment.
- F. The Contractor shall have delivered to the OWNER all manuals and materials required by the Contract.
- G. The Contractor shall have provided instruction to the OWNER on all operable equipment in accordance with the Contract.
- H. The Contractor shall have removed, or caused to be removed, all waste materials and rubbish from and about the Site, as well as all tools, construction equipment, machinery, surplus material, scaffolding equipment, and any other similar materials of the Contractor or any subcontractor, shall have cleaned, or caused to be cleaned, all glass surfaces, and shall have left the Work broom-clean, except as otherwise provided in the Contract.
- I. Prior to, and as a condition precedent for, final payment under this Contract, the Contractor shall provide documentation to the OWNER identifying the amounts paid to DVBE's in conjunction with this Contract so that the OWNER can assess its success at meeting its DVBE participation goal.

9.9.4 **OWNER'S PROPERTY**

All shop drawings, working drawings, plans, quantities, specifications, proposals, sketches, magnetic media, computer software or other programming, manuals and technical data submitted to the OWNER or its agents or representatives by Contractor, his employee or his subcontractor pursuant to the Work shall become the property of the OWNER upon payment in full of all undisputed amounts due and payable to Contractor under the Contract Documents. Such materials may be duplicated, used and disclosed by the OWNER, in any manner and for any purpose, provided that any such use not within the purposes intended by this Contract shall be at the OWNER's sole risk and provided that Contractor shall be indemnified against any damages resulting from such use, including the release of this material to third parties for a use not intended by this Contract. Manuals, software documentation or other technical data produced by Contractor shall not include copyrighted materials

without the express written permission of the copyright OWNER.

9.10 SUBSTITUTION OF SECURITIES

In accordance with § 22300 of the Public Contract Code, the OWNER will permit the substitution of securities for any monies withheld by the OWNER to ensure performance under the Contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the OWNER, or with a state or federally chartered bank in California as the escrow agent, and thereafter the OWNER shall then pay such monies to the Contractor as they come due. Upon satisfactory completion of the Contract, the securities shall be returned to the Contractor.

Unless otherwise agreed to by the OWNER and Contractor, securities eligible for investment under this section shall include those listed in Government Code § 16430, bank or savings and loan certificates of deposit, interest-bearing demand-deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the OWNER.

The Contractor shall be the beneficial OWNER of any securities substituted for monies withheld and shall receive any interest thereon.

The escrow agreement used for the purposes of this Section shall be substantially similar to the form set forth in the Contract.

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS.

10.1.1 CONTRACTOR RESPONSIBILITY

The Contractor shall have responsibility for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. Each Contractor shall designate a responsible member of its organization (who is not one of the required full-time staff listed in section 3.3.2) whose sole duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

10.1.2 SUBCONTRACTOR RESPONSIBILITY

Subcontractors have the responsibility for participating in, and enforcing, the safety and loss prevention programs established by the Contractor for the Project, which will cover all Work performed by the Contractor and its Subcontractors. Each Subcontractor shall designate and name a responsible, dedicated member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

10.1.3 COOPERATION

All Subcontractors and material or equipment suppliers shall cooperate fully with Contractor, the OWNER, and all insurance carriers and loss prevention engineers.

10.1.4 ACCIDENT REPORTS

Subcontractors shall promptly report in writing to the Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the Site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger. Contractor shall thereafter promptly report the facts in writing to the OWNER and the Architect giving full details of the accident.

10.1.5 FIRST-AID SUPPLIES AT SITE

The Contractor will provide and maintain at the Site first-aid supplies for minor injuries.

10.2 SAFETY OF PERSONS AND PROPERTY.

10.2.1 THE CONTRACTOR

The Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to arising in connection with Contractor's operations under the Contract:

- A. Employees on the Work and other persons who may be affected thereby;
- B. The Work, material, and equipment to be incorporated therein, whether in storage on or off the Site, under the care, custody, or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- C. Other property at the Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

10.2.2 CONTRACTOR NOTICES

The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

10.2.3 SAFETY BARRIERS AND SAFEGUARDS

The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent Sites and utilities.

10.2.4 USE OR STORAGE OF HAZARDOUS MATERIAL

When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall notify the OWNER any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the OWNER and local fire authorities.

10.3 PROTECTION OF WORK AND PROPERTY.

10.3.1 PROTECTION FROM LOSS

The Contractor and Subcontractors shall continuously protect the Work, the OWNER's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract. The Contractor and Subcontractors shall make good any such damage, injury, or loss, except such as may be due to, or caused by, agents or employees of the OWNER.

10.3.2 PROTECTION FROM ELEMENTS

The Contractor shall remove all mud, water, or other elements as may be required for the proper protection and prosecution of its Work. The Contractor shall at all times provide heat, coverings, and enclosures necessary to maintain adequate protection against weather so as to preserve the Work, materials, equipment, apparatus, and fixtures free from injury or damage.

10.3.3 SHORING AND STRUCTURAL LOADING

The Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the Site in excess of safe limits, or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural steel, is the sole responsibility of the appropriate Contractor. All such items shall conform with the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction. The Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage or cause damage to the Work in place or the Work installed by others. Any damage which does occur shall be promptly repaired by the Contractor at no cost to the OWNER.

10.3.4 CONFORMANCE WITHIN ESTABLISHED LIMITS

The Contractor and Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits, and the limits established by the OWNER or the Contractor, and shall not unreasonably encumber the premises with construction equipment or materials.

10.3.5 SUBCONTRACTOR ENFORCEMENT OF RULES

Subcontractors shall enforce the OWNER's and the Contractor's instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the Site.

10.3.6 SITE ACCESS

The Contractor and the Subcontractors shall use only those ingress and egress routes designated by the OWNER, observe the boundaries of the Site designated by the OWNER, park only in those areas designated by the OWNER, which areas may be on or off the Site, and comply with any parking control program established by the OWNER such as furnishing license plate information and placing identifying stickers on vehicles.

10.3.7 PROTECTION OF MATERIALS

The Contractor and the Subcontractors shall receive, count, inspect for damage, record, store, and protect construction materials for the Work and promptly send to the Contractor evidence of receipt of such materials, indicating thereon any shortage, change, or damage (failure to so note shall constitute acceptance by the Subcontractor of financial responsibility for any shortage).

10.4 EMERGENCIES.

10.4.1 EMERGENCY ACTION

In an emergency affecting the safety of persons or property, the Contractor shall take any action necessary, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 7.

10.4.2 ACCIDENT REPORTS

The Contractor shall promptly report in writing to the OWNER all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported immediately by telephone or messenger to the OWNER.

10.5 HAZARDOUS MATERIALS

10.5.1 ASBESTOS-FREE MATERIALS CERTIFICATION

The Contractor shall certify to the OWNER, in writing that, to the best of his knowledge, information and belief, no material furnished, installed or incorporated into the Project contains asbestos or any other material deemed to be hazardous by the state or federal government. To this end, the Contractor must provide for the completion of the certification form included in the Appendix of the Contract Documents at the time of execution of the Contract.

10.5.2 ACCIDENT PREVENTION:

The Contractor agrees that the prevention of accidents to workers engaged upon or in the vicinity of the Work is its responsibility. The Contractor agrees to comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, codes, standards, orders, notices and requirements concerning safety as shall be applicable to the Work, including, among others, the Federal Occupational Safety and Health Act of 1970, as amended, and all standards, rules, regulations and orders which have been or shall be adopted or issued thereunder.

10.5.3 SAFETY:

When so ordered, the Contractor shall stop any part of the Work which the College or the Construction Manager deems unsafe until corrective measures satisfactory to the College and the Construction Manager have been taken, and the Contractor agrees that it shall not have nor make any claim for damages growing out of such stoppages. Should the Contractor neglect to take such corrective measures, the College or Construction Manager may do so at the cost and expense of the Contractor and may deduct the cost thereof from any payments due or to become due to the Contractor. If the Contractor fails to take corrective measures, then the OWNER may initiate proceedings to declare the Contractor a non-responsible bidder on OWNER's future projects per Section 14.2.2. Failure on

the part of the College or the Construction Manager to stop unsafe practices shall in no way relieve the Contractor of its responsibility therefore.

10.5.4 HAZARDOUS SUBSTANCES:

In the event that Hazardous materials or substances ("Hazardous Substances") of a type of which an employer is required by law to notify its employees are being used or stored on the Site by the Contractor, its subcontractor and anyone directly or indirectly employed or otherwise retained by any of them, the Contractor shall immediately provide written notice of the chemical composition thereof (including, without limitation, a copy of the applicable Material Safety Data Sheet) to Construction Manager and the College in sufficient time to permit compliance with such laws by the College, other subcontractors and other contractors on Site. For the purposes of this Agreement, Hazardous Substances shall mean any substance, product, waste, or other material of any nature that is or becomes listed, regulated or addressed under one or more of the following Environmental Laws: (1) CERCLA; (2) Hazardous Materials Transportation Act; (3) RCRA, (4) the Clean Water Act; (5) the Toxic Substances Control Act, (6) HSAA, (7) the California Porter-Cologne Water Quality Control Act; (8) the California Hazardous Waste Management Act; (9) the California Safe Drinking Water Act; (10) the California Waste Management Act; and (11) any other federal or state law or local ordinance concerning hazardous, toxic or dangerous substances, wastes, or materials.

10.5.4.1 HAZARDOUS SUBSTANCES AT SITE:

In the event that the Contractor encounters on Site material reasonably believed to be a Hazardous Substance which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and immediately report the condition to Construction Manager and the College in writing. Work in the affected area shall resume when such Hazardous Substance has been rendered harmless or removed as determined by a licensed laboratory retained by the College to verify the presence or absence of the Hazardous Substance and, if found, to render the Hazardous Substance harmless. If, due to no fault of the Contractor or its subcontractors and suppliers, the Contract Time shall be extended accordingly and the Contract Sum shall be increased by a reasonable amount for additional costs incurred by the Contractor as a result of shut down, delay and start up, which adjustments shall be accomplished through Change Order.

10.5.5 INDEMNIFICATION:

To the fullest extent permitted by law, Contractor agrees to indemnify and hold harmless the College, the Construction Manager, the Owner's Representative, the Architect and other contractors from and against any and all loss, injury, claims, actions, proceedings, liability, damages, fines, penalties, cost and expenses, including legal fees and disbursements, caused by the negligent mishandling by Contractor or its subcontractors and suppliers of any Hazardous Substances found at Site to the extent the materials or substances were brought onto Site by Contractor, its subcontractors and/or material suppliers. The College shall indemnify and hold harmless the Contractor, the Construction Manager, their subcontractors and suppliers and other contractors against any and all demonstrated and proven loss, injury, claims, actions, proceedings, liability, damages, fines, penalties, cost and expenses arising out of or resulting from any Hazardous Substances existing at the Site before commencement of the Work.

ARTICLE 11 - INSURANCE AND BONDS

11.1 INSURANCE

Contractor must, at its expense, purchase and maintain in full force and effect such insurance as will protect itself and OWNER from claims which may arise from the Work required by the Contract Documents, whether such Work is done by Contractor, by any subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. The coverages required by these Supplementary General Conditions shall not in any way limit the liability of Contractor. All insurance purchased pursuant to these Supplementary General Conditions shall be in policies subject to the prior written approval of the OWNER as to form, content, liability limits, cost and issuing company. The requirements in these Supplementary General Conditions apply to the Contractor, subcontractors and sub-subcontractors performing Work on the Project. Contractor and all subcontractors shall furnish Certificates of Insurance, as required below, evidencing said coverage before commencing work on the Project.

- a. **COMMERCIAL GENERAL LIABILITY INSURANCE** covering operations. The policy form must be nothing less than the standard Commercial General Liability insurance policy (Occurrence Form") with limits no less than those specified in these Supplementary General Conditions.
- b. **AUTOMOBILE LIABILITY INSURANCE** covering the use of all owned, non-owned and hired vehicles and with limits no less than those specified in these Supplementary General Conditions.
- c. **WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE** as required by Federal and State of California law.

11.2 CONTRACTOR CONSTRUCTION EQUIPMENT INSURANCE:

Any policies maintained by the Contractor and subcontractors on their owned and/or rented equipment and materials shall contain a provision requiring the insurance carriers to waive their rights of subrogation against the OWNER and all other indemnities named in the contract.

11.3 PROFESSIONAL LIABILITY INSURANCE (ERRORS & OMISSIONS)

In the event any contract specification requires the performance of professional services, such as but not limited to, architectural, engineering, construction management, surveying, design, etc., a certificate of insurance must be provided prior to commencing work evidencing such coverage with a limit of not less than \$1,000,000.

11.4 ENVIRONMENTAL AND ASBESTOS ABATEMENT COVERAGES

If the Contract involves the removal of asbestos, the removal/replacement of underground tanks or the removal of toxic chemicals and substances, the Contractor will be required to provide adequate coverages, with limits not less than \$5,000,000 per claim basis, for such exposures subject to requirements and approval of the OWNER.

11.5 HOLD HARMLESS CLAUSE

Work done on the premises, or in connection with the prosecution of this contract by the Contractor, shall be at the Contractor's risk and the Contractor shall assume any and all liability and shall hold harmless the OWNER, its officials, officers, directors, agents and employees, from claims or demands, cost expenses, loss or damage due to bodily injury, sickness or disease, including death

to employees of the Contractor or any other person, or damage of property including loss of use thereof suffered by employees of the Contractor or any other person; to the extent caused by Contractor, whether such are based upon negligence of the OWNER or any other person, firm, corporation or organization for whom such contract is being performed, their agents, employees or otherwise.

11.6 PROOF OF INSURANCE – GENERAL REQUIREMENTS

Before work is started, the Contractor shall forward to the OWNER two copies of a Certificate of Insurance, evidencing that all required insurance is in full force and effect, executed by an authorized representative of the insurance company, and naming the OWNER “Chaffey Community College District” as an additional insured. The Certificate of Insurance shall show (1) all companies affording coverage and (2) the name of the insured exactly in the manner as shown on the bid. The name of the insured must be the name under which the entity is licensed by the Contractors State License Board.

All certificates of insurance, from both contractor and all subcontractors, shall clearly state that the OWNER is named as an additional insured under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by the OWNER.

Certificates and insurance policies shall include the following clause: *“This policy shall not be cancelled or reduced in required limits of liability or amounts of insurance until notice has been mailed to the OWNER. Date of cancellation or reduction may not be less than Thirty (30) days, or Ten (10) days for nonpayment of premium, after date of mailing notice.”*

Certificates of insurance shall state in particular those insured, extent of insurance, location and operation to which insurance applies, expiration date, and cancellation and reduction notice.

The form and substance of all insurance policies are subject to OWNER’S approval. Commercial General Liability and Automobile Liability Insurance policies shall be issued by companies with a Best rating of A- or better and a financial classification of VII or better (or an equivalent rating by Standard & Poor or Moody’s). Workers’ Compensation and Employer’s Liability Insurance policies shall be issued by companies with either (1) a Best rating of B+ or better and a financial classification of VII or better (or an equivalent rating by Standard & Poor or Moody’s), or (2) that are acceptable to OWNER.

In the event the contractor or any subcontractor fails to purchase and maintain the required insurance or to furnish satisfactory evidence thereof, the OWNER may procure and maintain such coverages for all parties on behalf of the contractor. Contractor shall furnish all necessary information and pay the premium cost to the OWNER immediately upon presentation of a premium invoice; otherwise, OWNER may deduct the cost of such insurance from the Contract Sum.

Each subcontractor must be covered by insurance of the same character and in the amounts specified in these Supplementary General Conditions, naming the Contractor and the OWNER as additional insureds. Copies of certificates of insurance for subcontractors must be filed with the OWNER within thirty (30) working days after issuance of a Notice to Proceed and at least five (5) working days before the subcontractor begins work on the site. Failure to provide evidence of such insurance shall result in the subcontractor being excluded from the site until proper coverage is verified. The cost of any resulting delay will be borne by the Contractor.

Any material changes in limits, coverages or loss of aggregate limit due to outstanding claims must be reported to the OWNER within 30 days of any such event.

11.7 LIMITS

The insurance policies for Commercial General Liability and Automobile Liability Insurance required of the Contractor and all subcontractors shall be written for not less than the following minimum limits:

Commercial Form General Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor(s)</u>
Per Occurrence	\$5,000,000.00	\$2,000,000.00
General Aggregate	\$5,000,000.00	\$3,000,000.00
Products/Completed Operations Aggregate	\$1,000,000.00	\$1,000,000.00
Personal/Advertising Injury Aggregate	\$5,000,000.00	\$1,000,000.00

Automobile Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor(s)</u>
Bodily Injury and Property Damage Combined Single Limit	\$1,000,000.00	\$1,000,000.00

Professional Errors and Omissions Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor(s)</u>
Per Occurrence	N/A	N/A
General Aggregate	N/A	N/A

Pollution Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor</u>
Per Occurrence	\$1,000,000.00	\$1,000,000.00
General Aggregate	\$1,000,000.00	\$1,000,000.00

NOTE: These limits can be attained by individual policies or by combining primary and umbrella policies.

11.8 Builder's Risk

OWNER shall provide Builder's Risk Insurance as follows:

- a. Primary Coverage: The policy shall cover the full contract value of the project, up to, but not to exceed, the Policy Limit of \$50,000,000.00.
- b. Coverage Term: Duration of project.
- c. Description of Coverages:
 - (1) All-risk (i.e., "open perils"), excluding earthquake.
 - (2) Replacement costs.
 - (3) Collapse, if resulting from a covered peril.
 - (4) Debris removal.
 - (5) Off-site storage.
 - i. Policy Limit of \$10,000,000.00 per occurrence.
 - (6) Property in transit.
 - i. Policy Limit of \$40,000,000.00 per occurrence.
- d. Deductible: \$5,000.00.
 - (1) Contractor shall be responsible for the first FIVE THOUSAND AND 00/100 DOLLARS (**\$5,000.00**) of each loss or damage covered by the Builder's Risk Insurance provided by the OWNER which is caused by the Contractor or any Subcontractor or Sub-Subcontractor or for which the Contractor, Subcontractor or Sub-Subcontractor is liable, and for all uninsured losses. No loss or damage, if any, incurred hereunder shall excuse Contractor's complete and satisfactory performance of the provisions of the Contract Documents.
- e. Exclusions:
 - (1) Earthquake.
 - (2) Contractor's equipment.

11.9 PERFORMANCE AND PAYMENT BONDS.

11.9.1 CONTRACTOR BOND REQUIREMENTS

Contractor maintains and agrees that it has executed Payment and Performance Bonds in the amounts and manner required by the Contract Documents. No payment will be made to Contractor until Contractor's Payment Bond and Performance Bond have been approved by the OWNER. Should, in the OWNER's sole opinion, any bond become insufficient or Surety found to be unsatisfactory, Contractor shall renew or replace the effected bond within 10 days of receiving notice from the OWNER. In the event the Surety or Contractor intends to reduce or cancel any required bonds, at least thirty (30) days prior written notice shall be given to the OWNER, and Contractor shall post acceptable replacement bonds at least ten (10) days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Contract until any replacement bonds required by this 11.4 are accepted by the OWNER. To the extent, if any, that the Contract Sum is increased in accordance with the Contract, the Contractor shall immediately cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the OWNER. To the extent available, the bonds shall further provide that no change or alteration of the Contract (including, without limitation, an increase in the Contract Sum, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the

Contractor will release the surety. If the Contractor fails to furnish any required bond, the OWNER may terminate the Contract for cause.

11.9.2 SUBCONTRACTOR BOND REQUIREMENTS

Per California Public Contract Code section 4108, it shall be the responsibility of each subcontractor submitting bids to Contractor, as a prime contractor, to be prepared to submit a faithful performance and payment bond or bonds if so requested by Contractor.

In the event any subcontractor submitting a bid to Contractor does not, upon the request of Contractor and at the expense of Contractor at the established charge or premium therefore, furnish to Contractor a bond or bonds issued by an admitted surety wherein Contractor shall be named the obligee, guaranteeing prompt and faithful performance of the subcontract and the payment of all claims for labor and materials furnished or used in and about the work to be done and performed under the subcontract, Contractor may reject the bid and make a substitution of another subcontractor subject to Public Contract Code section 4107.

The bond or bonds may be required under this Paragraph only if Contractor in his or her written or published request for subbids clearly specifies the amount and requirements of the bond or bonds. If the expense of the bond or bonds required under this Paragraph is to be borne by the subcontractor, that requirement shall also be specified in the Contractor's written or published request for subbids. Contractor's failure to specify bond requirements, in accordance with this subdivision, in the written or published request for subbids shall preclude Contractor from imposing bond requirements under this Paragraph.

11.9.3 SURETY QUALIFICATION

Surety companies used by Contractor shall be, on the date the Contract is signed by OWNER, an admitted surety insurer (as defined in the California Code of Civil Procedure Section 995.120). The signature of the person executing the bond must be notarized. If an attorney-in-fact executes the bond on behalf of the surety, a copy of the current power of attorney bearing the notarized signature of the appropriate corporate officer shall be included with the bond. Contractor must use the payment and performance bond forms provided by OWNER.

Pursuant to Code of Civil Procedure Section 995.660, Contractor shall provide OWNER with a certificate from the County Clerk verifying that the Payment Bond surety's certificate of authority has not been surrendered, revoked, canceled, annulled or suspended or, in the event that it has been suspended, that it has been renewed.

ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK.

12.1.1 UNCOVERING WORK FOR REQUIRED INSPECTIONS

If a portion of the Work is covered contrary to the Inspector's prior written request, the Architect's prior written request, or to requirements specifically expressed in the Contract, it must, if required in writing by the Inspector or the Architect, be uncovered for the Inspector's or the Architect's observation and be replaced at the Contractor's expense without change in the Contract Sum or Completion Time.

12.1.2 COSTS FOR INSPECTIONS NOT REQUIRED

If a portion of the Work has been covered which the Inspector or the Architect has not specifically requested to observe prior to its being covered, the Inspector or the Architect may request to see such Work, and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract, costs of uncover and replacement shall, by appropriate Change Order, be charged to the OWNER. If such Work is not in accordance with the Contract, the Contractor shall pay such costs unless the condition was caused by the OWNER or a separate contractor, in which event the OWNER shall be responsible for payment of such costs to the Contractor.

12.2 CORRECTION OF WORK.

12.2.1 CORRECTION OF REJECTED WORK

The Contractor shall promptly correct the Work rejected by the Inspector or the OWNER upon recommendation of the Architect or failing to conform to the requirements of the Contract, whether observed before or after Completion and whether or not fabricated, installed, or completed. The Contractor shall bear costs of correcting the rejected Work, including additional testing, inspections, and compensation for the Inspector's or the Architect's services and expenses made necessary thereby. If the Contractor fails to correct the Work within five (5) calendar days or such other time as OWNER may approve, the OWNER may withhold 150% of the estimated cost for repair and/or repair the rejected work with the OWNER's own resources and back charge the cost to the Contractor via a credit change order to the Contract.

12.2.2 TWO-YEAR WARRANTY CORRECTIONS

If, within one (1) year after Substantial Completion of the Work or OWNER'S acceptance of a designated portion thereof, or after the commencement of warranties at full completion of the Work, or by terms of an applicable special warranty required by the Contract, any of the Work is found to be not in accordance with the requirements of the Contract, the Contractor shall correct it promptly after receipt of written notice from the OWNER to do so unless the OWNER has previously given the Contractor a specific and clearly identifiable written acceptance of that particular condition. This period of one (1) year shall be extended with respect to portions of the corrective Work first performed after Substantial Completion by the period of time between the date of Substantial Completion and the actual performance of the corrective Work. This obligation under this paragraph 12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The OWNER shall give such notice promptly after discovery of the condition.

12.2.2.1 Contractor shall conduct a warranty inspection 11 months after commencement of any warranty, together with the Architect, Construction Manager, and Owner; which inspection is anticipated to be a one-day walkthrough unless otherwise necessitated by the scope of warranty repairs.

12.2.3 REMOVAL OF NONCONFORMING WORK

The Contractor shall remove from the Site portions of the Work which are not in accordance with the requirements of the Contract and are not corrected by the Contractor or accepted by the OWNER.

12.2.4 OWNER'S RIGHTS IF CONTRACTOR FAILS TO CORRECT

If the Contractor fails to correct nonconforming Work within a reasonable time, the OWNER may correct it in accordance with paragraph 2.4.1. In addition, if the Contractor does not proceed with

correction of such nonconforming Work within the time fixed by written notice from the Inspector or the OWNER through the Architect, the OWNER may remove it and store the salvageable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within ten (10) days after written notice, the OWNER may upon ten (10) additional days written notice sell such material or equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contractor shall be invoiced for the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the OWNER. OWNER may also elect to initiate proceedings to declare the Contractor a non-responsible bidder on future OWNER projects in accordance with Section 14.2.2 hereof.

12.2.5 COST OF CORRECTING THE WORK

The Contractor shall bear the cost of correcting destroyed or damaged construction of the OWNER or separate contractors, whether completed or partially completed, caused by the Contractor's correction or removal of the nonconforming Work.

12.2.6 NO TIME LIMITATION

Nothing contained in this paragraph 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract. Establishment of the time period of one (1) year as described in paragraph 12.2.2 relates only to the specific obligation of the Contractor to correct the Work and has, for example, no relationship to the time within which the obligation to comply with the Contract may be sought to be enforced, or to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

12.3 ACCEPTANCE OF NONCONFORMING WORK.

If it is found at any time before or after completion of the Work that the Contractor has varied from the Contract in materials, quality, form, finish, or in the amount or value of the materials or labor used, the Architect shall make a recommendation: that all such improper work should be removed, remade, and replaced, that all work disturbed by these changes be made good at the Contractor's expense, and that the OWNER deduct from any amount due Contractor that sum of money equivalent to the difference in value between the Work performed and that called for by the Drawings and Specifications. The Architect shall determine such difference in value. The OWNER, at its option, may pursue either course unless correction is required by law.

ARTICLE 13 - MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW.

The Contract shall be governed by the law of the place where the Project is located.

13.2 SUCCESSORS AND ASSIGNS.

The OWNER and the Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal

representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.3 WRITTEN NOTICE.

In the absence of specific notice requirements in the Contract, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES.

13.4.1 DUTIES AND OBLIGATIONS CUMULATIVE

Duties and obligations imposed by the Contract and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

13.4.2 NO WAIVER

No action or failure to act by the Inspector, the OWNER, the Architect or the Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

13.5 TESTS AND INSPECTIONS.

13.5.1 COMPLIANCE

Tests, inspections, and approvals of portions of the Work required by the Contract will comply with the applicable provisions of Titles 19 and 21 of the California Code of Regulations, the California Building Code (formerly Title 24 of the Code of Regulations), and the Uniform Building Code, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

13.5.2 INDEPENDENT TESTING LABORATORY

The OWNER will select and pay an independent testing laboratory to conduct all tests and inspections. Selection of the materials required to be tested shall be made by the laboratory or the OWNER's Representative and not by the Contractor. OWNER shall pay for the following:

- A. Any costs for required pick-up or delivery of samples occurring between the hours of 7:30 a.m. and 4:30 p.m., Monday through Friday;
- B. Any costs or expenses for material testing or inspection services performed as straight time;
- C. Any costs or expenses of inspection or testing incurred inside a fifty (50) mile radius from the Project Site, including, but not limited to, travel, shipping or supervision charges or expenses of any kind.

Contractor is liable for any and all overtime premiums incurred by OWNER for materials testing and inspection due to Contractor's acts or omissions. Contractor will pay for all costs borne by inspections

outside the parameters listed by the OWNER above. Costs or expenses of inspections outside a fifty (50) mile radius from the Project Site, including but not limited to, travel, shipping or supervision charges or expenses of any kind will be paid by the Contractor. OWNER shall invoice Contractor for such overtime premiums and deduct the invoice amount from Contractor's next payment if the Contractor delays the inspection schedule.

13.5.3 ADVANCE NOTICE TO INSPECTOR

The Contractor shall notify the Inspector forty eight (48) hours in advance of its readiness for required observation or inspection so that the Inspector may arrange for same. The Contractor shall notify the Inspector six (6) weeks in advance of the manufacture of material to be supplied under the Contract which must, by terms of the Contract, be tested in order that the Inspector may arrange for the testing of the material at the source of supply.

13.5.4 TESTING OFF-SITE

Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Work.

13.5.5 ADDITIONAL TESTING OR INSPECTION

If the Inspector, the Architect, the OWNER, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under paragraph 13.5.1, the Inspector will, upon written authorization from the OWNER, make arrangements for such additional testing, inspection, or approval. The OWNER shall bear such costs except as provided in paragraphs 13.5.2 and 13.5.6.

13.5.6 COSTS FOR RETESTING

If such procedures for testing, inspection, or approval under paragraphs 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract, the Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the OWNER, invoiced to the Contractor, and deducted from the next Progress Payment.

13.5.7 COSTS FOR PREMATURE TEST

In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the OWNER for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Architect's fees and expenses, and the amount of the invoice of shall be deducted from the next Progress Payment.

13.5.8 TESTS OR INSPECTIONS NOT TO DELAY WORK

Tests or inspections conducted pursuant to the Contract shall be made promptly to avoid unreasonable delay in the Work.

13.6 TRENCH EXCAVATION.

13.6.1 TRENCHES GREATER THAN FIVE FEET

Pursuant to Labor Code § 6705, if the Contract Sum exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall, in advance of excavation, submit to the OWNER or a registered civil or structural engineer employed by the OWNER a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

13.6.2 EXCAVATION SAFETY

If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the OWNER or by the person to whom authority to accept has been delegated by the OWNER.

13.6.3 NO TORT LIABILITY OF OWNER

Pursuant to Labor Code § 6705, nothing in this Article shall impose tort liability upon the OWNER or any of its employees.

13.6.4 NO EXCAVATION WITHOUT PERMITS

The Contractor shall not commence any excavation work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

13.6.5 HAZARDOUS MATERIALS AND DIFFERING CONDITIONS

As required by Public Contract Code Section 7104, if this Project involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor shall promptly, and prior to disturbance of any conditions, notify the OWNER of: (1) any material discovered in excavation that Contractor believes to be a hazardous waste that is required to be removed to a Class I, Class II or Class III disposal site; (2) subsurface or latent physical conditions at the site differing from those indicated by the OWNER; and (3) unknown physical conditions of an unusual nature at the site, significantly different from those ordinarily encountered in such contract work. Upon notification, the OWNER shall promptly investigate the conditions to determine whether a change order is appropriate. In the event of a dispute, Contractor shall not be excused from any scheduled completion date and shall proceed with all Work to be performed under the Contract, but shall retain all rights provided by the Contract or by law for making protests and resolving the dispute.

13.7 WAGE RATES, TRAVEL, AND SUBSISTENCE.

Contractor shall comply and shall ensure that all subcontractors comply with Sections 1770, 1771, 1772, 1773, 1774, and 1775 of the State of California Labor Code. Compliance with these sections is required by this Contract.

13.7.1 WAGE RATES

The Contractor is aware of the requirements of Labor Code sections 1720 *et seq.* and 1770 *et seq.*, as well as California Code of Regulations, Title 8, Section 16000 *et seq.* ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total

compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Contract from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov. In the alternative, the Contractor may view a copy of the prevailing rate of per diem wages which are on file at the OWNER's Purchasing Services Office and shall be made available to interested parties upon request. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification, or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project site. Contractor shall defend, indemnify and hold the OWNER, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.

13.7.2 HOLIDAY AND OVERTIME PAY

Holiday and overtime work, when permitted by law, shall be paid for at a rate of at least one and one-half (1½) times the above specified rate of *per diem* wages, unless otherwise specified. Holidays shall be defined in the Collective Bargaining Agreement applicable to each particular craft, classification, or type of worker employed.

13.7.3 WAGE RATES NOT AFFECTED BY SUBCONTRACTS

The Contractor shall pay and shall cause to be paid each worker engaged in work on the Project not less than the general prevailing rate of *per diem* wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such workers. Contractor shall pay not less than the prevailing wage rates, as specified in the schedule and any amendments thereto, to all workers employed by Contractor in the execution of the Work. Contractor shall cause all subcontracts to include the provision that all subcontractors shall pay not less than the prevailing rates to all workers employed by such subcontractors in the execution of the Work.

13.7.4 TRAVEL AND SUBSISTENCE

The Contractor shall pay and shall cause to be paid to each worker needed to execute the work on the Project travel and subsistence payments, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed with the Department of Industrial Relations in accordance with Labor Code Section 1773.8.

13.7.5 CHANGE IN PREVAILING WAGE DURING CONSTRUCTION

If during construction of the Project, the Director of Industrial Relations determines that there has been a change in any prevailing rate of *per diem* wages in the locality in which this public work is to be performed, such change shall not alter the wage rates in the contract awarded.

13.7.6 FORFEITURE AND PAYMENTS

Pursuant to Labor Code § 1775, the Contractor shall as a penalty to the OWNER, forfeit Two Hundred Dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of *per diem* wages, determined by the Director, for such craft or classification in which such worker is employed for any public work done under the Contract by the Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commission and shall be based on consideration of the Contractor's mistake, inadvertence, or neglect in failing to pay

the correct prevailing rate of *per diem* wage, the previous record of the Contractor in meeting his or her prevailing rate of *per diem* wage obligations, or the Contractor's willful failure to pay the correct prevailing rate of *per diem* wages. A mistake, inadvertence, or neglect in failing to pay the correct prevailing rate of *per diem* wage is not excusable if the Contractor had knowledge of it or the obligations under this part. The difference between such prevailing rate of *per diem* wage and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing rate of *per diem* wage shall be paid to each worker by the Contractor. The amount of this penalty shall be determined pursuant to applicable law. Such forfeiture amounts may be deducted from the Contract Sum or sought directly from the surety under its Performance Bond if there are insufficient funds remaining in the Contract Sum. Review of any civil wage and penalty assessment shall be made pursuant to section 17420 of the California Labor Code.

13.7.7 MINIMUM WAGE RATES

Any worker employed to perform work on the Project, which work is not covered by any craft or classification listed in the general prevailing rate of *per diem* wages determined by the Director, shall be paid not less than the minimum rate of wages specified therein for the craft or classification which most nearly corresponds to the Work to be performed by them, and such minimum wage rate shall be retroactive to time of initial employment of such person in such craft or classification.

13.7.8 PER DIEM WAGES

Pursuant to Labor Code § 1773.1, *per diem* wages are deemed to include employer payments for health and welfare, pension, vacation, travel time, and subsistence pay as provided for in Labor Code § 1773.8.

13.7.9 POSTING OF WAGE RATES

The Contractor shall post at appropriate conspicuous points on the Site, a schedule showing all determined minimum wage rates and all authorized deductions, if any, from unpaid wages actually earned.

13.8 RECORD OF WAGES PAID: INSPECTION.

For purposes of 13.8, the term subcontractor shall not include suppliers, manufacturers, or distributors.

13.8.1 APPLICATION OF LABOR CODE

Pursuant to Labor Code section 1776, Contractor and all subcontractors shall maintain weekly certified payroll records, showing the names, addresses, Social Security numbers, work classifications, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by them in connection with the Work under this Contract. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury. The responsibility for compliance with this Article shall rest upon the Contractor.

13.8.2 PAYROLL RECORD SUBMISSION

In accordance with Labor Code section 1771.4, the Contractor and each subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations ("DIR") on the specified

interval and format prescribed by the DIR, which may include electronic submission. Contractor shall comply with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

All payroll records shall be certified as being true and correct by Contractor or subcontractors keeping such records; and the payroll records shall be available for inspection at all reasonable hours at the principal office of Contractor on the following basis:

13.8.2.1 A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or the employee's authorized representative on request.

13.8.2.2 A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or the employee's authorized representative on request.

13.8.2.3 A certified copy of all payroll records shall be made available upon request by the public for inspection or copies thereof made; provided, however, that the request by the public shall be made to either OWNER, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. The public shall not be given access to such records at the principal offices of Contractor or subcontractors. Any copy of the records made available for inspection as copies and furnished upon request to the public or any public agency by OWNER shall be marked or obliterated by Contractor in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of Contractor awarded the Contract or performing the Contract shall not be marked or obliterated.

13.8.3 FORM OF CERTIFIED PAYROLL RECORDS

Unless submitted electronically, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.

13.8.4 NONCOMPLIANCE

In the event of noncompliance with the requirements of this Article, the Contractor shall have ten (10) calendar days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Article. Should noncompliance still be evident after such 10-day period, the Contractor shall pay a penalty of one hundred dollars (\$100.00) to the OWNER for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payment then due.

13.8.5 STOP WORK ORDERS

Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the OWNER. Contractor shall defend, indemnify and hold the OWNER, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

13.9 APPRENTICES.

13.9.1 APPRENTICE WAGES AND DEFINITIONS

All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and shall be employed only at the work of the craft or trade to which he or she is registered. Only apprentices, as defined in § 3077 of the Labor Code, who are in training under apprenticeship standards and written apprenticeship agreements under Chapter 4 (commencing with § 3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training.

13.9.2 APPRENTICE LABOR POOL

When the Contractor to whom the Contract is awarded by the OWNER, or any Subcontractor under him or her, in performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor shall apply to the joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the Site of the Project, for a certificate approving the Contractor or Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, approval as established by the joint apprenticeship committee or committees shall be subject to the approval of the Administrator of Apprenticeship. The joint apprenticeship committee or committees, subsequent to approving the subject Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor in order to comply with this section. Every Contractor and Subcontractor shall submit the contract award information to the applicable joint apprenticeship committee which shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices to be employed, and the approximate dates the apprentices will be employed. There shall be an affirmative duty upon the joint apprenticeship committee or committees administering the apprenticeship standards of the crafts or trade in the area of the Site of the public work, to ensure equal employment and affirmative action and apprenticeship for women and minorities. Contractors or Subcontractors shall not be required to submit individual applications for approval to local joint apprenticeship committees provided they are already covered by the local apprenticeship standards. The ratio of work performed by apprentices to journeymen, who shall be employed in the craft or trade on the Project, may be the ratio stipulated in the apprenticeship standards under which the joint apprenticeship committee operates, but, except as otherwise provided in this section, in no case shall the ratio be less than one (1) hour of apprentice work for every five (5) hours of labor performed by a journeyman. However, the minimum ratio for the land surveyor classification shall not be less than one (1) apprentice for each five (5) journeymen.

13.9.3 JOURNEYMAN/APPRENTICE RATIO; COMPUTATION OF HOURS

Any ratio shall apply during any day or portion of a day when any journeyman, or the higher standard stipulated by the joint apprenticeship committee, is employed at the job Site and shall be computed on the basis of the hours worked during the day by journeymen so employed, except for the land surveyor classification. The Contractor shall employ apprentices for the number of hours computed as above before the end of the Contract. However, the Contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the job Site. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Division of Apprenticeship Standards, upon application of a joint apprenticeship committee, may order a minimum ratio of not less than one (1) apprentice for each

five (5) journeymen in a craft or trade classification.

13.9.4 JOURNEYMAN/APPRENTICE RATIO

The Contractor or Subcontractor, if he or she is covered by this section upon the issuance of the approval certificate, or if he or she has been previously approved in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the apprenticeship standards. Upon proper showing by the Contractor that he or she employs apprentices in the craft or trade in the state on all of his or her contracts on an annual average of not less than one (1) hour of apprentice work for every five (5) hours of labor performed by a journeyman, or in the land surveyor classification, one (1) apprentice for each five (5) journeymen, the Division of Apprenticeship Standards may grant a certificate exempting the Contractor from the 1-to-5 hourly ratio as set forth in this section. This section shall not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor, when the contracts of general contractors or those specialty contractors involve less than Thirty Thousand Dollars (\$30,000) or twenty (20) Working Days. Any work performed by a journeyman in excess of eight (8) hours per day or forty (40) hours per week, shall not be used to calculate the hourly ratio required by this section.

13.9.4.1 *Apprenticeable Craft or Trade*

"Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the Apprenticeship Council. The joint apprenticeship committee shall have the discretion to grant a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting a Contractor from the 1-to-5 ratio set forth in this Article when it finds that any one of the following conditions is met:

- A. Unemployment for the previous three-month period in the area exceeds an average of fifteen percent (15%).
- B. The number of apprentices in training in such area exceeds a ratio of 1-to-5.
- C. There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth (1/30) of its journeymen annually through the apprenticeship training, either on a statewide basis or on a local basis.
- D. Assignment of an apprentice to any work performed under this contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman.

13.9.5 RATIO EXEMPTION

When exemptions are granted to an organization which represents Contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member Contractors will not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

13.9.6 APPRENTICE FUND

A Contractor to whom the Contract is awarded or any Subcontractor under him or her, who, in performing any of the work under the Contract, employs journeymen or apprentices in any

apprenticeable craft or trade and who is not contributing to a fund or funds to administer and conduct the apprenticeship program in any such craft or trade in the area of the site of the Project, to which fund or funds other contractors in the area of the site of the Project are contributing, shall contribute to the fund or funds in each craft or trade in which he or she employs journeymen or apprentices on the Project in the same amount or upon the same basis and in the same manner as the other contractors do, but where the trust fund administrators are unable to accept the funds, contractors not signatory to the trust agreement shall pay a like amount to the California Apprenticeship Council. The Contractor or Subcontractor may add the amount of the contributions in computing his or her bid for the contract. The Division of Labor Standards Enforcement is authorized to enforce the payment of the contributions to the fund or funds as set forth in the Labor Code § 227.

13.9.7 PRIME CONTRACTOR COMPLIANCE

The responsibility of compliance with Paragraph 13.9 of these General Conditions and § 1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. In the event Contractor willfully fails to comply with General Conditions, Paragraph 13.9, it will be considered in violation of the requirements of the Contract.

13.9.8 DECISIONS OF JOINT APPRENTICESHIP COMMITTEE

All decisions of the joint apprenticeship committee under this paragraph 13.10 and Labor Code § 1777.5 are subject to Labor Code § 3081.

13.9.9 NO BIAS

It shall be unlawful for an employer or a labor union to refuse to accept otherwise qualified employees as registered apprentices on any public works on the grounds of race, religious creed, color, national origin, ancestry, sex, or age, except as provided in the Labor Code § 3077.

13.9.10 VIOLATION OF LABOR CODE

Any violation of this Section or of Labor Code Section 1777.5 shall be governed by Labor Code Section 1777.7. Knowing violations of Labor Code section 1777.5 will result in forfeiture not to exceed one hundred dollars (\$100.00) for each calendar day of non-compliance pursuant to Labor Code section 1777.7. The interpretation and enforcement of Section 1777.5 and this section shall be in accordance with the rules and procedures of the California Apprenticeship Council.

13.10 ASSIGNMENT OF ANTITRUST CLAIMS.

13.10.1 APPLICATION

Pursuant to Government Code § 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the OWNER all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties. If the OWNER receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the OWNER any portion of the recovery, including

treble damages, attributable to overcharges that were paid by the assignor but were not paid by the OWNER as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

13.10.2 ASSIGNMENT OF CLAIM

Upon demand in writing by the assignor, the OWNER shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the OWNER has not been injured thereby or the OWNER declines to file a court action for the cause of action.

13.11 STATE AUDIT.

Pursuant to and in accordance with the provisions of Government Code § 10532, or any amendments thereto, all books, records, and files of the OWNER, the Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand Dollars (\$10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of three (3) years after final payment is made under this Contract. Contractor shall preserve and cause to be preserved such books, records, and files for the audit period.

Contractor shall make available to the College any of the Contractor's other documents related to the Work immediately upon request of the College.

In addition to the State Auditor rights above, the College shall have the right to examine and audit all books, estimates, records, contracts, documents, Request for Proposal, proposal, bid, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the College, for a period of four (4) years after final payment.

13.12 SMOKE-FREE AND DRUG-FREE WORKPLACE.

Pursuant to OWNER Policy, no tobacco products shall be used by anyone at any time on property of the OWNER, including the Project Site except in designated areas.

In addition, the OWNER and the Project are "drug-free" workplaces. As such, the Contractor is subject to the requirements mandated by the Drug-Free Workplace Act of 1990 (Government Code Section 8350 et seq.). The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred. It is the sole responsibility of the Contractor to police and oversee any and all personnel used in connection with the Work and the Project, whether employed directly or indirectly by Contractor. If Contractor fails to fully and adequately comply with the Drug-Free Workplace Act, the OWNER may enforce its lawful right to suspend pending or subsequent payments and to terminate the Contract, and may pursue all other rights and remedies it may have against the Contractor at law and/or in equity.

The Contractor shall also execute and submit to the OWNER the Drug-Free Workplace Certification included in the Appendix of the Contract Documents at the time of execution of the Contract. This certification indicates that the Contractor is aware of the provisions of the Drug-Free Workplace Act

of 1990 and will adhere to the requirements of the Act.

13.13 NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY

Pursuant to Labor Code Section 1735 and other applicable provisions of law, the Contractor and its Subcontractors shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap on this Project. The Contractor will take affirmative action to ensure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.

13.14 PROHIBITED INTERESTS

No College official or representative who is authorized in such capacity and on behalf of the College to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the Project, shall be or become directly or indirectly interested financially in this Agreement.

13.15 NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code Section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

13.16 CONTROLLING LAW

Notwithstanding any subcontract or other contract with any subcontractor, supplier, or other person or organization performing any part of the Work, this Contract shall be governed by the law of the State of California excluding any choice of law provisions.

13.17 JURISDICTION; VENUE

Contractor and any subcontractor, supplier, or other person or organization performing any part of the Work agrees that any action or suits at law or in equity arising out of or related to the bidding, award, or performance of the Work shall be maintained in the Superior Court of San Bernardino County, California, and expressly consent to the jurisdiction of said court, regardless of residence or domicile, and agree that said court shall be a proper venue for any such action.

13.18 SURVIVAL OF OBLIGATIONS

All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

ARTICLE 14 - TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR FOR CAUSE.

14.1.1 GROUNDS FOR TERMINATION

The Contractor may terminate the Contract if the Work is stopped for a period of ninety (90) consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, for only the following reasons:

- A. Issuance of an order of a court or other public authority having jurisdiction;
- B. An act of government, such as a declaration of national emergency, making material unavailable;
- C. If repeated suspensions, delays, or interruptions by the OWNER as described in paragraph 14.3 constitute in the aggregate more than 100 percent (100%) of the total number of days scheduled for completion, or one hundred twenty (120) days in any three hundred sixty-five (365) day period, whichever is less; or
- D. The OWNER has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence of financing or funding as required by paragraph 2.2.1.

14.1.2 NOTICE OF TERMINATION

If one of the above reasons exists, the Contractor may, upon written notice of seven (7) additional days to the OWNER, terminate the Contract and recover from the OWNER payment for Work satisfactorily completed and for reasonable costs accrued and any non-cancellable obligations as of the effective date of termination verified by the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead and profit. No damages or costs except those specified herein shall be recoverable by Contractor on account of termination by Contractor for cause.

14.1.3 NOTICE OF TERMINATION - OWNER FAULT

If the Work is stopped for a period of sixty (60) consecutive days through no act or fault of the Contractor, Subcontractor, Sub-Subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible because the OWNER has persistently failed to fulfill the OWNER's obligations under the Contract with respect to matters important to the progress of the Work, the Contractor may, upon written notice of seven (7) additional days to the OWNER, terminate the Contract and recover from the OWNER as provided in paragraph 14.1.2.

14.2 TERMINATION BY THE OWNER FOR CAUSE.

14.2.1 GROUNDS FOR TERMINATION

If the Contractor should be in violation of the Contract, then the OWNER, upon certification that sufficient cause exists to justify such action, may without prejudice to any other right or remedy and after giving the Contractor notice pursuant to Section 14.4.2, terminate the employment of the Contractor and take possession of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method the OWNER may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract Sum shall exceed the expense of finishing the work including compensation to the OWNER for its additional services, such excess shall be paid to the Contractor. If such expense

shall exceed such unpaid balance, the Contractor shall pay the difference to the OWNER. The OWNER may terminate the Contract if the Contractor:

- A. Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials in order to maintain the Project Schedule or to fully and adequately complete the Project within the Completion Time.
- B. Fails to make payment to Subcontractors for materials or labor in accordance with Public Contract Code § 10262;
- C. Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or
- D. Otherwise is in substantial breach of one or more provisions of the Contract.
- E. Is adjudged a bankrupt.
- F. Makes a general assignment for the benefit of its creditors.
- G. Has a receiver appointed on account of its insolvency.

14.2.2 NOTIFICATION OF TERMINATION

When any of the above reasons exist, the OWNER may, without prejudice to any other rights or remedies of the OWNER and after giving the Contractor and the Contractor's surety, if any, written notice of seven (7) days, terminate the Contract and, subject to any prior rights of the surety:

- A. Take possession of the Site and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- B. Accept assignment of subcontracts pursuant to paragraph 5.4; and
- C. Complete the Work by whatever reasonable method the OWNER may deem expedient.
- D. OWNER will initiate procedures to declare the Contractor a non-responsible bidder on future OWNER projects.

14.2.3 PAYMENTS WITHHELD

If the OWNER terminates the Contract for one of the reasons stated in paragraph 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is complete.

14.2.4 PAYMENTS UPON COMPLETION

If the unpaid balance of the Contract Sum, including contract retentions, exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the OWNER. The amount to be paid to the Contractor, or OWNER, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

14.3 **TERMINATION OR SUSPENSION BY THE OWNER FOR CONVENIENCE.**

14.3.1 **SUSPENSION BY OWNER**

The OWNER may, without cause, order the Contractor in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as the OWNER may determine.

14.3.1.1 ***Adjustments***

An adjustment shall be made for increases in the cost of performance of the Contract, including profit on the increased cost of performance caused by suspension, delay, or interruption. No adjustment shall be made to the extent:

- A. that performance is, was or would have been so suspended, delayed, or interrupted by another cause for which the Contractor is responsible; or
- B. that an equitable adjustment is made or denied under another provision of this Contract.

14.3.1.2 ***Adjustments for Fixed Cost***

Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

14.4 **OWNER TERMINATION FOR CONVENIENCE:**

The College may terminate performance of the Work in whole or, in part, if the College determines that a termination is in the College's best interest.

The Contractor shall terminate all or any part of the Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the convenience of the College, the extent of termination, and the effective date of such termination.

After receipt of Notice of Termination, and except as directed by the College and/or Construction Manager, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:

- 1) Stop Work as specified in the Notice.
- 2) Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.
- 3) Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Documents is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
- 4) Terminate all Subcontracts to the extent that they relate to the portions of the Work terminated.

- 5) Place no further subcontracts or orders, except as necessary to complete the remaining portion of the Work.
- 6) Submit to the College through the Construction Manager, within ten (10) Days from the effective date of the Notice of Termination, all of the documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Effective Date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the College's exercise of its right to terminate this Contract pursuant to this clause, which costs the Contractor is authorized under the Contract Documents to incur, shall: (i) be submitted to and received by the College and the Construction Manager no later than thirty (30) Days after the Effective Date of the Notice of Termination; (ii) describe the costs incurred with particularity; and (iii) be conspicuously identified as "Termination Costs Occasioned by the College's Termination for Convenience."
- 7) These provisions are in addition to and not in limitation of any other rights or remedies available to the College.

Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the College and/or Construction Manager may immediately order Contractor to cease Work on the Project until such safety or liability issues are addressed to the satisfaction of the College and/or the Construction Manager, or until the Contract is terminated.

14.5 TERMINATION DUE TO DISCOVERY OF UNKNOWN OR CHANGED CONDITIONS

The OWNER reserves the right to terminate this Contract should the OWNER determine not to proceed because of the discovery of any condition described in Article 4.5.5 or Article 10.5. The Contractor shall receive payment for all Work performed to the date of termination in accordance with the provisions of Article 9.

END OF GENERAL CONDITIONS

7. CONTRACT APPENDIX, SUBPART B

SUPPLEMENTARY GENERAL CONDITIONS

- A. The terms "OWNER" and "District" as used herein shall both be deemed to mean the Chaffey Community College District and Chaffey College or its representatives and Governing Board.
- B. The terms "CONTRACTOR" and "Bidder" as used herein shall both be deemed to mean the person or firm submitting the bid, his employees, representatives or agents.
- C. The terms "Construction Manager," "Project Manager," and "Program Manager" shall all be deemed to mean the person or firm providing Construction Management services to the Owner, his employees, representatives, or agents.
- D. The Work shall be completed within 738 calendar days (the "Completion Time") per the Contract and OWNER'S Notice to Proceed.
- E. The agreed liquidated damages, as provided in Article 8.4.1 of the General Conditions, shall be \$3,000 per calendar day.
- F. The number of copies of Construction Documents furnished, per Article 2.2.9 of the General Conditions, shall be 2.
- G. The number of executed copies the successful CONTRACTOR shall provide of the Contract is 4 and the number of PERFORMANCE and PAYMENT BONDS is 4 each.
- H. Paragraphs 11.1 – 11.3 of the General Conditions, shall not apply; instead, the insurance requirements set forth below shall apply.
 - 1. Contractor must, at its expense, purchase and maintain in full force and effect such insurance as will protect itself and OWNER from claims which may arise from the Work required by the Contract Documents, whether such Work is done by Contractor, by any subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. The coverages required by these Supplementary General Conditions shall not in any way limit the liability of Contractor. All insurance purchased pursuant to these Supplementary General Conditions shall be in policies subject to the prior written approval of the OWNER as to form, content, liability limits, cost and issuing company. The requirements in these Supplementary General Conditions apply to the Contractor, subcontractors and sub-subcontractors performing Work on the Project. Contractor and all subcontractors shall furnish

Certificates of Insurance, as required below, evidencing said coverage before commencing work on the Project.

- a. COMMERCIAL GENERAL LIABILITY INSURANCE covering operations. The policy form must be nothing less than the standard Commercial General Liability insurance policy (Occurrence Form”) with limits no less than those specified in these Supplementary General Conditions.
- b. AUTOMOBILE LIABILITY INSURANCE covering the use of all owned, non-owned and hired vehicles and with limits no less than those specified in these Supplementary General Conditions.
- c. WORKERS’ COMPENSATION AND EMPLOYER’S LIABILITY INSURANCE as required by Federal and State of California law.

2. Contractor Construction Equipment Insurance:

Any policies maintained by the Contractor and subcontractors on their owned and/or rented equipment and materials shall contain a provision requiring the insurance carriers to waive their rights of subrogation against the OWNER and all other indemnities named in the contract.

3. Professional Liability Insurance (Errors & Omissions)

In the event any contract specification requires the performance of professional services, such as but not limited to, architectural, engineering, construction management, surveying, design, etc., a certificate of insurance must be provided prior to commencing work evidencing such coverage with a limit of not less than \$1,000,000.

4. Environmental and Asbestos Abatement Coverages

If the Contract involves the removal of asbestos, the removal/replacement of underground tanks or the removal of toxic chemicals and substances, the Contractor will be required to provide adequate coverages, with limits not less than \$5,000,000 per claim basis, for such exposures subject to requirements and approval of the OWNER.

5. Hold Harmless Clause

Work done on the premises, or in connection with the prosecution of this contract by the Contractor, shall be at the Contractor’s risk and the Contractor shall assume any and all liability and shall hold harmless the OWNER, its officials, officers, directors, agents and employees, from claims or demands, cost expenses, loss or damage due to bodily injury, sickness or disease, including death to employees of the Contractor or any other person, or damage of property including loss of use thereof suffered by employees of the Contractor or any other person; arising out of the performance of the contract, whether such are based upon negligence of the OWNER or any other person, firm, corporation or organization for whom such contract is being performed, their agents, employees or otherwise.

6. Proof of Insurance – General Requirements

- a. Before work is started, the Contractor shall forward to the OWNER two copies of a Certificate of Insurance, evidencing that all required insurance is in full force and effect, executed by an authorized representative of the insurance company, and naming the OWNER "Chaffey Community College District" as an additional insured. The Certificate of Insurance shall show (1) all companies affording coverage and (2) the name of the insured exactly in the manner as shown on the Bid Form. The name of the insured must be the name under which the entity is licensed by the Contractors State License Board.

All certificates of insurance, from both contractor and all subcontractors, shall clearly state that the OWNER is named as an additional insured under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by the OWNER.

- b. Certificates and insurance policies shall include the following clause: *"This policy shall not be cancelled or reduced in required limits of liability or amounts of insurance until notice has been mailed to the OWNER. Date of cancellation or reduction may not be less than Thirty (30) days, or Ten (10) days for nonpayment of premium, after date of mailing notice."*
- c. Certificates of insurance shall state in particular those insured, extent of insurance, location and operation to which insurance applies, expiration date, and cancellation and reduction notice.
- d. The form and substance of all insurance policies are subject to OWNER'S approval. Commercial General Liability and Automobile Liability Insurance policies shall be issued by companies with a Best rating of A- or better and a financial classification of VII or better (or an equivalent rating by Standard & Poor or Moody's). Workers' Compensation and Employer's Liability Insurance policies shall be issued by companies with either (1) a Best rating of B+ or better and a financial classification of VII or better (or an equivalent rating by Standard & Poor or Moody's), or (2) that are acceptable to OWNER.
- e. In the event the contractor or any subcontractor fails to purchase and maintain the required insurance or to furnish satisfactory evidence thereof, the OWNER may procure and maintain such coverages for all parties on behalf of the contractor. Contractor shall furnish all necessary information and pay the premium cost to the OWNER immediately upon presentation of a premium invoice; otherwise, OWNER may deduct the cost of such insurance from the Contract Sum.
- f. Each subcontractor must be covered by insurance of the same character and in the amounts specified in these Supplementary General Conditions, naming the Contractor and the OWNER as additional insureds. Copies of certificates of insurance for subcontractors must be filed with the OWNER within thirty (30) working days after issuance of a Notice to Proceed and at least five (5) working days before the subcontractor begins work on the site. Failure to provide evidence of such insurance shall result in the subcontractor being excluded from the site until proper coverage is verified. The cost of any resulting delay will be borne by the Contractor.

- g. Any material change in limits, coverages or loss of aggregate limit due to outstanding claims must be reported to the OWNER within 30 days of any such event.
- I. The insurance policies for Commercial General Liability and Automobile Liability Insurance required of the Contractor and all subcontractors shall be written for not less than the following minimum limits:

Commercial Form General Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor(s)</u>
Per Occurrence	\$5,000,000.00	\$2,000,000.00
General Aggregate	\$5,000,000.00	\$3,000,000.00
Products/Completed Operations Aggregate	\$1,000,000.00	\$1,000,000.00
Personal/Advertising Injury Aggregate	\$5,000,000.00	\$1,000,000.00

Automobile Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor(s)</u>
Bodily Injury and Property Damage Combined Single Limit	\$1,000,000.00	\$1,000,000.00

Professional Errors and Omissions Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor(s)</u>
Per Occurrence	N/A	N/A
General Aggregate	N/A	N/A

Pollution Liability Insurance:

	<u>Contractor</u>	<u>Subcontractor(s)</u>
Per Occurrence	\$1,000,000.00	\$1,000,000.00
General Aggregate	\$1,000,000.00	\$1,000,000.00

NOTE: These limits can be attained by individual policies or by combining primary and umbrella policies.

- J. OWNER shall provide Builder's Risk Insurance as follows:
1. Primary Coverage: The policy shall cover the full contract value of the project, up to, but not to exceed, the Policy Limit of \$50,000,000.00.
 2. Coverage Term: Duration of project.
 3. Description of Coverages:
 - a. All-risk (i.e., "open perils"), excluding earthquake.
 - b. Replacement costs.
 - c. Collapse, if resulting from a covered peril.
 - d. Debris removal.
 - e. Off-site storage.
 - i. Policy Limit of \$10,000,000.00 per occurrence
 - f. Property in transit.
 - i. Policy Limit of \$40,000,000.00 per occurrence.

4. Deductible: \$5,000.00.
- a. Contractor shall be responsible for the first FIVE THOUSAND AND 00/100 DOLLARS (\$5,000.00) of each loss or damage covered by the Builder's Risk Insurance provided by the OWNER which is caused by the Contractor or any Subcontractor or Sub-Subcontractor or for which the Contractor, Subcontractor or Sub-Subcontractor is liable, and for all uninsured losses. No loss or damage, if any, incurred hereunder shall excuse Contractor's complete and satisfactory performance of the provisions of the Contract Documents.
5. Exclusions:
- a. Earthquake.
 - b. Contractor's equipment.
- K. Notwithstanding anything to the contrary contained herein, the General Precedence of Documents Comprising the Contract shall be as specified in the General Conditions Article 1.2.4.
- L. This Bid requires the successful Contractor to have the following experience and technical expertise in order to be responsive:
- a. The Contractor must have been in business under the same name/license number at the same location for a period of not less than continuous years. Contractor must provide this information in Section 4, Bidder Information Forms, subsections 4A4.0 and 4A5.0.
 - b. The Contractor, as a prime contractor under its current license number, must have completed:
 - (1) at least 3 construction projects for a California public school district, community college or university,
 - a. that required DSA submittals and approvals as evidenced by a DSA Project Number,
 - b. of two or more stories
 - c. with a construction cost of \$25M or more,
 - d. using design-bid-build, design-build, or CM-at-Risk delivery; and
 - (2) at least one construction project for a California public school district, community college or university,
 - a. that required DSA submittals and approvals as evidenced by a DSA Project Number,
 - b. of two or more stories,
 - c. with a construction cost of \$25M or more,
 - d. using design-bid-build, or design-build or CM-at-Risk delivery.Contractor **may/must** use the same/different project to satisfy both/each requirement(s) above. Contractor must provide this information in Section 4, Bidder Information Forms, subsection 4C.
 - c. Contractor shall have provided accurate and complete information in Section 4, Bidder Information Forms, which is verifiable.

M. **Delete** General Conditions paragraph 1.1.14, and **substitute** the following:

1.1.14 CONSTRUCTION MANAGER

The term "Construction Manager" means the individual, firm, partnership, corporation or other entity providing construction management services for the Project. The "Construction Manager" and the Construction Manager's Representative shall be referred to throughout the Contract as if singular in number.

Unless directed otherwise by OWNER, the Construction Manager shall have authority to act on behalf of OWNER for all purposes consistent with the Construction Manager's authority. The Contractor shall cooperate with the Construction Manager and respond to any requests or directives authorized by the OWNER to be made or given by the Construction Manager. The Contractor shall request clarification from OWNER in writing if the Contractor has any questions regarding the authority of the Construction Manager. OWNER may expand the Construction Manager's authority at any time and may direct the Contractor, subcontractors, Architect or any other party to acknowledge the authority of the Construction Manager in any situation.

N. **Delete** General Conditions paragraph 3.10, and **substitute** the following:

3.10 DOCUMENT RECORDS

The Contractor shall maintain a record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Contractor shall maintain approved Shop Drawings, Product Data, Samples, and similar required submittals. These documents shall be available to the Construction Manager and Architect, and shall be delivered to the Construction Manager and Architect for delivery to the OWNER upon completion of the Work.

O. The deadline by which Contractor must obtain and submit all shop drawings, product data and samples per **General Conditions, paragraph 3.11.1.4**, is no later than **twenty-one (21) days after** Contractor receives the Notice of Award letter for the Project from OWNER.

P. **Delete** General Conditions paragraph 3.11.2.4, and **substitute** the following:

3.11.2.4 Review and Approval Prior to Commencement of Work

The Architect shall review the submittals and return them **within fourteen (14) calendar days for regular submittals and within ninety (90) calendar days for deferred approval submittals**, as applicable, after receiving them from the Construction Manager, who will then forward them to the Contractor with one of three responses:

A. APPROVED WITH NO EXCEPTIONS-PROCEED.

Construction Manager shall return **one (1) copy to the Contractor** and **one (1) copy to the DSA Inspector**, both with the Architect's stamp and signature applied thereto.

B. APPROVED AS NOTED-PROCEED CONDITIONALLY:

Contractor shall make the required corrections and resubmit to Construction Manager **within five (5) calendar days** after Contractor's receipt of the returned submittal.

C. REJECTED-RESUBMIT-DO NOT PROCEED:

Contractor must completely revise and resubmit the submittal to Construction Manager **within five (5) calendar days** after Contractor's receipt of the returned submittal.

No portion of the Work requiring a submittal shall be commenced until the submission has been reviewed by OWNER and Architect, unless specifically directed in writing by the OWNER. All such portions of the Work shall be in accordance with Architect's approved response to the submittal.

- Q. The deadline by which Contractor must submit a request for substitution of products, materials or processes per **General Conditions, paragraph 3.11.5.3**, is no later than **five (5) days after** Contractor receives the Notice of Award letter for the Project from OWNER.

- R. **Delete** General Conditions Paragraph 3.11.5.4, and **substitute** the following:

3.11.5.4 List of Manufacturers and Products Required

Each Subcontractor shall prepare and submit to the Contractor within **thirty (30) calendar days** of execution of its Subcontract, comprehensive lists, in quadruplicate, of the manufacturers and products proposed for the Project, including information on materials, equipment, and fixtures required by the Contract, as may be required for Contractor's or Architect's preliminary approval. Approval of such lists of products shall not be construed as a substitute for the shop drawings, manufacturer's descriptive data, and samples, which are required by the Contract, but rather as a base from which more detailed submittals shall be developed for the final review of the Contractor and the Architect.

- S. The terms (Parking Lot 12 is used as an example) "Alterations to Parking Lot 12 and Construction of Elevator Tower & Pedestrian Bridge", "Re-Construction of Parking Lot 12", "Reconstruction of Parking Lot 12", "Redesign of Parking Lot 12", "R-Construction of Parking Lot 12", "Parking Lot 12", "Chaffey College Parking Lot 12", "Construction of Elevator Tower/Pedestrian Bridge & Alterations to Parking Lot 12", and any other combinations used within these Bid and Contract Documents shall be deemed to mean the same Project that constitutes Bid No. 2022PW01.

END OF SUPPLEMENTARY GENERAL CONDITIONS

7. CONTRACT APPENDIX, SUBPART C

SPECIAL CONDITIONS

- A. The timing mechanism utilized by PlanetBids is controlling and determining as to the time of the Bidder's submittal of the Bid. Bidders are solely responsible for timely submission of their Bids to the OWNER in accordance with the Notice Inviting Bids. Bids cannot be submitted past the bid submission deadline. Any attempt to submit a bid late will be rejected by the PlanetBids system.
- B. The Bidder must enter pricing in the electronic bid form for any and all line items or a lump sum bid amount, as required. The pricing provided in the electronic bid form will be the only valid bid pricing for determination of the low bid. The Bidder must attach a pdf file(s) to the electronic submission containing all the completed and signed Bid Documents. Bidders experience technical difficulties with the bid submission may contact PlanetBids System Support at 818-992-1771. Neither the OWNER or the OWNER's bid management system make any guarantee as to the timely availability of assistance, or assurance that any given problem will be resolved by the bid submission date and/or time.
- C. All labor, materials, equipment, and transportation required for proper installation, operation, and performance of facilities shown on the contract drawings, and described herein, in accordance with the stated intent of the Project, shall be new (no used, rebuilt or remanufactured items may be incorporated in the Work) and provided at the expense of the Contractor. Contractor shall not ship, or have shipped, any materials, tools, equipment, or any item directly to the OWNER without prior authorization. Such shipments, if made, will be refused.
- D. Keys to work areas, if required, must be obtained through the Construction Manager. Receipt of keys shall be signed for by the Contractor or authorized representative. A refundable deposit, in an amount of \$100 per key is required. Upon completion of the Work, all keys shall be returned. If Contractor fails to return all keys issued, Contractor shall be liable for the total cost of labor and material to re-key all areas accessible with the lost keys.
- E. Contractor Traffic Control and Logistics Plan shall be approved by the OWNER's representative prior to commencing work each day.

Contractor, his employees and material suppliers shall observe all Chaffey College traffic and parking regulations.

Contractor and his employees shall park in an area to be designated by the Construction Manager. Refer to Specification Section 01500 for additional provisions and requirements. Temporary parking permits will be issued by Campus Parking Services (located in the Campus Police Department office) to the Contractor for his employees.

Campus Police Department
(909) 652-6911 – After-hours Line
(909) 652-6632 – Direct Line

- F. If, in the opinion of OWNER's Safety Officers, the Contractor and/or his representatives are jeopardizing the health and safety of the campus or community, the Safety Officers, or any OWNER designees, have the authority to stop any job or portion thereof until appropriate corrections are made. Campus Police Officers, the Associate Superintendent of Administrative Services and Administrator of Campus Safety are, at all times, considered Safety Officers. If job supervisor is not available or adequate on the job site during the entire time of the construction, the Inspector may shut down the job.
- G. Contractor shall be aware of construction noise on the job and make necessary adjustments to ensure neighboring homes, offices, and classrooms minimal disturbance. Construction Manager will, upon request of Contractor, check with the scheduling office. Contractor is to avoid scheduling activities where construction noise may become an issue.
- H. All telephone lines and equipment shall be left intact by the Contractor. If wires/cables are not in conduit and phones are detachable, the Contractor shall notify the Construction Manager. If telephone lines/equipment are damaged during construction, it shall be the Contractor's responsibility to replace damaged items to operational use at his cost.

All (Interior) properties, structures, and equipment, etc., not indicated or specified to be removed, shall be properly and adequately protected from damage during the entire contract period. If any of these items are damaged or disturbed in any way by the Contractor, his employees or assignees, they shall be restored to their original condition at the Contractor's expense.

All (Exterior) properties, structures, equipment, trees, fences, shrubs, etc., not indicated or specified to be removed, and all existing utility lines, including irrigation, shall be properly and adequately protected from damage during the entire contract period. If any of these items are damaged or disturbed in any way, by the Contractor, his employees or assignees, they shall be restored to their original condition at the Contractor's expense. Any lawn area that is damaged shall be resodded at Contractor's expense. Restoration of landscaped areas shall be completed to the satisfaction of the OWNER's Interim Vice President of Administrative Services.

If, in the opinion of an OWNER's Safety Officer, or their designee, an area requiring barricades is left unsafe and the Contractor or his representative is not available, barricades will be set up by Campus Police and the Contractor billed for time and barricade rental. Barricades not returned to Campus Police will be charged to the Contractor.

- I. In accordance with the Hazardous Communication Standards and Employee's Right to Know law, OWNER requires Contractor to ensure that a Material Safety Data Sheet (MSDS) for any material or substance so requiring that is used on the job is readily available and accessible on the Project Site and a copy provided to the Interim Vice President of Administrative Services. OWNER requires Contractor to ensure the proper labeling of any substance brought onto the Chino College Campus so that person(s) working with the material, or within the general area of the material, is/are informed about the hazards of the substance and follow proper handling and protection procedures.

OWNER also requires Contractor to comply with the provisions of the California Health and Safety Code Section 25249, et seq., which requires Contractor to post and give notice to any person who may be exposed to any chemical known to the State of California to cause cancer. Contractor agrees to familiarize himself with such statutory provisions and to fully comply with these code requirements.

In the event of a hazardous materials spill at the Project Site or within the boundaries of the Chino College Campus. Contractor will immediately notify the Interim Vice President of Administrative Services and Administrator of Campus Safety in order to mitigate the spill and minimize its effect on the environment.

Troy Ament, Interim Vice President of Administrative Services and Emergency Operations

(909) 652-6735 – Direct Line

(909) 238-3764 – Cell Available 24/7

(909) 241-0480 – Cell for Rich Levin, Maintenance Manager

Campus Police Department Dispatch

(909) 652-6911 – Direct Line Available 24/7

- J. Any information provided as INFORMATION AVAILABLE TO BIDDERS will be available on the OWNER'S PlanetBids Vendor Portal that can be accessed through the Purchasing Services website at www.chaffey.edu/purchasing, and is subject to the following provisions:

- (1) The information is made available solely for the convenience of bidders and is not part of the Bid and Contract Documents.
- (2) The OWNER has not determined the accuracy or completeness of such information, and all such information is made available to bidders without any representation or warranty by OWNER whatsoever as to its accuracy, completeness, or relevancy.
- (3) The information does not relieve the bidders of the responsibility for determining the accuracy of the information provided, and bidders shall independently evaluate such information for their use and shall be solely responsible for use or interpretation of such information.
- (4) Any such use or interpretation shall not be the basis of any claim against the OWNER.

For Website:

INFORMATION AVAILABLE TO BIDDERS: www.chaffey.edu/purchasing. The Information Available to Bidders is made available solely for the convenience of bidders and is subject to the provisions of the Special Conditions, Paragraph J.

- K. SIEMENS INDUSTRY, INC. and QUARK COMMUNICATIONS, INC. Resolutions attached [IN ACCORDANCE WITH PUBLIC CONTRACT CODE SECTION 3400]
- L. Contractor shall use the OWNER's Program Management Information Software, PROCORE, to administer and manage project documentation throughout the course of this project.

Adopted Sole Source Resolutions for Siemens Building Technologies and
for the Quark Communication's InetSupervisor



Chaffey College

Governing Board

EXTRACT OF
OFFICIAL PROCEEDINGS
OF THE GOVERNING BOARD
CHAFFEY COMMUNITY COLLEGE DISTRICT

December 17, 2020

Members present: Ms. Brugger, Mr. Ovlitt, Mr. McDougal, Ms. McLeod,
Ms. Olivares-Lambert, Ms. Sanders (Student Trustee)

Members absent: None

BUSINESS/FISCAL AFFAIRS

The Governing Board adopted Resolution 121720, a resolution of the Governing Board of the District, designating proprietary Siemens products, bands and/or services for low voltage systems, as described herein and in the attached resolution, pursuant to California Public Contract Code Section 3400.

Yeas: Ms. Brugger, Mr. Ovlitt, Mr. McDougal, Ms. McLeod,
Ms. Olivares-Lambert, Ms. Sanders (advisory)

Nays: None

Certified to be a true and correct copy of the minutes.

Henry D. Shannon

Henry D. Shannon
Governing Board Secretary

jas-12/17/20

5985 Haven Avenue, Rancho Cucamonga, California 91737-5002 909/652-6102 Fax: 909/652-6104 www.chaffey.edu

RESOLUTION NO. 121720

**A RESOLUTION OF THE GOVERNING BOARD OF
CHAFFEY COMMUNITY COLLEGE DISTRICT
DESIGNATING CERTAIN PRODUCTS, BRANDS OR
SERVICES PURSUANT TO PUBLIC CONTRACT CODE
SECTION 3400**

WHEREAS, pursuant to Public Contract Code Section 3400(b) the Chaffey Community College District ("District") may make a finding(s) designating certain products, things, or services by specific brand or trade name for the statutorily enumerated purposes; and

WHEREAS, the District's Governing Board ("Board") has reviewed the District's current facilities, general contracts, plans, and specifications in order to evaluate the District's need to establish uniform, complete and compatible Fire Alarm and Security Systems ("Low Voltage Systems") District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District; and

WHEREAS, the Governing Board approved a similar resolution December 13, 2018 and this resolution would be to designate proprietary Siemens products, brands and/or services for low voltage systems for another two years; and

WHEREAS, the uniform Low Voltage Systems will allow the District to ensure that the Low Voltage Systems utilized on all future District facility projects match the Low Voltage Systems in use at other District facilities as permitted pursuant to Public Contract Code Section 3400(b)(2); and

WHEREAS, District staff will be trained in the maintenance, repair, and replacement of the Low Voltage Systems described in the Specification and will maintain a stock of the equipment needed for replacements and maintenance; and

WHEREAS, District staff have determined that proprietary Siemens security system products and services will permit centralized monitoring of security for all District facilities; and

WHEREAS, based on the Board's above described review and Public Contract Code Section 3400(b)(2), the Board has determined that District must require and specify the use of certain proprietary Siemens products, things, or services on District projects.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE CHAFFEY COMMUNITY COLLEGE DISTRICT AS FOLLOWS:

Section 1. The above recitals are true and correct.

Section 2. The District, pursuant to Public Contract Code Section 3400, intends to establish uniform, complete and compatible Low Voltage Systems specifications District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District.

Section 3. The District has found compatibility, cost, ease of maintenance, and utility of Low Voltage Systems problematic and believes it necessary to establish a uniform District Low Voltage Systems Specifications in order to avoid incompatibility issues, as well as durability and reliability issues, and costs associated with experimenting and replacing incompatible and useless Low Voltage Systems and to avoid the waste of District funds associated with addressing incompatible components.

Section 4. The District and its consultants have undertaken considerable research into the products/brands of Low Voltage Systems described in the Specification. District staff will be trained in the maintenance, replacement, and repair of the Low Voltage Systems described in the Specification and the District will maintain a stock of the equipment needed for replacements and maintenance.

Section 5. District staff has determined that the Low Voltage Systems has demonstrated their reliability, durability, and quality.

Section 6. Pursuant to Public Contract Code Section 3400(b)(2), the District's Board hereby designates the certain products/brands of Low Voltage Systems for the District's use in future projects so as to establish one complete uniform District-wide Low Voltage Systems system, thus, avoiding incompatibility of products, as well as replacement and maintenance problems.

Section 7. The designation of certain proprietary Siemens security system products and services of Low Voltage Electronic products shall be effective for 24 months from the date of this Resolution.

Section 8. At the end of the 24-month period, District staff will review the products/brands and evaluate whether re-adoption or discontinued use of the designated proprietary Siemens security system products and services is appropriate including presenting a recommendation to the Superintendent/President or his/her designee. The Superintendent/President or his/her designee shall then consider District staff's recommendations and either re-approve or discontinue the designation of the products/brands contained herein and/or approve additional/replacement products/brands.

Section 9. The Superintendent/President or his/her designee shall present changes, if any, for its ratification.

PASSED AND ADOPTED by the Governing Board of the Chaffey Community College District at Rancho Cucamonga, California, this 17th day of December 2020, at a regular meeting by the following vote:

I, Kathleen Brugger, Clerk of the Governing Board of the Chaffey Community College District of San Bernardino County, California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly adopted by said board at the regular meeting thereof at the date and place and by vote stated, which resolution is on file and of record in the office of said board.


Kathleen Brugger
Clerk, Governing Board



Chaffey College

Governing Board

EXTRACT OF
OFFICIAL PROCEEDINGS
OF THE GOVERNING BOARD
CHAFFEY COMMUNITY COLLEGE DISTRICT

June 22, 2017

Members present: Ms. Brugger, Mr. McDougal, Ms. McLeod, Mr. Ovitt,
Ms. Roberts, Ms. Contreras (Student Trustee)

Members absent: None

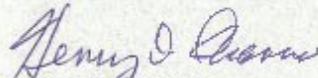
BUSINESS/FISCAL AFFAIRS

The Governing Board adopted Resolution 62217C, a resolution of the Governing Board of the District designating **InetSupervisor™** brands for designated campus building automation systems to be designated sole source and/or proprietary, as described herein and in the attached resolution, pursuant to California Public Contract Code, Section 3400.

Yeas: Ms. Brugger, Mr. McDougal, Ms. McLeod, Mr. Ovitt,
Ms. Roberts, Ms. Contreras (advisory)

Nays: None

Certified to be a true and correct copy of the minutes.


Henry D. Shannon
Governing Board Secretary

jas-6/22/17

5895 Haven Avenue, Rancho Cucamonga, California 91737-3002 909/852-6102 Fax: 909/852-6104 www.chaffey.edu

RESOLUTION NO. 62217C

**A RESOLUTION OF THE GOVERNING BOARD OF CHAFFEY
COMMUNITY COLLEGE DISTRICT DESIGNATING CERTAIN
PRODUCTS, BRANDS OR SERVICES PURSUANT TO PUBLIC
CONTRACT CODE SECTION 3400**

WHEREAS, pursuant to Public Contract Code Section 3400(c), the Chaffey Community College District ("District") may make a finding(s) designating certain products, things, or services by specific brand or trade name for the statutorily enumerated purposes; and

WHEREAS, the District's Governing Board ("Board") has reviewed the District's current facilities, general contracts, plans, and specifications in order to evaluate the District's need to establish uniform, complete and compatible campus building automation systems District-wide to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District; and

WHEREAS, the District has installed the Quark Communications Inc. manufactured, supplied, and installed InetSupervisor™ brand building automation systems in seven (7) Chaffey campus locations in place of the aging Andover Controls; and

WHEREAS, to continue the campus building retrofit program, it is essential to maintain campus-wide system continuity to achieve higher cost efficiencies associated with standardized building automation systems and controls as further described herein. It is also advantageous that these systems and controls are furnished exclusively by a proven regional vendor that is currently servicing and supporting our existing campus systems; and

WHEREAS, District staff has undertaken considerable research into these and other programs and services for building automation systems to determine the best options to optimize building energy and operating efficiencies and has determined the InetSupervisor™ programs have demonstrated reliability, durability, quality, and provide added energy efficiency; and

WHEREAS, the continued acquisition of InetSupervisor™ systems will allow the District to ensure that the building automation systems-related hardware and software which are operated and maintained on all future District facility projects match the existing InetSupervisor™ systems in use at the seven (7) previously updated District facilities as permitted pursuant to Public Contract Code Section 3400(c)(2); and

WHEREAS, District staff has been trained in the operation, programming, maintenance, and repair of the InetSupervisor™ systems and will maintain a stock of the equipment needed for replacements and maintenance; and

WHEREAS, District staff has determined that proprietary InetSupervisor™ system products and services will permit centralized computer monitoring of HVAC and lighting controls at all District facilities; and

WHEREAS, based on the Board's above-described review and Public Contract Code Section 3400(c)(2), the Board has determined that the District must require and specify the use of certain proprietary and sole source Quark Communications Inc. distributed InetSupervisor™ system products, things, or services on District projects.

END OF SPECIAL CONDITIONS

7. CONTRACT APPENDIX, SUBPART D

EXPANDED LIST OF SUBCONTRACTORS

Chaffey Community College District

(to be submitted within 24 hours after proposal submission)

Project Name: _____
 BID No. _____

This form shall contain the information for all subcontractors listed on the List of Proposed Subcontractors submitted with the proposal, per Contract General Conditions and Public Contract Code Section 4104. No subcontractor shall be added or deleted. All licenses shall be verified with the Contractor's State License Board. Check DVBE Status if subcontractor is certified by the State of California as a Disabled Veteran Business Enterprise. Failure to complete and submit this form on time may cause the proposal to be determined nonresponsive.

<u>% of Work Status</u>	<u>Subcontractor Name</u>	<u>Complete Address of Subcontractor</u>	<u>Contractor's Lic. # (verified)</u>	<u>M/W/DVBE</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

7. CONTRACT APPENDIX, SUBPART E

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, **Chaffey Community College District** (hereinafter referred to as "District") has awarded to, (hereinafter referred to as the "Contractor"), an agreement for 2022PW01 Chino Instructional Building (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by the Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of the Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the District in the sum of _____ DOLLARS, (\$ _____), the sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the District, its officers and agents, as stipulated in the Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the guarantee obligation shall hold good for a period of one (1) year after the acceptance of the work by District, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the District from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the District's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

As a part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees including reasonable attorney's

fees, incurred by District in enforcing such obligation.

Whenever Contractor shall be, and is declared by the District to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the District's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the District, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the District under the Contract and any modification thereto, less any amount previously paid by the District to the Contractor and any other set offs pursuant to the Contract Documents.
- (3) Permit the District to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the District under the Contract and any modification thereto, less any amount previously paid by the District to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the District may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the District, when declaring the Contractor in default, notifies Surety of the District's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

By their signatures hereunder, Surety and Contractor hereby confirm under penalty of perjury that surety is a surety insurer authorized to do business in the State of California.

[Remainder of Page Left Intentionally Blank.]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this day of _____, 20____.

CONTRACTOR/PRINCIPAL

Name

By _____

SURETY:

By: _____
Attorney-In-Fact

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$ _____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety) _____

(Name and Address of Agent or

Representative for service of process in
California, if different

from above) _____

(Telephone number of Surety and

Agent or Representative for service of
process in California)

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

- ☐ Individual
☐ Corporate Officer

DESCRIPTION OF ATTACHED DOCUMENT

Title(s)		Title or Type of Document
<input type="checkbox"/> Partner(s)	<input type="checkbox"/> Limited	Number of Pages
	<input type="checkbox"/> General	
<input type="checkbox"/> Attorney-In-Fact		Date of Document
<input type="checkbox"/> Trustee(s)		
<input type="checkbox"/> Guardian/Conservator		
<input type="checkbox"/> Other:		
Signer is representing: Name Of Person(s) Or Entity(ies)		Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)		Title or Type of Document
<input type="checkbox"/> Partner(s)	<input type="checkbox"/> Limited <input type="checkbox"/> General	Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Date of Document

Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact for Surety. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF PERFORMANCE BOND

Chaffey Community College District
Measure P Bond Program

PERFORMANCE BOND - 5 of 5

Chino Instructional Bldg.
Bid No. 2022PW01
January 11, 2022

7. CONTRACT APPENDIX, SUBPART F

PAYMENT BOND (LABOR AND MATERIALS)

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the **Chaffey Community College District** (hereinafter designated as the "District"), has awarded to _____ hereinafter designated as the "Contractor," a contract for the work described as follows: [Bid No. 2022PW01, Chino Instructional Building] (the "Work"); and

WHEREAS, Contractor is required to furnish a bond in connection with the contract described above; providing that if Contractor or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Contractor and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Contractor and _____ as Surety, are held and firmly bound unto the District in the penal sum of _____ Dollars (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Contractor, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the District in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or District and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned and the provisions of Section 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed unoriginal thereof, have been duly executed by the Contractor and Surety above named, on the ____ day of _____, 20____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

(Corporate Seal of Contractor,
if corporation)

Contractor (Name of Contractor)

By _____

(Signature of Contractor)

(Seal of Surety)

Surety

By _____

Attorney in Fact

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached. A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20__, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

- ☐ Individual
☐ Corporate Officer

Title(s)

DESCRIPTION OF ATTACHED DOCUMENT

Title or Type of Document

<input type="checkbox"/> Partner(s) <input type="checkbox"/> Attorney-In-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Guardian/Conservator <input type="checkbox"/> Other:	<input type="checkbox"/> Limited <input type="checkbox"/> General	<div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 10px;"></div> <div style="border-bottom: 1px solid black; height: 20px;"></div>
		Number of Pages
		Date of Document
Signer is representing: Name Of Person(s) Or Entity(ies)		
		Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
 COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally
 appeared _____, who proved to me on the basis of
 satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and
 acknowledged to me that he/she/they executed the same in his/her/their authorized
 capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity
 upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
 paragraph is true and correct.

WITNESS my hand and official seal.

 Signature of Notary Public

OPTIONAL

*Though the information below is not required by law, it may prove valuable to persons relying on the document
 and could prevent fraudulent removal and reattachment of this form to another document.*

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

<input type="checkbox"/> Individual <input type="checkbox"/> Corporate Officer		
	Title(s)	Title or Type of Document
<input type="checkbox"/> Partner(s)	<input type="checkbox"/> Limited <input type="checkbox"/> General	
<input type="checkbox"/> Attorney-In-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Guardian/Conservator <input type="checkbox"/> Other:		Number of Pages
Signer is representing: Name Of Person(s) Or Entity(ies)		Date of Document
_____ _____		Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact for Surety. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF PAYMENT BOND

7. CONTRACT APPENDIX, SUBPART G

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

(SAMPLE)

This Escrow Agreement is made and entered into by and between the **Chaffey Community College District**, whose address is **5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002** (hereinafter called "OWNER") and whose address is _____ (hereinafter called "Contractor") and whose address is _____ (hereinafter called "Escrow Agent").

For the consideration hereinafter set forth, the OWNER, Contractor, and Escrow Agent agree as follows:

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by OWNER pursuant to the Construction Contract entered into between the OWNER and Contractor for the **2022PW01, Chino Instructional Building** Project in the amount of _____ dated ____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the OWNER shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the OWNER within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the OWNER and Contractor. Securities shall be held in the name of _____, and shall designate the Contractor as the beneficial owner.

(2) The OWNER shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

(3) When the OWNER makes payment of retention earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this Escrow Agreement is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this

Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the OWNER pays the Escrow Agent directly.

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the OWNER. These expenses and payment terms shall be determined by the OWNER, Contractor and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the OWNER.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the OWNER to the Escrow Agent that OWNER consents to the withdrawal of the amount sought to be withdrawn by Contractor.

(7) The OWNER shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the OWNER of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the OWNER.

(8) Upon receipt of written notification from the OWNER certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the OWNER and the Contractor pursuant to Sections (5) to (8), inclusive, of this Escrow Agreement and the OWNER and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the OWNER and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of CONTRACTOR:

By: _____
Signature

Typed or Printed Name & Title

Complete Legal Address

On behalf of OWNER:

By: _____
Signature

Lisa Bailey,
Interim, Associate Superintendent,
Business Services and Economic
Development

Typed or Printed Name & Title

Chaffey Community College District
5885 Haven Avenue
Rancho Cucamonga, CA 91737-3002
Complete Legal Address

On behalf of ESCROW AGENT:

By: _____
Signature

Typed or Printed Name & Title

Complete Legal Address

At the time the Escrow Account is opened, the OWNER and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Escrow Agreement.

IN WITNESS WHEREOF, the Parties have executed this Escrow Agreement by their proper officers on the date first set forth above.

CONTRACTOR:

By: _____
Signature

Typed or Printed Name & Title

OWNER:

By: _____
Signature

Lisa Bailey,
Interim, Associate Superintendent,
Business Services and Economic
Development

Typed or Printed Name & Title

7. CONTRACT APPENDIX, SUBPART H

DRUG-FREE WORKPLACE CERTIFICATION

This Drug-Free Workplace Certification form is part of the Contract made by and between the **Chaffey Community College District** (hereinafter referred to as the "OWNER") and

_____ (hereinafter referred to as the "Contractor") for the **2022PW01, Chino Instructional Building** Project (hereinafter referred to as the "Project"). This form is required from all successful bidders pursuant to the Drug-Free Workplace Act of 1990 (Government Code Section 8350 et seq.) The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

Pursuant to Government Code Section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

- A. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in their workplace and specifying actions which will be taken against employees for violations of the prohibition;
- B. Establishing a drug-free awareness program to inform employees about all of the following:
 - 1. The dangers of drug abuse in the workplace;
 - 2. The person's or organization's policy of maintaining a drug-free workplace;
 - 3. The availability of drug counseling, rehabilitation and employee-assistance programs; and
 - 4. The penalties that may be imposed upon employees for drug abuse violations.
- C. Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision "A," and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of the Drug-Free Workplace Act as it now exists or may hereinafter be amended. Particularly, I shall abide by Government

Chaffey Community College District
Measure P Bond Program

Chino Instructional Bldg.
Bid No. 2022PW1
January 11, 2022

Code Section 8355 when performing the Contract for the Project by:

- A. Publishing a statement notifying employees concerning the prohibition of controlled substance at my workplace;
- B. Establishing a drug-free awareness program; and
- C. Requiring that each employee engaged in the performance of the contract be given a copy of the statement required by Section 8355(a) and agree to abide by the terms of that statement.

I also understand that if the OWNER determines that I have either: (a) made a false certification herein; or (b) violated this certification by failing to carry out the requirements of Section 8355, the Contract awarded herein is subject to termination, suspension of payments, or both. I further understand that if I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of the Act.

I acknowledge that I am aware of the provisions of Government Code Section 8350 et seq., and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

Executed on this _____ day of _____,
20____ at _____.

Name of Contractor (Print or Type)

By _____
Signature

Print Name

Title

Subscribed and sworn before me
this ____ day of _____, 20 ____

Notary Public in and for
the State of California

My Commission Expires: _____

7. CONTRACT APPENDIX, SUBPART I

RECYCLED CONTENT CERTIFICATION

The undersigned declares that he or she is the person who executed a Bid for the **2022PW01 Chino Instructional Building** Project (hereinafter referred to as the "Project"), and submitted it to the **Chaffey Community College District** (hereinafter referred to as the "OWNER") on behalf of _____ (hereinafter referred to as the "Contractor").

Pursuant to Public Contract Code Section 12213, all contractors are required to certify in writing under penalty of perjury the minimum (if not exact) percentage of recycled content in materials, goods, or supplies offered or products used in the performance of their contract, regardless of whether the product meets the required recycled product percentage as defined in Sections 12161 and 12200. The recycled content shall include both post consumer material and secondary material as defined in Public Contract Code Sections 12161 and 12200. The contractor may certify that the product contains zero recycled content. For purposes of this Certification, the definitions found in Public Contract Code Sections 12161 and 12200 shall apply.

I declare under the laws of the State of California that the following percentages of Postconsumer Material and Secondary Material is in the materials, goods or supplies offered for, or products used in, the performance of the Contract for the Project:

_____ % Postconsumer Material _____ % Secondary Material

Executed on this _____ day of _____, 20____

at _____.

Name of Contractor (Print or Type)

By _____
Signature

Print Name

Title

Subscribed and sworn before me
this _____ day of _____, 20____

Notary Public in and for the State of California
My Commission Expires: _____

7. CONTRACT APPENDIX, SUBPART J

ASBESTOS-FREE MATERIALS CERTIFICATION

The undersigned declares that he or she is the person who executed Bid for the **2022PW01 Chino Instructional Building** Project (hereinafter referred to as the "Project"), and submitted it to the **Chaffey Community College District** (hereinafter referred to as the "OWNER") on behalf of

____ (hereinafter referred to as the "Contractor").

To the best of my knowledge, information and belief, in completing the Contractor's Work for the Project, no material furnished, installed or incorporated into the Project will contain, or in itself be composed of, asbestos or any materials listed by the federal or state EPA or federal or state health agencies as a hazardous material.

I declare under the laws of the State of California that the foregoing is true and correct.

Executed on this _____ day of _____, 20____
at _____.

Name of Contractor (Print or Type)

By: _____
Signature

Print Name

Title

Subscribed and sworn before me
this _____ day of _____, 20____

Notary Public in and for
the State of California

My Commission Expires: _____

7. CONTRACT APPENDIX, SUBPART K

IRAN CONTRACTING ACT CERTIFICATION

(Public Contract Code Section 2200 *et seq.*)

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

- ☐ The Contractor is not:
- (i) identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
 - (ii) a financial institution that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.
- ☐ The District has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the District will be unable to obtain the goods and/or services to be provided pursuant to the Contract.
- ☐ The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signed: _____

Title: _____

Firm: _____ Date: _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

7. CONTRACT APPENDIX, SUBPART L

SIEMENS INDUSTRY, INC. and QUARK COMMUNICATIONS, INC. ACKNOWLEDGEMENT

CHAFFEY COMMUNITY COLLEGE DISTRICT
CHINO INSTRUCTIONAL BUILDING
BID NUMBER 2022PW01

The OWNER has made Siemens Building Technologies, its design standard for fire alarm systems, and the Quark Communication's InetSupervisor for controls.

The OWNER expects that each contractor submitting a bid for the Project, (a) is satisfied as to the conditions affecting the work, (b), has reviewed the plans and specifications, (c) has coordinated with their subcontractors, and (d) has contacted and coordinated with Siemens Building Technologies and the Quark Communication's InetSupervisor as to the scope of work and cost that Siemens and the Quark Communication's InetSupervisor will provide to the Project for devices, equipment, controls, and installation.

The OWNER will only accept the Siemens fire alarm system, which includes the following but is not limited to: fire alarm control panels, remote annunciators, manual stations, smoke detectors, control modules, horns & strobes, and water flow switches. The Quark Communication's InetSupervisor system for controls, which includes the following, but is not limited to: BAS control panels, sensor actuators, control devices, outdoor lighting controllers, lighting automation controllers, switches, and sensors. All the scope of work will be as noted on the plan and specifications and the OWNER will NOT accept "or equal" for devices, equipment, and controls.

A copy of the sole source resolution for the devices, equipment, and controls from Siemens Building Technologies and Quark Communication's InetSupervisor adopted by the Owner's Governing Board is attached hereto and incorporated herein by this reference.

Siemens Building Technologies contact information:

Fire Alarm Systems: Greg Binder, cell # :657-298-0112 gregory.binder@Siemens.com

Quark Communication's InetSupervisor contact information:

Controls: Adam Guzik, cell #: 760-907-8736 adam@inetsupervisor.com

By: _____
Company Name

Signature & Date

Type or Print Name

Title

Chaffey Community College District
Measure P Bond Program

Chino Instructional Bldg.
Bid No. 2022PW01
January 11, 2022

Adopted Sole Source Resolutions for Siemens Building Technologies and
for the Quark Communication's InetSupervisor



Chaffey College

Governing Board

EXTRACT OF
OFFICIAL PROCEEDINGS
OF THE GOVERNING BOARD
CHAFFEY COMMUNITY COLLEGE DISTRICT

December 17, 2020

Members present: Ms. Brugger, Mr. Ovlitt, Mr. McDougal, Ms. McLeod,
Ms. Olivares-Lambert, Ms. Sanders (Student Trustee)

Members absent: None

BUSINESS/FISCAL AFFAIRS

The Governing Board adopted Resolution 121720, a resolution of the Governing Board of the District, designating proprietary Siemens products, bands and/or services for low voltage systems, as described herein and in the attached resolution, pursuant to California Public Contract Code Section 3400.

Yeas: Ms. Brugger, Mr. Ovlitt, Mr. McDougal, Ms. McLeod,
Ms. Olivares-Lambert, Ms. Sanders (advisory)

Nays: None

Certified to be a true and correct copy of the minutes.

Henry D. Shannon

Henry D. Shannon
Governing Board Secretary

jas-12/17/20

5985 Haven Avenue, Rancho Cucamonga, California 91737-3002 909/852-6102 Fax: 909/852-6104 www.chaffey.edu

RESOLUTION NO. 121720

**A RESOLUTION OF THE GOVERNING BOARD OF
CHAFFEY COMMUNITY COLLEGE DISTRICT
DESIGNATING CERTAIN PRODUCTS, BRANDS OR
SERVICES PURSUANT TO PUBLIC CONTRACT CODE
SECTION 3400**

WHEREAS, pursuant to Public Contract Code Section 3400(b) the Chaffey Community College District ("District") may make a finding(s) designating certain products, things, or services by specific brand or trade name for the statutorily enumerated purposes; and

WHEREAS, the District's Governing Board ("Board") has reviewed the District's current facilities, general contracts, plans, and specifications in order to evaluate the District's need to establish uniform, complete and compatible Fire Alarm and Security Systems ("Low Voltage Systems") District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District; and

WHEREAS, the Governing Board approved a similar resolution December 13, 2018 and this resolution would be to designate proprietary Siemens products, brands and/or services for low voltage systems for another two years; and

WHEREAS, the uniform Low Voltage Systems will allow the District to ensure that the Low Voltage Systems utilized on all future District facility projects match the Low Voltage Systems in use at other District facilities as permitted pursuant to Public Contract Code Section 3400(b)(2); and

WHEREAS, District staff will be trained in the maintenance, repair, and replacement of the Low Voltage Systems described in the Specification and will maintain a stock of the equipment needed for replacements and maintenance; and

WHEREAS, District staff have determined that proprietary Siemens security system products and services will permit centralized monitoring of security for all District facilities; and

WHEREAS, based on the Board's above described review and Public Contract Code Section 3400(b)(2), the Board has determined that District must require and specify the use of certain proprietary Siemens products, things, or services on District projects.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE CHAFFEY COMMUNITY COLLEGE DISTRICT AS FOLLOWS:

Section 1. The above recitals are true and correct.

Section 2. The District, pursuant to Public Contract Code Section 3400, intends to establish uniform, complete and compatible Low Voltage Systems specifications District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District.

Section 3. The District has found compatibility, cost, ease of maintenance, and utility of Low Voltage Systems problematic and believes it necessary to establish a uniform District Low Voltage Systems Specifications in order to avoid incompatibility issues, as well as durability and reliability issues, and costs associated with experimenting and replacing incompatible and useless Low Voltage Systems and to avoid the waste of District funds associated with addressing incompatible components.

Section 4. The District and its consultants have undertaken considerable research into the products/brands of Low Voltage Systems described in the Specification. District staff will be trained in the maintenance, replacement, and repair of the Low Voltage Systems described in the Specification and the District will maintain a stock of the equipment needed for replacements and maintenance.

Section 5. District staff has determined that the Low Voltage Systems has demonstrated their reliability, durability, and quality.

Section 6. Pursuant to Public Contract Code Section 3400(b)(2), the District's Board hereby designates the certain products/brands of Low Voltage Systems for the District's use in future projects so as to establish one complete uniform District-wide Low Voltage Systems system, thus, avoiding incompatibility of products, as well as replacement and maintenance problems.

Section 7. The designation of certain proprietary Siemens security system products and services of Low Voltage Electronic products shall be effective for 24 months from the date of this Resolution.

Section 8. At the end of the 24-month period, District staff will review the products/brands and evaluate whether re-adoption or discontinued use of the designated proprietary Siemens security system products and services is appropriate including presenting a recommendation to the Superintendent/President or his/her designee. The Superintendent/President or his/her designee shall then consider District staff's recommendations and either re-approve or discontinue the designation of the products/brands contained herein and/or approve additional/replacement products/brands.

Section 9. The Superintendent/President or his/her designee shall present changes, if any, for its ratification.

PASSED AND ADOPTED by the Governing Board of the Chaffey Community College District at Rancho Cucamonga, California, this 17th day of December 2020, at a regular meeting by the following vote:

I, Kathleen Brugger, Clerk of the Governing Board of the Chaffey Community College District of San Bernardino County, California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly adopted by said board at the regular meeting thereof at the date and place and by vote stated, which resolution is on file and of record in the office of said board.


Kathleen Brugger
Clerk, Governing Board



Chaffey College

Governing Board

EXTRACT OF
OFFICIAL PROCEEDINGS
OF THE GOVERNING BOARD
CHAFFEY COMMUNITY COLLEGE DISTRICT

June 22, 2017

Members present: Ms. Brugger, Mr. McDougal, Ms. McLeod, Mr. Ovitt,
Ms. Roberts, Ms. Contreras (Student Trustee)

Members absent: None

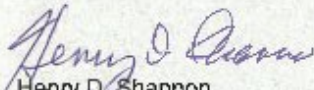
BUSINESS/FISCAL AFFAIRS

The Governing Board adopted Resolution 62217C, a resolution of the Governing Board of the District designating **InetSupervisor™** brands for designated campus building automation systems to be designated sole source and/or proprietary, as described herein and in the attached resolution, pursuant to California Public Contract Code, Section 3400.

Yeas: Ms. Brugger, Mr. McDougal, Ms. McLeod, Mr. Ovitt,
Ms. Roberts, Ms. Contreras (advisory)

Nays: None

Certified to be a true and correct copy of the minutes.


Henry D. Shannon
Governing Board Secretary

jas-6/22/17

5885 Haven Avenue, Rancho Cucamonga, California 91737-3002 909/862-6102 Fax: 909/862-6104 www.chaffey.edu

RESOLUTION NO. 62217C

**A RESOLUTION OF THE GOVERNING BOARD OF CHAFFEY
COMMUNITY COLLEGE DISTRICT DESIGNATING CERTAIN
PRODUCTS, BRANDS OR SERVICES PURSUANT TO PUBLIC
CONTRACT CODE SECTION 3400**

WHEREAS, pursuant to Public Contract Code Section 3400(c), the Chaffey Community College District ("District") may make a finding(s) designating certain products, things, or services by specific brand or trade name for the statutorily enumerated purposes; and

WHEREAS, the District's Governing Board ("Board") has reviewed the District's current facilities, general contracts, plans, and specifications in order to evaluate the District's need to establish uniform, complete and compatible campus building automation systems District-wide to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District; and

WHEREAS, the District has installed the Quark Communications, Inc. manufactured, supplied, and installed InetSupervisor™ brand building automation systems in seven (7) Chaffey campus locations in place of the aging Andover Controls; and

WHEREAS, to continue the campus building retrofit program, it is essential to maintain campus-wide system continuity to achieve higher cost efficiencies associated with standardized building automation systems and controls as further described herein. It is also advantageous that these systems and controls are furnished exclusively by a proven regional vendor that is currently servicing and supporting our existing campus systems; and

WHEREAS, District staff has undertaken considerable research into these and other programs and services for building automation systems to determine the best options to optimize building energy and operating efficiencies and has determined the InetSupervisor™ programs have demonstrated reliability, durability, quality, and provide added energy efficiency; and

WHEREAS, the continued acquisition of InetSupervisor™ systems will allow the District to ensure that the building automation systems-related hardware and software which are operated and maintained on all future District facility projects match the existing InetSupervisor™ systems in use at the seven (7) previously updated District facilities as permitted pursuant to Public Contract Code Section 3400(c)(2); and

WHEREAS, District staff has been trained in the operation, programming, maintenance, and repair of the InetSupervisor™ systems and will maintain a stock of the equipment needed for replacements and maintenance; and

WHEREAS, District staff has determined that proprietary InetSupervisor™ system products and services will permit centralized computer monitoring of HVAC and lighting controls at all District facilities; and

WHEREAS, based on the Board's above-described review and Public Contract Code Section 3400(c)(2), the Board has determined that the District must require and specify the use of certain proprietary and sole source Quark Communications Inc. distributed InetSupervisor™ system products, things, or services on District projects.

RESOLUTION NO. 52217C (CONT.)

NOW, THEREFORE, BE IT RESOLVED BY CHAFFEY COMMUNITY COLLEGE DISTRICT AS FOLLOWS:

Section 1. The above recitals are true and correct.

Section 2. The District, pursuant to Public Contract Code Section 3400, intends to establish uniform, complete and compatible building automation system specifications District-wide in order to facilitate the use of the most reliable, dependable, cost efficient and feasible products throughout the District.

Section 3. The District has found that compatibility, cost efficiency, ease of operation and control, low maintenance, and utility of existing building automation systems is problematic. As such, the District believes it is essential to standardize its InetSupervisor™ District building automation control system specifications in order to avoid incompatibility issues. Such incompatibility issues include reduced building system reliability along with the operational, maintenance and training issues that add unnecessary costs associated with specifying multiple systems in new facilities or replacing unserviceable building automation systems in existing facilities. The goal is to avoid incompatible and non-conforming systems to gain building HVAC and lighting system operational efficiencies to provide greater occupant comfort and the associated energy savings without the added cost burden on limited District resources.

Section 4. The District and its consultants have undertaken considerable research into the products/brands of InetSupervisor™ systems described in the specification. District staff has been trained in the operation, maintenance, replacement, and repair of the InetSupervisor™ system described in the specification and the District will maintain a stock of the equipment needed for replacements and maintenance.

Section 5. District staff has determined that the subject InetSupervisor™ system products provided by Quark Communications Inc. have demonstrated their reliability, durability, and quality.

Section 6. Pursuant to Public Contract Code Section 3400(c)(2), the District's Board hereby designates that certain products/brands of Quark Communications Inc. InetSupervisor™ systems for the District's use in future projects so as to establish one complete uniform District-wide building automation system, thus, avoiding the incompatibility of non-standardized products, and thus to minimize the operational and control issues associated with related installation, computer control, maintenance, and training-related problems.

Section 7. The designation of certain proprietary and sole source InetSupervisor™ systems distributed by Quark Communications Inc., along with associated software programs, products, diagnostic services, repairs, and upgrades related to the InetSupervisor™ systems, shall be effective for sixty (60) months from the date of this Resolution.

Section 8. At the end of the sixty (60)-month period, District staff will review the subject products/brands and evaluate whether re-adoption or discontinued use of the designated proprietary and sole source InetSupervisor™ system products and services provided by Quark Communications Inc. is appropriate, including presenting a recommendation to the Superintendent/President or his/her designee. The Superintendent/President or his/her designee shall then consider District staff's recommendations and either re-approve or discontinue the designation of the products/brands contained herein and/or approve additional/replacement products/brands.

Section 9. The Superintendent/President or his/her designee shall present changes, if any, for its ratification.

7. CONTRACT APPENDIX, SUBPART M

DRAWINGS (Under Separate Cover)

Sheet No.	Title	Date
See G0.12	Sheet Index - Volume 1 (225 sheets)	08.05.2021
See G0.21	Sheet Index - Volume 2 (175 sheets)	08.05.2021

SPECIFICATIONS

(Under Separate Cover)

[illegible]

7. CONTRACT APPENDIX, SUBPART O

CEQA (EIR) DOCUMENTS

Note: Addendum to EIR and Chino Campus Burrowing Owl Report attached.

**Addendum to the Environmental Impact Report
(SCH No. 2002071120)**

**Specific Plan for the Development of State Surplus Property and
Amendment to the Redevelopment Plan for the Merged Chino
Redevelopment Project Area**

Chaffey College – Chino Campus Instructional Building 1



Lead Agency:

Chaffey College

5885 Haven Avenue
Rancho Cucamonga, California 91737



Prepared by:

Albert A. WEBB Associates

3788 McCray Street
Riverside, California 92506

February 2020

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- Appendix C** – Energy Tables

List of Acronyms

<u>Acronym</u>	<u>Definition</u>
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
BMP	Best Management Practices
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CDGS	California Department of General Services
CEQA	California Environmental Quality Act
CH ₄	Methane
CIM	California Institution for Men
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
College Park SP	Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan for the Merged Chino Redevelopment Project Area
CVIFD	Chino Valley Independent Fire District
DOC	California Department of Conservation
EIR	Environmental Impact Report
FEIR	Final Environmental Impact Report
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gas
GWP	Global Warming Potential
IPPC	Intergovernmental Panel on Climate Change
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MRZ	Mineral Resource Zone
MT	Metric Ton
MT/yr	Metric Tons Per Year
MTCO ₂ e	Metric Tonnes of Carbon Dioxide Equivalents
N ₂ O	Nitrous Oxide
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
PM-10	Particulate matter less than 10 microns in size
PM-2.5	Particulate matter less than 2.5 microns in size
ROCs	Reactive Organic Compounds
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SRA	Source Receptor Area
SR-60	State Route 60
SR-71	State Route 71
SR-91	State Route 91
SR-142	State Route 142
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USGS	U.S. Geological Survey

1.0 INTRODUCTION

The California Department of General Services (CDGS) identified 710 acres of the California Institution for Men (CIM) facility as surplus property to be conveyed, sold, or otherwise transferred from State ownership to three parties: City of Chino, Chaffey College, and a private developer. The City and its Community Development Department, Chaffey College, and the CDGS signed a Memorandum of Understanding to carry forth the planning, entitlement, and ultimately, the development of the surplus property.

A Final Environmental Impact Report (FEIR) Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan for the Merged Chino Redevelopment Project Area was prepared by Sapphos Environmental, Inc. for the College Park Specific Plan (herein referred to as “College Park SP” or “SP”) which was certified by the City of Chino on September 7, 2004. Chaffey College is proposing an approximately 35,000-gross-square-foot (GSF) building (Instructional Building 1) (herein referred to as “Project” or “proposed Project”) on the Chaffey College – Chino Campus to serve primarily as an instructional facility and faculty offices for the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025 document. The proposed Project is subject to the California Environmental Quality Act (CEQA); but, in Chaffey College’s independent judgment acting as the CEQA Lead Agency (see *CEQA Guidelines Section 15050-15051*), the proposed Project’s actions are within the scope of the College Park SP. Accordingly, this document is an Addendum to the FEIR for the College Park SP (State Clearinghouse No. 2002071120).

1.1 Project Summary

The proposed Project involves the development of an approximately 2.6-acre property within the Chaffey College – Chino Campus located at 5897 College Park Avenue Chino, California 91710. Chaffey College proposes to construct approximately 35,000 GSF building to serve as an instructional facility and faculty offices. On-site improvements associated with the proposed Project include landscape, security lighting, bicycle racks, pedestrian pathways, and infrastructure improvements. Parking will be served by the existing parking lots on the Chino Campus. Refer to Section 2.0, *Project Description*, for a comprehensive description of the proposed Project.

1.2 California Environmental Quality Act (CEQA)

CEQA, a statewide environmental law contained in Public Resources Code Section 21000-21177, applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to adversely affect the environment. CEQA requires that public agencies inform their decision-makers of the environmental consequences of their discretionary actions and to consider alternatives and mitigation measures that could avoid or reduce the discretionary action’s significant, adverse environmental effects. CEQA also gives other public agencies and the general public an opportunity to participate in the environmental review process.

1.2.1 Prior CEQA Compliance

The City of Chino adopted the College Park SP and certified the associated Environmental Impact Report (EIR) (State Clearinghouse No. 2002071120) on September 7, 2004. The College Park SP encompasses approximately 710 acres of which approximately 140 acres has been identified for the City of Chino for the expansion of Ruben S. Ayala Park, approximately 100 acres set aside for the Chaffey College – Chino Campus, and approximately 470 acres set aside for a master planned community by a private developer. The foundation of the College Park’s vision reflects a mixed-use traditional community with the character and ambiance of a small college town.

In certifying the College Park SP EIR, the City of Chino City Council found that the EIR adequately addressed the potential environmental impacts associated with the buildout of the approximately 710-acre College Park SP area, inclusive of the Project site that is the subject of evaluation in this

document. The College Park SP EIR identified significant and unavoidable environmental impacts in regard to the loss of Farmland, air quality, and the loss of foraging habitat for native wildlife species that would result from implementation of the SP. In conjunction with certifying the College Park SP EIR, the City of Chino City Council adopted a Statement of Overriding Considerations, which stated that the benefits of the College Park SP outweighed the significant and unavoidable environmental impacts identified above.

1.2.2 CEQA Rules and Requirements for an Addendum

In instances where a CEQA compliance document was previously prepared for a project, the *CEQA Guidelines* allow for the updating and re-use of the previously approved/certified CEQA document when a subsequent project has been identified, has changed, or differs from the previous project or conditions analyzed in the original CEQA document. Where changes or additions to the subsequent project occur with no new significant environmental impacts, an Addendum to the previously approved/certified CEQA document may be prepared if the following conditions/requirements can be met (as defined by *CEQA Guidelines* Section 15164):

- a. The lead agency or responsible agency shall prepare an Addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 of the *CEQA Guidelines* calling for preparation of a Subsequent EIR have occurred.
- b. An Addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 of the *CEQA Guidelines* calling for the preparation of a subsequent EIR or negative declaration have occurred.
- c. An Addendum need not be circulated for public review but can be included in or attached to the EIR.
- d. The decision-making body shall consider the Addendum with the EIR prior to making a decision on the project.
- e. A brief explanation of the decision not to prepare Subsequent EIR pursuant to Section 15162 of the *CEQA Guidelines* should be included in an Addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

As noted above, Section 15164(a) of the *CEQA Guidelines* allows for the preparation of an Addendum if none of the conditions described in Section 15162 of the *CEQA Guidelines* are met. Section 15162 of the *CEQA Guidelines* describe the conditions under which a Subsequent EIR must be prepared, as follows:

- a. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- b. Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

- c. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
 1. The project will have one or more significant effects not discussed in the previous EIR;
 2. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 3. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or
 4. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents declined to adopt the mitigation measures or alternative.

If none of the circumstances listed above occur and only minor technical changes or additions are necessary to update the previously approved/certified CEQA document, an Addendum may be prepared (see Section 15164 of the *CEQA Guidelines*).

1.2.3 Finding for the Project

Chaffey College, serving as the CEQA Lead Agency, determined that the proposed Project does not meet any of the circumstances from Section 15162 of the *CEQA Guidelines* and that an Addendum to the previously-certified College Park SP EIR is the appropriate CEQA compliance document for the Project. Chaffey College's finding is based on the following facts:

- a. As demonstrated in detail in Section 3.0 of this document, the proposed Project would not require major revisions to the previously-certified College Park SP EIR because the proposed Project would neither result in any new significant impacts to the physical environment that were not already disclosed in the College Park SP EIR nor result in substantial increases in the severity of the environmental impacts previously disclosed in the College Park SP EIR.
- b. Subsequent to the certification of the College Park SP EIR, no substantial changes in the circumstances under which the Project would be undertaken have occurred.
- c. There is no evidence in the public record that new information has become available that is applicable to the proposed Project and/or Project site and would alter the conclusions of the College Park SP EIR.
- d. The Draft and Final College Park SP EIR and accompanying mitigation measures, and Technical Appendices are all herein incorporated by reference pursuant to Section 15150 of the *CEQA Guidelines* and are available for review at the City of Chino Planning Division; 13220 Central Avenue, Chino, California 91710 and online at: <http://cityofchino.org/government-services/community-development/planning/specific-plans/college-park-specific-plan/college-park-eir> and at Chaffey College; 5897 College Park Avenue Chino, California 91710 and online at: https://www.chaffey.edu/general_info/cp-eir.shtml.

1.3 Format and Content of this EIR Addendum

The following components comprise the EIR Addendum in its totality:

- a. This Introduction (Section 1.0) and the Project Description (Section 2.0).
- b. The completed Environmental Checklist Form and its associated analyses (Section 3.0), which conclude that the Project would not result in any new, significant environmental impacts or substantially increase the severity of environmental impacts beyond the levels disclosed in the College Park SP EIR.
- c. One technical report and other documentation that evaluate the proposed Project, which are attached as EIR Addendum Technical Appendices A through D.

Appendix A: California Emissions Estimator Model (CalEEMod) Output Files

Appendix B: Biological Resources Technical Report

Appendix C: Energy Tables

1.4 Preparation and Processing of this EIR Addendum

Chaffey College directed and supervised the preparation of this EIR Addendum. Although prepared with assistance of the consulting firm, Albert A. Webb Associates, the content contained within and the conclusions drawn by this EIR Addendum reflect the sole independent judgment of Chaffey College.

This EIR Addendum will be forwarded, along with the previously certified College Park SP EIR, to the Chaffey College Governing Board for review as part of their deliberations concerning the proposed Project. A public hearing will be held before the Chaffey College Governing Board to evaluate the merits of the proposed Project and the adequacy of this EIR Addendum. Public comments will be heard at the hearing. At the conclusion of the public hearing(s), the Chaffey College Governing Board will take action to approve or deny approval of the proposed Project. The decision of the Chaffey College Governing Board will be final.

2.0 PROJECT DESCRIPTION

2.1 Project Location and Surrounding Land Uses

The 2.6-acre Project site is located within the Chaffey College – Chino Campus at 5897 College Park Avenue Chino, California 91710. The Project site is located approximately 2.1 miles east of State Route 71 (SR-71) and approximately 2.5 miles south of SR-60. Specifically, the Project is located at the central portion of the Chaffey College – Chino Campus, south of College Park Avenue and west of Eucalyptus Avenue. The Project site is currently vacant, fenced, and undeveloped. Surrounding land uses include College Park Avenue followed by the Chaffey College Chino Community Center to the north; Chino Campus surface parking lots to the south and west; and a small patch of grass area, pedestrian pathways, and a roundabout followed by residential development to the east (see **Figure 1 – Regional Map** and **Figure 2 – Aerial Map**).

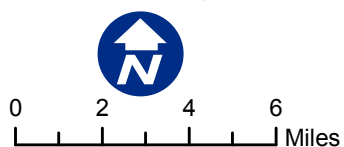
The Project site is located in Section 13 of Township 2 South, Range 8 West, within the Prado Dam 7.5 quadrangle, as mapped by the U.S. Geological Survey (USGS) (see **Figure 3 – USGS Map**).



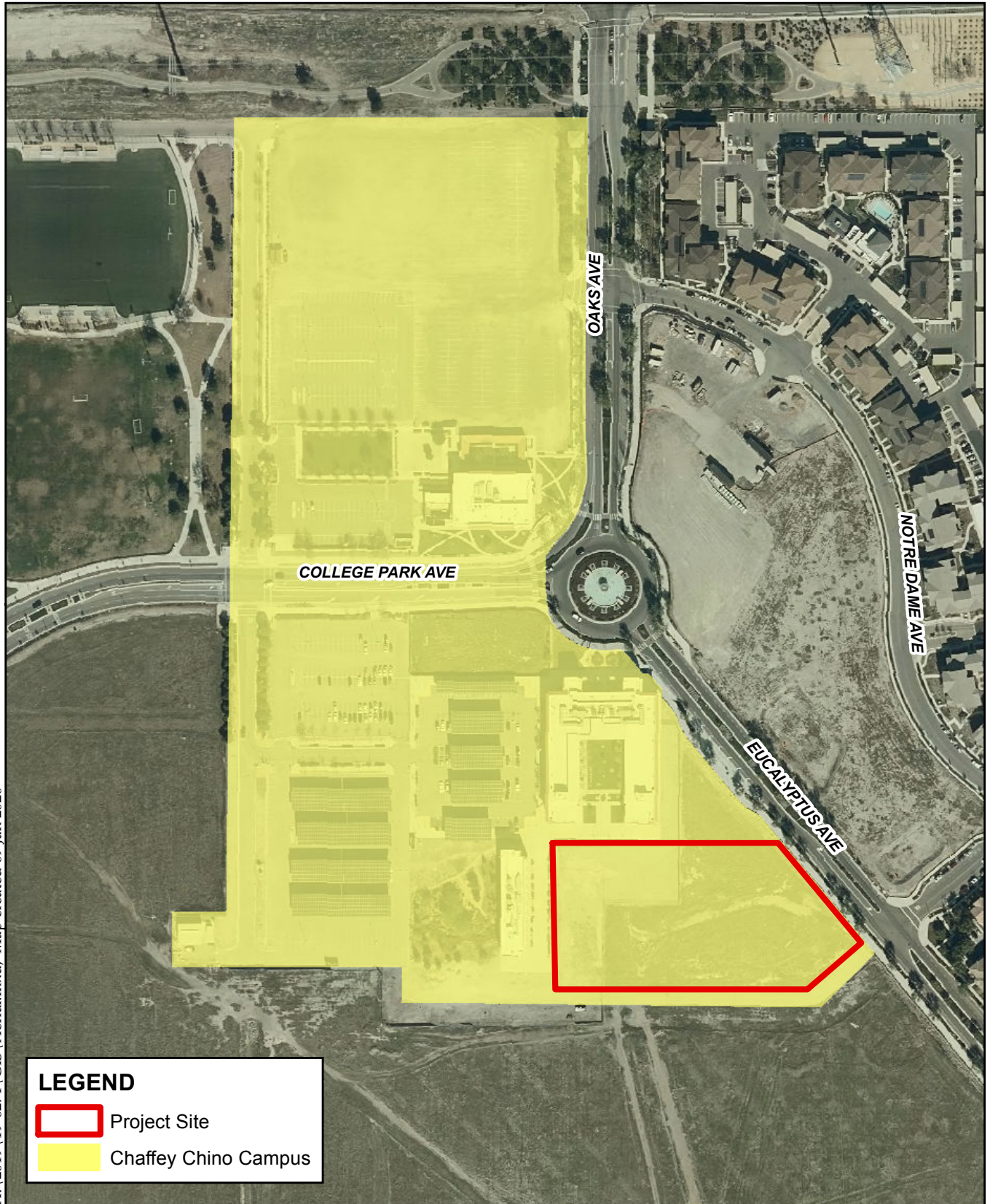
Map created March 29, 2018. H:\2019\19-0271\GIS\Vicinity.mxd

Sources: San Bernardino Co. GIMS, 2020;
Riverside Co. GIS, 2020.

Figure 1 – Regional Map
Chino Instructional Building 1



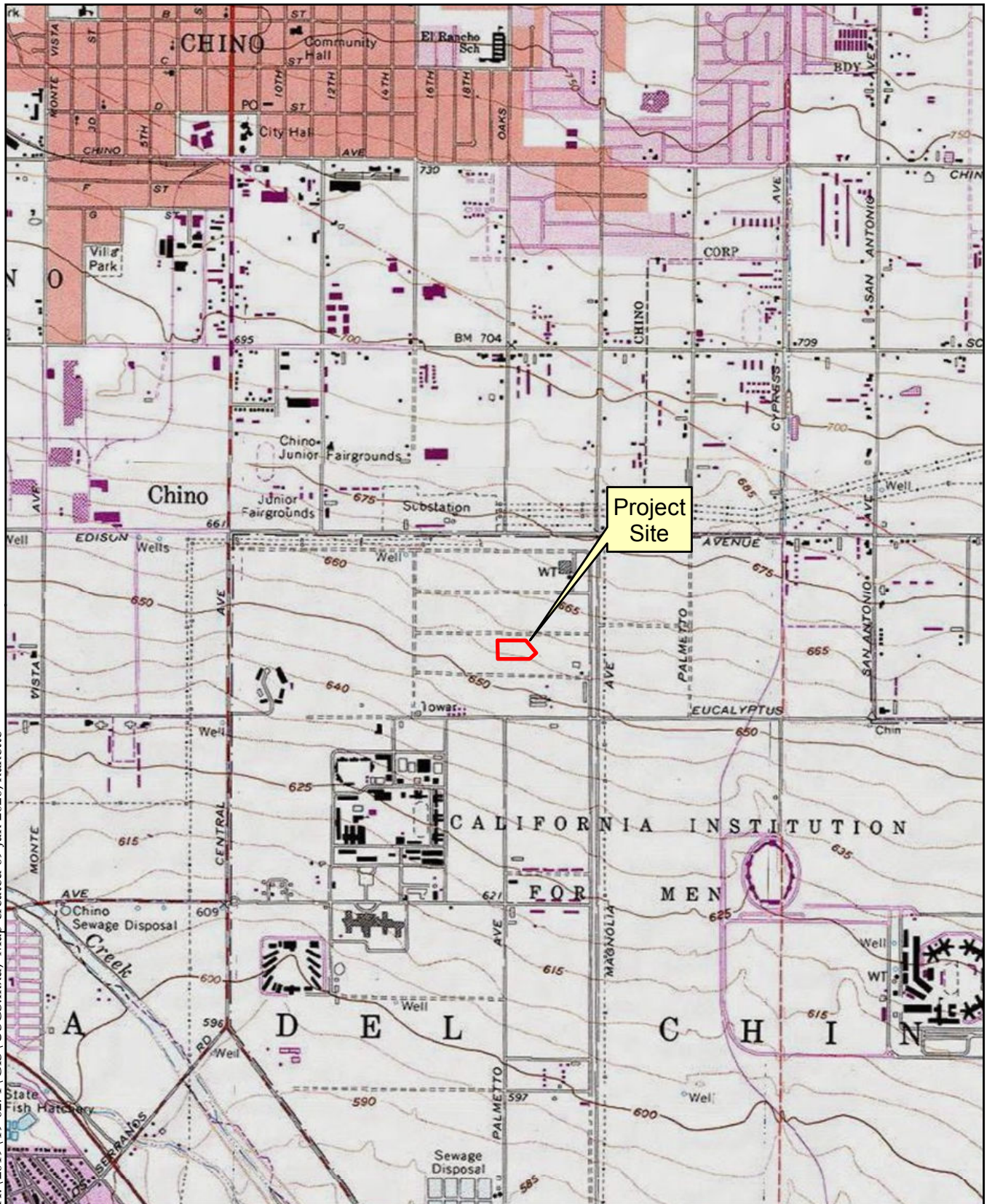
H:\2019\19-0271\GIS\Aerial.mxd; Map created 09 Jan 2020



Sources: San Bernardino Co. GIMS, 2020 (parcels) and 2018 (imagery).

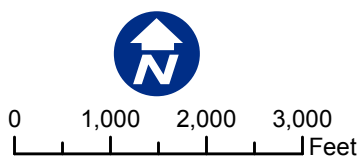
Figure 2 - Aerial Map
Chino Instructional Building 1

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Sources: ESRI / USGS 7.5min Quad
DRGs: PRADO DAM/ONTARIO

Figure 3 - USGS Map
Chino Instructional Building 1



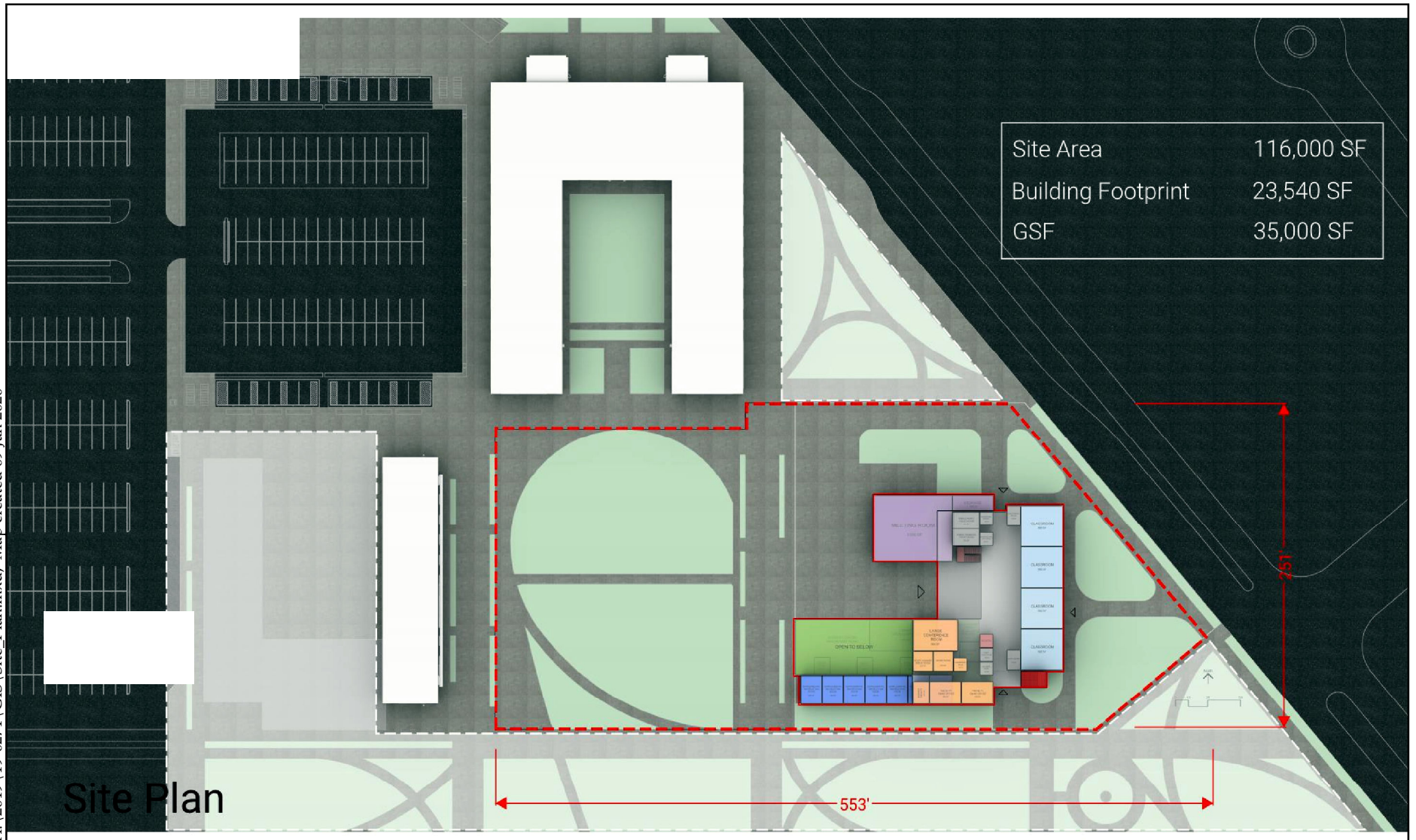
2.2 Project Description

The proposed Project includes an approximate 35,000 GSF building (“Instructional Building 1”) to be used primarily for classroom instruction and faculty offices as well as restrooms, staff break room and a mother’s room. The building will have a footprint of approximately 23,540 square feet and includes two stories. The ground floor will have a library that includes student meeting rooms and a large study area, 3,000 square foot meeting room, and restroom facilities. The second floor will have additional classrooms, conference room, staff lounge/break room and faculty offices. Outdoor amenities include pedestrian walkways and bicycle racks as well as installation of a signage wall, landscape, two bio-retention basins, security lighting, and infrastructure improvements. The bio-retention basins will convey flows to downstream receiving waters.

Parking will be served by the existing surface parking lots immediately northwest of the site. Pedestrian pathways will be constructed along each side of the building, connecting the site to the northwest parking lot and connecting the site to the sidewalk along College Park Avenue and to the east parking lot (see **Figure 4**). The construction and operation of Instructional Building 1 will repurpose existing space in the Main Instructional Building (CHMB). This facility will serve the existing students/staff on campus and the projected growth already contemplated by Chaffey College in its Vision 2025 document.

The purpose of the proposed Project is to provide more multi-discipline classroom space, expanded learning resources, faculty office space near classrooms, as well as outdoor courtyards providing for study space and areas for gathering.

H:\2019\19-0271\GIS\Site_Plan.mxd; Map created 09 Jan 2020



Source: HMC Architects, Jan. 2020



Not to Scale

Figure 4 - Site Plan
Chino Instructional Building 1

3.0 ENVIRONMENTAL CHECKLIST

1. Project Title

Chaffey College – Chino Campus Mixed Use Buildings

2. Lead Agency Name and Address:

Chaffey College
5885 Haven Avenue
Rancho Cucamonga, California 91737

3. Contact Person and Phone Number:

Melanie Siddiqi
Associate Superintendent, Administrative Affairs
(909) 652-6780

4. Project Location:

5897 College Park Avenue
Chino, California 91710
Refer to Section 2.1 of this document for a detailed description of the Project's location.

5. Project Sponsor's Name and Address:

Chaffey College
5885 Haven Avenue
Rancho Cucamonga, California 91737

6. General Plan Designation:

Public School (see **Figure 5 – General Plan Land Use Designation**)

7. Zoning:

I – Institutional (see **Figure 6 – Zoning**)

8. Description of the Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary)

Chaffey College proposes to construct an approximate 35,000 GSF building on approximately 2.6-acres campus site to serve as an instructional facility. On-site improvements associated with the proposed Project include landscape, security lighting, bicycle racks, pedestrian pathways, bio retention basins, and infrastructure improvements. Parking will be served by the existing parking lots on the Chino Campus. Refer to Section 2.2 of this document for a detailed description of the proposed Project.

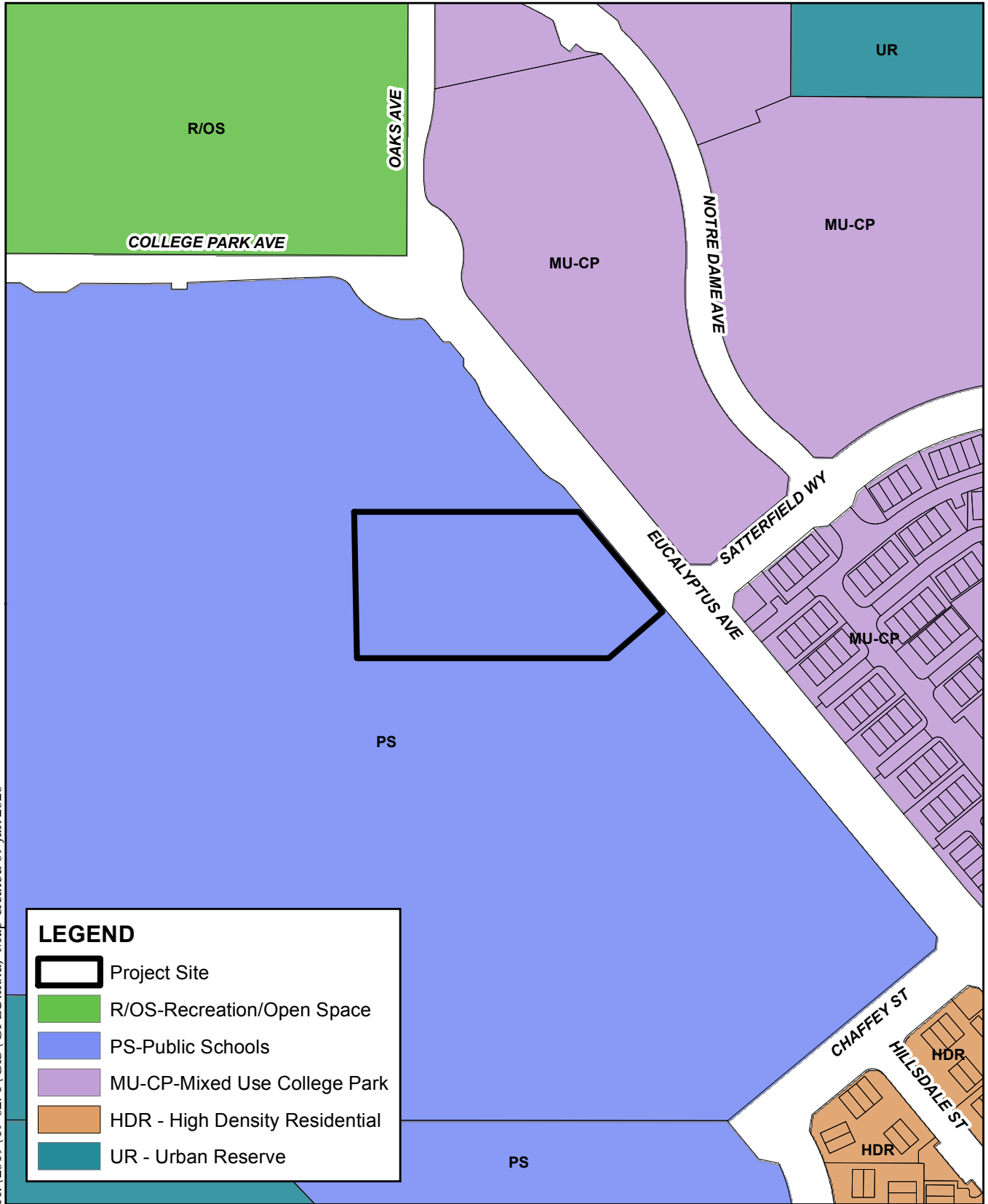
9. Surrounding Land Uses and Setting: (Briefly describe the Project's surroundings)

On the Chaffey College Chino campus, surrounding land uses include College Park Avenue followed by the Chaffey College Chino Community Center to the north; vacant land followed by the Health Science Center to the west; Chino Campus surface parking lots to the northwest; vacant land to the south; and the Main Instructional Building (CHMB) to the north. Beyond the campus, to the north is Edison Avenue followed by Southern California Edison (So. Cal Edison) substation, to the east are multifamily residential, to the south is single family residential, to the west is Ruben S. Ayala Park and California Institute for Men.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement).

- a. Division of the State Architect – Review and approve Project plans.
- b. City of Chino, Planning Division – Review and approve Project plans.

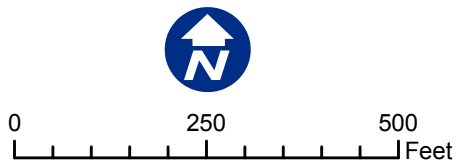
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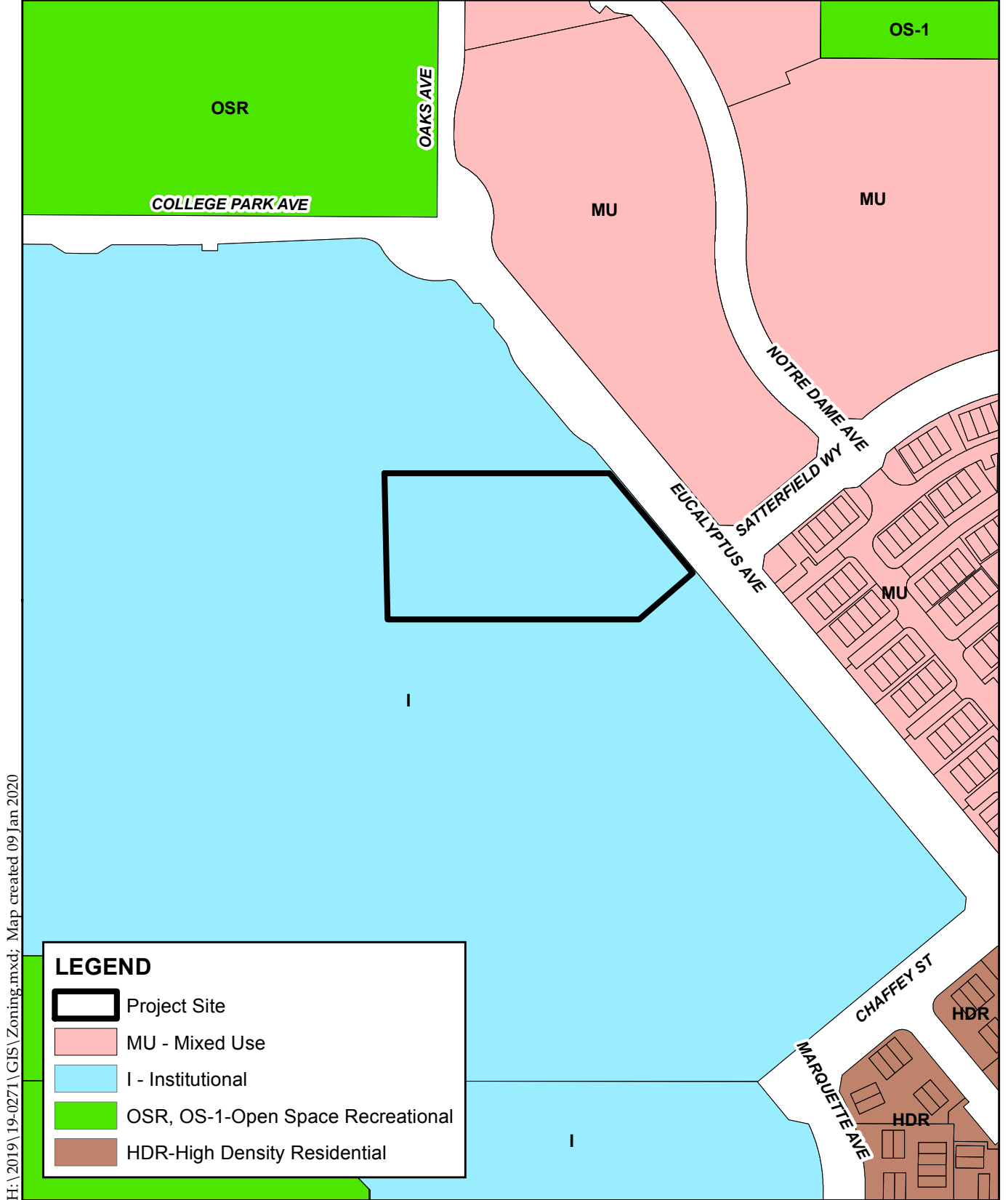


Sources: City of Chino, 2019;
San Bernardino Co. GIMS, 2020.

Figure 5 - General Plan Land Use Designations

Chino Instructional Building 1





Sources: City of Chino, 2019;
San Bernardino Co. GIMS, 2020.

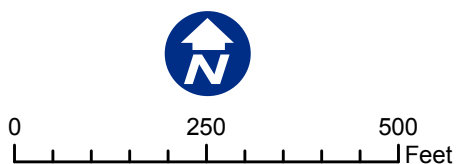


Figure 6 - Zoning
Chino Instructional Building 1

3.1 Environmental Factors Potentially Affected


The environmental factors checked below (X) would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

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

3.2 Environmental Determination

On the basis of this initial evaluation:

Chaffey College finds that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
Chaffey College finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	
Chaffey College finds that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
Chaffey College finds that the proposed Project MAY have a “potential significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
Chaffey College finds that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	X



Signature



Digitally signed by Melanie Siddiqi

Date: 2020.02.10 11:29:28 -08'00'

Date

Melanie Siddiqi

Printed Name

Associate Superintendent, Administrative Services

Title

3.3 Evaluation of Environmental Impacts

Chaffey College prepared the following Environmental Checklist as suggested by Section 15164(d) of the *CEQA Guidelines*. The *CEQA Guidelines* include a suggested checklist to indicate whether the conditions set forth in Section 15162 of the *CEQA Guidelines*, which would require a subsequent or supplemental EIR, are met and whether there would be new significant impacts resulting from the Project not examined in the College Park SP EIR.

There are four possible responses to each of the environmental issues included on the checklist:

- **New Significant Impact.** This response is used to indicate when major revisions of the College Park SP EIR are required because implementation of the Project would result in significant environmental effects that were not previously disclosed in the College Park SP EIR.
- **More Severe Impact.** This response is used to indicate when major revisions of the College Park SP EIR are required due to the fact that implementation of the Project would substantially increase the severity of significant impacts that were previously disclosed in the College Park SP DEIR.
- **Less Severe Impact.** This response is used to indicate when implementation of the Project would result in fewer/less severe environmental impacts than what was previously disclosed in the College Park SP DEIR. By definition, this circumstance would not trigger the requirement to prepare a subsequent or supplemental EIR pursuant to Section 15162 of the *CEQA Guidelines*.
- **No Substantial Change from Previous Analysis.** This response is used to indicate when the College Park SP EIR adequately addressed an environmental effect, and the proposed Project would not create a new impact or substantially increase the severity of the previously identified environmental impact.

The Environmental Checklist and accompanying responses provide the information and analysis necessary to assess relative environmental impacts of the proposed Project in the context of environmental impacts addressed for Chaffey College in the previously certified College Park SP EIR. In doing so, Chaffey College will determine the extent of additional environmental review, if any, for the current Project.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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AESTHETICS – Would the Project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
-

Source: College Park SP DEIR and City of Chino General Plan (GP) EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that development of the Chaffey College campus may disrupt the view of scenic vistas identified in the City of Chino's General Plan (GP) EIR, including views of the San Bernardino and San Gabriel Mountains and Chino Hills. The College Park SP DEIR concluded that implementation of mitigation measure **Aesthetics-1** would reduce impacts in regard to scenic vistas to a less than significant level. (College Park SP DEIR pp. 3.1-4 – 3.1-5, p. 3.1-7)

No Substantial Change from Previous Analysis. Partial views of scenic vistas, including views of the San Bernardino and San Gabriel Mountains and Chino Hills are available from the Project site. Implementation of the proposed Project includes development of an instructional building for multidisciplinary instruction, faculty offices and expanded library services. The proposed pedestrian pathways and existing sidewalk along College Park Avenue (immediately north and east of the Project site) will allow the partial views of scenic vistas to remain visible from and along the frontage of the Project site. The proposed Project will implement the same mitigation identified in College Park SP DEIR (mitigation measure **Aesthetics-1**) to ensure that the proposed Project adheres to the City of Chino's Municipal Code Title 20, Zoning Code. Therefore, the proposed Project will not result in any new or more severe impacts to scenic vistas than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Aesthetics-1** identified in the College Park SP DEIR to mitigate potential impacts continues to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
-

Source: College Park SP DEIR and California Department of Transportation (Caltrans) 2011.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR stated that there are no State-designated scenic highways in the City of Chino. The College Park SP DEIR states the nearest eligible state scenic highways are SR-91 and SR-142, located approximately 11 miles southwest and 3 miles southwest from the Project site, respectively. Thus, the College Park SP DEIR concluded that no impacts to scenic resources within a state scenic highway would occur. (College Park SP DEIR p. 3.1-5)

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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No Substantial Change from Previous Analysis. According to the California Department of Transportation (Caltrans), there are no State-designated scenic highways within proximity of the Project site. No historic buildings or rock outcroppings are on the Project site. Since there are no state scenic highway within proximity of the site, implementation of the proposed Project will not damage scenic resources within a state scenic highway. No impacts will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

c)	Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR stated that implementation of the College Park SP would convert the predominantly vacant, rural landscape character of the area to a small-town character. Thus, the College Park SP DEIR concluded that implementation of mitigation measure **Aesthetics-2** would reduce impacts in regard to substantial degradation of existing visual character of the site and its surroundings to a less than significant level. (College Park SP DEIR pp. 3.1-5 – 3.1-7)

No Substantial Change from Previous Analysis. The Project site is currently vacant, fenced, and undeveloped. On the Chaffey College Chino campus, surrounding land uses include College Park Avenue followed by the Chaffey College Chino Community Center to the north; vacant land followed by the Health Science Center to the west; Chino Campus surface parking lots to the northwest; vacant land to the south; and the Main Instructional Building (CHMB) to the north.

The proposed Project will implement the same mitigation identified in the College Park SP DEIR (mitigation measure **Aesthetics-2**) to ensure that the proposed Project adheres to the City of Chino's Municipal Code Title 20, Zoning Code and other City regulations including compliance with the College Park SP design guidelines so that development of the Project would be compatible in height, massing, and design to other existing campus facilities. Additionally, the proposed Project will be required to submit Project plans to be reviewed and approved by the Division of the State Architect. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Aesthetics-2** identified in the College Park SP DEIR to mitigate potential impacts regarding substantially degrading existing visual character and its surroundings continue to apply to the proposed Project.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that there would be new sources of light and glare from development of the college campus. Thus, the College Park SP DEIR concluded that implementation of mitigation measure **Aesthetics-3** would reduce impacts in regard to light and glare to a less than significant level. (College Park SP DEIR p. 3.1-6, p. 3.1-8)

No Substantial Change from Previous Analysis. The Project site is located in an area with existing outdoor lighting sources from the developed Chaffey College Chino campus facilities to the north, and west of the Project site; parking lot lighting and vehicle headlights and taillights from the campus surface parking lots to the northwest of the Project site; lighting from the Ruben S. Ayala Park west of the Project site; lighting from the existing residential development to the east of the Project site; and lighting from vehicle headlights and taillights traveling along College Park Avenue, Oaks Avenue, and Eucalyptus Avenue, all of which was previously analyzed in the College Park SP DEIR. The proposed Project will include interior lighting and outdoor security lighting throughout the site. The proposed Project will implement the same mitigation identified in the College Park SP DEIR (mitigation measure **Aesthetics-3**) to ensure that the proposed Project submits a lighting plan and specifications to the City of Chino Public Works Department for review to ensure that all light fixtures use glare-control visors, arc tube suppression caps, and a photometric design that maintains 70 percent of the light intensity in the lower half of the light beam, or comparable design or technology, to achieve those criteria. Additionally, the proposed Project will be required to submit Project plans to be reviewed and approved by the Division of the State Architect. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Aesthetics-3** identified in the College Park SP DEIR to mitigate potential impacts regarding light and glare continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

AGRICULTURE & FORESTRY RESOURCES – 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"/>
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Source: College Park SP DEIR and California Department of Conservation (DOC) 2017.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Findings of Fact:

College Park SP DEIR Finding: As shown on Figure 3.2.2-1 – Important Farmland Map of the College Park SP DEIR, the Project site is designated Prime Farmland. The College Park SP DEIR concluded that buildout of the College Park SP DEIR including the Project site would result in significant direct impacts to Farmland and there were no feasible mitigation measures to mitigate the conversion of Farmland. A Statement of Overriding Consideration was prepared and certified with the College Park SP FEIR. (College Park SP DEIR pp. 3.2-6 – 3.2-8)

Less Severe Impact. The proposed Project will be constructed within the existing Chaffey College – Chino Campus. The Project site was designated as Prime Farmland when the College Park SP DEIR was prepared in 2003 (certified in 2004) which resulted in significant and unavoidable impacts to Farmland with development of Chaffey College. The Project site is currently designated as “Urban and Built-Up Land” by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) (DOC 2017). The DOC defines “Urban and Built-Up Land” as occupied structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Since the Project site is not located on any designated Farmland per the FMMP, no conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use would occur. Accordingly, the proposed Project will result in less severe impacts than were previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

- | | | | | | |
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| 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"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR, DOC 2016, and City of Chino Zoning Map.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of the College Park SP would not conflict with an agricultural zoning or Williamson Act contract as none exist within the SP area and no mitigation was required. (College Park SP DEIR pp. 3.2-7 – 3.2-8)

No Substantial Change from Previous Analysis. According to the City of Chino as documented in the College Park SP DEIR Section 3.2.2, there are no Williamson Act contracts on the Project site. The Project site is zoned I – Institutional on the City of Chino’s zoning map (see **Figure 6 – Zoning**). As such, no conflicts with zoning for agriculture use or a Williamson Act contract would occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) | Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Source: College Park SP DEIR and City of Chino Zoning Map.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR did not include a discussion related to forest land, timberland or Timberland Production. However, the Project site was identified for use by Chaffey College in the College Park SP DEIR and thus, was zoned for educational purposes and not for forest land, timberland, or Timberland Production. (College Park SP DEIR Figure 2.4-1)

No Substantial Change from Previous Analysis. The Project site is zoned I – Institutional on the City of Chino’s zoning map (see **Figure 6 – Zoning**). As such, the Project site is not zoned for forest land, timberland, or Timberland Production. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

d)	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR and City of Chino Zoning Map.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR did not include a discussion related to forest land. However, the Project site was identified for use by Chaffey College in the College Park SP DEIR and thus, was zoned for educational purposes and not for forest land. (College Park SP DEIR Figure 2.4-1)

No Substantial Change from Previous Analysis. The Project site is zoned I – Institutional on the City of Chino’s zoning map (see **Figure 6 – Zoning**). As such, the Project site is not zoned for forest land. Implementation of the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR, DOC 2017, and City of Chino Zoning Map.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Findings of Fact:

College Park SP DEIR Finding: As shown on Figure 3.2.2-1 – Important Farmland Map of the College Park SP DEIR, the Project site is designated Prime Farmland. The College Park SP DEIR concluded that buildout of the College Park SP DEIR including the Project site would result in significant direct impacts to Farmland and there were no feasible mitigation measures to mitigate the conversion of Farmland. A Statement of Overriding Consideration was prepared and certified with the College Park SP FEIR. (College Park SP DEIR pp. 3.2-6 – 3.2-8)

The College Park SP DEIR did not include a discussion related to forest land. However, the Project site was identified for use by Chaffey College in the College Park SP DEIR and thus, was zoned for educational purposes and not for forest land.

Less Severe Impact. The proposed Project will be constructed within the existing Chaffey College – Chino Campus. The Project site was designated as Prime Farmland when the College Park SP DEIR was prepared in 2003 (certified in 2004) which resulted in significant and unavoidable impacts to Farmland with development of Chaffey College. The Project site is currently designated as “Urban and Built-Up Land” by the DOC FMMP (DOC 2016). Since the Project site is not located on any designated Farmland per the FMMP, no conversion of Farmland to non-agricultural use would occur. Accordingly, the proposed Project will result in less severe impacts than were previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

AIR QUALITY – 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"/>
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Source: College Park SP DEIR and South Coast Air Quality Management District (SCAQMD) 2016.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR did not include a discussion related to conflicting with an air quality plan. However, the DEIR disclosed that the air quality management plan (AQMP) contains measures to meet state and federal requirements and that the 1999 AQMP was the adopted plan in place at the time the College Park SP DEIR was prepared.

The Initial Study prepared for the College Park SP DEIR determined that the College Park SP would not have significant impact to land use and planning; therefore, these issues were not addressed in the College Park SP DEIR (College Park SP DEIR, p. ES-6). Because the College Park SP would not have significant impacts to land use, it is assumed that the College Park SP area was anticipated by regional growth projections that were used by the 1999 AQMP to forecast regional air pollutant levels; therefore, the College Park SP would neither result in air quality violations that were unanticipated by the 1999 AQMP nor exceed the AQMP’s long-term growth assumptions. Thus, the College Park SP would not conflict with the 1999 AQMP.

No Substantial Change from Previous Analysis. The Project site is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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(SCAQMD). The SCAQMD has adopted a series of AQMPs to reduce air emissions in the Basin. When the College Park SP DEIR was certified, the SCAQMD's 1999 AQMP was the applicable air quality plan for the Basin. Since that time, the SCAQMD has adopted several updates to the AQMP, including the 2016 AQMP which was approved in March 2017 and is in effect at this time. For purposes of evaluation and to determine whether the proposed Project would result in any new or more severe air quality impacts than disclosed in the College Park SP DEIR, consistency with the 2016 AQMP, which is applicable today, is discussed below.

The Project would not result in air pollutant emissions that were not anticipated by the 2016 AQMP and would not exceed the AQMP's long-term growth assumptions because the Project would implement the College Park SP land plan on the Project site.

The Project would be consistent with the 2016 AQMP, which relies on adopted local plans for growth projections. The Project is consistent with the College Park SP, which was approved by the City of Chino in 2004. As described in the responses to Thresholds b), c), and d) below, the Project would not increase the severity of existing air quality violations, cause or contribute to new violations, or delay the timely attainment of the air quality standards established in the 2016 AQMP. The land uses proposed by the Project are consistent with the land plans of the City of Chino GP and the College Park SP; these land use plans were accounted for in the regional growth projections that were used to prepare the 2016 AQMP.

Based on the foregoing analysis, the Project would not conflict with or obstruct implementation of the AQMP to a greater degree than the approved College Park SP DEIR and would not result in new or substantially increased impacts that were not previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR, SCAQMD 1993, SCAQMD 2003, and Appendix A – CalEEMod Output Files.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR determined that implementation of the College Park SP would not result in cumulatively considerable air quality impact because the increase in traffic would not be sufficient enough to cause CO standards to be exceeded and the traffic report identified mitigation that improves traffic impacts to acceptable levels. (College Park SP DEIR, p. 3.3-18)

The College Park SP DEIR stated that air quality impacts may occur during construction activities including demolition, grading, excavation, and dirt hauling, and gaseous emissions from the use of heavy equipment, delivery and dirt-hauling trucks, employee vehicles, and paints and coatings of the College Park SP. Construction air quality impacts were assessed in accordance with the procedures

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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contained in the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The College Park SP DEIR concluded that construction activities would exceed the SCAQMD threshold for particulate matter less than 10 microns in size (PM-10) and nitrogen oxides (NO_x) even with implementation of mitigation measures **Air-1 through Air-6**.

The College Park SP DEIR analyzed operational impacts for full buildout of the College Park SP consisting of 15,000 students at buildout of the college in 2025, up to 2,500 dwelling units, up to 120,000 square feet of retail space, an elementary school, and 157.5 acres of parks. The College Park SP DEIR concluded that operational activities of the College Park SP would exceed the SCAQMD threshold for carbon monoxide (CO), reactive organic compounds (ROCs), NO_x, and PM-10. The College Park SP DEIR concluded there are no feasible mitigation measures that would mitigate significant operational air quality impacts to less than significant levels.

Consequently, the College Park SP DEIR concluded that the air quality impacts during construction and operation were significant and unavoidable. A Statement of Overriding Consideration was prepared and certified with the College Park SP FEIR. (College Park SP DEIR, p. 3.3-21).

No Substantial Change from Previous Analysis. The SCAQMD considers any project-specific emissions of criteria pollutants that exceed applicable SCAQMD significance thresholds to also be cumulatively considerable (SCAQMD 2003). Conversely, if a project does not exceed the SCAQMD regional thresholds, then SCAQMD considers that project's air pollutant emissions to be less than cumulatively considerable. Based on SCAQMD's regulatory jurisdiction over regional air quality, it is reasonable to rely on its thresholds to determine whether there is a cumulative air quality impact.

The proposed Project is located on approximately 2.6 acres and is only one component of the approximately 710-acre College Park SP area that was analyzed in the College Park SP DEIR. As such, the Project would not generate air pollution emissions that were not already anticipated in the College Park SP DEIR.

Nonetheless, analysis of the Project construction and operation has been conducted to estimate the Project's associated air pollutant emissions. Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occurring during construction consist of fugitive dust and other particulate matter as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts will occur once the Project is in operation. Operational emissions would occur from the operation of the proposed building and traffic from the employees and existing students on campus.

Short-term emissions were evaluated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 computer program (Appendix A – CalEEMod Output Files). Short term emissions consist of fugitive dust and other particulate matter, as well as exhaust emission generated by construction-related vehicles.

The estimated construction period for the proposed Project is approximately two years, consisting of a six-week grading phase, two-year building construction phase, and four-week paving and architectural coating (painting) phase overlapping with the last month of building construction. The Project does not require a new parking lot paving phase because there is an existing parking area adjacent to the site that will serve the Project; however, a limited amount of paving is assumed to be required during the installation of underground utilities.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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The equipment to be used is based on CalEEMod defaults, as well as information from Chaffey College. The construction emissions reflect the Project's mandatory compliance with SCAQMD Rule 403 for fugitive dust control, which utilized the mitigation option of watering the Project site three times daily and achieves a control efficiency of 61 percent for PM-10 and particulate matter less than 2.5 microns in size (PM-2.5) emissions. This is also consistent with the College Park SP DEIR mitigation measures **Air-1 through Air-6** for fugitive dust control.

Maximum daily emissions from Project construction are summarized in **Table 1 – Estimated Maximum Daily Construction Emissions** and compared to the SCAQMD's daily regional thresholds.

Table 1 – Estimated Maximum Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day) ²					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	75	100	550	150	150	55
Grading-2021	3.09	34.21	20.77	0.05	4.09	2.69
Building Construction-2021	4.03	33.89	28.76	0.06	2.24	1.71
Building Construction-2022	3.65	30.03	28.00	0.06	2.02	1.49
Building Construction-2023	3.40	27.71	27.55	0.06	1.86	1.34
Paving-2023	1.07	8.79	12.24	0.02	0.62	0.45
Architectural Coating-2023	16.82	1.76	2.76	0.00	0.21	0.12
Maximum ¹	21.29	38.26	42.55	0.08	4.09	2.69
Exceeds Thresholds?	No	No	No	No	No	No
Source: Appendix A Note: lb/day – pound per day; VOC – volatile organic compound; NO _x – oxides of nitrogen; CO – carbon monoxide; SO ₂ – sulfur dioxide; PM-10 – particulate matter less than 10 microns in size; PM-2.5 – particulate matter less than 2.5 microns in size; SCAQMD – South Coast Air Quality Management District ¹ Maximum emissions are shown in bold and are the greater of either grading alone, building construction-2021, building construction-2022, or the sum of building construction-2023 and paving and architectural coating phases since these activities overlap. ² The numbers shown are the maximum summer or winter daily emissions (i.e., worst-case) results from CalEEMod and incorporates fugitive dust reductions achieved through standard regulatory requirements (SCAQMD Rule 403).						

As shown in **Table 1**, the maximum daily criteria pollutant emissions from construction of the proposed Project will be below the SCAQMD daily regional thresholds for all criteria pollutants.

Long-term emissions result once a project is operational and were evaluated in CalEEMod. Three types of sources are estimated in CalEEMod: area, energy, and mobile. Area source emissions include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, consumer use of solvents and personal care products, and an average building square footage to be repainted each year. Mobile source emissions refer to on-road motor vehicle emissions generated from the Project's traffic and are based on program defaults.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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The long-term emissions from both summer and winter are shown in **Table 2 – Estimated Daily Project Operation Emissions (summer)** and **Table 3 – Estimated Daily Project Operation Emissions (winter)**.

Table 2 – Estimated Daily Project Operation Emissions (summer)

Source	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Area	0.82	0.00	0.00	0.00	0.00	0.00
Energy	0.01	0.13	0.11	0.00	0.01	0.01
Mobile	1.76	9.72	19.99	0.08	6.24	1.70
Total¹	2.59	9.85	20.10	0.08	6.25	1.71
Exceed Thresholds?	No	No	No	No	No	No
Source: Appendix A Note: lb/day – pound per day; NO _x – oxides of nitrogen; CO – carbon monoxide; PM-10 – particulate matter less than 10 microns in size; PM-2.5 – particulate matter less than 2.5 microns in size. Emissions reported as zero are rounded and not necessarily equal to zero. ¹ The total numbers may not add up with the combined area, energy, and mobile peak daily emissions due to rounding of numbers.						

Table 3 – Estimated Daily Project Operation Emissions (winter)

Source	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Area	0.82	0.00	0.00	0.00	0.00	0.00
Energy	0.01	0.13	0.11	0.00	0.01	0.01
Mobile	1.52	9.71	17.55	0.08	6.24	1.70
Total¹	2.35	9.84	17.66	0.08	6.25	1.71
Exceeds Threshold?	No	No	No	No	No	No
Source: Appendix A Note: lb/day – pound per day; NO _x – oxides of nitrogen; CO – carbon monoxide; PM-10 – particulate matter less than 10 microns in size; PM-2.5 – particulate matter less than 2.5 microns in size. Emissions reported as zero are rounded and not necessarily equal to zero. ¹ The total numbers may not add up with the combined area, energy, and mobile peak daily emissions due to rounding of numbers.						

As shown in **Table 2** and **Table 3**, all concentrations of pollutants would be below the SCAQMD's thresholds for operational emissions for the Project.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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In addition to the daily regional thresholds, the SCAQMD has developed localized significance threshold (LST) methodology¹ that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located in SRA 33.

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO_x, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. The Project site is approximately 2.6 acres. Based on the SCAQMD guidance, the construction equipment would disturb two acres per day.² Therefore, the one-acre LST was used.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest sensitive receptors to the Project construction site are surrounding educational facilities adjacent to and across from the Project site. According to the LST methodology, projects with boundaries closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors located at 25 meters (82 feet). Therefore, the nearest receptor distance of 25 meters (82 feet) was used for the construction analysis. **Table 4 – Construction Localized Significance Threshold Impacts** identifies the worst-case on-site construction emissions for the proposed Project.

¹ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008. (Available at <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>, accessed April 2018.)

² <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

New
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from
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Table 4 – Construction Localized Significance Threshold Impacts

Pollutant	Peak Daily Emissions (lb/day) ²			
	NO _x	CO	PM-10	PM-2.5
LST Threshold for 2 acre at 25 meters	170	1,232	6	5
Grading-2021	33.32	19.88	3.82	2.62
Building Construction-2021	32.96	26.59	1.64	1.54
Building Construction-2022	29.16	26.01	1.41	1.33
Building Construction-2023	27.02	25.72	1.26	1.18
Paving-2023	8.61	11.68	0.43	0.40
Architectural-Coating	1.74	2.41	0.09	0.09
Maximum¹	37.37	39.82	3.82	2.62
Exceeds Threshold?	No	No	No	No
Note: lb/day – pound per day; NO _x – oxides of nitrogen; CO – carbon monoxide; PM-10 – particulate matter less than 10 microns in size; PM-2.5 – particulate matter less than 2.5 microns in size; LST – localized significance threshold ¹ Maximum emissions are shown in bold and are the greater of either grading, building construction-2021, or building construction-2022 alone, or the sum of building construction-2023, paving and architectural coating phases since these activities overlap.				

As shown in **Table 4**, all concentrations of pollutants would be below the SCAQMD's construction LST.

SCAQMD has also developed long-term operational LST. According to the LST methodology, LSTs only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site. The proposed Project does not include such uses. Therefore, no long-term LST analysis is required and localized impacts are considered to be less than significant.

Based on the analysis presented above, the short-term construction and long-term operation of the Project will not exceed applicable regional or localized thresholds established by SCAQMD therefore will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Accordingly, the proposed Project will not result in new air quality impacts that were not disclosed in the College Park SP DEIR or increase the severity of air quality impacts than were previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Air-1 through Air-6** identified in the College Park SP DEIR to mitigate potential impacts related to air quality impacts during construction activities continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

c) Expose sensitive receptors to substantial pollutant concentrations? ☐ ☐ ☐ ☒

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Source: College Park SP DEIR, SCAQMD 2003 and Appendix A – CalEEMod Output Files.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR determined that implementation of the College Park SP would not result in cumulatively considerable air quality impact because the increase in traffic would not be sufficient enough to cause CO standards to be exceeded and the traffic report identified mitigation that improves traffic impacts to acceptable levels. The College Park SP DEIR also determined that operation of the College Park SP would not result in localized pollutant concentrations that exceed the 8-hour CO standard. Thus, the air quality impacts related to localized pollutant concentrations would be less than significant and no mitigation was required. (College Park SP DEIR, p. 3.3-17 – 3.3-18)

No Substantial Change from Previous Analysis. The proposed Project is located in a developed area with school uses planned in the College Park SP. Nonetheless, as detailed in response to Threshold b) above, short-term and long-term emissions generated by the Project during construction and operation of the Project have been found to be less than significant on both a regional and localized level. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations. Accordingly, the Project would not result in new air quality impacts that were not disclosed in the College Park SP DEIR or increase the severity of air quality impacts that were previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Air-1 through Air-6** identified in the College Park SP DEIR to mitigate potential impacts related to air quality impacts during construction activities continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR, SCAQMD 1976, and Appendix A – CalEEMod Output Files.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR determined that the College Park SP would not result in other emissions, such as those leading to odors, adversely affecting a substantial number of people because there are no known sources of significant odors released during construction and any operational odors would not be significant on a regional or local scale and no mitigation was required. (College Park SP DEIR, p. 3.3-14, p. 3.3-21)

No Substantial Change from Previous Analysis. The Project could produce odors during construction activities resulting from construction equipment exhaust, and/or the application of architectural coatings; however, standard construction practices would minimize the odor emissions and their associated impacts. Furthermore, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. In addition, construction activities on the Project site would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance (SCAQMD, 1976). Accordingly, the proposed Project would not

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

During long-term operation, the proposed instructional buildings will include services such as classrooms, library, faculty offices and lounge, which are not typically associated with objectionable odors. Furthermore, the proposed Project would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance, during long-term operation (SCAQMD, 1976). As such, long-term operation of the proposed Project would not create objectionable odors affecting a substantial number of people.

In conclusion, the Project would not create objectionable odors affecting a substantial number of people during either the construction or long-term operation of the Project site. Therefore, implementation of the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

No Substantial Change from Previous Analysis.

BIOLOGICAL RESOURCES – Would the Project:

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| 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR and Appendix B – Biological Resources Technical Report.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR stated that no listed plant species, sensitive plant species, or locally important plant species were observed during the biological survey efforts conducted in 2001 and 2002 for the College Park SP and concluded these plant species were not expected to occur due to a lack of suitable habitat and no mitigation was required. (College Park SP DEIR, p. 3.4-36, p. 3.4-39)

The College Park SP DEIR notes that the College Park SP area contains suitable wintering habitat for the proposed federally threatened mountain plover; however, the DEIR concluded that there were no known records of this species in the vicinity of the College Park SP area and the species has not been seen during wildlife surveys within the College Park SP area. Accordingly, the College Park SP DEIR concluded that no listed wildlife species were expected to occur within the College Park SP area and no mitigation was required. (College Park SP DEIR, p. 3.4-37, p. 3.4-39)

The College Park SP DEIR noted that based on the 2001 and 2002 biological survey efforts, up to six burrowing owl burrow sites could potentially be impacted as a result of implementation of the College Park SP and concluded that 6.5 acres of habitat would be set aside for each impacted

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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burrow. Additionally, golden eagles, Cooper's hawk, sharp-shinned hawk, and California horned larks may potentially be impacted with implementation of the College Park SP and result in the loss of nesting habitat. The College Park SP DEIR concluded that implementation of mitigation measures **Burrowing Owl-1 through Burrowing Owl-6** and mitigation measures **Sensitive Species-1 through Sensitive Species-8** would reduce impacts to sensitive wildlife species mentioned above to a less than significant level. (College Park SP DEIR pp. 3.4-37 –3.4-46)

No Substantial Change from Previous Analysis. A Biological Resource Technical Report was prepared by Cadre Environmental (Cadre) dated January 2020 (Appendix B). A reconnaissance survey was conducted by Cadre on January 7, 2020. The Project site is characterized as disturbed/non-native grassland; thus, no sensitive or undisturbed native habitats were documented within the Project site by Cadre. No sensitive plant species or sensitive wildlife species including those listed as federal or state threatened/endangered/rare were observed by Cadre during the reconnaissance survey efforts on the Project site (refer to Table 2 – Sensitive Plant Species Assessment and Table 3 – Sensitive Wildlife Species Assessment in Appendix B for further details). Specifically, sensitive wildlife species noted in the College Park SP DEIR having the potential to occur included golden eagles, sharp-shinned hawk, and California horned larks. Cadre determined that these species were not expected to occur on the Project site based on a lack of suitable habitat.

There were suitable burrowing owl burrows documented within the Project site, within the central region of the non-native grassland area during Cadre's reconnaissance survey effort. The burrows were occupied by ground squirrels; there were no characteristic burrowing owl signs at the burrows, such as white wash, feathers, tracks or pellets. Burrowing owl do not currently occupy the Project site; however, there is suitable foraging habitat on the Project site which provides the possibly of owl colonization prior to construction. Therefore, with the implementation of mitigation measure **Burrowing Owl-6**, which calls for a preconstruction survey for burrowing owls at least 30 days prior to the initiation of construction, will ensure potential impacts to burrowing owls are reduced to a level below significance. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

The non-native grassland within and immediately adjacent to the Project site are expected to potentially provide nesting habitat for common migratory birds protected under the federal Migratory Bird Treaty Act (MBTA); thus, standard required compliance with the MBTA (covered under mitigation measure **Sensitive Species-4** in the College Park SP DEIR) will ensure potential impacts to migratory birds are reduced to a level below significance. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Sensitive Species-1** through **Sensitive Species-6** and **Burrowing Owl-6** identified in the College Park SP DEIR to mitigate potential impacts related to migratory birds and identified in the College Park SP DEIR to mitigate potential impacts related to burrowing owls during construction activities continues to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Source: College Park SP DEIR and Appendix B – Biological Resources Technical Report.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded no riparian vegetation exists within the College Park SP area thus, no significant impacts would be expected, and no mitigation was required. (College Park SP DEIR p. 3.4-38, p. 3.4-46)

No Substantial Change from Previous Analysis. Based on the January 7, 2020 reconnaissance survey by Cadre, no riparian, sensitive, or undisturbed native habitat were documented within or adjacent to the Project site. The Project site is characterized as disturbed/non-native grassland and is surrounded by Chaffey College Chino Community Center to the north; Chino Campus surface parking lots to the north; and a small patch of grass area, pedestrian pathways, and a roundabout followed by residential development to the east. No impacts will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR and Appendix B – Biological Resources Technical Report.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded no federally protected wetlands exist within the College Park SP area; thus, no significant impacts would be expected. The Cypress Channel within the College Park SP area is subject to Section 1600 of the Fish and Game Code and Section 404 of the Clean Water Act; however, the Project site is located approximately 4,005 feet west of the Cypress Channel and therefore would avoid impacts to the Cypress Channel. No mitigation measures related to wetlands as outlined in the College Park SP DEIR are applicable to the Project. (College Park SP DEIR p. 3.4-36, p. 3.4-38, p. 3.4-47)

No Substantial Change from Previous Analysis. Based on the January 7, 2020 reconnaissance survey by Cadre, no wetlands or jurisdictional resources regulated by the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), or Regional Water Quality Control Board (RWQCB) were documented within or immediately adjacent to the Project Site. The Project site is characterized as disturbed/non-native grassland and is surrounded by Chaffey College Chino Community Center to the north; Chino Campus surface parking lots to the northwest and a small patch of grass area, pedestrian pathways, and a roundabout followed by residential

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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development to the east. No impacts will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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| d) | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR and Appendix B – Biological Resources Technical Report.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the Cypress Channel is utilized as a north-south wildlife movement corridor by the wildlife species in the College Park SP area and the proposed roadway crossings of Cypress Channel could potentially impact wildlife movement through Cypress Channel. The Project site is located approximately 4,005 feet west of the Cypress Channel and therefore would avoid impacts to the Cypress Channel. No mitigation measures related to protection of wildlife corridors, as outlined in the College Park SP DEIR, are applicable to the Project site given the Project site's distance to Cypress Channel. (College Park SP DEIR p. 3.4-38, pp. 3.4-40 –3.4-47)

No Substantial Change from Previous Analysis. The Project site is located in a mostly developed area surrounded by Chaffey College Chino Community Center to the north; Chino Campus surface parking lots to the northwest; and a small patch of grass area, pedestrian pathways, and a roundabout followed by residential development to the east. In addition, the Project site is fenced on all sides and as noted in the College Park SP, the Project is approximately 4,005 feet west of the closest wildlife movement corridor. Therefore, the site does not function as a wildlife corridor or habitat linkage. No impacts will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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| 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR and Appendix B – Biological Resources Technical Report.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the College Park SP shall be in compliance with the City's GP Policy P5-3.4: Preserve mature native trees and shrubs in the City and the City's General Plan Action A5-3.4.1: Tree preservation ordinance: The City shall pursue the

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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preparation of a tree preservation ordinance that will identify mature and significant trees and offer measures to protect them from eradication. The College Park SP DEIR concluded that the College Park SP would be in compliance with all City of Chino environmental ordinances and no mitigation was required. (College Park SP DEIR p. 3.4-6)

No Substantial Change from Previous Analysis. As shown on Figure 7 – Vegetation Communities Map in the Biological Resources Technical Report (Appendix B), there are no trees located onsite. Impacts are considered to be less than significant. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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| f) Conflict with the provisions or an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or 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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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR stated that the College Park SP area is not subject to a habitat conservation plan or natural community conservation plan thus, no significant impacts would be expected and no mitigation was required. (College Park SP DEIR p. 3.5-39)

No Substantial Change from Previous Analysis. The Project site is not subject to a habitat conservation plan or natural community conservation plan. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

CULTURAL RESOURCES – Would the Project:

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| a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR stated that there are no recorded historic sites or sites determined to be eligible for listing as a historic resource based on the archives and records search prepared for the College Park SP. However, the College Park SP DEIR outlined mitigation measures to reduce potential impacts to the Cypress Channel. The Project site is located approximately 4,005 feet west of the Cypress Channel and will not impact the Cypress Channel with

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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implementation of the proposed Project given the distance between the site and the channel.
(College Park SP DEIR p. 3.5-8, pp. 3.5-13 – 3.5-14, and Figure 2.4-1)

No Substantial Change from Previous Analysis. The Project site is undeveloped and contains no developed features (i.e., structures). There were no historic resources identified in the City of Chino GP Cultural and Paleontological Resources EIR sections. No impacts will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR stated that the College Park SP area does not contain sites recorded as Native American cultural resources in the Native American Heritage Commission sacred lands file and concluded that implementation of the College Park SP would not impact Native American sacred site. (College Park SP DEIR p. 3.5-8)

As a result of directed surveys, the College Park SP DEIR stated that approximately 50 percent of the College Park SP site was determined to be free of archeological resources. However, visibility was obscured by vegetation or hardscape in the remaining 50 percent of the site. Ground-disturbing activities within those portions of the College Park SP site where visibility was obscured have the potential to result in adverse change to currently unknown archeological resources. The implementation of mitigation measure **Cultural-2** will reduce impacts to less than significant. (College Park SP DEIR p. 3.5-8, pp. 3.5-11 – 3.5-13)

No Substantial Change from Previous Analysis. The Project site is currently vacant and undeveloped. Construction of the proposed Project would involve excavation of approximately 5 to 10 feet in depth. The proposed Project will implement the same mitigation identified in the College Park SP DEIR (mitigation measure **Cultural-2**) to ensure potential impacts to archaeological resources remain at a level below significant. Although not noted in the College Park SP DEIR, Chaffey College will comply with the City of Chino's GP Policy P3 which states that if unknown archaeological resources are discovered during construction, the Planning Division should be notified immediately and construction should stop until an archaeologist evaluates the discovered resources and recommends appropriate action. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Cultural-2** identified in the College Park SP DEIR to mitigate potential impacts related to archaeological resources continues to apply to the proposed Project.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of the College Park SP would not be expected to impact human remains due to the low probability of the College Park SP area containing either formal or informal cemeteries. Additionally, the archive and records search conducted for the College Park SP DEIR yielded no known records of prehistoric or historic cemeteries within the College Park SP area. No mitigation was required. (College Park SP DEIR p. 3.5-6, p. 3.5-8)

No Substantial Change from Previous Analysis. The Project site does not contain a known cemetery. While not anticipated, in the unlikely event that unknown human remains are uncovered during Project construction, pursuant to law, the proper authorities will be notified and standard procedures for the respectful handling of human remains will be adhered to in compliance with California Code of Regulations Section 15064.5(e), Public Resources Code Section 5097.98, and Section 7050.5 of the State Health and Safety Code. Mandatory compliance with these regulations would ensure that potential impacts to human remains are less than significant. As such, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

Energy – Would the Project:				
a) Result in potentially significant environmental impact due to wasteful, insufficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: CARB 2012, CBSC 2019, CEC 2019, COG 2007, College Park SP DEIR and City of Chino GP EIR, LCC 2002 and Appendix C.

Finding of Fact:

College Park SP DEIR Finding: The College Park SP DEIR did not include a discussion related to energy consumption of a project. However, the DEIR disclosed that while energy conservation cannot be addressed on a project-by-project level, initiatives can be taken to consider conservation in general, including meeting State of California guidelines for insulation, provide energy, water and fuel efficient appliances as well as considerations for active solar powered resources. (College Park SP p. 3.14-3)

No Substantial Change from Previous Analysis. Although this topic was not specifically addressed in the College Park SP DEIR, energy efficiency does not represent new information of substantial importance which was not known and could not have been known at the time that the College Park

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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SP DEIR was certified. Information on the effect of energy efficiency on climate was known long before the City of Chino certified the College Park SP DEIR. The City of Chino GP does address energy consumption in Section 9 - Open Space and Conservation Element which includes Goal OSC-4 "Minimize the consumption of energy and non-renewable sources, and promote environmental sustainability." (Chino GP, p. OSC-18).

Energy consumption from the proposed Project would occur during both construction and subsequent operation. Energy consumed during Project construction and operation has been estimated and is included in Appendix C. Fuel consumption from on-site heavy-duty construction equipment and construction vehicles would be temporary in nature and uses a limited number of equipment, which would represent a negligible demand on energy resources. Furthermore, there are no unusual Project site characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state.

Energy consumed during Project operations is primarily from electricity and natural gas usage in the buildings and transportation fuel consumption from student and faculty travel. The Project will promote building energy efficiency through compliance with energy efficiency standards such as Title 24 and CALGreen (CEC 2019 and CBSC 2019). The Project also reduces vehicle fuel usage due to compliance with regulatory programs that reduce VMT. AB 1493 ("the Pavley Standard") requires reduction in greenhouse gas (GHG) emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 and after (COG 2007). Executive Order S-01-07 went into effect in 2010 and requires a reduction in the carbon intensity of transportation fuels used in California by at least 10 percent by 2020 (LCC 2002). The Executive Order imposes fuel requirements on fuel that will be sold in California that will decrease GHG emissions by reducing the full fuel-cycle and the carbon intensity of the transportation fuel pool in California. The Advanced Clean Cars program, introduced in 2012, combines the control of smog, soot causing pollutants and greenhouse gas emissions into a single coordinated package of requirements for model years 2017 through 2025 (CARB 2012). In addition, the Project is consistent with the College Park SP. For these reasons, the Project would not result in a potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy during Project construction or operation.

Mitigation: None.

Monitoring: None required.

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| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR and City of Chino GP EIR.

Finding of Fact:

College Park SP DEIR Finding: The College Park SP DEIR did not include a discussion related to conflicting with a state or local plan for renewable energy. However, the DEIR disclosed that while energy conservation cannot be addressed on a project-by-project level, initiatives can be taken to consider conservation in general, including meeting State of California guidelines for insulation, provide energy, water and fuel efficient appliances as well as considerations for active solar powered resources. (College Park SP p. 3.14-3)

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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No Substantial Change from Previous Analysis. Because the proposed Project will comply with applicable City, state and federal energy conservation measures related to construction and operations, as noted above in Energy Threshold a, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the proposed Project will not result in any new or more severe impacts to Energy than previously disclosed in the College Park SP DEIR.

GEOLOGY AND SOILS – Would the Project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

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Source: College Park SP DEIR, DOC (2015), City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the Chino-Central Avenue Fault is located approximately 4,000 feet south and west of the College Park SP area and other possible fault- or fold-related features represented by photoalignments were observed in previous studies south of the College Park SP area. The College Park SP DEIR concluded that implementation of mitigation measure **Geology-1** would reduce impacts in regard to fault rupture to a less than significant level. (College Park SP DEIR p. 3.6-14, p. 3.6-18)

No Substantial Change from Previous Analysis. Seismic activity is expected in southern California; however, the Project site is not located within an Alquist-Priolo zone. The Chino-Central Avenue Fault is located over 4,000 feet south and west of the Project site. Proper engineering design and construction of the proposed instructional building in conformance with the California Building Code (CBC) would ensure that people using the multiuse facility would not be subject to substantial effects from seismic ground shaking. Impacts are considered to be less than significant. Additionally, a Geotechnical Investigation & Geohazard Report will be prepared for the proposed Project as identified in College Park SP DEIR (mitigation measure **Geology-1**) to ensure that the proposed Project incorporates any geotechnical recommendations. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Geology-1** identified in the College Park SP DEIR to mitigate potential impacts related to rupture of a known earthquake continues to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: College Park SP DEIR, DOC (2015), City of Chino GP EIR

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the Chino-Central Avenue Fault is located approximately 4,000 feet south and west of the College Park SP area which could result in a peak horizontal ground acceleration that may exceed the Uniform Building Code threshold during an earthquake event. The College Park SP DEIR concluded that implementation of mitigation measure **Geology-1** would ensure potential impacts related to seismic ground shaking are less than significant. (College Park SP DEIR pp. 3.6-14 – 3.6-15, p. 3.6-19)

No Substantial Change from Previous Analysis. The Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the proposed Project. The ground shaking risk is not considered substantially different than that of other similar properties in the southern California area. Because the proposed Project must comply with CBC regulations and the geotechnical recommendations outlined in the Geotechnical Investigation & Geohazard Report which will be prepared for the Project as identified in the College Park SP DEIR (mitigation measure **Geology-1** as noted in Response to Threshold a) i) above), impacts associated with strong seismic ground shaking will have a less than significant impact. Additionally, Project plans will be submitted to the Division of the State Architect for review and approval. The Division of the State Architect sets policies for building design and construction and provides design and construction oversight to ensure that the Project complies with the CBC regulations. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Geology-1** identified in the College Park SP DEIR to mitigate potential impacts related to strong seismic ground shaking continues to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the College Park SP area is susceptible to liquefaction and standard engineering practices could reduce or eliminate significant impacts related to liquefaction. The College Park SP DEIR concluded that mitigation measure **Geology-3** would ensure that Project plans are reviewed by the City of Chino's engineering geology and geotechnical representative to ensure that the proposed Project does not result in a seismic-related ground failure, including liquefaction. (College Park SP DEIR p. 3.6-15, p. 3.6-19)

No Substantial Change from Previous Analysis. The proposed Project will comply with CBC regulations and mitigation measure **Geology-1** (as noted in Response to Threshold a) i) above) as

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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well as implement mitigation measure **Geology-3** which will ensure that impacts to the Project from seismic-related ground failure, including liquefaction, is less than significant. Additionally, Project plans will be submitted to the Division of the State Architect for review and approval. The Division of the State Architect sets policies for building design and construction and provides design and construction oversight to ensure that the Project complies with the CBC regulations. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Geology-1 and Geology-3** identified in the College Park SP DEIR to mitigate potential impacts from seismic-related ground failure, including liquefaction, continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

iv. Landslides?

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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the potential for landslides is most likely to occur adjacent to the drainages where slopes are steepest and water may be more likely to accumulate, such as along the Cypress Channel, which provides a “free-face” where movement could occur. The Project site is located approximately 4,005 feet west of the Cypress Channel and thus not located adjacent to the Cypress Channel where the potential for landslides were concluded in the College Park SP DEIR as most likely to occur. Therefore, no mitigation measure related to landslides as outlined in the College Park SP DEIR is applicable to the Project given the Project site’s distance to Cypress Channel. (College Park SP DEIR p. 3.6-15, p. 3.6-20)

No Substantial Change from Previous Analysis. The Project site is relatively flat and the surrounding area is relatively flat as well. As previously noted, the Project site is located approximately 4,005 feet west of the Cypress Channel and thus not located adjacent to the Cypress Channel where the potential for landslides were concluded in the College Park SP DEIR as most likely to occur. No impacts will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

b) Result in substantial soil erosion or the loss of topsoil?

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Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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College Park SP DEIR Finding: The College Park SP DEIR did not include a discussion related to soil erosion or the loss of topsoil but noted that there are no known soils engineering conditions that are severe enough to qualify as significant impacts and no mitigation was required. (College Park SP DEIR p. 3.6-16)

No Substantial Change from Previous Analysis. The City of Chino's GP EIR noted that the City, which includes the Project site, are at a limited risk of erosion. During construction activities, disturbance of soil by heavy equipment could result in erosion. Short-term erosion effects during construction of the proposed Project will be prevented through best management practices (BMPs) intended to reduce soil erosion to be reviewed and approved by City of Chino and the Division of the State Architect during the plan review process. The proposed landscaped areas and bio-swale will help reduce erosion potential during implementation of the proposed Project. Impacts are considered to be less than significant. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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| c) | Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the potential for landslides and lateral spreading is most likely to occur adjacent to the drainages where slopes are steepest and water may be more likely to accumulate, such as along the Cypress Channel, which provides a "free-face" where movement could occur. The Project site is located approximately 4,005 feet west of the Cypress Channel and thus not located adjacent to the Cypress Channel where the potential for landslides and lateral spreading were concluded as most likely to occur in the College Park SP DEIR. Therefore, no mitigation measure related to landslides and lateral spreading, as outlined in the College Park SP DEIR, is applicable to the Project given the Project site's distance to Cypress Channel. (College Park SP DEIR p. 3.6-15, p. 3.6-20)

The College Park SP DEIR noted that the potential for subsidence occurs within the College Park SP area and insufficient information existed at the time the DEIR was prepared to fully define the potential for the hazard and degree of constraint through the College Park SP area since the analysis was done on a programmatic level, given no specific project was proposed as part of the College Park SP. The College Park SP DEIR concluded that mitigation measure **Geology-5** would ensure potential impacts related to subsidence are reduced to less than significant levels. (College Park SP DEIR pp. 3.6-16 – 3.6-17, p. 3.6-20)

The College Park SP DEIR noted that the College Park SP area is susceptible to liquefaction and standard engineering practices could reduce or eliminate significant impacts related to liquefaction.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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The College Park SP DEIR concluded that mitigation measure **Geology-3** would ensure that Project plans are reviewed by the City of Chino's engineering geology and geotechnical representative to ensure that the proposed Project does not result in a seismic-related ground failure, including liquefaction. (College Park SP DEIR p. 3.6-15, p. 3.6-19)

No Substantial Change from Previous Analysis. The Project site is relatively flat and the surrounding area is relatively flat as well. As previously noted, the Project site is located approximately 4,005 feet west of the Cypress Channel and thus not located adjacent to the Cypress Channel where the potential for landslides and lateral spreading were concluded as most likely to occur in the College Park SP DEIR. The proposed Project will comply with CBC regulations and the geotechnical recommendations outlined in mitigation measure **Geology-1** (as noted in Response to Threshold a) i) above) as well as implement mitigation measures **Geology-3 and Geology-5** which will ensure that impacts to the Project related to liquefaction, subsidence or collapse be reduced to less than significant. Additionally, Project plans will be submitted to the Division of the State Architect for review and approval. The Division of the State Architect sets policies for building design and construction and provides design and construction oversight to ensure that the Project complies with the CBC regulations. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Geology-1, Geology-3, and Geology-5** identified in the College Park SP DEIR to mitigate potential impacts related to liquefaction, subsidence, or collapse continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and Appendix B – Biological Resources Technical Report.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded the expansion potential for the near surface soils is considered low, although blending with deeper alluvium could increase the expansion potential. No mitigation was required. (College Park SP DEIR pp. 3.6-10)

No Substantial Change from Previous Analysis. Expansive soils expand when wet and shrink when dry. The amount or type of clay present in soil determines its shrink potential. According to the United States Department of Agriculture (USDA) Web Soil Survey, the site is mapped as having Chino silt loam (Cb) soils, with 0 percent to 2 percent slopes, which consist of silt loam and silty clay loam and drains poorly, with the water table depth to be approximately more than 80 inches. As noted in the College Park SP DEIR, the soils are considered to have a low expansion potential, although the expansion potential can increase with blending of deeper blue alluvium. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Monitoring: None required.

e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that development of the College Park SP would connect to the public wastewater collection system, as stated in the City of Chino GP Policy P2 under Objective PFS-9.1. Therefore, implementation of the College Park SP would not result in soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems. No mitigation was required. (College Park SP DEIR pp. 4.6-21)

No Substantial Change from Previous Analysis. The proposed Project will be served by existing sewer infrastructure in College Park Avenue. Accordingly, implementation of the proposed Project will have no impacts in regard to septic tanks or alternative waste water disposal systems. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Source: College Park SP DEIR, City of Chino GP EIR

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR stated that construction of the College Park SP is expected to require ground-disturbing activities at depths of greater than 5 feet below the existing surface, which contain Holocene alluvium (Qhm and Qhf) geologic units. These units have a low probability of containing paleontological resources but are known to yield fossils of high scientific value, thus creating a potentially significant impact. As such, the College Park SP DEIR concluded that implementation of mitigation measure **Cultural-1** will reduce impacts in regard to paleontological resources to less than significant levels. (College Park SP DEIR pp. 3.5-8 – 3.5-11)

No Substantial change from Previous Analysis. Construction of the proposed Project will include excavation of approximately 5 to 10 feet below the existing surface. Therefore, mitigation measure **Cultural-1** outlined in the College Park SP DEIR will not be applicable to the proposed Project. Accordingly, the proposed Project will not result in any new or more severe impacts than were previously disclosed in the College Park SP DEIR.

Mitigation: None.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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 type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: College Park SP DEIR, SCAQMD 2008, Pub L 95-367, 92 Stat 601, and Appendix A – CalEEMod Output Files.

Findings of Fact:

- a-b) **College Park SP DEIR Finding:** The topic of greenhouse gas (GHG) emissions was not specifically addressed in the College Park SP DEIR, and the College Park SP DEIR did not identify a significant impact on the environment due to GHG emissions related to buildout of the College Park SP.

No Substantial Change from Previous Analysis. Although this topic was not specifically addressed in the College Park SP DEIR, GHG emissions and the issue of global climate change do not represent new information of substantial importance which was not known and could not have been known at the time that the College Park SP DEIR was certified. Information on the effect of GHG emissions on climate was known long before the City of Chino certified the College Park SP DEIR. Global climate change and GHG emissions were identified as environmental issues as early as 1978 when the U.S. Congress enacted the National Climate Program Act (Pub L 95-367, 92 Stat 601). In 1979, the National Research Council published “Carbon Dioxide and Climate: A Scientific Assessment,” which concluded that climate change was an accelerating phenomenon partly due to human activity. Global climate change was also addressed in a widely-published series of reports by the Intergovernmental Panel on Climate Change (IPCC) dating back to the 1990s, including IPCC’s “2001 Third Assessment Report.” California adopted legislation in 2002 requiring the California Air Resources Board to develop regulations limiting GHG emissions from automobiles. As such, information about global climate change and its relationship to GHG emissions was available with the exercise of reasonable diligence at the time the College Park SP DEIR was certified in 2004.

Furthermore, the College Park SP DEIR analyzed air quality impacts associated with buildout of the College Park SP, inclusive of carbon dioxide (CO₂) and other GHG emissions (methane (CH₄), nitrous oxide (N₂O), and carbon dioxide (CO₂E)). The College Park SP DEIR also addressed vehicle emissions (both construction and operational) and operational emissions from energy consumption, which are the most common sources of GHG emissions. During the public review period and public hearings associated with the College Park SP DEIR, no objections or concerns were raised regarding the College Park SP DEIR’s analysis of GHG emissions, and no legal challenge was filed within the statute of limitations period established by Public Resources Code § 21167I. Pursuant to CEQA case law and CEQA Guidelines §

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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15162 (a)(3), the issue of project-related GHG emissions does not provide new information of substantial importance or substantial evidence of a new impact to the environment that was not or could not have been known at the time the College Park SP DEIR was certified; thus, minor additions are needed to make the previous EIR adequate to cover the actions that are currently proposed, which are documented herein.

For informational purposes, the Project's annual GHG emissions have been estimated, as described below. The proposed Project will not alter the present or planned land use of this area, and impacts from air quality emissions from the proposed land use, short-term, long-term and cumulative, are similar or less than those examined previously in the College Park SP DEIR.

The CalEEMod model was used to estimate GHG emission from both construction and operation and presents the output results for carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and CO₂E. CO₂E is the sum of CO₂ emissions estimated, plus the sum of CH₄ and N₂O emissions estimated, multiplied by their respective global warming potential (GWP). The GWP concept compares the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of individual GHGs is determined through a comparison with the GWP of CO₂. CO₂ has a GWP of one; CH₄ has a GWP of 28, meaning that on a molecule-by-molecule basis, CH₄ has 28 times the global warming potential of CO₂.

Each source of GHG emissions is described in greater detail below, followed by tables summarizing the results provided in Appendix A.

- Construction

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, such as construction worker trips, for the Project. The CalEEMod estimate does not analyze emissions from construction-related electricity use or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. The assumptions related to Project construction are provided in the response to Air Quality Threshold b), above. The GHG emissions from construction of the Project are shown in **Table 5 – Project Construction Equipment GHG Emissions**. SCAQMD recommends amortizing construction emissions over a 30-year period. Thus, **Table 5** also includes the amortized emissions.

Table 5 – Project Construction Equipment GHG Emissions

Year	Metric Tons per year (MT/yr)			
	Total CO ₂	Total CH ₄	Total N ₂ O	Total CO ₂ E
2021	208.88	0.05	0.00	210.20
2022	670.20	0.16	0.00	674.16
2023	551.50	0.13	0.00	554.74
Total	1,430.58	0.34	0.00	1,439.10
Amortized				47.97
Source: Appendix A Notes: MT/yr – metric tons per year; CO ₂ – carbon dioxide; CH ₄ – methane; N ₂ O – nitrous oxide; CO ₂ E – carbon dioxide equivalent.				

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Table 5 indicates that an estimated 1,439.10MTCO₂E will occur from Project construction equipment over the course of the estimated construction period of 26 months. Since the draft SCAQMD GHG Threshold Guidance document released in October 2008 (SCAQMD 2008) recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the total GHG emissions from Project construction were amortized and are included in **Table 6 – Total Project-Related GHG Emissions**, below.

Operational sources of GHG emissions include: area, energy, mobile, solid waste, and water. Each source is briefly described below.

- Area Sources

Area sources include landscape equipment emissions, architectural coating, consumer products, and hearths (for residential uses). Landscape equipment servicing the Project site create CO₂ resulting from fuel combustion based on the Project's land uses. Consumer products consist of consumer use of solvents and personal care products and architectural coatings consist of an average building square footage to be repainted each year. Default values were used. **Table 6** summarizes the Project's area source emissions, which were negligible and reported as zero.

- Energy Sources

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically generated at an off-site power plant which indirectly generates GHG emissions. Default values were used based on Southern California Edison emission records and **Table 6** summarizes the Project's energy source emissions, which were negligible.

- Mobile Sources

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults. The GHG emissions from mobile sources were estimated using the defaults and results are summarized in **Tables 6**.

- Solid Waste Sources

GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. This analysis assumes a solid waste diversion from the landfills consistent with data provided by the state. Conservatively, this was assumed as 61 percent

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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for the City of Chino,³ the waste diversion rate reported for the year 2006. This is the most recent year reported by the state. Results are summarized in **Table 6**.

- Water Sources

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in Southern California and plays a large role in GHG production. CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project's location. Default values were used and results are summarized in **Table 6**.

Table 6 – Total Project-Related GHG Emissions

Year	Metric Tons per year (MT/yr)			
	Total CO ₂	Total CH ₄	Total N ₂ O	Total CO ₂ E
Amortized Construction	--	--	--	47.97
Area	0.00	0.00	0.00	0.00
Energy	113.71	0.00	0.00	114.17
Mobile	1,019.29	0.05	0.00	1,020.50
Solid Waste	3.60	0.21	0.00	8.92
Water	17.17	0.06	0.00	19.02
Total	1,153.77	0.32	0.00	1,210.58

Source: Appendix A
Notes: MT/yr – metric tons per year; CO₂ – carbon dioxide; CH₄ – methane; N₂O – nitrous oxide; CO₂E – carbon dioxide equivalent.

Table 6 shows the total annual GHG emissions from the proposed instructional building are approximately 1,210.58MTCO₂E, which include construction-related emissions and amortized over a typical project life of 30 years.

Beginning in 2008, SCAQMD convened a working group to develop GHG CEQA significance thresholds for development projects. In December 2008, the SCAQMD adopted a threshold of 10,000 MTCO₂E/yr for stationary source projects where SCAQMD is the lead agency. The most recent draft proposal was in September 2010 and included significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 MTCO₂E/yr, respectively. Alternatively, a lead agency has the option to use 3,000 MTCO₂E/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. The analysis herein relies on the SCAQMD recommended screening level of 3,000 MTCO₂E/yr for non-industrial projects.

Because the proposed Project's GHG emissions will not exceed the SCAQMD screening threshold as demonstrated in **Table 6** and the Project is consistent with the uses identified in the College Park SP DEIR, it will not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment nor would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of

³ CalRecycle, Jurisdiction Diversion/ Disposal Rate Summary (2007-Current). Available at <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006>, accessed January 24, 2020.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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GHG. Thus, the Project's incremental contribution to a cumulative impact to global climate change is considered less than significant. Therefore, the proposed Project will not result in any new or more severe impacts to GHG than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that construction activities have the potential to create a significant impact related to the accidental release of hazardous materials (e.g., fuel). The College Park SP DEIR also noted that Chaffey College would likely utilize underground storage tanks and/or aboveground storage tanks for refueling of campus vehicles and to store fuel for emergency backup generators. Numerous hazardous chemicals would normally be stored, used, generated, and/or disposed within laboratories and for maintenance purposes. The College Park SP DEIR concluded that implementation of mitigation measures **Hazards-1, Hazards-2, and Hazards-4** would reduce impacts in regard to the routine transport, use, or disposal of hazardous materials to a less than significant level. (College Park SP DEIR pp. 3.17-11 – 3.7-12, pp. 3.7-15 – 3.7-16)

No Substantial Change from Previous Analysis. Construction of the proposed Project has the potential to create a hazard to the public or environment through the routine transport, use, and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other materials. These materials are typical of materials delivered and used at construction sites. The Project shall comply with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the California Code of Regulations, which describes strict regulations for the safe transportation of hazardous materials. The proposed Project will implement the same mitigation identified in College Park SP DEIR (mitigation measures **Hazards-1, Hazards-2, and Hazards-4**) to ensure that Chaffey College handles hazardous materials in a manner consistent with relevant regulations and guidelines including those mandated by the U.S. Environmental Protection Agency, Caltrans, the Santa Ana Regional Water Quality Control Board, and the San Bernardino County Fire Department. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Hazards-1, Hazards-2, and Hazards-4** identified in the College Park SP DEIR to mitigate potential impacts related to routine transport, use, or disposal of hazardous materials continue to apply to the proposed Project.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that construction activities have the potential to create a significant impact related to the accidental release of hazardous materials (e.g., fuel). During operations of the Chaffey College, accidental release of hazardous materials may occur from the utilization of underground storage tanks and/or aboveground storage tanks for refueling of campus vehicles and the storage of fuel for emergency backup generators. Numerous hazardous chemicals would normally be stored, used, generated, and/or disposed within laboratories and for maintenance purposes. The College Park SP DEIR concluded that implementation of mitigation measures **Hazards-1, Hazards-2, and Hazards-4** would reduce impacts in regard to the accidental release of hazardous materials into the environment to a less than significant level. (College Park SP DEIR pp. 3.17-11 – 3.7-12, pp. 3.7-15 – 3.7-16)

No Substantial Change from Previous Analysis. Construction and periodic maintenance operations of the proposed Project has the potential to create a hazard to the environment through the routine transport, use, and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other materials. The Project shall comply with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the California Code of Regulations, which describes strict regulations for the safe transportation of hazardous materials. The proposed Project will implement the same mitigation identified in College Park SP DEIR (mitigation measures **Hazards-1, Hazards-2, and Hazards-4**) to ensure that Chaffey College handles hazardous materials in a manner consistent with relevant regulations and guidelines including those mandated by the U.S. Environmental Protection Agency, Caltrans, the Santa Ana Regional Water Quality Control Board, and the San Bernardino County Fire Department. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Hazards-1, Hazards-2, and Hazards-4** identified in the College Park SP DEIR to mitigate potential impacts related to accidental release of hazardous materials into the environment continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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waste within one-quarter mile of an existing or proposed school?

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP concluded that the College Park SP would not result in a significant impact to the proposed elementary school site in the central portion of the College Park SP area. No mitigation was required. (College Park SP DEIR p. 3.7-13)

No Substantial Change from Previous Analysis. The Project site is located within the existing Chaffey College campus. The Project shall comply with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the California Code of Regulations, which describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable Federal, State, and local laws related to hazardous materials would ensure that impacts in regard to emitting hazardous emissions or materials within one-quarter mile of a school would be less than significant. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and San Bernardino County Airport Land Use Commission (1991).

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that the College Park SP area was not identified as a hazardous waste and substances site in the Hazardous Wastes and Substances Site List (Cortese List) and no mitigation was required. (College Park SP DEIR p. 3.7-13)

No Substantial Change from Previous Analysis. No hazardous materials sites, compiled pursuant to Government Code Section 65962.5, are depicted on or adjacent to the Project site. Accordingly, implementation of the proposed Project will not create a significant hazard to the public or the environment. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

		New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: College Park SP DEIR and San Bernardino County Airport Land Use Commission (1991).

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the College Park SP area is partially included in Referral Area C/Safety Zone III and the conical surface obstruction planning criteria area, which is in an area where the threat of aircraft accidents is minimal. Consequently, the College Park SP DEIR concluded that the College Park SP uses are consistent with the land use regulations in the Chino Airport Comprehensive Land Use Plan and thus would not result in a significant impact related to a safety hazard for people residing or working in the proposed College Park SP area. No mitigation was required. (College Park SP DEIR p. 3.7-13)

No Substantial Change from Previous Analysis. The Project site is located approximately 1.8 miles northwest of Chino Airport. As depicted on Figure I-4 – Chino Airport Referral Areas in the Chino Airport Comprehensive Land Use Plan, the Project site is located within the conical surface area. Similar to the conclusion noted in the College Park SP DEIR, the proposed use does not conflict with the Chino Airport Comprehensive Land Use Plan and will not result in a significant impact related to safety hazard for people working on the Project site. Impacts are less than significant. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of the College Park SP would be developed in compliance with the City Standardized Emergency System Multi-Hazard Functional Plan regarding the provision of, and accessibility to, emergency response personnel and vehicles. No mitigation was required. (College Park SP DEIR p. 3.7-14)

No Substantial Change from Previous Analysis. The Project site is within the existing Chaffey College – Chino campus served by the surrounding network of existing streets. Access to the site will be made available for emergency responders from College Park Avenue, Oaks Avenue, or Eucalyptus Avenue. Accordingly, implementation of the proposed Project will not interfere with an adopted emergency response or evacuation plan including the City of Chino's Standardized

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Emergency System Multi-Hazard Functional Plan. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| g) | Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that the College Park SP area is located within an urbanized area and would not be expected to result in a significant impact related to the exposure of people or structures to a significant risk involving wildfires given the distance from the College Park SP area to the City of Chino Hills. No mitigation was required. (College Park SP DEIR p. 3.7-14)

No Substantial Change from Previous Analysis. As depicted on Figure 4.7-1 – Wildland Urban Interface Threat to Community in the City of Chino’s GP EIR, the Project site is located within an area of little or no threat to wildland fires. The Project site is located within an urbanized area surrounded by College Park Avenue followed by the Chaffey College Chino Community Center to the north; Chino Campus surface parking lots to the south and west; and a small patch of grass area, pedestrian pathways, and a roundabout followed by residential development to the east. Accordingly, implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

HYDROLOGY AND WATER QUALITY – Would the Project:

- | | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) | Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that grading activities would have the potential to transport pollutants of concern from the construction area to the storm drainage system. The College Park SP DEIR concluded that compliance with BMPs and implementation of standard construction and operation practices required by the National Pollutant Discharge Elimination System (NPDES) including a Storm Water Pollution Prevention Plan (SWPPP) would

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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reduce impacts to less than significant levels. No mitigation was required. (College Park SP DEIR p. 3.8-8)

No Substantial Change from Previous Analysis. Construction activities will disturb surface soils, potentially resulting in erosion and sedimentation. Because the Project site is greater than one acre of ground disturbance, compliance with NPDES requirements will be required through implementation of a SWPPP, including site-specific erosion control BMPs. Post-construction runoff from the Project site will be conveyed into the proposed on-site bio-retention basins for water quality treatment prior to discharge to downstream receiving waters. The City of Chino will review and approve the proposed basins and water quality treatment method as required by the NPDES municipal separate storm sewer system (MS4) permit. Therefore, compliance with existing regulations will ensure potential impacts related to water quality standards and waste discharge requirements are less than significant. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that groundwater quality would not be adversely affected since the groundwater wells used for agricultural irrigation would discontinue with implementation of the College Park SP. Additionally, the College Park SP DEIR noted that the City of Chino prepared a water supply assessment (WSA) to document the sufficiency of water supply for the City, including development of the College Park SP which concluded that the water supply would exceed demand for the entire City through 2022. No mitigation was required. (College Park SP DEIR pp. 3.8-9 – 3.8-11)

No Substantial Change from Previous Analysis. The Project site is currently vacant and undeveloped. It is not a known groundwater recharge location, nor is it slated for one in the future. Although the site will consist of pavement and construction of an instructional building, the Project has been designed to maximize the landscape areas, thereby minimizing the impervious area to the maximum extent possible; runoff from the site will disperse into the landscape areas and incorporated on site bio retention basins. The Project does not include wells nor are there any groundwater production wells near the site that would be affected by the Project. The Project is consistent with the land use assumptions used in the WSA. Further, the City of Chino is party to the activities of the Chino Basin Watermaster and the Optimum Basin Management Plan (OBMP) that oversee the activities to sustainably manage the adjudicated Chino Groundwater Basin. The OBMP contains several elements designed to provide enhanced management of the local groundwater basin resource, including protection of water quality and the safe yield of the basin (GPDEIR, p. 4.8-20). Through the City's ongoing participation in OBMP programs and adherence to the Watermaster

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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rules and regulations, and the Project's consistency with the assumptions made in the WSA, accordingly, implementation of the proposed Project will not substantially deplete groundwater supplies or interfere with recharge. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- i. result in substantial erosion or siltation on- or off-site;

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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that the proposed drainage system depicted on Figure 3.8.4-1 – Proposed Drainage in the College Park SP DEIR would not direct runoff into an adjacent drainage district nor increase the runoff flow rate for post-development when compared to existing conditions. As such, implementation of the College Park SP would not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site. (College Park SP DEIR p. 3.8-11)

No Substantial Change from Previous Analysis. The Project site is relatively flat and does not contain drainage features, such as a ditch or creek. A Project-specific Water Quality Management Plan (WQMP) will be prepared to demonstrate that the proposed drainage system for the Project will treat onsite stormwater runoff for the pollutants of concern. The WQMP will also describe how the proposed drainage system will avoid adverse impacts to downstream infrastructure mimic the existing drainage pattern on site to the satisfaction of the City of Chino's Engineer prior to plan check approval; thus, all runoff generated on-site will be conveyed directly into the proposed landscape areas and integrated on site bio retention basins.

A storm drain is proposed and that will connect to the existing storm drain adjacent to the site which will be sized appropriately to City of Chino's requirements and will be reviewed and approved by City of Chino's Engineer during the plan check review process. Additionally, implementation of the site-specific erosion control BMPs as required by the SWPPP will ensure all impacts related to pollutants from construction runoff erosion and sedimentation from ground disturbance are minimized to the maximum extent practicable. Therefore, through the implementation of existing regulations for the reduction in erosion and minimization of polluted runoff, the proposed Project will not substantially alter the existing drainage pattern of the site in a manner which would result in substantial erosion or siltation on- or off-site. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

	New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Monitoring: None required.

ii.	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that the proposed drainage system depicted on Figure 3.8.4-1 – Proposed Drainage in the College Park SP DEIR would not direct runoff into an adjacent drainage district nor increase the runoff flow rate for post-development when compared to existing conditions. As such, implementation of the College Park SP would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (College Park SP DEIR p. 3.8-11)

No Substantial Change from Previous Analysis.

The Project site is relatively flat and does not contain drainage features that would require alterations, such as a ditch or creek. A WQMP will be prepared that demonstrates, to the satisfaction of the City, how the post-project condition will not result in flooding onsite or downstream of the Project site. The proposed Project will include landscaped areas and two bio retention basins that will contain and treat runoff generated onsite. Further, a storm drain is proposed that will connect to the existing storm drain located adjacent to the site which will be sized appropriately to City of Chino's requirements and will be reviewed and approved by City of Chino's Engineer during the plan check review process. Therefore, through implementation of existing regulations for the conveyance of runoff such that flooding does not occur on- or off-site, the proposed Project will not create or contribute runoff that would exceed the capacity of the existing stormwater drainage system or create substantial additional sources of polluted runoff. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

iii.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that grading activities would have the potential to transport pollutants of concern from the construction area to the storm drainage

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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system. The College Park SP DEIR concluded that compliance with BMPs and implementation of standard construction and operation practices required by the NPDES including SWPPP would reduce impacts in regard to water quality to less than significant levels. No mitigation was required. (College Park SP DEIR p. 3.8-8)

No Substantial Change from Previous Analysis. During construction, a SWPPP will be implemented to direct the use of effective BMPs for the reduction of pollutants in runoff to the maximum extent practicable. A WQMP will be prepared to demonstrate to the satisfaction of the City how the post-project condition will treat the stormwater runoff generated onsite and avoid exceeding the capacity of downstream drainage systems. Therefore, through the implementation of existing regulations for the control of runoff volumes and stormwater pollutants, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

d) in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that the existing Cypress Channel and other proposed drainage system depicted on Figure 3.8.4-1 – Proposed Drainage in the College Park SP DEIR were determined to be adequate to control a 100-year storm and therefore would not be at risk to release pollutants due to project inundation. No mitigation was required. (College Park SP DEIR pp. 3.8-11 – 3.8-12)

No Substantial Change from Previous Analysis. As depicted on Figure 4.8-1 – FEMA Floodplains in the City of Chino GP EIR, the Project site is located within an undetermined flood hazard area. Additionally, as depicted on Figure 4.8-2 – 566-foot Prado Dam Inundation Area in the City of Chino GP EIR, the Project site is located outside of the Prado Dam inundation area. The site is also not located where a tsunami or seiche may occur. The Cypress Channel and other infrastructure in College Park Avenue, Oaks Avenue, and Eucalyptus Avenue are in place which are adequate to control the flows generated by a 100-year storm event in the Project area. The Project proposes a storm drain system that will capture and convey onsite runoff to the satisfaction of the City, and two bio retention basins will provide the required stormwater treatment. In the event of inundation on the Project site, the proposed Project does not pose a higher risk from release of pollutants than neighboring properties. Therefore, through the implementation of existing regulations for the design of drainage infrastructure, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

		New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
e)	Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: While the College Park SP DEIR did not specifically analyze this impact, it determined that strict compliance with all standard NPDES permit requirements would reduce impacts to surface water quality to below the level of significance (College Park SP DEIR pp. 3.8-13). No mitigation was required.

No Substantial Change from Previous Analysis. This threshold has been added to the CEQA Appendix G Checklist since certification of the College Park SP DEIR. The water quality control plan (Basin Plan) is developed and enforced by the Regional Water Quality Control Board (RWQCB) for the protection of the state's surface and groundwaters. The Basin Plan identifies the beneficial uses of waterbodies and their numeric and narrative water quality standards. Through compliance with applicable NPDES permits, the Project will not conflict or obstruct implementation of the Basin Plan. Said compliance will consist of a satisfactory WQMP and a SWPPP for construction activities.

The Project site overlies the Chino Groundwater Basin. Because the basin is adjudicated, the sustainable groundwater management plan for the basin is in the form of the court's Judgment issued in 1978. The City of Chino is a Party to the Judgment and therefore has rights to the groundwater while also subject to the rules and regulations of the court-appointed Chino Basin Watermaster. The Watermaster oversees programs to sustainably manage the groundwater for future use by all Parties. Because the proposed Project has been planned by the City since 2004, development of the College Park SP would have been accounted for in the planning of Watermaster programs and therefore would not conflict with or obstruct implementation of the Judgment.

Therefore, through the implementation of existing regulations to implement the Basin Plan and Chino Basin Judgment, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

LAND USE/PLANNING – Would the Project:

a)	Physically divide any established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that issue areas related to land use and planning were considered to be less than significant in the Initial Study and were not further discussed in the DEIR. No mitigation was required. (College Park SP DEIR p. ES-6)

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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No Substantial Change from Previous Analysis. The Project site is located within the Chaffey College – Chino Campus, an area contemplated for institutional use which is consistent with the City of Chino’s zoning of I - Institutional. The Project site is located in a primarily urbanized area surrounded by Chaffey College Chino Community Center to the north; Chino Campus surface parking lots to the northwest; and a small patch of grass area, pedestrian pathways, and a roundabout followed by residential development to the east. Accordingly, the proposed Project will not divide an established community. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that issue areas related to land use and planning were considered to be less than significant in the Initial Study and were not further discussed in the DEIR. No mitigation was required. (College Park SP DEIR p. ES-6)

No Substantial Change from Previous Analysis. The Project site is located within the Chaffey College – Chino Campus, an area contemplated for institutional use which is consistent with the City of Chino’s zoning of I – Institutional and GP designation of Public School. Since the proposed use is consistent with the zoning and GP, no impacts will occur. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that issue areas related to mineral resources were considered to be less than significant in the Initial Study and were not further discussed in the DEIR. No mitigation was required. (College Park SP DEIR p. ES-6)

No Substantial Change from Previous Analysis. The Project site is located in a primarily urbanized area surrounded by development. The Project site is located within Mineral Resource Zone-3 (MRZ-

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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3) as depicted in Figure 4.6-4 – Mineral Resource Zones of the City of Chino’s GP EIR which is an area that does not have sufficient information available to determine whether the deposits are significant. Accordingly, the Project site will not result in the loss of availability of a known mineral resource. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that issue areas related to mineral resources were considered to be less than significant in the Initial Study and were not further discussed in the DEIR. No mitigation is required. (College Park SP DEIR p. ES-6)

No Substantial Change from Previous Analysis. The Project site is located in a primarily urbanized area surrounded by development and is not next to a locally important resource recovery site. The Project site is located within Mineral Resource Zone-3 (MRZ-3) as depicted in Figure 4.6-4 – Mineral Resource Zones of the City of Chino’s GP EIR which is an area that does not have sufficient information available to determine whether the deposits are significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

NOISE – Would the Project result in:

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and Chapter 15.44 – On-Site Construction Development of the City of Chino’s Municipal Code.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that incorporation of mitigation measures **Noise-1 and Noise-2** would reduce construction noise levels to sensitive receptors to less than significant levels. The College Park SP DEIR also concluded that future traffic

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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volumes with implementation of the College Park SP would not result in a significant noise level increase and the land uses in the College Park SP would comply with the City of Chino's Noise Ordinance. (College Park SP DEIR pp. 3.9-11 – 3.9-14)

No Substantial Change from Previous Analysis. Construction of the proposed Project may potentially create short-term noise impacts. According to Section 15.44.030-A, Construction Hours, in the City of Chino's Municipal Code, "construction shall occur only between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday, with no construction allowed on Sundays and federal holidays. Since construction of the proposed Project will comply with the days and hours allowed by Section 15.44.030-A of the City of Chino's Municipal Code which is included as mitigation measure **Noise-1** and will incorporate mitigation measure **Noise-2** to ensure construction and grading equipment are properly maintained, impacts related to short-term construction noise are considered to be less than significant. Operational noise will be negligible since the proposed Project will serve the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025, and no new vehicular trips will be generated by the proposed Project. The hours of operation for the Project will be similar to that of the existing campus uses. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Noise-1** and **Noise-2** identified in the College Park SP DEIR to mitigate temporary construction noise impacts continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR, Chapter 9.40 – Noise of the City of Chino's Municipal Code, and Chapter 15.44 – On-Site Construction Development of the City of Chino's Municipal Code.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that incorporation of mitigation measures **Noise-1** and **Noise-2** would reduce construction noise levels to sensitive receptors to less than significant levels. (College Park SP DEIR p. 3.9-11, p. 3.9-14)

No Substantial Change from Previous Analysis. Construction of the proposed Project may potentially create short-term vibration noise impacts. Section 9.40.060-D of the City of Chino's Municipal Code states that noise sources associated with or vibration created by construction or grading are exempt from the provisions of the Noise Ordinance provided that the activities take place within the allowed construction hours as noted in Section 15.44-030-A of the City of Chino's Municipal Code (same as the College Park SP DEIR mitigation measure **Noise-1** and complies with the noise standard outlined in Section 9.40.040-B of the City's Noise Ordinance. Since the Project will involve standard construction equipment and will incorporate mitigation measures **Noise-1** and **Noise-2**, impacts related to groundborne vibration or groundborne noise are considered to be less than significant. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Mitigation: No new or updated mitigation measures are required. Mitigation measures **Noise-1 and Noise-2** identified in the College Park SP DEIR to mitigate excessive groundborne vibration or groundborne noise levels continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) | For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and San Bernardino County Airport Land Use Commission (1991).

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the College Park SP does not lie within the Chino Airport runway protection zone or Safety Zone II areas and is outside the Chino Airport Community Noise Equivalent Level (CNEL) 65 contour area. The College Park SP DEIR concluded that the College Park SP is not located in the vicinity of a private airstrip and therefore would not expose people in the project area to excessive noise levels. No mitigation was required. (College Park SP DEIR p. 3.7-14) As such, implementation of the College Park SP would not expose people to excessive noise levels. No mitigation was required. (College Park SP DEIR p. 3.9-12)

No Substantial Change from Previous Analysis. The Project site is located approximately 1.8 miles northwest of Chino Airport. As depicted on Figure II-5 – Year 2025 CNEL Noise Contours in the Chino Airport Comprehensive Land Use Plan, the Project site is located outside of the Chino Airport CNEL 65 noise contour area which, similar to the College Park SP DEIR, will not expose people to excessive noise levels. The Project site is not located within the vicinity of a private airstrip and thus will not expose people in the Project area to excessive noise levels. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

POPULATION AND HOUSING – Would the Project:

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Induce substantial unplanned population growth in an area, either directly (for example, by proposed new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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College Park SP DEIR Finding: The College Park SP DEIR concluded that the anticipated growth with implementation of the College Park SP would be consistent with the City of Chino GP and the Southern California Association of Governments Regional Comprehensive Plan and no mitigation was required. (College Park SP DEIR p. 3.10-10)

No Substantial Change from Previous Analysis. The proposed Project will serve as a multiuse student facility for the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025 document. Therefore, implementation of the proposed Project will not induce substantial population growth. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of the College Park SP would not displace substantial numbers of houses, necessitating the construction of replacement housing elsewhere. No mitigation was required. (College Park SP DEIR p. 3.10-10)

No Substantial Change from Previous Analysis. The Project site is currently vacant, undeveloped and thus does not contain any residential structures. Therefore, implementation of the proposed Project will not displace existing housing necessitating the construction of replacement housing elsewhere. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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

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|---------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR.

Findings of Fact:

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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College Park SP DEIR Finding: The College Park SP DEIR noted that the students, teachers, and employees of Chaffey College would find housing outside of the residential component of the College Park SP, thereby indirectly increasing the population of the City and the need for additional fire protection services. The College Park SP DEIR concluded that the population growth as a result of the College Park SP was included in the City of Chino's GP. However, the College Park SP DEIR noted that the Chino Valley Independent Fire District (CVIFD) which services the College Park SP area was exceeding their service level goal and construction of new facilities would be necessary to serve the College Park SP. The College Park SP DEIR concluded that implementation of mitigation measures **Public Services-1** and **Public Services-2** would reduce potential impacts related to fire protection services to less than significant levels. (College Park SP DEIR p. 3.11-10, pp. 3.11-12-3.11-13)

No Substantial Change from Previous Analysis. The development of the instructional building is not anticipated to require the construction of a new fire protection facility as existing fire stations within proximity of the Project site will be able to serve the proposed Project. The closest fire stations to the Project site include CAL FIRE Prado Station (14467 Central Avenue Chino, California 91710) and Chino Valley Fire Department Station 1 (5078 Schaefer Avenue Chino, California 91710) located approximately 0.7 mile southwest and 1.2 miles northwest of the Project site, respectively. The proposed Project will serve the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025. The instructional building will be constructed in compliance with the CBC which includes fire protection and safety elements. The proposed Project will implement the same mitigation identified in College Park SP DEIR (mitigation measure **Public Services-2**) to ensure payment of development impact fees for fire protection is provided to the City of Chino. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Public Services-2** identified in the College Park SP DEIR to mitigate potential impacts related to fire protection continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR noted that the Chino Police Department resources and services were maximized at the time the DEIR was prepared in 2003 (certified in 2004) and that additional police facilities and resources would be required with implementation of the College Park SP. The College Park SP DEIR noted that police protection would further be impacted if Chaffey College requires patrol from the Chino Police Department rather than, or in addition to, on-campus security services. The College Park SP DEIR concluded that implementation of mitigation measure **Public Services-2** would reduce potential impacts related to police protection services to less than significant levels. (College Park SP DEIR p. 3.11-10, pp. 3.11-12 – 3.11-13)

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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No Substantial Change from Previous Analysis. The proposed instructional building will include an area for campus police services which will provide security on the Project site as well as the rest of the campus. The proposed Project will implement the same mitigation identified in College Park SP DEIR (mitigation measure **Public Services-2**) to ensure payment of development impact fees for police protection is provided to the City of Chino. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Public Services-2** identified in the College Park SP DEIR to mitigate potential impacts related to police protection continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that development of the 2,500 dwelling units as part of the College Park SP would generate approximately 1,775 students necessitating the need for construction or expansion of schools. The College Park SP DEIR concluded that implementation of mitigation measure **Public Services-3** would reduce potential impacts related to schools to less than significant levels. (College Park SP DEIR pp. 3.11-10 – 3.11-11, p. 3.11-13)

No Substantial Change from Previous Analysis. The proposed Project consists of an instructional building within the existing Chaffey College – Chino campus. The proposed Project will serve the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025 and thus is not a use that would generate substantial employment resulting in the need for additional school facilities. No impacts will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that the expansion of the existing 70-acre Ruben S. Ayala Park up to approximately 140 acres, development of approximately 15 acres of neighborhood parks, 6 acres of multi-use trails, and 3 acres of village and campus green open space with implementation of the College Park SP would not result in significant impacts to parks. No mitigation was required. (College Park SP DEIR p. 3.11-11)

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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No Substantial Change from Previous Analysis. The proposed Project consists of an instructional building within the existing Chaffey College – Chino campus and is not a residential development or a use that generates substantial employment resulting in the need for additional park facilities. The proposed Project will serve the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025. Chaffey College includes open space areas for recreational opportunities throughout the campus and the Ruben S. Ayala Park is located immediately west of the campus. As such, no impacts to parks will occur. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that population growth as a result of implementation of the College Park SP would result in the need for additional library facilities. The College Park SP DEIR concluded that implementation of mitigation measure **Public Services-4** would reduce potential impacts related to libraries to less than significant levels. (College Park SP DEIR pp. 3.11-11 – 3.11-13)

No Substantial Change from Previous Analysis. The proposed Project consists of an instructional building with a library within the existing Chaffey College – Chino campus and is not a residential development or a use that generates substantial population growth resulting in the need for additional library facilities. The proposed Project will serve the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

RECREATION – Would the Project:				
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a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of the College Park SP would expand recreational opportunities at Ruben S. Ayala Park from 70 acres up to 140 acres, incorporate approximately six acres of pedestrian trails, bike paths, and equestrian trails, as well as increase the number of parks within the master-planned community to serve the additional demand associated with development of Chaffey College, the mixed-use area, and the residential development. Accordingly, implementation of the College Park SP would not result in a substantial physical deterioration of recreational areas. No mitigation was required. (College Park SP DEIR pp. 3.12-4 – 3.12-5)

No Substantial Change from Previous Analysis. The proposed Project will serve as an instructional building for the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025 document. The Project encourages recreational opportunities by providing pedestrian pathways and bicycle racks so that students, visitors, and staff can walk or ride their bicycles. Additionally, the Ruben S. Ayala Park located west of the college campus, was contemplated in the College Park SP DEIR, and provides recreational opportunities for students, visitors, and staff on the Project site. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of the College Park SP would expand recreational opportunities at Ruben S. Ayala Community Park from 70 acres up to 140 acres, incorporate approximately six acres of pedestrian trails, bike paths, and equestrian trails, as well as increase the number of parks within the master-planned community to serve the additional demand associated with development of Chaffey College, the mixed-use area, and the residential development. Implementation of mitigation measures **Recreation-1 through Recreation-3** would ensure that construction impacts related to development of recreational facilities are reduce to less than significant levels. (College Park SP DEIR pp. 3.12-4 – 3.12-6)

No Substantial Change from Previous Analysis. The proposed Project encourages recreational opportunities by providing pedestrian pathways and bicycle racks so that students, visitors, and staff can walk or ride their bicycles on campus or within the College Park SP area. No temporary closures of recreational facilities will occur as none currently exist on site. The Project will implement standard BMPs during construction activities to ensure construction of the Project will not result in adverse physical effect on the environment. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Monitoring: None required.

TRANSPORTATION/TRAFFIC – Would the Project:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?

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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that development of the College Park SP with residential, retail, Chaffey College, park, and open space uses would result in potentially significant impacts for the interim year 2012 and year 2025 of the College Park SP. The College Park SP DEIR concluded that implementation of mitigation measures **Transportation-1 and Transportation-2** would reduce impacts related to the circulation system to less than significant levels, (College Park SP DEIR, pp. 3.13-10 – 3.13-13, pp. 3.13-29 – 3.13-33) thus would not conflict with alternate modes of transportation.

No Substantial Change from Previous Analysis. The proposed Project is the development of an instructional building that will serve the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025, and no new vehicular trips will be generated by the proposed Project. The proposed Project will include the construction of pedestrian pathways that would safely channel pedestrians to the surface parking lots to the south and west of the site and to the sidewalk along Collage Park Avenue. These pathways will be designed and constructed in accordance with the CBC and to the satisfaction of the Division of the State Architect and City of Chino Engineer during the plan review process. Accordingly, implementation of the proposed Project will not impact the existing circulation system. Impacts are considered to be less than significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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- b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that development of the College Park SP with residential, retail, Chaffey College, park, and open space uses would result in potentially significant impacts for the interim year 2012 and year 2025 of the College Park SP. The College Park SP DEIR concluded that implementation of mitigation measures **Transportation-1 and Transportation-2** would reduce impacts related to level of service standards to less than significant. (College Park SP DEIR, pp. 3.13-10 – 3.13-13, pp. 3.13-29 – 3.13-33)

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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No Substantial Change from Previous Analysis. The proposed Project is the development of an instructional building that will serve the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025. Consequently, it is expected that the vehicles will not increase the level of service along the adjacent streets as no new vehicular trips will be generated by the proposed Project. Thus, impacts are considered to be less than significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of the College Park SP would include construction of new streets that would connect to the surrounding street system and that the design of these street connections would be undertaken in a manner that would avoid hazardous design features. No mitigation was required. (College Park SP DEIR p. 3.13-14)

No Substantial Change from Previous Analysis. The proposed Project is the development of an instructional building within a vacant parcel on the Chaffey College – Chino campus surrounded by existing streets (College Park Avenue, Oaks Avenue, and Eucalyptus Avenue). The proposed Project will include the construction of pedestrian pathways that would safely channel pedestrians to the surface parking lots to the northwest of the site and to the sidewalk along Collage Park Avenue. These pathways will be designed and constructed in accordance with the CBC and to the satisfaction of the Division of the State Architect and City of Chino Engineer during the plan review process. As such, the proposed Project will not substantially increase hazards due to a design feature or incompatible use. Thus, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that new streets developed as part of the College Park SP would be designed to allow adequate emergency access and would

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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be reviewed by appropriate City of Chino and Chino Valley Fire District staff for safety and adequacy. No mitigation was required. (College Park SP DEIR p. 3.13-14)

No Substantial Change from Previous Analysis. The Project site is within the Chaffey College – Chino campus and is served by the surrounding network of existing streets. Planned, temporary street closures may be necessary during construction activities. Any street closure will be of short duration and coordinated with the City of Chino’s Engineer so as not to interfere or impede with any emergency response or evacuation plan. Access to the site will be made available for emergency responders from College Park Avenue. Accordingly, implementation of the proposed Project will not interfere with emergency access. Impacts are considered to be less than significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

TRIBAL CULTURAL RESOURCES – Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR, prepared in 2003 (certified in 2004), did not include a discussion related to tribal cultural resources as this requirement stemmed from Assembly Bill 52 requiring projects with a notice of preparation or a notice of negative declaration filed or mitigation negative declaration on or after July 1, 2015 to discuss tribal cultural resources.

The College Park SP DEIR stated that there are no recorded historic sites or sites determined to be eligible for listing as a historic resource based on the archives and records search prepared for the College Park SP. However, the College Park SP DEIR outlined mitigation measures to reduce potential impacts to the Cypress Channel. The Project site is located approximately 4,005 feet west of the Cypress Channel and will not impact the Cypress Channel with implementation of the proposed Project given the distance between the site and the channel. (College Park SP DEIR p. 3.5-8, pp. 3.5-13 – 3.5-14, and Figure 2.4-1)

No Substantial Change from Previous Analysis. The Project site is vacant, undeveloped and contains no developed features (i.e., structures). There were no historic resources identified in the City of Chino GP Cultural and Paleontological Resources EIR sections. Impacts related to historic resources are considered to be less than significant. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Mitigation: None.

Monitoring: None required.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR, prepared in 2003 (certified in 2004), did not include a discussion related to tribal cultural resources as this requirement stemmed from Assembly Bill 52 requiring projects with a notice of preparation or a notice of negative declaration filed or mitigation negative declaration on or after July 1, 2015 to discuss tribal cultural resources.

The College Park SP DEIR stated that there are no recorded historic sites or sites determined to be eligible for listing as a historic resource based on the archives and records search prepared for the College Park SP. However, the College Park SP DEIR outlined mitigation measures to reduce potential impacts to the Cypress Channel. The Project site is located approximately 4,005 feet west of the Cypress Channel and will not impact the Cypress Channel with implementation of the proposed Project given the distance between the site and the channel. (College Park SP DEIR p. 3.5-8, pp. 3.5-13 – 3.5-14, and Figure 2.4-1)

The College Park SP DEIR stated that the College Park SP area does not contain sites recorded as Native American cultural resources in the Native American Heritage Commission sacred lands file and concluded that implementation of the College Park SP would not impact Native American sacred site. (College Park SP DEIR p. 3.5-8)

The College Park SP DEIR stated that approximately 50 percent of the College Park SP site was determined to be free of archeological resources as a result of directed surveys. However, visibility was obscured by vegetation or hardscape in the remaining 50 percent of the site. Ground-disturbing activities within those portions of the College Park SP site where visibility was obscured have the potential to result in adverse change to currently unknown archeological resources. The implementation of mitigation measure **Cultural-2** will reduce impacts to a less than significant level. (College Park SP DEIR pp. 3.5-8, pp. 3.5-11 – 3.5-13)

No Substantial Change from Previous Analysis. The Project site is vacant, undeveloped and contains no developed features (i.e., structures). There were no historic resources identified in the City of Chino GP Cultural and Paleontological Resources EIR sections. Impacts related to historic resources are considered to be less than significant.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Construction of the proposed Project would involve excavation of approximately 5 to 10 feet in depth. The proposed Project will implement the same mitigation identified in the College Park SP DEIR (mitigation measure **Cultural-2**) to ensure potential impacts to archaeological resources remain at a level below significant. Additionally, Chaffey College will comply with the City of Chino's GP Policy P3 which states that if unknown archaeological resources are discovered during construction, the Planning Division should be notified immediately and construction should stop until an archaeologist evaluates the discovered resources and recommends appropriate action. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Cultural-2** identified in the College Park SP DEIR to mitigate potential impacts related to archaeological resources continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

UTILITIES AND SERVICE SYSTEMS – Would the Project:

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| a) | Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of mitigation measures **Utilities-1 through Utilities-6** would reduce impacts related to water or wastewater facilities to less than significant levels. (College Park SP DEIR pp. 3.14-7 – 3.14-9)

No Substantial Change from Previous Analysis. A waterline will tie into the existing water infrastructure adjacent to the site which will be sized appropriately to the City of Chino's requirements and will be reviewed and approved by City of Chino's Engineer during the plan check review process. Since the Project is not creating any new waterline facilities, only connecting the Project site to currently existing facilities, impacts in regard to water facilities will be less than significant. The proposed Project will implement the same mitigation identified in the College Park SP DEIR (mitigation measure **Utilities-1**) to ensure any connection fees are paid to the City.

The City of Chino GP EIR notes that the Carbon Canyon Wastewater Reclamation Facility, Regional Plant 1 and Regional Plant 5 will have sufficient wastewater treatment capacity to meet the City's needs at buildout. Since the proposed Project is a use that is consistent with the City of Chino's GP land use designation, the Carbon Canyon Wastewater Reclamation Facility will be able to accommodate the wastewater generated as a result of the instructional building. Impacts are considered to be less than significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Natural gas is provided to the site by Southern California Gas Company; electricity is provided by Southern California Edison, and telephone/internet is provided by Frontier and Spectrum. Since the Project is consistent with the land uses and zoning assumed in the GP, impacts from the provision of electricity, natural gas, and telecommunication services are the same as analyzed in the GP and SP EIR. Therefore, potential impacts related to construction of new storm water drainage, electric power, natural gas, and telecommunication facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, are less than significant with mitigation.

Mitigation: No new or updated mitigation measures are required. Mitigation measures **Utilities-1, Utilities-3, and Utilites-5** identified in the College Park SP DEIR to mitigate potential impacts related to water facilities continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) | Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: A water supply assessment was prepared for the College Park SP which demonstrated that water supply would exceed the demand for the entire City through the year 2022. Therefore, the College Park SP DEIR concluded that sufficient water supplies would be available to serve the College Park SP and no new or expanded entitlements would be required. No mitigation was required. (College Park SP DEIR p. 3.14-7)

No Substantial Change from Previous Analysis. The proposed Project is an instructional building for the existing students/staff and the projected growth already contemplated by Chaffey College in its Vision 2025 document. Additionally, since the proposed Project is a use analyzed in the College Park SP which concluded that sufficient water supplies would be available, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) | Result in a determination by the wastewater treatment provider which serves or may serve the project that is 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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College Park SP DEIR Finding: The College Park SP DEIR did not specifically address whether the wastewater treatment provider would have adequate capacity to serve the College Park SP. The College Park SP DEIR noted that the construction and operation of the sanitary sewer system improvements as shown on Figure 3.14.4-3 of the College Park SP DEIR would result in beneficial impacts on the City's wastewater treatment and sewage conveyance systems, including the upsizing of existing sewer lines to accommodate future sewage flows from outside the College Park SP area. The College Park SP DEIR concluded that implementation of mitigation measures **Utilities-4 and Utilities-6** would reduce impacts in regard to wastewater to less than significant levels. (College Park SP DEIR p. 3.14-7, p. 3.14-9)

No Substantial Change from Previous Analysis. The City of Chino GP EIR notes that the Carbon Canyon Wastewater Reclamation Facility, Regional Plant 1 and Regional Plant 5 will have sufficient wastewater treatment capacity to meet the City's needs at buildout. Since the proposed Project is a use that is consistent with the City of Chino's GP land use designation, the Canyon Wastewater Reclamation Facility will be able to accommodate the wastewater generated as a result of the instructional building. Impacts are considered to be less than significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR did not specifically discuss whether the College Park SP would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. The College Park SP DEIR concluded that implementation of mitigation measure **Utilities-7** would ensure compliance with the California Solid Waste Management Act of 1989 during construction and operation of the College Park SP. (College Park SP DEIR pp. 3.14-8 – 3.14-9)

No Substantial Change from Previous Analysis. The proposed Project would generate an incremental increase in solid waste volumes requiring off-site disposal during short-term construction and long-term operational activities. Any solid waste debris will be disposed of at El Sobrante Landfill. The proposed Project will implement the same mitigation identified in the College Park SP DEIR (mitigation measure **Utilities-7**) to ensure compliance with the California Solid Waste Management Act of 1989. Moreover, Assembly Bill 939 mandates the reduction of solid waste disposal in landfills by requiring a minimum 50 percent diversion goal. As such, at least half of the potential debris generated during construction of this Project will be diverted from the landfill. As noted in Greenhouse Gas Threshold a-b), this analysis assumed a solid waste diversion of 61 percent for the City of Chino, the waste diversion rate reported for the year 2006. This is the most recent year reported by the state. The remaining waste is reasonably anticipated to be within the

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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permitted capacity of the aforementioned landfills. As such, impacts are considered to be less than significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Utilities-7** identified in the College Park SP DEIR to mitigate potential impacts related to solid waste disposal needs continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and City of Chino GP EIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of mitigation measure **Utilities-7** would ensure compliance with the California Solid Waste Management Act of 1989 during construction and operation of the College Park SP. (College Park SP DEIR pp. 3.14-8 – 3.14-9)

No Substantial Change from Previous Analysis. The proposed Project would generate an incremental increase in solid waste volumes requiring off-site disposal during short-term construction and long-term operational activities. The proposed Project will implement the same mitigation identified in the College Park SP DEIR (mitigation measure **Utilities-7**) to ensure compliance with the California Solid Waste Management Act of 1989. Moreover, Assembly Bill 939 mandates the reduction of solid waste disposal in landfills by requiring a minimum 50 percent diversion goal. As such, at least half of the potential debris generated during construction of this Project will be diverted from the landfill. As noted in Greenhouse Gas Threshold a-b), this analysis assumed a solid waste diversion of 61 percent for the City of Chino, the waste diversion rate reported for the year 2006. This is the most recent year reported by the state. The remaining waste is reasonably anticipated to be within the permitted capacity of the aforementioned landfills. As such, impacts are considered to be less than significant. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: No new or updated mitigation measures are required. Mitigation measure **Utilities-7** identified in the College Park SP DEIR to mitigate potential impacts related to solid waste continue to apply to the proposed Project.

Monitoring: Monitoring shall occur as specified in the College Park SP DEIR.

WILDFIRE

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Findings of Fact:

College Park SP DEIR Finding:

The College Park SP DEIR concluded that implementation of the project would have a less than significant impact on emergency response and the emergency evacuation plan. There are no mitigation measures related to impairment of an adopted emergency plan. (College Park SP DEIR p. 3.7-14)

No Substantial Change from Previous Analysis. The proposed Project is the construction and operation of an instructional building and would not interfere with the City of Chino's emergency response and evacuation plan. The proposed project would not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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|----|--|--------------------------|--------------------------|--------------------------|--------------------------|
| b) | Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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Source: College Park SP DEIR

Findings of Fact:

College Park SP DEIR Finding:

The College Park SP DEIR concluded that the proposed Project would not be exposed to significant risks related to wildfires due to the distance of the Project to the nearest wildfire hazard. The nearest wildfire hazard, as defined in the College Park SP is approximately 1.75 miles west with urbanized areas surrounding the Project site. There are no mitigation measures related to wildland fires. (College Park SP DEIR pp. 3.7-10, 3.7-14)

No Substantial Change from Previous Analysis. The proposed Project is the construction and operation of an instructional building and would not expose occupants on site to pollutant concentrations from a wildfire. The proposed project would not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

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| c) | Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Source: College Park SP DEIR

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Findings of Fact:

College Park SP DEIR Finding:

As noted in Wildfire Impact a) above, the College Park SP DEIR concluded the project would have a less than significant impact on emergency response and the emergency evacuation plan; the SP DEIR did not specifically analyze installation or maintenance of associated infrastructure that could exacerbate fire risks. The nearest wildfire hazard, as defined in the College Park SP is approximately 1.75 miles west with urbanized areas surrounding the Project site. There are no mitigation measures related to infrastructure exacerbating fire risks. (College Park SP DEIR p. 3.7-14)

No Substantial Change from Previous Analysis. The proposed Project is the construction and operation of an instructional building and would not require installation or maintenance of associated infrastructure. Chaffey College – Chino campus is surrounded by existing streets (College Park Avenue, Oaks Avenue, and Eucalyptus Avenue). The proposed Project will include the construction of pedestrian pathways that would safely channel pedestrians to the surface parking lots to the northwest of the site and to the sidewalk along Collage Park Avenue. As such, the proposed Project will not exacerbate fire risks related to installation or maintenance of infrastructure. Thus, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

Mitigation: None.

Monitoring: None required.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR

Findings of Fact:

College Park SP DEIR Finding:

The SP DEIR did not specifically analyze the risk of flooding or landslides post-fire. The nearest wildfire hazard, as defined in the College Park SP is approximately 1.75 miles west with urbanized areas surrounding the Project site, including residential, commercial and transportation land uses. There are no mitigation measures related to flooding or landslides as a result of a fire in the College Park SP DEIR. However, the SP DEIR did discuss flooding as a result of drainage changes due to substantial changes to an existing drainage pattern. The SP DEIR found that implementation of the project would not result in substantially altering the existing drainage pattern that would result in flooding and no mitigation measures. (College Park SP DEIR p. 3.8-12)

No Substantial Change from Previous Analysis. The proposed Project is the construction and operation of an instructional building and would not expose people or structures to flooding risks due to runoff from post-fire slope instability. Chaffey College – Chino campus is surrounded by existing streets (College Park Avenue, Oaks Avenue, and Eucalyptus Avenue). As such, the proposed Project will not exacerbate post-fire flooding risks. Thus, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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Mitigation: None.

Monitoring: None required.

MANDATORY FINDINGS OF SIGNIFICANCE

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR and Appendix B – Biological Resources Technical Report.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that implementation of mitigation measures discussed in the Biological Resources section and Cultural Resources section of this document would reduce potential impacts to less than significant levels.

No Substantial Change from Previous Analysis. Implementation of the proposed Project would not substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or 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. The proposed Project does not result in any impacts beyond what was previously analyzed and mitigation remains as noted in the Biological Resources, Cultural Resources, and Tribal Cultural Resources sections of this document. The proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) | Does the project have impacts which 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that impacts related to the loss of Farmland, air quality, and the loss of foraging habitat for native wildlife species would result in

New Significant Impact	More Severe Impact	Less Severe Impact	No Substantial Change from Previous Analysis
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significant and unavoidable cumulative impacts even with feasible mitigation measures. (College Park SP DEIR, p. 3.2-8, p. 3.3-18, p. 3.4-49)

No Substantial Change from Previous Analysis. The Project does not have impacts which are individually limited, but cumulatively considerable. The proposed Project does not result in any impacts beyond what was previously analyzed and mitigation measures noted throughout the analysis in Section 3.0 of this document would reduce all potential Project impacts to less than significant levels. Therefore, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: College Park SP DEIR.

Findings of Fact:

College Park SP DEIR Finding: The College Park SP DEIR concluded that impacts related to air quality would result in significant and unavoidable impacts even with feasible mitigation measures. (College Park SP DEIR, p. 3.3-18)

No Substantial Change from Previous Analysis. The proposed Project would not result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. Impacts related to aesthetics, air quality, cultural as it relates to human remains, geology and soils, GHGs, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, traffic, tribal cultural resources, wildland fires and utilities and service systems that could potentially affect human beings directly or indirectly were analyzed in this Initial Study for the proposed Project. Impacts for these topics were considered to have no impact, less than significant impact, or less than significant with mitigation incorporated. Accordingly, the proposed Project will not result in any new or more severe impacts than previously disclosed in the College Park SP DEIR.

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4.0 Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
Aesthetics			
Aesthetics-1: The Chaffey Community College and the private developer shall require that new facilities constructed as a result of the proposed Chaffey Community College component and the retail/mixed-use element of the master-planned community components of the proposed project adhere to the City's municipal Code Title 20, zoning code for commercial zoning districts as a means of reducing the disruption of scenic vistas. Prior to completion of final plans and specifications, the City of Chino Community Development Department shall review the plans and specifications to ensure that new facilities adhere to the zoning code and any other applicable City regulations pertaining to the disruption of scenic vistas. Completion of this measure shall be monitored and enforced by the Chaffey Community College for the College component of the proposed project and the private developer for the retail/mixed-use element of the master-planned community component of the proposed project.	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans.
Aesthetics-2: The City of Chino Community Development Department, Chaffey Community College, and the private developer shall require that new facilities constructed as a result of the proposed recreational, educational, residential, retail/mixed-use and infrastructure components of	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
the proposed project adhere to the City's municipal Code Title 20, zoning code for commercial zoning districts and residential zoning districts, as a means of reducing adverse effects to visual character and the associated impacts to aesthetics. The City of Chino Community Development Department shall review the plans and specifications to ensure that new facilities adhere to the zoning code and any other applicable City regulations pertaining to the integration of new construction into the existing visual character of the surrounding area, or a comparable measure that meets the standard or equivalent. Completion of this measure shall be monitored and enforced by the City of Chino Community Development Department for the residential component of the proposed project, Chaffey Community College for the College component of the proposed project, and the private developer for the master-planned community component of the proposed project.			
Aesthetics-3: The potential increase in the amount of light and glare produced due to implementation of the recreation component of the proposed project, the Chaffey College component of the proposed project, and the master-planned community component of the proposed project shall be reduced to below the threshold for significance by mandating the design type of the light fixtures, light standard height, and light fixture and standard orientation. Prior to completion of final plans and specifications, the City of Chino Community Development	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of lighting plans.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>Department, Chaffey Community College, and the private developer of the master-planned community shall submit the lighting plans and specifications to the City of Chino Public Works Department for review to ensure that all light fixtures shall use glare-control visors, arc tube suppression caps, and a photometric design that maintains 70 percent of the light intensity in the lower half of the light beam, or comparable design or technology, to achieve those criteria. Completion of this measure shall be monitored and enforced by the Chino Community Development Department for the recreational component of the proposed project, Chaffey Community College for the College component of the proposed project, and the private developer for the master-planned community component of the proposed project.</p>			
Air Quality			
<p>Air-1: To reduce PM10 emissions generated from construction by at least 60 percent as part of the City's site plan review prior to soliciting bids for construction for each of the three respective project elements (the City of Chino recreation facilities and the California Department of Forestry and Fire Protection Helicopter Facility; the Chaffey Community College campus; and the master-planned community, including infrastructure), the City of Chino, Chaffey College, and the private developer, respectively, shall ensure that the plans and specifications include</p>	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans and during construction of the Project.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>the requirement for the construction contractor to ensure that soils are moistened 15 minutes prior to grading and that, three times a day (four times a day in windy conditions), the soil moisture content is maintained at a minimum of 12 percent for all grading activities. At a minimum, the construction contractor field supervisor (or designee) shall conduct unscheduled weekly walk-throughs of the project site and complete a checklist of measures Air-1 through Air-6 to demonstrate compliance with the mitigation measures. Monitoring reports shall be signed by the construction contractor and submitted to the City on a weekly basis.</p>			
<p>Air-2: To reduce PM10 emissions generated from the construction by at least 60 percent as part of the City's site plan review process prior to soliciting bids for construction for each of the three respective project elements (the City of Chino recreation facilities and the California Department of Forestry and Fire Protection Helicopter Facility; the Chaffey Community College campus; and the master-planned community, including infrastructure), the City of Chino, Chaffey College, and the private developer, respectively, shall ensure that the plans and specifications include the requirement for the construction contractor to ensure that, on the last day of active operations prior to a weekend or holiday, water or a chemical stabilizer is applied to maintain a stabilized surface. At a minimum, the construction contractor field supervisor (or designee) shall conduct unscheduled weekly walk-throughs of the project site and complete a</p>	<p>Less Than Significant.</p>	<p>City of Chino Community Development Department.</p>	<p>Prior to approval of Project plans and during construction of the Project.</p>

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
checklist of measures Air-1 through Air-6 to demonstrate compliance with the mitigation measures. Monitoring reports shall be signed by the construction contractor and submitted to the City on a weekly basis.			
Air-3: To reduce PM10 emissions generated from the construction by at least 60 percent as part of the City's site plan review process prior to soliciting bids for construction for each of the three respective project elements (the City of Chino recreation facilities and the California Department of Forestry and Fire Protection Helicopter Facility; the Chaffey Community College campus; and the master-planned community, including infrastructure), the City of Chino, Chaffey College, and the private developer, respectively, shall ensure that the plans and specifications include the requirement for the construction contractor to ensure the watering of excavated soil piles hourly or to cover them securely with temporary coverings. At a minimum, the construction contractor field supervisor (or designee) shall conduct unscheduled weekly walk-throughs of the project site and complete a checklist of measures Air-1 through Air-6 to demonstrate compliance with the mitigation measures. Monitoring reports shall be signed by the construction contractor and submitted to the City on a weekly basis.	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans and during construction of the Project.
Air-4: To reduce PM10 emissions generated from construction by at least 60 percent as part of the City's site plan review process prior to soliciting bids for construction for each of the three	Less Than Significant.	City of Chino Community	Prior to approval of Project plans and during

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
respective project elements (the City of Chino recreation facilities and the California Department of Forestry and Fire Protection Helicopter Facility; the Chaffey Community College campus; and the master-planned community, including infrastructure), the City of Chino, Chaffey College, and the private developer, respectively, shall ensure that the plans and specifications include the requirement for the construction contractor to ensure that grading is ceased during periods when winds exceed 25 miles per hour. At a minimum, the construction contractor field supervisor (or designee) shall conduct unscheduled weekly walk-throughs of the project site and complete a checklist of measures Air-1 through Air-6 to demonstrate compliance with the mitigation measures. Monitoring reports shall be signed by the construction contractor and submitted to the City on a weekly basis.		Development Department.	construction of the Project.
Air-5: To reduce PM10 emissions generated from the construction by at least 60 percent as part of the City's site plan review process prior to soliciting bids for construction for each of the three respective project elements (the City of Chino recreation facilities and the California Department of Forestry and Fire Protection Helicopter Facility; the Chaffey Community College campus; and the master-planned community, including infrastructure), the City of Chino, Chaffey College, and the private developer, respectively, shall ensure that the plans and specifications include the requirement for the construction contractor to ensure the moistening	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans and during construction of the Project.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>of excavated soil prior to loading on trucks. At a minimum, the construction contractor field supervisor (or designee) shall conduct unscheduled weekly walk-throughs of the project site and complete a checklist of measures Air-1 through Air-6 to demonstrate compliance with the mitigation measures. Monitoring reports shall be signed by the construction contractor and submitted to the City on a weekly basis.</p>			
<p>Air-6: To reduce PM10 emissions generated from construction by at least 60 percent as part of the City's site plan review process prior to soliciting bids for construction for each of the three respective project elements (the City of Chino recreation facilities and the California Department of Forestry and Fire Protection Helicopter Facility; the Chaffey Community College campus; and the master-planned community, including infrastructure), the City of Chino, Chaffey College, and the private developer, respectively, shall ensure that the plans and specifications include the requirement for the construction contractor to ensure that loads of dirt are securely covered with a tight-fitting tarp on any truck leaving or entering the construction sites to bring fill dirt to the site or to dispose of excavated soil or leave sufficient freeboard capacity in the truck to prevent fugitive dust emissions enroute to the disposal site. At a minimum, the construction contractor field supervisor (or designee) shall conduct weekly unscheduled walkthroughs of the project site and complete a checklist of measures Air-1 through</p>	<p>Less Than Significant.</p>	<p>City of Chino Community Development Department.</p>	<p>Prior to approval of Project plans and during construction of the Project.</p>

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
Air-6 to demonstrate compliance with the mitigation measures. Monitoring reports shall be signed by the construction contractor and submitted to the City on a weekly basis.			
Biological Resources			
Sensitive Species-1: As a means of minimizing impacts to potentially occurring sensitive wildlife species described in Table 3.4.2-2, at least 45 days prior to the initiation of construction activities within the proposed project area, the project applicant shall stake all proposed impact areas, staging areas, storage areas, parking areas, or other project elements to be potentially impacted by construction so as to allow a qualified biologist familiar with the sensitive biological resources that may occur within the proposed project area to perform preconstruction surveys for sensitive wildlife species. Based on previous surveys, these species may include burrowing owl, California horned lark, Cooper's hawk, sharp-shinned hawk, and golden eagle. Compliance with this mitigation measure shall be verified by the City prior to the initiation of construction activities.	Less Than Significant.	City of Chino Community Development Department.	Prior to initiation of construction activities.
Sensitive Species-2: As a means of minimizing impacts to sensitive wildlife species described in Table 3.4.2-2, at least 30 days prior to the initiation of construction within the proposed project area, the project applicant shall initiate preconstruction surveys for sensitive wildlife species. Preconstruction surveys shall be conducted by a qualified biologist familiar with the sensitive biological resources that may occur	Less Than Significant.	City of Chino Community Development Department.	Prior to initiation of construction activities.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
within the proposed project area. Preconstruction surveys shall be timed to allow detection of sensitive biological resources that may occur within the proposed project site. If sensitive wildlife species are found, to the greatest extent practical, the biologist shall relocate the individual(s) to a designated area outside of the construction zone, unless the species is state listed or federally listed. If any listed species are found on site, all activities shall cease until the project applicant obtains the appropriate state and/or federal incidental take permits. No threatened, endangered, or fully protected species shall be handled without appropriate permits. Compliance with this mitigation measure shall be confirmed by the City, and a copy of the proof of compliance provided to CDFG prior to the initiation of construction activities.			
Sensitive Species-3: As a means of minimizing impacts to sensitive wildlife species mentioned in Sensitive Species-1, the private developer responsible for development of the disposition area, Chaffey College for college construction, and the City of Chino for Ayala Park construction, shall implement a dust control program consistent with the air quality mitigation measures of the EIR for the proposed project. This program shall be in place during all construction activities that could potentially generate dust emissions that may subsequently disturb wildlife species that may be nesting or foraging within the proposed project area. A copy of the completed dust control	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans and during construction of the Project.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
program shall be submitted to the City prior to the initiation of construction activities. Compliance with this mitigation measure shall be confirmed by the City prior to the initiation of construction activities.			
Sensitive Species-4: As a means of minimizing impacts to sensitive bird species listed in Sensitive Species-1 or their nests, the private developer responsible for development of the disposition area, Chaffey College for college construction, and the City of Chino for Ayala Park construction shall conduct all grubbing and brushing activities outside of the breeding season (February 15 to September 15) for burrowing owls and nesting birds subject to the MBTA. If any grubbing or brush removal is required within this time window, a preconstruction wildlife survey shall be conducted by a qualified biologist familiar with the sensitive avian species that may occur in the vicinity of the proposed project area prior to the initiation of brushing activities. If an active nest is found during ground disturbance activities, the biologist shall mark a 100-foot area around the nest. No disturbance can take place within the 100-foot area until such time that the nest is determined to be no longer active as confirmed by the project biologist. A monitoring report for any biological resource found shall be submitted to the City and CDFG by the project biologist. Compliance with this mitigation measure shall be confirmed by the City.	Less Than Significant.	City of Chino Community Development Department and California Department of Fish and Wildlife.	Prior to approval of Project plans and during construction of the Project.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
Sensitive Species-5: As a means of minimizing impacts to sensitive wildlife species listed in Sensitive Species-1, the private developer responsible for development of the disposition area, Chaffey College for college construction, and the City of Chino for Ayala Park construction shall have a qualified biological construction monitor oversee brush removal activities to monitor potential impacts to sensitive wildlife species. Upon completion of all brush removal or ground disturbance activity for the proposed project elements, the biological construction monitoring activity shall be discontinued. The construction monitor shall be familiar with the sensitive biological resources that may occur in the vicinity of the proposed project area. The construction monitor shall have the authority to temporarily stop construction activity if sensitive biological resources are in eminent danger of being impacted. The construction monitor shall keep a log of construction activities and submit log reports to the City and CDFG. Compliance with this mitigation measure shall be confirmed by the City.	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans and during construction of the Project.
Sensitive Species-6: As a means of minimizing impacts to sensitive wildlife species mentioned in Sensitive Species-1, the private developer responsible for development of the disposition area, Chaffey College for college construction, and the City of Chino for Ayala Park construction shall implement a contractor education program. The contractor education program shall be written	Less Than Significant.	City of Chino Community Development Department.	Prior to approval of Project plans and during construction of the Project.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>and conducted by a qualified biologist familiar with the sensitive biological resources that may occur in the vicinity of the proposed project area. The contractor education program shall include field identification of sensitive wildlife species, potential impacts that may result from construction activities, all compliance measures required by the EIR, consequences of not complying with mitigation measures, and contact information for the project biologist and/or biological monitor. A copy of the mitigation and monitoring plan shall be kept on site for work crews to consult. A list of all personnel that have completed the training shall be kept on site, and a copy shall be submitted to the City. Workers shall also be required to have a sticker or other visual marker showing that they have completed the program so that biological monitors and other supervisory personnel can ensure that all construction personnel are in compliance with the mitigation measure. Compliance with this mitigation measure shall be confirmed by the City prior to the initiation of construction activities.</p>			
<p>Burrowing Owl-6: As a means of minimizing impacts to burrowing owls, the private developer responsible for development of the disposition area, Chaffey College for college construction, and the City of Chino for Ayala Park construction, shall implement preconstruction surveys for burrowing owls at least 30 days prior to the initiation of construction within the proposed project area. This will be in addition to the passive relocation specified in Burrowing Owl-4 and shall</p>	Less Than Significant.	City of Chino Community Development Department.	Prior to initiation of construction activities.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>be performed in conjunction with preconstruction surveys as specified in Sensitive Species-2. These preconstruction surveys will be performed to ensure that no active owl burrows were missed during previous surveys. Passive relocation procedures for any burrowing owls found within the proposed construction area during preconstruction surveys will occur as described in mitigation measure Burrowing Owl-4. Passive relocation will not be conducted during the breeding season (between February 15 to September 15), except where fledging of all juvenile owls from the burrow has been completed. Compliance with this mitigation measure shall be confirmed by the City, and a copy of the proof of compliance provided to CDFG prior to the initiation of construction activities.</p>			
Cultural Resources and Tribal Cultural Resources			
<p>Cultural-2: The impact to cultural resources related directly or indirectly to the destruction of archeological resources from the proposed project shall be reduced to below the level of significance through the recovery or treatment of any archeological resources encountered during Phase II archeological site investigations or monitoring of ground-disturbing activities in areas with the potential to contain archeological resources during the construction of City of Chino recreation facilities; the Chaffey Community College campus; the master-planned community, including infrastructure; and the California</p>	<p>Less Than Significant.</p>	<p>City of Chino Community Development Department.</p>	<p>Prior to Project plan approval, prior to initiation of construction activities, and during construction activities.</p>

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>Department of Forestry and Fire Protection Helicopter Facility.</p> <p>Prior to final plans and specifications, for each of the three respective project elements: the City of Chino recreation facilities and the California Department of Forestry and Fire Protection Helicopter Facility; the Chaffey Community College campus; and the master-planned community, including infrastructure, the City of Chino shall require the construction contractor to complete Phase II investigations in the areas characterized by dense vegetation in Cultural Resources Investigation, California Institution for Men, Chino, California. Where Phase II investigations identify unique archeological resources as defined in Section 21083.2 of the Public Resources Code, the site shall be subject to specified requirements for treatment. Any area where unique archeological resources are not identified, but the materials recovered from shovel test pits indicate the potential presence of unique archeological resources, shall be reported to the City of Chino. Where one of the respective elements of the project is expected to require earthmoving in soils at depths of greater than 5 feet below the existing surface, the City shall require that the following program be implemented and that the requirement be duly noted in the plans and specifications:</p> <ul style="list-style-type: none"> • Retain a Qualified Archeologist. A qualified archeologist shall be retained to implement a 			

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>monitoring and recovery program in any area identified as having the potential to contain unique archeological resources.</p> <ul style="list-style-type: none"> • Agreement for Disposition of Recovered Artifact. The selected archeologist shall be required to secure a written agreement with a recognized museum repository, such as the San Bernardino County Museum, Los Angeles County Museum of Natural History, or the California State University, regarding the final disposition and permanent storage and maintenance of any unique archeological resources recovered as a result of the archeological monitoring, as well as corresponding geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (preparation, identification, curation, cataloging) required before the collection would be accepted for storage. • Preconstruction Briefing. The selected archeologist, or an equally qualified designee, shall attend a preconstruction briefing to provide information regarding regulatory requirements for the protection of unique archeological resources. Construction personnel shall be briefed on procedures to be followed in the event that a unique archeological resource is encountered during construction. In addition, the archeologists shall ensure that the participants in the preconstruction briefing shall be informed of the requirement to notify the coroner of the County 			

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>within 24 hours of the discovery of human remains. Upon discovery of human remains, there shall be no further excavation or disturbance of the site or any nearby or reasonably nearby area reasonably suspected to overlie adjacent human remains until the following conditions are met:</p> <ul style="list-style-type: none"> • The coroner of the County in which the remains are discovered has been informed and has determined that no investigation of the cause of death is required, and If the remains are of Native American origin, the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. <p>An information package shall be provided for construction personnel not present at the initial preconstruction briefing. The archeologist shall be required to provide a telephone number where they can be reached by the City Inspector or construction contractor, as necessary.</p> <ul style="list-style-type: none"> • Construction Monitoring. A qualified archeologist shall monitor earthmoving activities in areas of greater than 5 feet in depth that are likely to contain unique archeological resources. The archeologist shall be authorized to halt construction, if necessary, in the immediate area 			

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>where buried cultural remains are encountered. Prior to the resumption of grading activities in the immediate vicinity of the cultural remains, the project proponent shall provide the archeologist with the necessary resources to identify and implement a program for the appropriate disposition (as specified by Section 15064.5 (e) of the State CEQA Guidelines).</p> <ul style="list-style-type: none"> • Monitoring Report. The monitor shall maintain daily monitoring logs that shall be submitted weekly to the City of Chino. A complete set of the daily monitoring logs shall be kept on site throughout the earthmoving activities and be available for inspection. The daily monitoring log shall be keyed to a location map to indicate the area monitored, the date, assigned personnel, and the results of monitoring, including the recovery of archeological material, sketches of recovered materials, and associated geographic site data. Within 90 days of the completion of the archeological monitoring, a monitoring report shall be submitted to the City of Chino and to the Archeological Information Center at the San Bernardino County Museum. The report, when submitted to the City of Chino and the San Bernardino County Museum, signifies the completion of the program to mitigate impacts to archeological resources. 			
Geology and Soils			
Geology-1: To reduce impacts related to faulting and surface rupture on previously unmapped	Less Than Significant.	City of Chino Community	Prior to Project approval.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>photolineaments, and because the proposed project area has not been previously evaluated in detail, the required geotechnical report shall include an assessment to determine if possible faults or fault-related features exist within the proposed project site. No known or suspected faults have been mapped within or trending toward the proposed project based on the reports reviewed for this EIR. The assessment would consist of detailed mapping from aerial photographs and topographic maps, as well as field checking to confirm where possible mapped features have significance to overall development plans. The procedure for implementation would be as follows:</p> <ol style="list-style-type: none">1. Review the geologic data and multiple sets of predevelopment stereoscopic aerial photograph pairs of the proposed project area and the surrounding area sufficient to develop an opinion relative to identification of photolineaments that appear to suggest faulting as the most reasonable interpretation.2. Recommend further analyses or an investigation program to determine which of these identified features may be faults that pose a potential hazard to the development as planned.3. If the evidence generated by the review confirms potential fault features, then appropriate subsurface exploration shall be required to resolve the nature of the		Development Department and City of Chino Engineering Geology and Geotechnical Representative.	

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>suspected trend(s).</p> <p>4. If subsurface exploration reveals sufficiently active trends on previously unmapped photolineaments, the location(s) of the fault(s) shall be mapped and an appropriate setback zone (from habitable structures) shall be delineated. This zone will be delineated at a sufficient number of locations to allow an accurate location of the surface trace(s) and to establish a suitable setback distance from the trace(s), which shall not be less than 50 feet from habitable building foundations unless approved by a qualified certified engineering geologist.</p> <p>The nature of the assessment recommended herein will allow the ground rupture potential to be evaluated prior to more detailed planning of habitable or critical structures and major utilities in the area. The fault study, setback designations, and mitigation measures shall be reviewed and approved by the City's designated engineering geologist representative prior to permit approval.</p> <p>The applicant for each of the three project components (City of Chino, Chaffey Community College, and a private developer) shall be responsible for implementing this mitigation measure with respect to the project component under their jurisdiction. Monitoring and enforcement of this mitigation measure shall be performed by the City of Chino for the entire proposed project area.</p>			

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
Geology-3: The applicant for each of the three project components (City of Chino, Chaffey Community College, and a private developer) shall be responsible for implementing this mitigation measure with respect to the project component under their jurisdiction. The Chaffey Community College component and elementary school plans and specifications shall be subject to review of liquefaction area designations and mitigation measures reviewed and approved by the City of Chino's engineering geology and geotechnical representative. Monitoring and enforcement of this mitigation measure shall be performed by the City of Chino for the entire proposed project area.	Less Than Significant.	City of Chino Engineering Geology and Geotechnical Representative.	Prior to Project plan approval.
Geology-5: To reduce impacts related to subsidence, the applicants shall use the results from the assessment and procedure required in mitigation measure Geology-1 and other evidence for ground distress to determine if other likely locations of fissuring or other ground distress can be identified within and around each component of the proposed project. Using combined ISOB investigation and analysis results, as well as surface data with aerial photographic and topographic map analysis, high potential areas for subsidence-related ground fissures, if any, shall be defined. This shall include the compilation of leveling survey data within the proposed project site as appropriate. High potential subsidence areas shall be further investigated for each individual project component as indicated by the results. Suggested mitigation measures to minimize the impacts of ground fissures on	Less Than Significant.	City of Chino Community Development Department and City of Chino Engineering Geology and Geotechnical Representative.	Prior to Project plan approval.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
<p>construction shall be developed and may include, but not be limited to, one or more of the following:</p> <ul style="list-style-type: none"> • Identifying and avoiding when safer alternative sites are available • Zoning for open spaces, parks, or some kinds of agricultural uses • Structural strengthening to minimize damage to foundations and linear structures <p>The applicant for each of the three project components shall be responsible for implementing this mitigation measure with respect to the project component under their jurisdiction. Monitoring and enforcement of this mitigation measure shall be performed by the City of Chino for the entire proposed project area.</p>			
Hazards and Hazardous Materials			
<p>Hazards-1: To reduce impacts related to the accidental release of hazardous materials during construction, the project proponent and the City shall ensure, through its construction permitting process or through enforcement of contractual obligations for its own projects, that all contractors transport, store, and handle construction-required hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended by California Department of Transportation (Caltrans, regulations regarding transport of hazardous</p>	Less Than Significant.	Chaffey College.	During construction activities.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
materials); the California Regional Water Quality Control Board (CRWQCB), Santa Ana Region (including National Pollution Elimination Discharge Permits for storm water); and the San Bernardino County Fire Department (fuel modification plan requirements) prior to construction. These agencies shall regulate, through the permitting process, the monitoring and enforcement of this mitigation measure as required by law.			
Hazards-2: To reduce impacts related to the accidental release of hazardous materials during construction, the project proponent and the City shall ensure, through its construction permitting process or through enforcement of contractual obligation for its own projects, that all contractors immediately control the source of any unauthorized release of hazardous materials using appropriate release containment measures and remediate any unauthorized release using the methodologies mandated by the City throughout the construction period. The San Bernardino County Fire Department shall monitor and enforce regulations pertaining to the containment, disposal, and unauthorized release of hazardous materials.	Less Than Significant.	Chaffey College and/or San Bernardino County Fire Department.	During construction activities.
Hazards-4: To reduce impacts related to the routine use, transport, or disposal of hazardous materials in the AST at the water treatment plant and on the Chaffey Community College campus, the City shall ensure, through its business operation permitting process or through enforcement through the City Fire Department for its own projects, that all municipal and private	Less Than Significant.	Chaffey College and City of Chino.	During Project operations.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
operations permitted to use, store, or generate hazardous materials do so in a manner consistent with relevant regulations and guidelines, including those mandated by the California EPA; Caltrans; the CRWQCB, Santa Ana Region; and the San Bernardino County Fire Department. These agencies shall be responsible for the monitoring and enforcement of this mitigation measure as required by law.			
Noise			
Noise-1: The City shall minimize the potential for construction noise levels to exceed City noise standards by restricting grading and construction activities to daily operation between 7:00 a.m. and 7:00 p.m. from Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturdays. There shall be no work on Sundays or federal holidays.	Less Than Significant.	Chaffey College and City of Chino.	During construction activities.
Noise-2: Prior to the completion of final plans and specifications, the City shall ensure that the plans and specifications include a requirement that all construction and grading equipment shall be properly maintained. All vehicles and compressors shall utilize exhaust mufflers. Engine enclosure covers as designed by the manufacture shall be in place at all times. The City shall monitor the use of heavy equipment during all construction to ensure conformance with the requirements of properly maintained heavy equipment.	Less Than Significant.	Chaffey College and City of Chino.	During construction activities.
Public Services			
Public Services-2: To reduce impacts to police protection and fire protection services, the applicant for each of the three elements of the	Less Than Significant.	City of Chino Community	Prior to Project plan approval.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
proposed project, City of Chino, Chaffey Community College, and the private developer, shall pay development impact fees (DIFs) in accordance with the City of Chino Municipal Code, where necessary to maintain service objectives to each proposed project element. Chapter 3.4.0 of the City of Chino Municipal Code establishes appropriate DIFs to ensure the necessary funding for the construction of the public improvement needs resulting from the implementation of the proposed project. Monitoring and enforcement of mitigation measure Public Services-2 shall be performed by the City of Chino.		Development Department.	
Utilities and Service Systems			
Utilities-1: The City shall require the owners, developer, and/or successors-in-interest to pay all applicable connection fees and/or capital improvement fees required by City ordinance to fund the improvements necessary to provide potable water to the proposed project site. The City of Chino is responsible for implementation of this mitigation measure.	Less Than Significant.	City of Chino Community Development Department.	Prior to Project plan approval.
Utilities-7: In accordance with the California Solid Waste Management Act of 1989, the City of Chino Department of Public Works shall require the construction contractor to manage the solid waste generated during construction of the project by diverting it from disposal in landfills, particularly Class III landfills, through source reduction, reuse, and recycling of construction and demolition debris. In addition, the City shall require the	Less Than Significant.	City of Chino Community Development Department.	During construction activities.

Mitigation Measures	Level of Significance After Mitigation	Reviewing Entity	Review Stage
owners, developer, and/or successors-in-interest to comply with the City's Solid Waste Source Reduction Plan, which requires mandatory preprocessing of all solid waste generated within the proposed project, including on-site recycling, composting, or reuse programs. The City of Chino is responsible for implementation of this mitigation measure.			

Appendix A

CalEEMod Output Files

SUMMER OUTPUT FILES

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

Chaffey College Chino Campus Mixed Use Building

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	0.93	Acre	0.93	40,510.80	0
Other Non-Asphalt Surfaces	0.93	Acre	0.93	40,510.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2023
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

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

Project Characteristics -

Land Use - Per Site Plan

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Trips and VMT - Hauling trips added per dump truck trips. Vendor trips 2 water truck per Rule 403 during grading and paving; 2 dump truck during grading; 8 daily concrete truck trips during Building construction.

Construction Off-road Equipment Mitigation - Per Rule 403

Waste Mitigation - Per CalRecycle

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	220.00	523.00
tblConstructionPhase	NumDays	6.00	31.00
tblConstructionPhase	NumDays	10.00	21.00
tblGrading	AcresOfGrading	46.50	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	19.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

2.0 Emissions Summary

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)**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	lb/day										lb/day					
2021	4.0221	34.1523	28.7617	0.0604	6.3865	1.6450	7.8221	3.3917	1.5447	4.7132	0.0000	5,745.832 2	5,745.832 2	1.3510	0.0000	5,779.606 6
2022	3.6445	30.0206	28.0033	0.0602	0.5989	1.4157	2.0147	0.1600	1.3296	1.4896	0.0000	5,725.688 7	5,725.688 7	1.3405	0.0000	5,759.200 6
2023	21.2888	38.2512	42.5469	0.0848	0.8912	1.7918	2.6830	0.2378	1.6807	1.9185	0.0000	8,095.349 5	8,095.349 5	1.9015	0.0000	8,142.887 1
Maximum	21.2888	38.2512	42.5469	0.0848	6.3865	1.7918	7.8221	3.3917	1.6807	4.7132	0.0000	8,095.349 5	8,095.349 5	1.9015	0.0000	8,142.887 1

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	lb/day										lb/day					
2021	4.0221	34.1523	28.7617	0.0604	2.6505	1.6450	4.0860	1.3657	1.5447	2.6872	0.0000	5,745.832 1	5,745.832 1	1.3510	0.0000	5,779.606 6
2022	3.6445	30.0206	28.0033	0.0602	0.5989	1.4157	2.0147	0.1600	1.3296	1.4896	0.0000	5,725.688 7	5,725.688 7	1.3405	0.0000	5,759.200 6
2023	21.2888	38.2512	42.5469	0.0848	0.8912	1.7918	2.6830	0.2378	1.6807	1.9185	0.0000	8,095.349 5	8,095.349 5	1.9015	0.0000	8,142.887 1
Maximum	21.2888	38.2512	42.5469	0.0848	2.6505	1.7918	4.0860	1.3657	1.6807	2.6872	0.0000	8,095.349 5	8,095.349 5	1.9015	0.0000	8,142.887 1

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

	ROG	NOx	CO	SO2	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	47.43	0.00	29.84	53.46	0.00	24.95	0.00	0.00	0.00	0.00	0.00	0.00

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

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	lb/day										lb/day					
Area	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Energy	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Mobile	1.7558	9.7213	19.9850	0.0823	6.1960	0.0466	6.2426	1.6579	0.0434	1.7013		8,409.8867	8,409.8867	0.3796		8,419.3767
Total	2.5872	9.8514	20.0979	0.0831	6.1960	0.0565	6.2525	1.6579	0.0533	1.7112		8,565.9141	8,565.9141	0.3826	2.8600e-003	8,576.3318

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	lb/day										lb/day					
Area	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Energy	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Mobile	1.7558	9.7213	19.9850	0.0823	6.1960	0.0466	6.2426	1.6579	0.0434	1.7013		8,409.8867	8,409.8867	0.3796		8,419.3767
Total	2.5872	9.8514	20.0979	0.0831	6.1960	0.0565	6.2525	1.6579	0.0533	1.7112		8,565.9141	8,565.9141	0.3826	2.8600e-003	8,576.3318

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

	ROG	NOx	CO	SO2	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**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2021	10/13/2021	5	31	
2	Building Construction	Building Construction	10/14/2021	10/16/2023	5	523	
3	Paving	Paving	9/18/2023	10/16/2023	5	21	
4	Architectural Coating	Architectural Coating	9/18/2023	10/16/2023	5	21	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 3****Acres of Paving: 1.86****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,500; Non-Residential Outdoor: 17,500; Striped Parking Area: 4,861 (Architectural Coating – sqft)****OffRoad Equipment**

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	1	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

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
Grading	7	18.00	4.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	49.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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	lb/day										lb/day					
Fugitive Dust					6.1247	0.0000	6.1247	3.3213	0.0000	3.3213			0.0000			0.0000
Off-Road	2.9667	33.2538	19.8348	0.0405		1.4323	1.4323		1.3185	1.3185		3,906.9966	3,906.9966	1.2560		3,938.3974
Total	2.9667	33.2538	19.8348	0.0405	6.1247	1.4323	7.5570	3.3213	1.3185	4.6398		3,906.9966	3,906.9966	1.2560		3,938.3974

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.2 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	lb/day										lb/day					
Hauling	0.0119	0.4562	0.0707	1.5500e-003	0.0350	1.2900e-003	0.0363	9.6000e-003	1.2300e-003	0.0108		165.0379	165.0379	8.8500e-003		165.2591
Vendor	0.0104	0.3858	0.0726	1.0800e-003	0.0256	6.6000e-004	0.0263	7.3800e-003	6.3000e-004	8.0100e-003		113.8357	113.8357	7.1900e-003		114.0156
Worker	0.0915	0.0565	0.7452	1.9800e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		196.9345	196.9345	5.6000e-003		197.0746
Total	0.1137	0.8985	0.8884	4.6100e-003	0.2618	3.2400e-003	0.2651	0.0703	3.0500e-003	0.0734		475.8082	475.8082	0.0216		476.3493

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	lb/day										lb/day					
Fugitive Dust					2.3886	0.0000	2.3886	1.2953	0.0000	1.2953			0.0000			0.0000
Off-Road	2.9667	33.2538	19.8348	0.0405		1.4323	1.4323		1.3185	1.3185	0.0000	3,906.9966	3,906.9966	1.2560		3,938.3974
Total	2.9667	33.2538	19.8348	0.0405	2.3886	1.4323	3.8210	1.2953	1.3185	2.6138	0.0000	3,906.9966	3,906.9966	1.2560		3,938.3974

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.2 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	lb/day										lb/day					
Hauling	0.0119	0.4562	0.0707	1.5500e-003	0.0350	1.2900e-003	0.0363	9.6000e-003	1.2300e-003	0.0108		165.0379	165.0379	8.8500e-003		165.2591
Vendor	0.0104	0.3858	0.0726	1.0800e-003	0.0256	6.6000e-004	0.0263	7.3800e-003	6.3000e-004	8.0100e-003		113.8357	113.8357	7.1900e-003		114.0156
Worker	0.0915	0.0565	0.7452	1.9800e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		196.9345	196.9345	5.6000e-003		197.0746
Total	0.1137	0.8985	0.8884	4.6100e-003	0.2618	3.2400e-003	0.2651	0.0703	3.0500e-003	0.0734		475.8082	475.8082	0.0216		476.3493

3.3 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	lb/day										lb/day					
Off-Road	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402		4,982.0613	4,982.0613	1.3213		5,015,0946
Total	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402		4,982.0613	4,982.0613	1.3213		5,015,0946

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.3 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	lb/day										lb/day					
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
Vendor	0.0207	0.7715	0.1452	2.1600e-003	0.0512	1.3200e-003	0.0526	0.0148	1.2700e-003	0.0160		227.6715	227.6715	0.0144		228.0311
Worker	0.2490	0.1539	2.0285	5.3800e-003	0.5477	3.5000e-003	0.5512	0.1453	3.2300e-003	0.1485		536.0995	536.0995	0.0153		536.4809
Total	0.2697	0.9254	2.1737	7.5400e-003	0.5989	4.8200e-003	0.6038	0.1600	4.5000e-003	0.1645		763.7709	763.7709	0.0297		764.5121

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	lb/day										lb/day					
Off-Road	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402	0.0000	4,982.0612	4,982.0612	1.3213		5,015,0946
Total	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402	0.0000	4,982.0612	4,982.0612	1.3213		5,015,0946

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.3 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	lb/day										lb/day					
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
Vendor	0.0207	0.7715	0.1452	2.1600e-003	0.0512	1.3200e-003	0.0526	0.0148	1.2700e-003	0.0160		227.6715	227.6715	0.0144		228.0311
Worker	0.2490	0.1539	2.0285	5.3800e-003	0.5477	3.5000e-003	0.5512	0.1453	3.2300e-003	0.1485		536.0995	536.0995	0.0153		536.4809
Total	0.2697	0.9254	2.1737	7.5400e-003	0.5989	4.8200e-003	0.6038	0.1600	4.5000e-003	0.1645		763.7709	763.7709	0.0297		764.5121

3.3 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	lb/day										lb/day					
Off-Road	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254		4,983.0875	4,983.0875	1.3129		5,015.9100
Total	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254		4,983.0875	4,983.0875	1.3129		5,015.9100

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.3 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	lb/day										lb/day					
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
Vendor	0.0193	0.7317	0.1342	2.1400e-003	0.0512	1.1100e-003	0.0524	0.0148	1.0600e-003	0.0158		225.8461	225.8461	0.0139		226.1933
Worker	0.2325	0.1384	1.8635	5.1900e-003	0.5477	3.4000e-003	0.5511	0.1453	3.1300e-003	0.1484		516.7552	516.7552	0.0137		517.0973
Total	0.2518	0.8701	1.9977	7.3300e-003	0.5989	4.5100e-003	0.6035	0.1600	4.1900e-003	0.1642		742.6013	742.6013	0.0276		743.2907

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	lb/day										lb/day					
Off-Road	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254	0.0000	4,983.0875	4,983.0875	1.3129		5,015.9100
Total	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254	0.0000	4,983.0875	4,983.0875	1.3129		5,015.9100

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.3 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	lb/day										lb/day					
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
Vendor	0.0193	0.7317	0.1342	2.1400e-003	0.0512	1.1100e-003	0.0524	0.0148	1.0600e-003	0.0158		225.8461	225.8461	0.0139		226.1933
Worker	0.2325	0.1384	1.8635	5.1900e-003	0.5477	3.4000e-003	0.5511	0.1453	3.1300e-003	0.1484		516.7552	516.7552	0.0137		517.0973
Total	0.2518	0.8701	1.9977	7.3300e-003	0.5989	4.5100e-003	0.6035	0.1600	4.1900e-003	0.1642		742.6013	742.6013	0.0276		743.2907

3.3 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	lb/day										lb/day					
Off-Road	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807		4,984.5603	4,984.5603	1.3046		5,017.1756
Total	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807		4,984.5603	4,984.5603	1.3046		5,017.1756

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.3 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	lb/day										lb/day					
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
Vendor	0.0146	0.5666	0.1170	2.0800e-003	0.0512	5.5000e-004	0.0518	0.0148	5.2000e-004	0.0153		219.5756	219.5756	0.0112		219.8553
Worker	0.2175	0.1246	1.7111	4.9900e-003	0.5477	3.3100e-003	0.5510	0.1453	3.0500e-003	0.1483		497.3256	497.3256	0.0123		497.6319
Total	0.2321	0.6912	1.8281	7.0700e-003	0.5989	3.8600e-003	0.6028	0.1600	3.5700e-003	0.1636		716.9012	716.9012	0.0234		717.4872

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	lb/day										lb/day					
Off-Road	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807	0.0000	4,984.5603	4,984.5603	1.3046		5,017.1756
Total	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807	0.0000	4,984.5603	4,984.5603	1.3046		5,017.1756

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.3 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	lb/day										lb/day					
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
Vendor	0.0146	0.5666	0.1170	2.0800e-003	0.0512	5.5000e-004	0.0518	0.0148	5.2000e-004	0.0153		219.5756	219.5756	0.0112		219.8553
Worker	0.2175	0.1246	1.7111	4.9900e-003	0.5477	3.3100e-003	0.5510	0.1453	3.0500e-003	0.1483		497.3256	497.3256	0.0123		497.6319
Total	0.2321	0.6912	1.8281	7.0700e-003	0.5989	3.8600e-003	0.6028	0.1600	3.5700e-003	0.1636		716.9012	716.9012	0.0234		717.4872

3.4 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	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9962	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.4 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	lb/day										lb/day					
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
Vendor	3.6400e-003	0.1416	0.0292	5.2000e-004	0.0128	1.4000e-004	0.0130	3.6900e-003	1.3000e-004	3.8200e-003		54.8939	54.8939	2.8000e-003		54.9638
Worker	0.0666	0.0381	0.5238	1.5300e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		152.2425	152.2425	3.7500e-003		152.3363
Total	0.0702	0.1798	0.5531	2.0500e-003	0.1805	1.1500e-003	0.1816	0.0482	1.0600e-003	0.0492		207.1364	207.1364	6.5500e-003		207.3001

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	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9962	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.4 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	lb/day										lb/day					
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
Vendor	3.6400e-003	0.1416	0.0292	5.2000e-004	0.0128	1.4000e-004	0.0130	3.6900e-003	1.3000e-004	3.8200e-003		54.8939	54.8939	2.8000e-003		54.9638
Worker	0.0666	0.0381	0.5238	1.5300e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		152.2425	152.2425	3.7500e-003		152.3363
Total	0.0702	0.1798	0.5531	2.0500e-003	0.1805	1.1500e-003	0.1816	0.0482	1.0600e-003	0.0492		207.1364	207.1364	6.5500e-003		207.3001

3.5 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	lb/day										lb/day					
Archit. Coating	16.5229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	16.7784	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253

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3.5 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	lb/day										lb/day					
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
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
Worker	0.0444	0.0254	0.3492	1.0200e-003	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.4950	101.4950	2.5000e-003		101.5575
Total	0.0444	0.0254	0.3492	1.0200e-003	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.4950	101.4950	2.5000e-003		101.5575

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	lb/day										lb/day					
Archit. Coating	16.5229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	16.7784	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

3.5 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	lb/day										lb/day					
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
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
Worker	0.0444	0.0254	0.3492	1.0200e-003	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.4950	101.4950	2.5000e-003		101.5575
Total	0.0444	0.0254	0.3492	1.0200e-003	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		101.4950	101.4950	2.5000e-003		101.5575

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7558	9.7213	19.9850	0.0823	6.1960	0.0466	6.2426	1.6579	0.0434	1.7013		8,409.8867	8,409.8867	0.3796		8,419.3767
Unmitigated	1.7558	9.7213	19.9850	0.0823	6.1960	0.0466	6.2426	1.6579	0.0434	1.7013		8,409.8867	8,409.8867	0.3796		8,419.3767

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	962.15	393.05	42.35	2,263,607	2,263,607
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	962.15	393.05	42.35	2,263,607	2,263,607

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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Non-Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
NaturalGas Unmitigated	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	1326.16	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465

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	lb/day										lb/day					
Junior College (2Yr)	1.32616	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465

6.0 Area Detail

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

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	lb/day										lb/day					
Mitigated	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Unmitigated	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7217					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Total	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7217					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Total	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Summer

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

WINTER OUTPUT FILES

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

Chaffey College Chino Campus Mixed Use Building

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	0.93	Acre	0.93	40,510.80	0
Other Non-Asphalt Surfaces	0.93	Acre	0.93	40,510.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2023
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

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

Project Characteristics -

Land Use - Per Site Plan

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Trips and VMT - Hauling trips added per dump truck trips. Vendor trips 2 water truck per Rule 403 during grading and paving; 2 dump truck during grading; 8 daily concrete truck trips during Building construction.

Construction Off-road Equipment Mitigation - Per Rule 403

Waste Mitigation - Per CalRecycle

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	220.00	523.00
tblConstructionPhase	NumDays	6.00	31.00
tblConstructionPhase	NumDays	10.00	21.00
tblGrading	AcresOfGrading	46.50	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	19.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

2.0 Emissions Summary

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)**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	lb/day										lb/day					
2021	4.0239	34.1528	28.4216	0.0597	6.3865	1.6450	7.8221	3.3917	1.5447	4.7132	0.0000	5,681.823 2	5,681.823 2	1.3507	0.0000	5,715.589 9
2022	3.6468	30.0191	27.6891	0.0596	0.5989	1.4158	2.0147	0.1600	1.3296	1.4896	0.0000	5,663.704 0	5,663.704 0	1.3403	0.0000	5,697.212 3
2023	21.2924	38.2511	42.0969	0.0839	0.8912	1.7918	2.6830	0.2378	1.6807	1.9185	0.0000	8,007.584 0	8,007.584 0	1.9007	0.0000	8,055.102 0
Maximum	21.2924	38.2511	42.0969	0.0839	6.3865	1.7918	7.8221	3.3917	1.6807	4.7132	0.0000	8,007.584 0	8,007.584 0	1.9007	0.0000	8,055.102 0

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	lb/day										lb/day					
2021	4.0239	34.1528	28.4216	0.0597	2.6505	1.6450	4.0860	1.3657	1.5447	2.6872	0.0000	5,681.823 2	5,681.823 2	1.3507	0.0000	5,715.589 9
2022	3.6468	30.0191	27.6891	0.0596	0.5989	1.4158	2.0147	0.1600	1.3296	1.4896	0.0000	5,663.704 0	5,663.704 0	1.3403	0.0000	5,697.212 3
2023	21.2924	38.2511	42.0969	0.0839	0.8912	1.7918	2.6830	0.2378	1.6807	1.9185	0.0000	8,007.584 0	8,007.584 0	1.9007	0.0000	8,055.102 0
Maximum	21.2924	38.2511	42.0969	0.0839	2.6505	1.7918	4.0860	1.3657	1.6807	2.6872	0.0000	8,007.584 0	8,007.584 0	1.9007	0.0000	8,055.102 0

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

	ROG	NOx	CO	SO2	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	47.43	0.00	29.84	53.46	0.00	24.95	0.00	0.00	0.00	0.00	0.00	0.00

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

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	lb/day										lb/day					
Area	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Energy	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Mobile	1.5170	9.7077	17.5454	0.0759	6.1960	0.0469	6.2429	1.6579	0.0437	1.7016		7,760.6487	7,760.6487	0.3859		7,770.2967
Total	2.3484	9.8378	17.6584	0.0767	6.1960	0.0568	6.2528	1.6579	0.0536	1.7115		7,916.6761	7,916.6761	0.3889	2.8600e-003	7,927.2518

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	lb/day										lb/day					
Area	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Energy	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Mobile	1.5170	9.7077	17.5454	0.0759	6.1960	0.0469	6.2429	1.6579	0.0437	1.7016		7,760.6487	7,760.6487	0.3859		7,770.2967
Total	2.3484	9.8378	17.6584	0.0767	6.1960	0.0568	6.2528	1.6579	0.0536	1.7115		7,916.6761	7,916.6761	0.3889	2.8600e-003	7,927.2518

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

	ROG	NOx	CO	SO2	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2021	10/13/2021	5	31	
2	Building Construction	Building Construction	10/14/2021	10/16/2023	5	523	
3	Paving	Paving	9/18/2023	10/16/2023	5	21	
4	Architectural Coating	Architectural Coating	9/18/2023	10/16/2023	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.86

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,500; Non-Residential Outdoor: 17,500; Striped Parking Area: 4,861 (Architectural Coating – sqft)

OffRoad Equipment

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	1	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

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
Grading	7	18.00	4.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	49.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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	lb/day										lb/day					
Fugitive Dust					6.1247	0.0000	6.1247	3.3213	0.0000	3.3213			0.0000			0.0000
Off-Road	2.9667	33.2538	19.8348	0.0405		1.4323	1.4323		1.3185	1.3185		3,906.9966	3,906.9966	1.2560		3,938.3974
Total	2.9667	33.2538	19.8348	0.0405	6.1247	1.4323	7.5570	3.3213	1.3185	4.6398		3,906.9966	3,906.9966	1.2560		3,938.3974

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.2 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	lb/day										lb/day					
Hauling	0.0124	0.4579	0.0807	1.5100e-003	0.0350	1.3100e-003	0.0363	9.6000e-003	1.2500e-003	0.0109		160.7128	160.7128	9.6100e-003		160.9529
Vendor	0.0110	0.3816	0.0849	1.0400e-003	0.0256	6.8000e-004	0.0263	7.3800e-003	6.5000e-004	8.0300e-003		109.4141	109.4141	7.9700e-003		109.6134
Worker	0.0917	0.0595	0.6112	1.7700e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		176.6696	176.6696	4.9200e-003		176.7925
Total	0.1151	0.8990	0.7768	4.3200e-003	0.2618	3.2800e-003	0.2651	0.0703	3.0900e-003	0.0734		446.7964	446.7964	0.0225		447.3589

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	lb/day										lb/day					
Fugitive Dust					2.3886	0.0000	2.3886	1.2953	0.0000	1.2953			0.0000			0.0000
Off-Road	2.9667	33.2538	19.8348	0.0405		1.4323	1.4323		1.3185	1.3185	0.0000	3,906.9966	3,906.9966	1.2560		3,938.3974
Total	2.9667	33.2538	19.8348	0.0405	2.3886	1.4323	3.8210	1.2953	1.3185	2.6138	0.0000	3,906.9966	3,906.9966	1.2560		3,938.3974

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.2 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	lb/day										lb/day					
Hauling	0.0124	0.4579	0.0807	1.5100e-003	0.0350	1.3100e-003	0.0363	9.6000e-003	1.2500e-003	0.0109		160.7128	160.7128	9.6100e-003		160.9529
Vendor	0.0110	0.3816	0.0849	1.0400e-003	0.0256	6.8000e-004	0.0263	7.3800e-003	6.5000e-004	8.0300e-003		109.4141	109.4141	7.9700e-003		109.6134
Worker	0.0917	0.0595	0.6112	1.7700e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		176.6696	176.6696	4.9200e-003		176.7925
Total	0.1151	0.8990	0.7768	4.3200e-003	0.2618	3.2800e-003	0.2651	0.0703	3.0900e-003	0.0734		446.7964	446.7964	0.0225		447.3589

3.3 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	lb/day										lb/day					
Off-Road	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402		4,982.0613	4,982.0613	1.3213		5,015,0946
Total	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402		4,982.0613	4,982.0613	1.3213		5,015,0946

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.3 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	lb/day										lb/day					
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
Vendor	0.0220	0.7633	0.1698	2.0700e-003	0.0512	1.3600e-003	0.0526	0.0148	1.3000e-003	0.0161		218.8281	218.8281	0.0160		219.2268
Worker	0.2495	0.1619	1.6638	4.8300e-003	0.5477	3.5000e-003	0.5512	0.1453	3.2300e-003	0.1485		480.9339	480.9339	0.0134		481.2685
Total	0.2715	0.9252	1.8336	6.9000e-003	0.5989	4.8600e-003	0.6038	0.1600	4.5300e-003	0.1645		699.7620	699.7620	0.0293		700.4953

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	lb/day										lb/day					
Off-Road	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402	0.0000	4,982.0612	4,982.0612	1.3213		5,015,0946
Total	3.7525	32.9459	26.5880	0.0528		1.6402	1.6402		1.5402	1.5402	0.0000	4,982.0612	4,982.0612	1.3213		5,015,0946

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.3 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	lb/day										lb/day					
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
Vendor	0.0220	0.7633	0.1698	2.0700e-003	0.0512	1.3600e-003	0.0526	0.0148	1.3000e-003	0.0161		218.8281	218.8281	0.0160		219.2268
Worker	0.2495	0.1619	1.6638	4.8300e-003	0.5477	3.5000e-003	0.5512	0.1453	3.2300e-003	0.1485		480.9339	480.9339	0.0134		481.2685
Total	0.2715	0.9252	1.8336	6.9000e-003	0.5989	4.8600e-003	0.6038	0.1600	4.5300e-003	0.1645		699.7620	699.7620	0.0293		700.4953

3.3 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	lb/day										lb/day					
Off-Road	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254		4,983.0875	4,983.0875	1.3129		5,015.9100
Total	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254		4,983.0875	4,983.0875	1.3129		5,015.9100

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.3 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	lb/day										lb/day					
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
Vendor	0.0205	0.7231	0.1576	2.0600e-003	0.0512	1.1400e-003	0.0524	0.0148	1.0900e-003	0.0159		217.0050	217.0050	0.0154		217.3905
Worker	0.2336	0.1455	1.5260	4.6500e-003	0.5477	3.4000e-003	0.5511	0.1453	3.1300e-003	0.1484		463.6115	463.6115	0.0120		463.9119
Total	0.2541	0.8686	1.6836	6.7100e-003	0.5989	4.5400e-003	0.6035	0.1600	4.2200e-003	0.1642		680.6165	680.6165	0.0274		681.3024

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	lb/day										lb/day					
Off-Road	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254	0.0000	4,983.0875	4,983.0875	1.3129		5,015.9100
Total	3.3927	29.1505	26.0055	0.0528		1.4112	1.4112		1.3254	1.3254	0.0000	4,983.0875	4,983.0875	1.3129		5,015.9100

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.3 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	lb/day										lb/day					
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
Vendor	0.0205	0.7231	0.1576	2.0600e-003	0.0512	1.1400e-003	0.0524	0.0148	1.0900e-003	0.0159		217.0050	217.0050	0.0154		217.3905
Worker	0.2336	0.1455	1.5260	4.6500e-003	0.5477	3.4000e-003	0.5511	0.1453	3.1300e-003	0.1484		463.6115	463.6115	0.0120		463.9119
Total	0.2541	0.8686	1.6836	6.7100e-003	0.5989	4.5400e-003	0.6035	0.1600	4.2200e-003	0.1642		680.6165	680.6165	0.0274		681.3024

3.3 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	lb/day										lb/day					
Off-Road	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807		4,984.5603	4,984.5603	1.3046		5,017.1756
Total	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807		4,984.5603	4,984.5603	1.3046		5,017.1756

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.3 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	lb/day										lb/day					
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
Vendor	0.0155	0.5589	0.1341	2.0000e-003	0.0512	5.7000e-004	0.0518	0.0148	5.4000e-004	0.0153		211.1187	211.1187	0.0124		211.4275
Worker	0.2192	0.1309	1.3990	4.4800e-003	0.5477	3.3100e-003	0.5510	0.1453	3.0500e-003	0.1483		446.2104	446.2104	0.0108		446.4796
Total	0.2346	0.6898	1.5331	6.4800e-003	0.5989	3.8800e-003	0.6028	0.1600	3.5900e-003	0.1636		657.3291	657.3291	0.0231		657.9071

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	lb/day										lb/day					
Off-Road	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807	0.0000	4,984.5603	4,984.5603	1.3046		5,017.1756
Total	3.1674	27.0077	25.7177	0.0529		1.2579	1.2579		1.1807	1.1807	0.0000	4,984.5603	4,984.5603	1.3046		5,017.1756

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.3 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	lb/day										lb/day					
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
Vendor	0.0155	0.5589	0.1341	2.0000e-003	0.0512	5.7000e-004	0.0518	0.0148	5.4000e-004	0.0153		211.1187	211.1187	0.0124		211.4275
Worker	0.2192	0.1309	1.3990	4.4800e-003	0.5477	3.3100e-003	0.5510	0.1453	3.0500e-003	0.1483		446.2104	446.2104	0.0108		446.4796
Total	0.2346	0.6898	1.5331	6.4800e-003	0.5989	3.8800e-003	0.6028	0.1600	3.5900e-003	0.1636		657.3291	657.3291	0.0231		657.9071

3.4 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	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9962	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.4 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	lb/day										lb/day					
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
Vendor	3.8600e-003	0.1397	0.0335	5.0000e-004	0.0128	1.4000e-004	0.0130	3.6900e-003	1.4000e-004	3.8200e-003		52.7797	52.7797	3.0900e-003		52.8569
Worker	0.0671	0.0401	0.4283	1.3700e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		136.5950	136.5950	3.3000e-003		136.6774
Total	0.0710	0.1798	0.4618	1.8700e-003	0.1805	1.1500e-003	0.1816	0.0482	1.0700e-003	0.0492		189.3747	189.3747	6.3900e-003		189.5343

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	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9962	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.4 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	lb/day										lb/day					
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
Vendor	3.8600e-003	0.1397	0.0335	5.0000e-004	0.0128	1.4000e-004	0.0130	3.6900e-003	1.4000e-004	3.8200e-003		52.7797	52.7797	3.0900e-003		52.8569
Worker	0.0671	0.0401	0.4283	1.3700e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		136.5950	136.5950	3.3000e-003		136.6774
Total	0.0710	0.1798	0.4618	1.8700e-003	0.1805	1.1500e-003	0.1816	0.0482	1.0700e-003	0.0492		189.3747	189.3747	6.3900e-003		189.5343

3.5 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	lb/day										lb/day					
Archit. Coating	16.5229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	16.7784	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.5 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	lb/day										lb/day					
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
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
Worker	0.0447	0.0267	0.2855	9.1000e-004	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		91.0633	91.0633	2.2000e-003		91.1183
Total	0.0447	0.0267	0.2855	9.1000e-004	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		91.0633	91.0633	2.2000e-003		91.1183

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	lb/day										lb/day					
Archit. Coating	16.5229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	16.7784	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

3.5 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	lb/day										lb/day					
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
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
Worker	0.0447	0.0267	0.2855	9.1000e-004	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		91.0633	91.0633	2.2000e-003		91.1183
Total	0.0447	0.0267	0.2855	9.1000e-004	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		91.0633	91.0633	2.2000e-003		91.1183

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5170	9.7077	17.5454	0.0759	6.1960	0.0469	6.2429	1.6579	0.0437	1.7016		7,760.6487	7,760.6487	0.3859		7,770.2967
Unmitigated	1.5170	9.7077	17.5454	0.0759	6.1960	0.0469	6.2429	1.6579	0.0437	1.7016		7,760.6487	7,760.6487	0.3859		7,770.2967

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	962.15	393.05	42.35	2,263,607	2,263,607
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	962.15	393.05	42.35	2,263,607	2,263,607

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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Non-Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
NaturalGas Unmitigated	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	1326.16	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465

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	lb/day										lb/day					
Junior College (2Yr)	1.32616	0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		0.0143	0.1300	0.1092	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003		156.0193	156.0193	2.9900e-003	2.8600e-003	156.9465

6.0 Area Detail

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

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	lb/day										lb/day					
Mitigated	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Unmitigated	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7217					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Total	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7217					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003
Total	0.8171	3.0000e-005	3.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.0700e-003	8.0700e-003	2.0000e-005		8.6000e-003

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Winter

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

ANNUAL OUTPUT FILES

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

Chaffey College Chino Campus Mixed Use Building

San Bernardino-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)	35.00	1000sqft	0.80	35,000.00	0
Other Asphalt Surfaces	0.93	Acre	0.93	40,510.80	0
Other Non-Asphalt Surfaces	0.93	Acre	0.93	40,510.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2023
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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Project Characteristics -

Land Use - Per Site Plan

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Off-road Equipment - Per Applicant

Trips and VMT - Hauling trips added per dump truck trips. Vendor trips 2 water truck per Rule 403 during grading and paving; 2 dump truck during grading; 8 daily concrete truck trips during Building construction.

Construction Off-road Equipment Mitigation - Per Rule 403

Waste Mitigation - Per CalRecycle

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	220.00	523.00
tblConstructionPhase	NumDays	6.00	31.00
tblConstructionPhase	NumDays	10.00	21.00
tblGrading	AcresOfGrading	46.50	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	19.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

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2.0 Emissions Summary

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1616	1.4957	1.1318	2.4000e-003	0.1157	0.0691	0.1848	0.0570	0.0645	0.1215	0.0000	208.6532	208.6532	0.0529	0.0000	209.9751
2022	0.4710	3.9053	3.6079	7.7600e-003	0.0764	0.1840	0.2605	0.0204	0.1729	0.1933	0.0000	669.7447	669.7447	0.1580	0.0000	673.6949
2023	0.5359	2.9654	2.9694	6.3900e-003	0.0635	0.1355	0.1991	0.0170	0.1272	0.1442	0.0000	551.1419	551.1419	0.1295	0.0000	554.3791
Maximum	0.5359	3.9053	3.6079	7.7600e-003	0.1157	0.1840	0.2605	0.0570	0.1729	0.1933	0.0000	669.7447	669.7447	0.1580	0.0000	673.6949

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1616	1.4957	1.1318	2.4000e-003	0.0578	0.0691	0.1269	0.0256	0.0645	0.0901	0.0000	208.6529	208.6529	0.0529	0.0000	209.9748
2022	0.4710	3.9053	3.6079	7.7600e-003	0.0764	0.1840	0.2605	0.0204	0.1729	0.1933	0.0000	669.7440	669.7440	0.1580	0.0000	673.6942
2023	0.5359	2.9654	2.9694	6.3900e-003	0.0635	0.1355	0.1991	0.0170	0.1272	0.1442	0.0000	551.1413	551.1413	0.1295	0.0000	554.3785
Maximum	0.5359	3.9053	3.6079	7.7600e-003	0.0764	0.1840	0.2605	0.0256	0.1729	0.1933	0.0000	669.7440	669.7440	0.1580	0.0000	673.6942

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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	0.00	0.00	0.00	0.00	22.66	0.00	8.99	33.24	0.00	6.84	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.2214	1.2214
2	12-1-2021	2-28-2022	1.1289	1.1289
3	3-1-2022	5-31-2022	1.1061	1.1061
4	6-1-2022	8-31-2022	1.1061	1.1061
5	9-1-2022	11-30-2022	1.0941	1.0941
6	12-1-2022	2-28-2023	1.0280	1.0280
7	3-1-2023	5-31-2023	1.0218	1.0218
8	6-1-2023	8-31-2023	1.0218	1.0218
9	9-1-2023	9-30-2023	0.4652	0.4652
		Highest	1.2214	1.2214

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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	0.1491	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Energy	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	113.7065	113.7065	4.1200e-003	1.2200e-003	114.1744
Mobile	0.2099	1.4066	2.5698	0.0110	0.8620	6.6200e-003	0.8686	0.2310	6.1700e-003	0.2372	0.0000	1,019.2855	1,019.2855	0.0487	0.0000	1,020.5031
Waste						0.0000	0.0000		0.0000	0.0000	9.2361	0.0000	9.2361	0.5458	0.0000	22.8820
Water						0.0000	0.0000		0.0000	0.0000	0.5446	16.6273	17.1719	0.0566	1.4600e-003	19.0235
Total	0.3616	1.4303	2.5902	0.0111	0.8620	8.4200e-003	0.8704	0.2310	7.9700e-003	0.2390	9.7807	1,149.6202	1,159.4009	0.6553	2.6800e-003	1,176.5840

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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	0.1491	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Energy	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	113.7065	113.7065	4.1200e-003	1.2200e-003	114.1744
Mobile	0.2099	1.4066	2.5698	0.0110	0.8620	6.6200e-003	0.8686	0.2310	6.1700e-003	0.2372	0.0000	1,019.2855	1,019.2855	0.0487	0.0000	1,020.5031
Waste						0.0000	0.0000		0.0000	0.0000	3.6021	0.0000	3.6021	0.2129	0.0000	8.9240
Water						0.0000	0.0000		0.0000	0.0000	0.5446	16.6273	17.1719	0.0566	1.4600e-003	19.0235
Total	0.3616	1.4303	2.5902	0.0111	0.8620	8.4200e-003	0.8704	0.2310	7.9700e-003	0.2390	4.1467	1,149.6202	1,153.7669	0.3223	2.6800e-003	1,162.6259

	ROG	NOx	CO	SO2	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	57.60	0.00	0.49	50.81	0.00	1.19

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	Grading	Grading	9/1/2021	10/13/2021	5	31	
2	Building Construction	Building Construction	10/14/2021	10/16/2023	5	523	
3	Paving	Paving	9/18/2023	10/16/2023	5	21	
4	Architectural Coating	Architectural Coating	9/18/2023	10/16/2023	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.86

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,500; Non-Residential Outdoor: 17,500; Striped Parking Area: 4,861 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	1	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	402	0.38
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Trenchers	1	8.00	78	0.50
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

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
Grading	7	18.00	4.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	49.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					0.0949	0.0000	0.0949	0.0515	0.0000	0.0515	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0460	0.5154	0.3074	6.3000e-004		0.0222	0.0222		0.0204	0.0204	0.0000	54.9377	54.9377	0.0177	0.0000	55.3792
Total	0.0460	0.5154	0.3074	6.3000e-004	0.0949	0.0222	0.1171	0.0515	0.0204	0.0719	0.0000	54.9377	54.9377	0.0177	0.0000	55.3792

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3.2 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	1.9000e-004	7.2400e-003	1.1600e-003	2.0000e-005	5.3000e-004	2.0000e-005	5.5000e-004	1.5000e-004	2.0000e-005	1.7000e-004	0.0000	2.2951	2.2951	1.3000e-004	0.0000	2.2983
Vendor	1.6000e-004	6.0300e-003	1.2300e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.5746	1.5746	1.1000e-004	0.0000	1.5772
Worker	1.2800e-003	9.7000e-004	9.9400e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0800e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.5386	2.5386	7.0000e-005	0.0000	2.5404
Total	1.6300e-003	0.0142	0.0123	7.0000e-005	3.9800e-003	5.0000e-005	4.0300e-003	1.0700e-003	5.0000e-005	1.1200e-003	0.0000	6.4083	6.4083	3.1000e-004	0.0000	6.4160

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					0.0370	0.0000	0.0370	0.0201	0.0000	0.0201	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0460	0.5154	0.3074	6.3000e-004		0.0222	0.0222		0.0204	0.0204	0.0000	54.9376	54.9376	0.0177	0.0000	55.3792
Total	0.0460	0.5154	0.3074	6.3000e-004	0.0370	0.0222	0.0592	0.0201	0.0204	0.0405	0.0000	54.9376	54.9376	0.0177	0.0000	55.3792

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3.2 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	1.9000e-004	7.2400e-003	1.1600e-003	2.0000e-005	5.3000e-004	2.0000e-005	5.5000e-004	1.5000e-004	2.0000e-005	1.7000e-004	0.0000	2.2951	2.2951	1.3000e-004	0.0000	2.2983
Vendor	1.6000e-004	6.0300e-003	1.2300e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.5746	1.5746	1.1000e-004	0.0000	1.5772
Worker	1.2800e-003	9.7000e-004	9.9400e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0800e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.5386	2.5386	7.0000e-005	0.0000	2.5404
Total	1.6300e-003	0.0142	0.0123	7.0000e-005	3.9800e-003	5.0000e-005	4.0300e-003	1.0700e-003	5.0000e-005	1.1200e-003	0.0000	6.4083	6.4083	3.1000e-004	0.0000	6.4160

3.3 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	0.1070	0.9390	0.7578	1.5100e-003		0.0467	0.0467		0.0439	0.0439	0.0000	128.8100	128.8100	0.0342	0.0000	129.6641
Total	0.1070	0.9390	0.7578	1.5100e-003		0.0467	0.0467		0.0439	0.0439	0.0000	128.8100	128.8100	0.0342	0.0000	129.6641

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3.3 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	6.0000e-004	0.0222	4.5100e-003	6.0000e-005	1.4400e-003	4.0000e-005	1.4800e-003	4.1000e-004	4.0000e-005	4.5000e-004	0.0000	5.7904	5.7904	3.9000e-004	0.0000	5.8001
Worker	6.4300e-003	4.8600e-003	0.0498	1.4000e-004	0.0153	1.0000e-004	0.0154	4.0700e-003	9.0000e-005	4.1600e-003	0.0000	12.7068	12.7068	3.6000e-004	0.0000	12.7157
Total	7.0300e-003	0.0270	0.0543	2.0000e-004	0.0168	1.4000e-004	0.0169	4.4800e-003	1.3000e-004	4.6100e-003	0.0000	18.4971	18.4971	7.5000e-004	0.0000	18.5158

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	0.1069	0.9390	0.7578	1.5100e-003		0.0467	0.0467		0.0439	0.0439	0.0000	128.8099	128.8099	0.0342	0.0000	129.6639
Total	0.1069	0.9390	0.7578	1.5100e-003		0.0467	0.0467		0.0439	0.0439	0.0000	128.8099	128.8099	0.0342	0.0000	129.6639

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3.3 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	6.0000e-004	0.0222	4.5100e-003	6.0000e-005	1.4400e-003	4.0000e-005	1.4800e-003	4.1000e-004	4.0000e-005	4.5000e-004	0.0000	5.7904	5.7904	3.9000e-004	0.0000	5.8001
Worker	6.4300e-003	4.8600e-003	0.0498	1.4000e-004	0.0153	1.0000e-004	0.0154	4.0700e-003	9.0000e-005	4.1600e-003	0.0000	12.7068	12.7068	3.6000e-004	0.0000	12.7157
Total	7.0300e-003	0.0270	0.0543	2.0000e-004	0.0168	1.4000e-004	0.0169	4.4800e-003	1.3000e-004	4.6100e-003	0.0000	18.4971	18.4971	7.5000e-004	0.0000	18.5158

3.3 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	0.4411	3.7896	3.3807	6.8700e-003		0.1835	0.1835		0.1723	0.1723	0.0000	587.6755	587.6755	0.1548	0.0000	591.5464
Total	0.4411	3.7896	3.3807	6.8700e-003		0.1835	0.1835		0.1723	0.1723	0.0000	587.6755	587.6755	0.1548	0.0000	591.5464

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3.3 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	2.5700e-003	0.0958	0.0191	2.7000e-004	6.5600e-003	1.5000e-004	6.7000e-003	1.8900e-003	1.4000e-004	2.0300e-003	0.0000	26.1970	26.1970	1.7200e-003	0.0000	26.2400
Worker	0.0274	0.0199	0.2082	6.2000e-004	0.0698	4.4000e-004	0.0703	0.0186	4.1000e-004	0.0190	0.0000	55.8722	55.8722	1.4600e-003	0.0000	55.9085
Total	0.0300	0.1158	0.2272	8.9000e-004	0.0764	5.9000e-004	0.0770	0.0204	5.5000e-004	0.0210	0.0000	82.0692	82.0692	3.1800e-003	0.0000	82.1485

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	0.4411	3.7896	3.3807	6.8700e-003		0.1835	0.1835		0.1723	0.1723	0.0000	587.6748	587.6748	0.1548	0.0000	591.5457
Total	0.4411	3.7896	3.3807	6.8700e-003		0.1835	0.1835		0.1723	0.1723	0.0000	587.6748	587.6748	0.1548	0.0000	591.5457

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3.3 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	2.5700e-003	0.0958	0.0191	2.7000e-004	6.5600e-003	1.5000e-004	6.7000e-003	1.8900e-003	1.4000e-004	2.0300e-003	0.0000	26.1970	26.1970	1.7200e-003	0.0000	26.2400
Worker	0.0274	0.0199	0.2082	6.2000e-004	0.0698	4.4000e-004	0.0703	0.0186	4.1000e-004	0.0190	0.0000	55.8722	55.8722	1.4600e-003	0.0000	55.9085
Total	0.0300	0.1158	0.2272	8.9000e-004	0.0764	5.9000e-004	0.0770	0.0204	5.5000e-004	0.0210	0.0000	82.0692	82.0692	3.1800e-003	0.0000	82.1485

3.3 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	0.3262	2.7818	2.6489	5.4400e-003		0.1296	0.1296		0.1216	0.1216	0.0000	465.7575	465.7575	0.1219	0.0000	468.8050
Total	0.3262	2.7818	2.6489	5.4400e-003		0.1296	0.1296		0.1216	0.1216	0.0000	465.7575	465.7575	0.1219	0.0000	468.8050

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3.3 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	1.5400e-003	0.0585	0.0130	2.1000e-004	5.1900e-003	6.0000e-005	5.2500e-003	1.5000e-003	5.0000e-005	1.5500e-003	0.0000	20.1853	20.1853	1.0900e-003	0.0000	20.2126
Worker	0.0204	0.0142	0.1512	4.7000e-004	0.0553	3.4000e-004	0.0557	0.0147	3.1000e-004	0.0150	0.0000	42.6057	42.6057	1.0300e-003	0.0000	42.6316
Total	0.0219	0.0728	0.1642	6.8000e-004	0.0605	4.0000e-004	0.0609	0.0162	3.6000e-004	0.0166	0.0000	62.7910	62.7910	2.1200e-003	0.0000	62.8442

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	0.3262	2.7818	2.6489	5.4400e-003		0.1296	0.1296		0.1216	0.1216	0.0000	465.7569	465.7569	0.1219	0.0000	468.8045
Total	0.3262	2.7818	2.6489	5.4400e-003		0.1296	0.1296		0.1216	0.1216	0.0000	465.7569	465.7569	0.1219	0.0000	468.8045

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3.3 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	1.5400e-003	0.0585	0.0130	2.1000e-004	5.1900e-003	6.0000e-005	5.2500e-003	1.5000e-003	5.0000e-005	1.5500e-003	0.0000	20.1853	20.1853	1.0900e-003	0.0000	20.2126
Worker	0.0204	0.0142	0.1512	4.7000e-004	0.0553	3.4000e-004	0.0557	0.0147	3.1000e-004	0.0150	0.0000	42.6057	42.6057	1.0300e-003	0.0000	42.6316
Total	0.0219	0.0728	0.1642	6.8000e-004	0.0605	4.0000e-004	0.0609	0.0162	3.6000e-004	0.0166	0.0000	62.7910	62.7910	2.1200e-003	0.0000	62.8442

3.4 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.2400e-003	0.0904	0.1227	1.9000e-004		4.5600e-003	4.5600e-003		4.2000e-003	4.2000e-003	0.0000	16.2884	16.2884	5.1600e-003	0.0000	16.4175
Paving	1.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0105	0.0904	0.1227	1.9000e-004		4.5600e-003	4.5600e-003		4.2000e-003	4.2000e-003	0.0000	16.2884	16.2884	5.1600e-003	0.0000	16.4175

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3.4 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	4.0000e-005	1.4900e-003	3.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5144	0.5144	3.0000e-005	0.0000	0.5151
Worker	6.3000e-004	4.4000e-004	4.7200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3296	1.3296	3.0000e-005	0.0000	1.3304
Total	6.7000e-004	1.9300e-003	5.0500e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8700e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.8440	1.8440	6.0000e-005	0.0000	1.8455

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.2400e-003	0.0904	0.1227	1.9000e-004		4.5500e-003	4.5500e-003		4.2000e-003	4.2000e-003	0.0000	16.2884	16.2884	5.1600e-003	0.0000	16.4175
Paving	1.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0105	0.0904	0.1227	1.9000e-004		4.5500e-003	4.5500e-003		4.2000e-003	4.2000e-003	0.0000	16.2884	16.2884	5.1600e-003	0.0000	16.4175

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3.4 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	4.0000e-005	1.4900e-003	3.3000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5144	0.5144	3.0000e-005	0.0000	0.5151
Worker	6.3000e-004	4.4000e-004	4.7200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3296	1.3296	3.0000e-005	0.0000	1.3304
Total	6.7000e-004	1.9300e-003	5.0500e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8700e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.8440	1.8440	6.0000e-005	0.0000	1.8455

3.5 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	0.1735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6800e-003	0.0182	0.0254	4.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	3.5746	3.5746	2.1000e-004	0.0000	3.5799
Total	0.1762	0.0182	0.0254	4.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	3.5746	3.5746	2.1000e-004	0.0000	3.5799

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

3.5 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	4.2000e-004	3.0000e-004	3.1500e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.8864	0.8864	2.0000e-005	0.0000	0.8869
Total	4.2000e-004	3.0000e-004	3.1500e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.8864	0.8864	2.0000e-005	0.0000	0.8869

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	0.1735					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6800e-003	0.0182	0.0254	4.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	3.5746	3.5746	2.1000e-004	0.0000	3.5799
Total	0.1762	0.0182	0.0254	4.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	3.5746	3.5746	2.1000e-004	0.0000	3.5799

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

3.5 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	4.2000e-004	3.0000e-004	3.1500e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.8864	0.8864	2.0000e-005	0.0000	0.8869
Total	4.2000e-004	3.0000e-004	3.1500e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.8864	0.8864	2.0000e-005	0.0000	0.8869

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Chaffey College Chino Campus Mixed Use Building - San Bernardino-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	0.2099	1.4066	2.5698	0.0110	0.8620	6.6200e-003	0.8686	0.2310	6.1700e-003	0.2372	0.0000	1,019.2855	1,019.2855	0.0487	0.0000	1,020.5031
Unmitigated	0.2099	1.4066	2.5698	0.0110	0.8620	6.6200e-003	0.8686	0.2310	6.1700e-003	0.2372	0.0000	1,019.2855	1,019.2855	0.0487	0.0000	1,020.5031

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	962.15	393.05	42.35	2,263,607	2,263,607
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	962.15	393.05	42.35	2,263,607	2,263,607

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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Non-Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	87.8758	87.8758	3.6300e-003	7.5000e-004	88.1902
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	87.8758	87.8758	3.6300e-003	7.5000e-004	88.1902
NaturalGas Mitigated	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8308	25.8308	5.0000e-004	4.7000e-004	25.9843
NaturalGas Unmitigated	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8308	25.8308	5.0000e-004	4.7000e-004	25.9843

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	484050	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8308	25.8308	5.0000e-004	4.7000e-004	25.9843
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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		2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8308	25.8308	5.0000e-004	4.7000e-004	25.9843

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)	484050	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8308	25.8308	5.0000e-004	4.7000e-004	25.9843
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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		2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8308	25.8308	5.0000e-004	4.7000e-004	25.9843

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	275800	87.8758	3.6300e-003	7.5000e-004	88.1902
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		87.8758	3.6300e-003	7.5000e-004	88.1902

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	275800	87.8758	3.6300e-003	7.5000e-004	88.1902
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		87.8758	3.6300e-003	7.5000e-004	88.1902

6.0 Area Detail

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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	0.1491	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Unmitigated	0.1491	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0174					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1317					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Total	0.1491	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0174					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1317					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Total	0.1491	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.1719	0.0566	1.4600e-003	19.0235
Unmitigated	17.1719	0.0566	1.4600e-003	19.0235

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.71672 / 2.68512	17.1719	0.0566	1.4600e-003	19.0235
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.1719	0.0566	1.4600e-003	19.0235

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	1.71672 / 2.68512	17.1719	0.0566	1.4600e-003	19.0235
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.1719	0.0566	1.4600e-003	19.0235

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.6021	0.2129	0.0000	8.9240
Unmitigated	9.2361	0.5458	0.0000	22.8820

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	45.5	9.2361	0.5458	0.0000	22.8820
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		9.2361	0.5458	0.0000	22.8820

Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	17.745	3.6021	0.2129	0.0000	8.9240
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		3.6021	0.2129	0.0000	8.9240

9.0 Operational Offroad

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Boilers

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

Equipment Type	Number
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Chaffey College Chino Campus Mixed Use Building - San Bernardino-South Coast County, Annual

11.0 Vegetation

Appendix B
Biological Resources Technical Report

Biological Resources Technical Report

Chaffey College - Chino Campus Instructional Building Project *City of Chino, San Bernardino County, California*

DRAFT REPORT



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INTRODUCTION

The following biological resources technical report describes a detailed assessment of potential sensitive natural resources located within and/or immediately adjacent to the Chaffey College – Chino Campus Instructional Building project site (Project Site). The report has been prepared to support compliance with the California Environmental Quality Act (CEQA) documentation including the preparation of an Addendum to the Environmental Impact Report (EIR) Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan for the Merged Chino Redevelopment Project Area (herein referred to as College Park SP) to be reviewed and approved by the Chaffey College Governing Board. As discussed below, the assessment included a thorough literature review, site reconnaissance characterizing existing conditions (including floral, faunal and dominant vegetation communities), impact analysis, applicable standards and regulations, and review of the biological resources analysis and mitigation measures outlined in the EIR for the College Park SP.

PROJECT LOCATION

The 2.66-acre Project Site (Partially within APN 102-601-106) is located at 5897 College Park Avenue Chino, California 91710 within the College Park SP, San Bernardino County, California, as shown in Figure 1, *Regional Location Map*. The Project site is located approximately 2.1 miles east of State Route 71 (SR-71) and approximately 2.5 miles south of SR 60. Specifically, the Project Site extends southeast of the existing developed region of the Chaffey College – Chino Campus and west of Eucalyptus Avenue as shown in Figure 2, *Project Site Vicinity Map*.

PROJECT DESCRIPTION

The proposed Project includes an approximate 35,000 GSF building (“Instructional Building 1”) to be used primarily for classroom instruction and faculty offices as well as restrooms, staff break room and a mother’s room. The building will have a footprint of approximately 23,540 square feet and includes two stories. The ground floor will have a library that includes student meeting rooms and a large study area, 3,000 square foot meeting room, and restroom facilities. The second floor will have additional classrooms, conference room, staff lounge/break room and faculty offices. Outdoor amenities include pedestrian walkways and bicycle racks as well as installation of a signage wall, landscape, bio-retention basins, security lighting, and infrastructure improvements. Parking will be served by the existing surface parking lots immediately northwest of the site. Pedestrian pathways will be constructed along each side of the building, connecting the site to the northwest parking lot and connecting the site to the sidewalk along College Park Avenue and to the east parking lot. The construction and operation of Instructional Building 1 will repurpose existing space in the Main Instructional Building (CHMB). This facility will serve the existing students/staff on campus and the projected growth already contemplated by Chaffey College in its Vision 2025 document.

The purpose of the proposed Project is to provide more multi-discipline classroom space, expanded learning resources, faculty office space near classrooms, as well as outdoor courtyards providing for study space and areas for gathering.



Portion of APN 102-601-106

Figure 1 - Regional Location Map

Biological Resources Technical Report

Chaffey College – Chino Campus Instructional Building Project

CADRE
Environmental





Portion of APN 102-601-106

Figure 2 - Project Site Vicinity Map

*Biological Resources Technical Report
Chaffey College – Chino Campus Instructional Building Project*



1 inch = 300 ft.

METHODOLOGY

The following section details the methods implemented prior to and during the reconnaissance survey conducted throughout the Project Site.

LITERATURE REVIEW

Existing biological resource conditions within and adjacent to the Project Site were initially investigated through review of pertinent scientific literature. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) were also reviewed in conjunction with anticipated federally listed species potentially occurring within the region of the Project Site. The California Natural Diversity Database (CNDDDB) (CDFW 2019a), a California Department of Fish and Wildlife (CDFW) Natural Heritage Division species account database, was also reviewed for all pertinent information regarding the locations of known occurrences of sensitive species in the vicinity of the property. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. Combined, the reviewed sources provided an excellent baseline from which to inventory the biological resources potentially occurring in the area. Other sources of information included the review of unpublished biological resource letter reports and assessments. Other CDFW reports and publications consulted include the following:

- Special Animals (CDFW 2019b);
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2019c);
- Endangered, Threatened, and Rare Plants of California (CDFW 2019d); and
- Special Vascular Plants and Bryophytes List (CDFW 2019).

SPECIFIC PLAN DEIR BIOLOGICAL RESOURCES MITIGATION REVIEW

A review of all biological mitigation measures outlined in the Draft Environmental Impact Report (DEIR) – Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan for the Merged Chino Redevelopment Project Area, Chino, California. Volume 1 CH Number 2002071120 were reviewed to determine which if any are applicable to the proposed project (Sapphos Environmental, Inc. 2003).

FIELD SURVEY

A reconnaissance survey of the Project Site was conducted by Ruben Ramirez of Cadre Environmental (USFWS Permit 780566-14, CDFW Permit 02243) on January 7th, 2020 in order to characterize and identify potential sensitive plant and wildlife habitats, and to establish the accuracy of the data identified in the literature search. Geologic and soil maps were examined to identify local soil types that may support sensitive taxa. Aerial photograph, topographic maps, vegetation and rare plant maps prepared for previous studies in the region were used to determine community types and other physical features that may support sensitive plants/wildlife, uncommon taxa, or rare communities that occur within or adjacent to the Project Site. Habitat assessments were conducted for, but not limited to, the following target species/groups.

- Coastal California gnatcatcher – FT/SSC
- Burrowing owl - SSC
- Least Bell's vireo – FE/SE
- Southwestern willow flycatcher – FE/SE
- Western yellow-billed cuckoo – FT/SE
- San Bernardino kangaroo rat – FE/SSC
- Sensitive plants
- Protected trees (City of Chino, Chapter 12.16, Municipal Code)

Vegetation Communities/Habitat Classification Mapping

Natural community names and hierarchical structure follows the “*Manual of California Vegetation*” (Sayer and Keeler-Wolf 2009) classification system, which has been refined and augmented where appropriate to better characterize the habitat types observed onsite.

Floristic Plant Inventory

A general plant survey was conducted throughout the Project Site during the reconnaissance in a collective effort to identify all species occurring onsite.

All plants observed during the survey efforts were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy follows Hickman (1993). Scientific nomenclature and common names used in this report generally follow Roberts et al. (2004) or Baldwin et al. (2012) for updated taxonomy. Scientific names are included only at the first mention of a species; thereafter, common names alone are used.

Wildlife Resources Inventory

All animals identified during the reconnaissance survey by sight, call, tracks, scat, or other characteristic sign were documented. In addition to species actually detected, expected use of the site by other wildlife was derived from the analysis of habitats on the site, combined with known habitat preferences of regionally occurring wildlife species.

Vertebrate taxonomy followed in this report is according to the Center for North American Herpetology (2020 for amphibians and reptiles), the American Ornithologists' Union (1988 and supplemental) for birds, and Baker et al. (2003) for mammals. Both common and scientific names are used during the first mention of a species; common names only are used in the remainder of the text.

Jurisdictional Resources Assessment

The Project Site was assessed for jurisdiction by the United States Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB). Non-wetland waters of the United States were assessed based on the limits of the Ordinary High-Water Mark (OHWM) as determined by erosion, the deposition of vegetation or debris, and changes in vegetation and soil characteristics. The assessment utilized the methodology for routine wetland determination according to the methods outlined in the

USACE Wetland Delineation Manual (Environmental Laboratory 1987) and the Arid West Wetland Delineation Supplement and updated regulatory guidance letters (USACE 2008). Wetlands are identified by the presence of three characteristics: hydrophytic vegetation, wetland hydrology, and hydric soils. If any of these criteria were met, one or more transects were run to determine the extent of the wetland. Specifically, the presence of wetland hydrology was evaluated throughout the Project Site by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil pits, where applicable. In addition, indicators of wetland or riverine hydrology were recorded, including water marks, drift lines, rack, debris, and sediment deposits, as warranted. Any indicators of hydric soils, such as redoximorphic features, buried organic matter, organic streaking, reduced soil conditions, gleyed or low-chroma soils, or sulfidic odor were also recorded.

EXISTING ENVIRONMENTAL SETTING

The following section presents the existing conditions of the Project Site assessment area. The Project Site is a 2.66-acre undeveloped region extending southeast of the existing developed Chaffey College Chino Campus. Substrates onsite are characterized as Chino silt loam (Cb), somewhat poorly drained (USDA 2020).

VEGETATION COMMUNITIES

The Project Site is dominated by disturbed and non-native grassland vegetation communities as described in this report, and illustrated in Figure 3, *Vegetation Communities Map*, and Figures 4 and 5, *Current Project Site Photographs*. Natural community names and hierarchical structure follows the “*Manual of California Vegetation*” (Sayer and Keeler-Wolf 2009) classification system, which has been refined and augmented where appropriate to better characterize the habitat types observed.

Disturbed

The 0.82-acre western region of the Project Site is characterized as disturbed habitat generally devoid of vegetation. This disturbed habitat is located within the gated region of the campus and possess scattered patches of ruderal non-native plant species.

Non-Native Grassland

The 1.84-acre eastern region of the Project Site is characterized as non-native grassland. Scattered ruderal non-native plant species documented onsite include wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), Russian thistle (*Kali tragus*), horseweed (*Conyza canadensis*), cheeseweed (*Malva parviflora*), red-stemmed filaree (*Erodium cicutarium*), and tumbling pigweed (*Amaranthus albus*).

No riparian, sensitive, or undisturbed native habitat were documented within or adjacent to the Project site as outlined in Table 1, *Project Site Vegetation Community Acreages*.



Figure 3 - Vegetation Communities Map

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CADRE
Environmental



1 inch = 300 ft.



PHOTOGRAPH 1 - Southeast view of Project Site from Northwest corner. The Project Site is dominated by disturbed and non-native grassland.



PHOTOGRAPH 2 - Northeast view of Project Site from southwest corner.

Figure 4 - Current Project Site Photographs

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PHOTOGRAPH 3 - Northwest view of Project Site from southeast corner.



PHOTOGRAPH 4 - Southwest view of Project Site from Northeast corner.

Figure 5 - Current Project Site Photographs

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Table 1 – Project Site Vegetation Community Acreages

Vegetation Community	Acres
Non-Native Grassland	1.84
Disturbed	0.82
TOTAL	2.66

Source: Cadre Environmental 2020.

GENERAL PLANT & WILDLIFE SPECIES

General plant species documented within the Project Site area are presented in the previous section.

General wildlife species documented onsite or within the vicinity during previous site assessments on the campus include but are not limited to red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), rock dove (*Columba livia*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), western meadowlark (*Sturnella neglecta*), great egret (*Ardea alba*), northern mockingbird (*Mimus polyglottos*), yellow rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), Botta's pocket gopher (*Thomomys bottae*), desert cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Otospermophilus beecheyi*).

JURISDICTIONAL WETLAND RESOURCES

No wetlands or jurisdictional resources regulated by the USACE, CDFW, or RWQCB were documented within or immediately adjacent to the Project Site.

The Project contractor would implement standard best management practices (BMPs) during construction, incorporate landscape features and bio-swales that would provide pervious surface to capture on-site runoff.

SENSITIVE BIOLOGICAL RESOURCES

The following discussion describes the plant and wildlife species present, or potentially present within the property boundaries, that have been afforded special recognition by federal, state, or local resource conservation agencies and organizations, principally due to the species' declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by state and/or federal resource management agencies, or both, as threatened or endangered, under provisions of the state and federal endangered species act. Vulnerable or "at-risk" species that are proposed for listing as threatened or endangered (and thereby for protected status) are categorized administratively as "candidates" by the USFWS. CDFW uses various terminology and classifications to describe vulnerable species. There are additional sensitive species classifications applicable in California. These are described below.

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, USFWS, and special groups like the California Native Plant Society (CNPS) maintain watch lists of such resources. For the purpose of this assessment sources used to determine the sensitive status of biological resources are:

Plants: USFWS (2019), CDFW (2019d), CNDDDB (CDFW 2019a), CNPS (2019), and Skinner and Pavlik (1994),

Wildlife: California Wildlife Habitat Relationships (2008), USFWS (2019), CDFW (2019b, 2019e), and CNDDDB (CDFW 2019a),

Habitats: CNDDDB (CDFW 2019a).

FEDERAL PROTECTION AND CLASSIFICATIONS

The Federal Endangered Species Act of 1973 (FESA) defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range...” Threatened species are defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species. “Take” is defined as follows in Section 3(18) of the FESA: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the USFWS, through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification as forms of a “take.” These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. Recently, the USFWS instituted changes in the listing status of former candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing at this time) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. However, some USFWS field offices have issued memoranda stating that former C2 species are henceforth to be considered Federal Species of Concern. This term is employed in this document but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For purposes of this assessment, the following acronyms are used for federal status species:

FE	Federal Endangered
FT	Federal Threatened
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
FC	Federal Candidate for Listing

The designation of critical habitat can also have a significant impact on the development of land designated as “*critical habitat*.” The FESA prohibits federal agencies from taking any action that will “*adversely modify or destroy*” critical habitat (16 U.S.C. § 1536(a)(2)). This provision of the FESA applies to the issuance of permits by federal agencies. Before approving an action affecting critical habitat, the federal agency is required to consult with the USFWS who then issues a biological opinion evaluating whether the action will “*adversely modify*” critical habitat. Thus, the designation of critical habitat effectively gives the USFWS extensive regulatory control over the development of land designated as critical habitat.

The Migratory Bird Treaty Act of 1918 (MBTA) makes it unlawful to “*take*” any migratory bird or part, nest, or egg of such bird listed in wildlife protection treaties between the United States and Great Britain, the Republic of Mexico, Japan, and the Union of Soviet States. For purposes of the MBTA, “*take*” is defined as to pursue, hunt, capture, kill, or possess or attempt to do the same.

The Bald Eagle and Golden Eagle Protection Act explicitly protects the bald eagle and golden eagle and imposes its own prohibition on any taking of these species. As defined in this act, take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb. Current USFWS policy is not to refer the incidental take of bald eagles for prosecution under the Bald Eagle and Golden Eagle Protection Act (16 U.S.C. 668-668d).

STATE PROTECTION AND CLASSIFICATIONS

California's Endangered Species Act (CESA) defines an endangered species as “...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.” The State defines a threatened species as “...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.” Candidate species are defined as “...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species

to either list.” Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of CESA addresses the taking of threatened or endangered species by stating “No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided...” Under CESA, “take” is defined as “...hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Exceptions authorized by the state to allow “take” require “...permits or memorandums of understanding...” and can be authorized for “...endangered species, threatened species, or candidate species for scientific, educational, or management purposes.” Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. SSC (“special” animals and plants) listings include special status species, including all state and federal protected and candidate taxa, Bureau of Land Management (BLM) and US Forest Service (USFS) sensitive species, species considered to be declining or rare by the CNPS or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing. This list is primarily a working document for the CDFW’s CNDDDB project. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For the purposes of this assessment, the following acronyms are used for State status species:

SE	State Endangered
ST	State Threatened
SCE	State Candidate Endangered
SCT	State Candidate Threatened
SFP	State Fully Protected
SP	State Protected
SR	State Rare
SSC	California Species of Special Concern
CWL	California Watch List

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in the State. This organization has compiled an inventory comprised of the information focusing on geographic distribution and qualitative

characterization of rare, threatened, or endangered vascular plant species of California (Tibor 2001). The list serves as the candidate list for listing as threatened and endangered by CDFW. The CNPS has developed five categories of rarity (CRPR):

CRPR 1A	Presumed extinct in California.
CRPR 1B	Rare, threatened, or endangered in California and elsewhere.
CRPR 2A	Plants presumed extirpated in California but common elsewhere
CRPR 2B	Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3	Plants about which we need more information – a review list.
CRPR 4	Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.

As stated by the CNPS:

“Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.” (CNPS 2020)

0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

LOCAL PROTECTION AND CLASSIFICATIONS

The City of Chino's Municipal Code (§20.19.040) requires that mature trees shall not be removed without prior written approval of the Director of Community Development or his designee. As stated by the City of Chino:

“The following standards apply to multi-family development, common areas in residential development, and non-residential development. Single-family homes are exempt from the provisions in this section for

trees under fifteen inches in diameter. 1) Mature trees shall not be removed without prior written approval of the Director of Community Development or his designee. For the purposes of this section, mature trees shall include: oak trees with trunks more than eight inches in diameter at breast height; other trees with trunks more than ten inches in diameter at breast height; and multi-trunk trees with a total circumference of thirty-eight inches or more at breast height. 2) Any removed mature tree(s) requires replacement as designated in the chart below with a species designated by the director of community development or his designee. 3) An arborist report shall be provided at the property owner's expense for any tree(s) proposed to be removed that are ten inches or larger in diameter to document the health and viability of the tree(s) and to make a recommendation as to the feasibility of maintaining or removing the tree(s). The arborist shall be certified by the ISA (International Society of Arboriculture), 4) If the tree(s) to be removed are dead, severely damaged, diseased, or causing a public hazard such as uprooting sidewalks, destroying underground infrastructure or displacing building foundations, the tree shall be replaced by the property owner(s) at a one-to-one (1:1) ratio. The size of the replacement tree(s) shall be based on the trunk diameter of the tree(s) to be removed as shown in Table 20.19-4.1., 5) In the event that the number of replacement trees shown in Table 20.19.4-1 cannot be planted on-site, the director of community development may consider an off-site location to plant the replacement trees or accept an in-lieu fee based on International Society of Arboriculture (ISA) guidelines or other method approved by the director of community development. In-lieu fees collected shall be deposited into a tree replacement fund to be used for tree planting at alternate locations in the city. 6) All pruning should be accomplished according to good horticultural standards. Trees shall only be pruned as necessary to promote healthy growth. 7) All watering of planted areas shall be managed so as to maintain healthy flora, make plant material more drought tolerant, avoid excessive turf growth, minimize fungus growth, stimulate deep root growth, and minimize the leaching of soil nutrients. 8) Watering of plants and trees should be of sufficient quantity to thoroughly soak the root ball of the plant and surrounding area, thereby promoting deep root growth and drought tolerance. 9) Integrated pest management (IPM) shall be used to mitigate weeds, fertilize with organic matter, and minimize the use of pesticides and herbicides. 10) Irrigation systems shall be constantly maintained to eliminate wastewater due to loss of head." (City of Chino, Ord. 2015-008, § 1, 2015; Ord. 2016-005, §§ 12, 13, 2016)

No trees are located within the Project Site.

SENSITIVE HABITATS

As stated by CDFW:

"One purpose of the vegetation classification is to assist in determining the level of rarity and imperilment of vegetation types. Ranking of alliances

according to their degree of imperilment (as measured by rarity, trends, and threats) follows NatureServe's Heritage Methodology, in which all alliances are listed with a G (global) and S (state) rank. For alliances with State ranks of S1-S3, all associations within them are also considered to be highly imperiled'. (CDFW 2017c)

No sensitive or undisturbed native habitats were documented within or adjacent to the Project Site. The Project Site is characterized as disturbed and non-native grassland.

SENSITIVE PLANTS

As outlined in the City of Chino General Plan, the Project Site was assessed to determine the potential for thirty-one (31) sensitive plant species known to occur within the region, to occur onsite, as presented in Table 2, *Sensitive Plant Species Assessment*. No suitable habitat for sensitive plant species including those listed as federal or state threatened/endangered was documented within the Project Site. No sensitive plant species listed in Table 2, *Sensitive Plant Species Assessment*, or undisturbed native habitats were documented within the Project Site. The Project Site is characterized as disturbed and non-native grassland habitat.

Table 2. Sensitive Plant Species Assessment

Species Name (Scientific Name)	Habitat Description	Comments
Status		
Chaparral sand-verbena (<i>Abronia villosa</i> var. <i>aurita</i>) CRPR 1B.1	Annual herb which generally blooms from January to September within chaparral, coastal scrub and desert dunes in sandy substrates. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat and disturbed condition of site.
Marsh sandwort (<i>Arenaria paludicola</i>) CRPR 1B.1 FE/SE	Perennial stoloniferous herb which generally blooms from May to August within sandy openings in Marshes and swamps. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.
Braunton's milk vetch (<i>Astragalus brauntonii</i>) CRPR 1B.1 FE	Perennial herb which generally blooms from January to August in chaparral, coastal scrub and valley and foothill grasslands within recently burned or disturbed areas in association with sandstone/carbonate layers. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Coulter's saltbush (<i>Atriplex coulteri</i>) CRPR 1B.2	Perennial herb which generally blooms from March to October within coastal bluff scrub, dunes and valley/foothill grasslands in alkaline or clay soils. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.
Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>) CRPR 1B.2	Annual herb which generally blooms from April to October within coastal bluff scrub and coastal scrub habitats in alkaline soils. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.
Nevin's barberry (<i>Berberis nevinii</i>) CRPR 1B.1 FE/SE	Perennial evergreen shrub which generally blooms from February to June within chaparral, cismontane woodland, coastal scrub, and riparian scrub in sandy, gravelly substrates. (CNPS 2020)	Not observed onsite.
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>) CRPR 1B.1 FT/SE	Perennial bulbiferous herb which generally blooms from March to June in chaparral, coastal scrub, valley, foothill grassland and vernal pools habitats often associated within clay soils. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.
Slender mariposa lily (<i>Calochortus clavatus</i> var. <i>gracilis</i>) CRPR 1B.2	Perennial bulbiferous herb which generally blooms from June to July within coastal bluff scrub, and chaparral (maritime). (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Palmer's mariposa lily (<i>Calochortus palmeri</i> var. <i>palmeri</i>) CRPR 1B.2	Perennial bulbiferous herb which generally blooms from April to July within mesic regions of chaparral, lower montane coniferous forest, meadows and seeps. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Plummer's mariposa-lily (<i>Calochortus plummerae</i>) CRPR 4.2	Perennial bulbiferous herb which generally blooms from May to June within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and grassland habitats with granite and rocky substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Intermediate mariposa lily (<i>Calochortus weedii</i> var. <i>intermedius</i>) CRPR 1B.2	Perennial bulbiferous herb which generally blooms from May to July within chaparral, coastal scrub and valley and foothill grasslands in association with rocky calcareous substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Southern tarplant (<i>Centromadia parryi</i> ssp. <i>australis</i>) CRPR 1B.1	Annual herb which generally blooms from May to November in Marshes, swamps, valley and foothill grassland (vernally mesic), and vernal pools. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>) CRPR 1B.1	Annual herb which generally blooms from April to September within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland (alkaline substrates). (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.
San Fernando Valley spineflower (<i>Chorizanthe parryi</i> var. <i>fernandina</i>) CRPR 1B.1 FC/SE	Annual herb which generally blooms from April to July within coastal scrub (sandy), valley and foothill grassland. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat and substrates.
Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>) CRPR 1B.1	Annual herb which generally blooms from April to June within chaparral, cismontane woodland, coastal scrub and grassland habitats with sandy and/or rocky openings. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
California saw-grass (<i>Cladium californicum</i>) CRPR 2B.2	Perennial rhizomatous herb which generally blooms from June to September within meadows, seeps, marshes and swamps in both alkaline and freshwater. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Slender-horned spineflower (<i>Dodecahema leptoceras</i>) CRPR 1B.1 FE/SE	Annual herb which generally blooms from April to June within chaparral, cismontane woodland and coastal scrub (alluvial fan) with sandy substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
San Gabriel Mountains dudleya (<i>Dudleya densiflora</i>) CRPR 1B.1	Perennial herb which generally blooms from March to June in chaparral, cismontane woodland, coastal scrub and riparian woodland habitats in association with granitic cliffs and canyon walls. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.
Many-stemmed dudleya (<i>Dudleya multicaulis</i>) CRPR 1B.2	Perennial herb which generally blooms from April to July within chaparral, coastal scrub and valley and foothill grassland often associated with clay substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Santa Ana River woollystar (<i>Eriastrum densifolium ssp. sanctorum</i>) CRPR 1B.1 FE/SE	Perennial herb which generally blooms from April to September within chaparral, coastal scrub (alluvial fan) in sandy and gravelly substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat and substrates.
Mesa horkelia (<i>Horkelia cuneata ssp. puberula</i>) CRPR 1B.1	Perennial herb which generally blooms from February to September within chaparral (maritime), cismontane woodland and coastal scrub with sandy or gravelly substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
California satintail (<i>Imperata brevifolia</i>) CRPR 2B.1	Perennial rhizomatous herb which generally blooms from September to May in mesic habitats including chaparral, coastal scrub, desert scrub, meadows, seeps and riparian scrub. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Robinson's pepper-grass (<i>Lepidium virginicum var. robinsonii</i>) CRPR 4.3	Annual herb which generally blooms from January to July within chaparral and coastal sage scrub habitats. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Prostrate vernal pool navarretia (<i>Navarretia prostrata</i>) CRPR 1B.1	Annual herb which generally blooms from April to July coastal sage scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Peninsular nolina (<i>Nolina cismontana</i>) CRPR 1B.2	Perennial evergreen shrub which generally blooms from May to July within sandstone or gabbro in chaparral or coastal scrub habitats. (CNPS 2020)	Not observed or expected to occur onsite based on a lack of suitable habitat.
White-rabbit tobacco (<i>Pseudognaphalium leucocephalum</i>) CRPR 2B.2	Perennial herb which generally blooms from July to August within chaparral, cismontane woodland, coastal scrub, and riparian woodland with sandy or gravelly substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Gambel's watercress (<i>Rorippa gambellii</i>) CRPR 1B.1 FE/ST	Perennial rhizomatous herb which generally blooms from April to October in marsh and swamp habitats. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Chaparral ragwort (<i>Senecio aphanactis</i>) CRPR 2B.2	Annual herb which generally blooms from January to May within chaparral, cismontane woodland and coastal scrub habitats. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
Salt spring checkerbloom (<i>Sidalcea neomexicana</i>) CRPR 2.2	Perennial herb which generally blooms from March to June within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas within alkaline and mesic substrates gravelly substrates. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
San Bernardino aster (<i>Symphyotrichum defoliatum</i>) CRPR 1B.2	Perennial rhizomatous herb which generally blooms from July to November near ditches, streams, springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland (vernally mesic). (CNPS 2020).	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (Scientific Name)	Habitat Description	Comments
Status		
Greata's aster <i>(Symphyotrichum greatae)</i> CRPR 1B.3	Perennial rhizomatous herb which generally blooms from June to October within broad-leaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest and riparian woodland habitats. (CNPS 2020)	Not expected to occur onsite based on a lack of suitable habitat.
<p>California Native Plant Society (CNPS): California Rare Plant Rank (CRPR) CRPR 1A – Plants presumed extinct in California. CRPR 1B – Plants rare, threatened, or endangered in California, but more common elsewhere. CRPR 2 – Plants rare, threatened, or endangered in California, but more common elsewhere. CRPR 3 – Plants about which we need more information, a review list. CRPR 4 – Species of limited distribution in California (i.e., naturally rare or in the wild), but whose existence does not appear to be susceptible to threat. .1 – Seriously endangered in California .2 – Fairly endangered in California .3 – Not very endangered in California</p> <p>Federal (USFWS) Protection and Classification FE – Federally Endangered FC – Federal Candidate for Listing</p> <p>State (CDFW) Protection and Classification SE – State Endangered</p>		

SENSITIVE WILDLIFE

As outlined in the City of Chino General Plan, the Project Site was assessed to determine the potential for forty-nine (49) sensitive wildlife species known to occur within the region, to occur onsite, as presented in Table 3, *Sensitive Wildlife Species Assessment*. No suitable habitat for species listed as federal or state threatened/endangered was documented within the Project Site.

The non-native grassland vegetation provides suitable foraging habitat for the grasshopper sparrow (*Ammodramus savannarum*), sharp-shinned hawk (*Accipiter striatus*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), northern harrier (*Circus cyaneus*), California horned lark (*Eremophila alpestris actia*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), and loggerhead shrike (*Lanius ludovicianus*). The Project Site also possess suitable burrowing owl burrows within the central region of the non-native grassland habitats.

Table 3. Sensitive Wildlife Species Assessment

Species Name (Scientific Name)	Habitat Description	Comments
Status		
INVERTEBRATES		
Delhi sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>) FE	Restricted to Delhi sand formations in Riverside and San Bernardino Counties.	Not expected to occur onsite based on a lack of suitable soils.
AMPHIBIANS		
Arroyo toad (<i>Anaxyrus californicus</i>) FE/SSC	Shallow, slow moving active and braided stream channels with sandy substrates for breeding, bench and terrace habitats for foraging and aestivation, willow scrub, coastal sage scrub and riparian/oak woodlands.	Not expected to occur onsite based on a lack of suitable breeding and upland habitat.
California red-legged frog (<i>Rana aurora draytonii</i>) FT	Streams with slow moving water and deep pools; dense shrubby riparian vegetation at pool edges. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable breeding and upland habitat.
Southern mountain yellow-legged frog (<i>Rana muscosa</i>) FE/SE/CWL Southern California Distinct Population Segment	Occurs in close proximity to lakes, streams, pools in rocky tributaries and canyons. Federal listing refers to populations in the San Gabriel mountains; always encountered within a few feet of water. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable breeding and upland habitat.
Western spadefoot (<i>Spea hammondi</i>) SSC	Vernal pools, swales and even man-made pools with needed hydrology, warm water temperatures, nearby upland estivation sites, and limited predators. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable breeding habitat.
Coast range newt (<i>Taricha torosa torosa</i>) SSC	Coastal drainages from Mendocino to San Diego County. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable breeding habitat.
REPTILES		
Southwestern pond turtle (<i>Actinemys pallida</i>) SSC	Permanent or nearly permanent bodies of water in many habitat types. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Southern California legless lizard (<i>Anniella stebbinsi</i>) SSC	Sandy soils with shade or leaf litter and springtime moisture (but not wetlands). (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>) WL	Inhabits low-elevation coastal scrub and chaparral. Occurs on or adjacent to floodplains or the terraces of streams, in or by open sage scrub and chaparral communities. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.
Red-diamond rattlesnake (<i>Crotalus ruber</i>) SSC	Areas of heavy brush, such as chamise chaparral, boulders and rocky outcrops. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.
Coast horned lizard (<i>Phrynosoma blainvillii</i>) SSC	The horned lizard occurs primarily in scrub, chaparral, and grassland habitats.	Not observed or expected to occur onsite based on a lack of suitable habitat and disturbed conditions onsite.
Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>) SSC	Extensive shrublands, generally with minimal degradation. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.
Two-striped garter snake (<i>Thamnophis hammondi</i>) SSC	Commonly inhabits perennial and intermittent streams having rocky beds bordered by willow thickets or other dense vegetation. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.
BIRDS		
Tricolored blackbird (<i>Agelaius tricolor</i>) SSC	Marshes, agricultural fields, sewage treatment plants, or stockyards and grasslands. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.
Grasshopper sparrow (<i>Ammodramus savannarum</i>) SSC	Dense grassland on rolling hills with scattered shrubs. (City of Chino 2010)	May infrequently forage within the Project Site and adjacent open space lands extending south of the Campus.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Cooper's hawk (<i>Accipiter cooperii</i>) SSC	Cooper's hawk is most commonly found within or adjacent to riparian/oak forest and woodland habitats. This uncommon resident of California increases in numbers during winter migration.	Cooper's hawks occasionally nest in large pines and Eucalyptus trees. No nesting habitat documented onsite. Not expected to forage or nest onsite.
Sharp-shinned hawk (<i>Accipiter striatus</i>) CWL	Potential habitat for the sharp-shinned hawk includes montane coniferous forest for potential breeding areas and riparian scrub, woodland, and forest habitat, oak woodland and forest, chaparral, coastal sage scrub, desert scrub, and Riversidean alluvial fan sage scrub for foraging.	May infrequently forage over the Project Site and adjacent open space lands extending south of the Campus.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>) CWL	Southern California rufous-crowned sparrow is a non-migratory bird species that primarily occurs within sage scrub and grassland habitats and to a lesser extent chaparral sub-associations. This species generally breeds on the ground within grassland and scrub communities in the western and central regions of California.	Not observed or expected to occur onsite based on a lack of suitable habitat.
Golden eagle (<i>Aquila chrysaetos</i>) CWL, SFP	Within southern California, the species prefers grasslands, brushlands (coastal sage scrub and chaparral), deserts, oak savannas, open coniferous forests, and montane valleys.	Not expected to breed onsite based on a lack of suitable habitat. May infrequently forage over the Project Site and adjacent open space lands extending south of the Campus.

Species Name (Scientific Name)	Habitat Description	Comments
Status		
Burrowing owl <i>(Athene cunicularia)</i> SSC	The burrowing owl uses predominantly open land, including grassland, agriculture (e.g., dry-land farming and grazing areas), playa, and sparse coastal sage scrub and desert scrub habitats. Some breeding burrowing owls are year-round residents and additional individuals from the north may winter throughout the region.	No burrowing owl or sign of occupation were documented within or immediately adjacent to the Project Site. However, suitable burrows and foraging habitat were documented throughout the western region (non-native grassland) of the Project Site. At a minimum, burrowing owl are expected to utilize the Project Site for foraging. Several burrowing owl and occupied burrows were documented offsite within the Chaffey College – Chino Campus open space lands located south and west of the Project Site as shown in Figure 6, <i>Burrowing Owl Location Map</i> (Chaffey College 2019).
Long-eared owl <i>(Asio otus)</i> SSC	Riparian and oak forests. Hunts small mammals at night in adjacent open habitats. (City of Chino 2010)	Not expected to breed onsite based on a lack of suitable habitat.
Coastal cactus wren <i>(Campylorhynchus brunneicapillus sandiegoensis)</i> SSC	Obligate resident within a subset of coastal sage scrub habitats. Cactus wrens additionally require the presence of, but are not entirely restricted within, relatively arborescent (over 1 meter tall) stands of several species of cactus (<i>Opuntia</i> spp.). (City of Chino 2010)	Not expected to occur onsite based on a lack of observations and suitable habitat.
Mountain plover (wintering) <i>(Charadrius montanus)</i> FPT/CSC	The southern California wintering mountain plover uses playas and vernal pool, open plains, fields of bare dirt (Unitt 2004).	Not expected to occur onsite based on a lack of suitable habitat. No records of species in USFWS Species Occurrence Database 2019.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Northern harrier (<i>Circus cyaneus</i>) SSC	The northern harrier frequents open wetlands, wet/lightly grazed pastures, fields, dry uplands/prairies, mesic grasslands, drained marshlands, croplands, meadows, grasslands, open rangelands, fresh and saltwater emergent wetlands.	May infrequently forage over the Project Site and adjacent open space lands extending south of the Campus.
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>) FT/SE	The western yellow-billed cuckoo inhabits dense riparian and shrub communities.	Not expected to occur onsite based on a lack of suitable riparian habitat.
White-tailed kite (<i>Elanus leucurus</i>) SFP	The white-tailed kite is found in riparian, oak woodlands adjacent to open spaces including grasslands, wetlands, savannahs and agricultural fields. This non-migratory bird occurs in lower elevations of California.	Not observed or expected to occur onsite based on a lack of suitable habitat.
Southwestern willow flycatcher (<i>Empidonax traillii eximius</i>) FE/SE	The southwestern willow flycatcher breeds in dense riparian and shrub communities where exposed water is present including rivers, wetlands and reservoirs.	Not expected to occur onsite based on a lack of suitable riparian habitat.
California horned lark (<i>Eremophila alpestris actia</i>) CWL	The California horned lark is a common to abundant resident in a variety of open habitats, arid grasslands, where trees and large shrubs are absent (open ground).	The Project Site represents suitable habitat for the California horned lark and are expected to occasionally occur onsite.
Merlin (<i>Falco columbarius</i>) CWL	Transient in the spring and fall and may occasionally winter within the area. It does not require specific conditions or locations for nesting because it does not nest in the region.	Breeds in the northern Great Plains. May infrequently forage over the Project Site and adjacent open space lands extending south of the Campus.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Prairie falcon (<i>Falco mexicanus</i>) CWL	Habitat use of the prairie falcon includes annual grasslands to alpine meadows. The prairie falcon is associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields during the winter season, and desert scrub areas, all typically dry environments of western North American where there are cliffs or bluffs for nest sites.	May infrequently forage over the Project Site and adjacent open space lands extending south of the Campus.
American peregrine falcon (<i>Falco peregrinus anatum</i>) SFP	Throughout the species' range, peregrine falcons are found in a large variety of open habitats, including tundra, marshes, seacoasts, savannahs and high mountains.	Not expected to breed onsite based on a lack of suitable breeding habitat in the region.
Bald eagle (<i>Haliaeetus leucocephalus</i>) SFP/SE	Largely restricted to extensive lakes with limited disturbance.	Not expected to occur onsite based on a lack of suitable habitat.
Yellow-breasted Chat (<i>Icteria virens</i>) SSC	The yellow-breasted chat is associated with riparian woodland and riparian scrub habitats.	Not expected to occur onsite based on a lack of suitable riparian habitat.
Least bittern (<i>Ixobrychus exilis</i>) SSC	Extensive tule or cattail marshes near open water. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat.
Loggerhead shrike (<i>Lanius ludovicianus</i>) SSC	Open, dry areas, usually with some bare ground, limited disturbance, and abundant prey (large insects, lizards, etc.). (City of Chino 2010)	May infrequently forage over the Project Site and adjacent open space lands extending south of the Campus.
Coastal California gnatcatcher (<i>Polioptila californica californica</i>) FT/SSC	The coastal California gnatcatcher is a non-migratory bird species that primarily occurs within sage scrub habitats in coastal southern California dominated by California sagebrush.	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Yellow warbler (<i>Setophaga petechia</i>) SSC	Habitat characteristics of the yellow warbler are well known to include riparian scrub, forest and woodland vegetation.	Not expected to occur onsite based on a lack of suitable riparian habitat.
Least Bell's vireo (<i>Vireo bellii pusillus</i>) FE/SE	Least Bell's vireo reside in riparian habitats with a well-defined understory including southern willow scrub, mulefat, and riparian forest/woodland habitats.	Not expected to occur onsite based on a lack of suitable riparian habitat.
MAMMALS		
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>) SSC	The northwestern San Diego pocket mouse occurs in coastal sage, upland sage scrubs, and alluvial fan sage scrub, sage scrub/grassland ecotones, chaparral, and desert scrubs at all elevations up to 6,000 feet.	Not expected to occur onsite based on a lack of suitable habitat.
Pallid bat (<i>Antrozous pallidus</i>) SSC	Roosts in rocky areas and forages in grassland, shrublands, and woodlands.	Not expected to occur onsite based on a lack of suitable habitat.
San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>) FE/SSC	Prefers alluvial scrub, coastal sage scrub habitats with sandy and gravelly substrates.	Not expected to occur onsite based on a lack of suitable habitat.
Western mastiff bat (<i>Eumops perotis californicus</i>) SSC	Roosts in rocky areas and forages in grassland, shrublands, and woodlands.	Not expected to occur onsite based on a lack of suitable habitat.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>) SSC	The San Diego black-tailed jackrabbit in open habitats, primarily including grasslands, sage scrub, alluvial fan sage scrub, and Great Basin sage scrub.	Not observed or expected to occur onsite based on a lack of suitable habitat and sign of suitable sized burrow structures.
Desert San Diego woodrat (<i>Neotoma lepida intermedia</i>) SSC	The San Diego desert woodrat is found in sage scrub and chaparral wherever there are rock outcrops, boulders, cactus patches and dense undergrowth.	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (<i>Scientific Name</i>)	Habitat Description	Comments
Status		
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>) SSC	Arid habitat, roost in high rock crevices and cliffs. (City of Chino 2010)	Not expected to occur onsite based on lack of roosting and foraging habitat within and adjacent to the Project Site.
Big free-tailed bat (<i>Nyctinomops macrotis</i>) SSC	Arid habitat, roost in high rock crevices and cliffs. (City of Chino 2010)	Not expected to occur onsite based on lack of roosting and foraging habitat within and adjacent to the Project Site.
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>) SSC	Dry grasslands and open shrublands with abundant prey (large insects and occasionally even small vertebrates).	Not expected to occur onsite based on a lack of suitable habitat.
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>) SSC	Low elevation grassland alluvial sage scrub and coastal sage scrub habitats.	Not expected to occur onsite based on a lack of suitable habitat.
American badger (<i>Taxidea taxus</i>) SSC	Most abundant in drier open stages of most shrub and forest, herbaceous habitats with friable soils. (City of Chino 2010)	Not expected to occur onsite based on a lack of suitable habitat. No potential burrows documented onsite.
Federal (USFWS) Protection and Classification FE – Federally Endangered FC – Federal Candidate for Listing State (CDFW) Protection and Classification SE – State Endangered SSC – State Species of Special Concern CWL – California Watch List SPF – State Fully Protected		

The Project Site does not occur within or adjacent to USFWS designated critical habitat for any federally listed threatened or endangered species.

JURISDICTIONAL WETLAND RESOURCES

No wetlands or jurisdictional resources regulated by the USACE, CDFW, or RWQCB were documented within or immediately adjacent to the Project Site.

The Project contractor would implement standard BMPs during construction, incorporate landscape features and bio-swales that would provide pervious surface to capture on-site runoff.

ENVIRONMENTAL IMPACTS

The following section includes an analysis of the direct and/or indirect impacts of the proposed action on sensitive biological resources. This analysis characterizes the project related activities that are anticipated to adversely impact the species, and when feasible, quantifies such impacts. Direct effects are defined as actions that may cause an immediate effect on the species or its habitat, including the effects of interrelated actions and interdependent actions. Indirect effects are caused by or result from the proposed actions, are later in time, and are reasonably certain to occur. Indirect effects may occur outside of the area directly affected by the proposed action.

DIRECT IMPACTS

No riparian, sensitive or undisturbed native habitats were documented within or adjacent to the Project Site as outlined in Table 4, *Project Site Vegetation Community Impacts*, and Figure 7, *Vegetation Communities Impact Map*. The Project Site is characterized as disturbed and non-native grassland vegetation. A total of 0.80-acre of non-native grassland will be permanently impacted as a result of the proposed project.

Table 4 – Project Site Vegetation Community Impacts

Vegetation Community	Onsite Acres	Permanent Impact Acres
Non-native Grassland	1.84	0.80
Disturbed	0.82	0.00
TOTAL	2.66	0.80

Source: Cadre Environmental 2020.

The proposed project would not result in impacts either directly or through habitat modifications, on any plant or wildlife species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. No native undisturbed suitable habitat or sensitive plant/wildlife species observations were documented within the Project Site. The Project Site is characterized as disturbed and non-native grassland habitat.

Suitable burrowing owl burrows were documented onsite in the non-native grassland region of the Project Site. All burrows were occupied by California ground squirrel and no burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within the Project Site. The species does not currently occupy the site. However, the site represents suitable foraging habitat for the species and there is a possibility of owl colonization within the Project Site prior to site grading. Several burrowing owl and occupied burrows were documented offsite within the Chaffey College – Chino Campus open space lands located south and west of the Project Site as shown in Figure 6, *Burrowing Owl Location Map* (Chaffey College 2019).

To ensure that no direct loss of individuals or indirect impacts to breeding occur as a result of project initiation, Mitigation Measures as outlined in the DEIR Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan

for the Merged Chino Redevelopment Project Area will be implemented. Implementation of BIO-MM 1 Burrowing Owl 1 and BIO-MM 2 Burrowing Owl 2 will ensure compliance with CDFW species protection regulations for the burrowing owl.

Implementation of the proposed project may result in direct impacts to foraging habitat for sensitive bird species including grasshopper sparrow, sharp-shinned hawk, golden eagle, burrowing owl, northern harrier, California horned lark, merlin, prairie falcon, and loggerhead shrike. Potential impacts to foraging habitat as a result of project initiation will be mitigated by implementing Mitigation Measures as outlined in the DEIR Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan for the Merged Chino Redevelopment Project Area, BIO-MM 3 Sensitive Species 1 to BIO-MM 8 Sensitive Species 6.

No wetlands or jurisdictional resources regulated by the USACE, CDFW, or RWQCB were documented within or immediately adjacent to the Project Site.

The Project Site is largely disturbed and dominated by non-native grasslands and does not represent a wildlife movement corridor or route between open space habitats. However, the non-native grassland and adjacent shrubs and ornamental landscaping are expected to potentially provide nesting habitat for raptors and migratory birds protected under the CDFG Codes. Mitigation for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 15th and February 15th) does not require preconstruction nesting bird surveys. If construction is proposed between February 16th and September 14th, a qualified biologist must conduct a preconstruction nesting bird survey. Potential impacts to nesting birds as a result of project initiation will be mitigated by implementing Mitigation Measures as outlined in the DEIR Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan for the Merged Chino Redevelopment Project Area, BIO-MM 5 – Sensitive Species.

There is no habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan in the City of Chino. Therefore, implementation of the project would not result in a conflict with the provisions of an adopted habitat conservation plan and no impact would occur.

INDIRECT IMPACTS

Potential indirect impacts include hydrological modification, discharges, lighting, and construction noise. Compliance with all the following guidelines will ensure that the proposed project will not result in indirect impacts to habitats and associated floral and faunal species within and/or adjacent to the Project Site.

Water Quality

The Project contractor would implement standard best management practices (BMPs) during construction, incorporate landscape features and bio-swales that would provide pervious surface to capture on-site runoff.

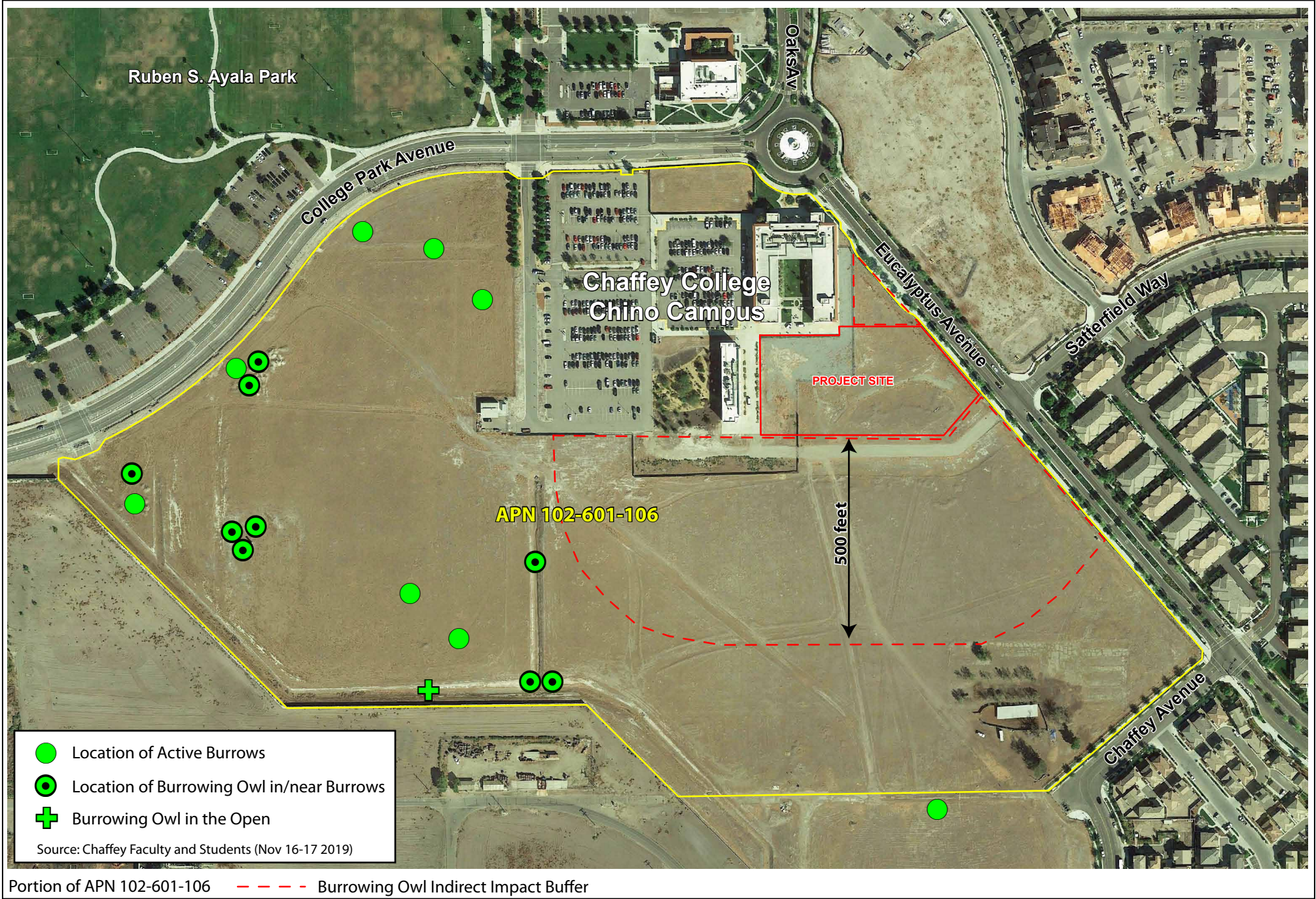


Figure 6 - Burrowing Owl Location Map

*Biological Resources Technical Report
Chaffey College – Chino Campus Instructional Building Project*



Figure 7 - Vegetation Communities Impact Map

Biological Resources Technical Report

Chaffey College – Chino Campus Instructional Building Project

CADRE
Environmental



1 inch = 300 ft.

Toxics

Toxic sources within the Project Site would be limited to those commonly associated with facility developments such as pesticides, insecticides, herbicides, fertilizers, and vehicle emissions. The Project contractor would implement standard best management practices (BMPs) during construction, incorporate landscape features and bio-swales that would provide pervious surface to capture on-site runoff.

Lighting

No native habitat is located adjacent to the Project Site and no indirect impacts to wildlife species will occur.

Noise

Indirect temporal noise impacts may occur to nesting bird species located adjacent to the Project Site during project construction. Noise and vibration associated with the use of heavy equipment during project construction has the potential to disrupt bird nesting, foraging and breeding behavior within and adjacent to sensitive receptor sites. Biological Mitigation Measure BIO-MM 5 – Sensitive Species 3 has been incorporated into the project to collectively contribute to reducing potential indirect noise impacts to nesting bird species located within and adjacent to the Project Site.

MITIGATION MEASURES

A review of all biological mitigation measures outlined in the DEIR Specific Plan for the Development of State Surplus Property and Amendment to the Redevelopment Plan for the Merged Chino Redevelopment Project Area, Chino, California was conducted to determine which if any are applicable to the proposed project.

Based on the existing conditions documented onsite which include suitable habitat for the burrowing owl and foraging habitat for eight (8) sensitive bird and raptor species, the following DEIR Specific Plan mitigation measures are applicable and will be implemented to reduce impacts to sensitive species.

BIO-MM 1 – Burrowing Owl 1

As a means of minimizing impacts to burrowing owls, Chaffey College for college construction, shall implement preconstruction surveys for burrowing owls at least 30 days prior to the initiation of construction within the proposed project area. This will be in addition to the passive relocation specified in Burrowing Owl-2 (if owls are detected onsite). These preconstruction surveys will be performed to ensure that no active owl burrows were missed during previous surveys. Passive relocation procedures for any burrowing owls found within the proposed construction area during preconstruction surveys will occur as described in mitigation measure BIO-MM 2 - Burrowing Owl 2. Passive relocation will not be conducted during the breeding season (between February 15 to September 15), except where fledging of all juvenile owls from the burrow has been completed. Compliance with this mitigation measure shall be confirmed by the City, and

a copy of the proof of compliance provided to CDFW prior to the initiation of construction activities.

BIO-MM 2 – Burrowing Owl 2

In the event burrowing owl are detected onsite during the pre-construction surveys (BIO-MM 1 – Burrowing Owl 1), the following condition will be implemented. A burrowing owl monitoring and relocation plan will be developed, reviewed and approved by Chaffey College and CDFW prior to initiating passive relocation efforts. In the event burrowing owls are detected within the 500ft survey buffer, a burrowing owl monitoring plan will be developed, reviewed and approved by Chaffey College and CDFW prior to initiating construction activities. The monitoring plan will focus on implementing measures to ensure indirect impacts to burrowing owls do not occur as a result of project initiation. Artificial burrows would be constructed at a 2:1 ratio for all occupied burrows that are located during preconstruction surveys. Where possible, the artificial burrows shall be placed no more than 100 feet from known occupied burrows so that individual owls can be passively relocated. Construction of the artificial burrows shall be performed or directly supervised by a biologist familiar with the biology of the burrowing owl and with the construction of artificial burrows. Upon completion of artificial burrow construction, proof of compliance with this mitigation measure shall be submitted to the City and CDFW prior to construction of any project elements. Known occupied burrows will be closed, and individuals will be passively relocated. Passive relocation will occur outside of the breeding season (February 15 to September 15). Passive relocation shall be performed by attaching one-way entrances to any active burrowing owl burrows as prescribed in CDFG burrowing owl mitigation guidelines. This will allow exit of owls from active burrows but will not allow owls to reenter the burrows once they have exited. It is anticipated that owls will relocate to the mitigation areas or to the remaining open space to the south of the proposed project. The burrows shall be monitored by a qualified biologist for at least seven days after initiation of passive relocation to confirm that the burrow is no longer active. Once it has been determined that the burrow is no longer active, the burrow will be removed. Passive relocation of the burrowing owls shall be performed by a qualified biologist who holds valid state permits and a Memorandum of Understanding with the CDFW for such relocation efforts.

BIO-MM 3 – Sensitive Species 1

As a means of minimizing impacts to potentially occurring sensitive wildlife species described in Table 3, *Sensitive Wildlife Species Assessment* at least 45 days prior to the initiation of construction activities within the proposed project area, the project applicant shall stake all proposed impact areas, staging areas, storage areas, parking areas, or other project elements to be potentially impacted by construction so as to allow a qualified biologist familiar with the sensitive biological resources that may occur within the proposed project area to perform preconstruction surveys for sensitive wildlife species. Based on previous surveys, these species may include grasshopper sparrow, sharp-shinned hawk, golden eagle, burrowing owl, northern harrier, California horned lark, merlin, prairie falcon, and loggerhead shrike. Compliance with this mitigation measure shall be verified by the City prior to the initiation of construction activities.

BIO-MM 4 – Sensitive Species 2

As a means of minimizing impacts to sensitive wildlife species mentioned in Sensitive Species 1, Chaffey College for college construction shall implement a dust control program consistent with the air quality mitigation measures of the EIR for the proposed project. This program shall be in place during all construction activities that could potentially generate dust emissions that may subsequently disturb wildlife species that may be nesting or foraging within or adjacent to the proposed Project Site. A copy of the completed dust control program shall be submitted to the City prior to the initiation of construction activities. Compliance with this mitigation measure shall be confirmed by the City prior to the initiation of construction activities.

BIO-MM 5 – Sensitive Species 3

As a means of minimizing impacts to sensitive bird species listed in Sensitive Species-1 or their nests, Chaffey College for college construction shall conduct all grubbing and brushing activities outside of the breeding season (February 15 to September 15) for burrowing owls and nesting birds subject to the CDFG Codes. If any grubbing or brush removal is required within this time window, a preconstruction wildlife survey shall be conducted by a qualified biologist familiar with the sensitive avian species that may occur in the vicinity of the proposed project area prior to the initiation of brushing activities. If an active nest is found during ground disturbance activities, the biologist shall mark a 100-foot area around the nest. No disturbance can take place within the 100-foot area until such time that the nest is determined to be no longer active as confirmed by the project biologist. A monitoring report for any biological resource found shall be submitted to the City and CDFW by the project biologist. Compliance with this mitigation measure shall be confirmed by the City.

BIO-MM 6 – Sensitive Species 4

As a means of minimizing impacts to sensitive wildlife species listed in Sensitive Species-1, Chaffey College for college construction shall have a qualified biological construction monitor oversee brush removal activities to monitor potential impacts to sensitive wildlife species. Upon completion of all brush (vegetation) removal or ground disturbance activity for the proposed project elements, the biological construction monitoring activity shall be discontinued. The construction monitor shall be familiar with the sensitive biological resources that may occur in the vicinity of the proposed project area. The construction monitor shall have the authority to temporarily stop construction activity if sensitive biological resources are in eminent danger of being impacted. The construction monitor shall keep a log of construction activities and submit log reports to the City and CDFW. Compliance with this mitigation measure shall be confirmed by the City.

BIO-MM 7 – Sensitive Species 5

As a means of minimizing impacts to sensitive wildlife species mentioned in Sensitive Species-1, Chaffey College for college construction shall implement a contractor education program. The contractor education program shall be written and conducted by a qualified biologist familiar with the sensitive biological resources that may occur in the vicinity of the proposed project area. The contractor education program shall include field

identification of sensitive wildlife species, potential impacts that may result from construction activities, all compliance measures required by the EIR, consequences of not complying with mitigation measures, and contact information for the project biologist and/or biological monitor. A copy of the mitigation and monitoring plan shall be kept on site for work crews to consult. A list of all personnel that have completed the training shall be kept on site, and a copy shall be submitted to the City. Workers shall also be required to have a sticker or other visual marker showing that they have completed the program so that biological monitors and other supervisory personnel can ensure that all construction personnel are in compliance with the mitigation measure. Compliance with this mitigation measure shall be confirmed by the City prior to the initiation of construction activities.

BIO-MM 8 – Sensitive Species 6

As a means of minimizing impacts to sensitive wildlife species mentioned in Sensitive Species-1, Chaffey College for college construction shall implement and enforce a 25-mph speed limit within the construction area. This speed limit will help to reduce potential collisions between construction traffic and wildlife. These speed limits shall be posted within the areas of enforcement. The speed limit requirements shall be part of the contractor education program, along with consequences that may result from noncompliance with this mitigation measure. Compliance with this mitigation measure shall be confirmed by the City.

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Certification "I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge".

Author: _____ Date: January 20th, 2020

Contact: Ruben S. Ramirez, Jr. 949-300-0212, r.ramirez@cadreenvironmental.com

ADMINISTRATION AND BURROWING OWLS

CONSERVATION, MANAGEMENT, AND CAMPUS PLANNING

Development of the College's Lands, Relative to Federal and State Endangered Species Acts (FESA & CESA, respectively), and Interaction with Wildlife Agencies (US Fish and Wildlife Service & California Department of Fish and Wildlife)

Relevant Documents

- A. Due to their rapidly declining numbers, burrowing owls are listed as a California Species of Special Concern. Burrowing owls are also protected under the U.S. Migratory Bird Species Treaty Act. Present requirements for the protection and management of burrowing owls are outlined in the 2004 [College Park \(Specific Plan\) Environmental Impact Report](#),¹ as required by the California Environmental Quality Act (CEQA). Those protections include:
 1. Long-term monitoring and management of burrowing owls (BUOW)
 2. Preservation of owl nest sites
 3. Protections of sensitive species prior to and during construction (surveying, training, etc.)
 - a. At least 45 days prior to construction: stake areas potentially impacted by construction
 - b. At least 30 days prior to construction: qualified biologist surveys for potential impacts
 - c. Contractor education program conducted by a qualified biologist
 - d. Visual marker (badge) of sensitive species training required for workers on site
 - e. Mitigation measures in the presence of potential impacts
 4. A burrowing owl preserve of at least 4.5 acres on the Chaffey College campus
 5. Collaboration on a biological resource education program for the community
- B. Documents Codifying Standard Protocols for Monitoring and Managing BUOW
 1. California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. CBOC. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842&inline>
 2. CDFW. 2012. Staff Report on Burrowing Owl Mitigation. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>
- C. Chaffey College Planning Documents for the development of the Chino campus do not consistently align with the college's commitment to preserve burrowing owl habitat.
 1. [Chaffey College Chino Campus Master Plan 2004](#) The plan does not describe a burrowing owl preserve on campus, and it is unclear whether one is shown in the campus maps. Appendix III reflects discussion of the college's obligation to set aside 4.5 acres for "native owl habitat," the possibility of locating the habitat at the far south of the property; and that being an ideal location for a football stadium.
 2. [Chaffey College Vision 2025 Facilities Master Plan](#) This plan contains no mention of a burrowing owl preserve; and shows campus development in some of the areas with the highest density of owl breeding activity.
 3. [Vision 2025 Addendum, June 2018](#) The addendum to the Vision 2025 Master Plan indicates that a portion of land at the southern quadrant of the property will be set aside for native owl habitat. It also states, however, "this facilities master plan recommends the continued development of the campus toward its full build-out, as conceived by the District's 2004 Facilities Mater Plan and Vision 2025...."

¹ Volumes I-II are the DEIR, July 2003. Relevant portions are: Page 3.4-11. Table 3.4.2-1. Listed wildlife with the potential to occur in the region of the proposed project site; Page 3.4-40-47. Sensitive Wildlife Species; Page ES-11-19. Table ES.6-1. Summary of Impacts, biological resources. Volume III is Final EIR, June 2004. These are probably the most helpful and authoritative (to my understanding). Page III-5-10; Table III-1, Mitigation measures summary; Page IV-4-13. IV.C Biological Resources, significant impact; See especially Page IV-12.

BURROWING OWLS: AGENCY & PARTNER CONTACTS

MONITORING, MANAGEMENT, RESEARCH, OUTREACH, TRAINING, AND BANDING

U.S. Fish and Wildlife Service (USFWS)

Thiede and Taylor have provided helpful information in the past. Thiede is a BUOW specialist.

- James Thiede, Endangered Species Biologist, USFWS, 777 East Tahquitz Canyon Way, Suite 208, Palm Springs, California 92262, (760) 322-2070 x419, james_thiede@fws.gov
- John Taylor, same contact as for Thiede, x218

California Department of Fish and Wildlife (CDFW)

Romich and Peterson have been extremely generous with information and support, including training and offering summer internships to Chaffey students. Peterson works in the field; Romich's work is more office-based.

- Kim Romich, Senior Environmental Scientist (Specialist), CDFW, Habitat Conservation-Region 6, 3602 Inland Empire Blvd Suite C-220, Ontario, CA 91764, (909) 980-3818, Kimberly.Romich@wildlife.ca.gov
- Nicholas Peterson, CDFW, Western Riverside County MSHCP Biological Monitoring Program, Nicholas.Peterson@wildlife.ca.gov

Pomona Valley Audubon Society (PVAS) Burrowing Owl Committee

Amateur experts and current and retired professionals from PVAS volunteer to monitor BUOW in the IE, including on the Chaffey Chino campus. The committee is active in BUOW habitat restoration and conservation efforts, education and outreach. PVAS partners closely with Pomona College; also Chaffey College, Cal Poly Pomona, San Diego Zoo Institute for Conservation Research on Burrowing Owl, and Southern California Edison.

- Suzanne Thompson, PVAS Burrowing Owl Committee Chair: SCT04747@pomona.edu
- Tina Stoner, PVAS President: tinastoner@earthlink.net
- Nina Karnovsky: zoology professor, Pomona College, Department of Biology; office: 909-607-9794; Nina.Karnovsky@pomona.edu

Professional Biologists with Burrowing Owl & Related Expertise

- Pete Bloom: Bloom specializes in raptor research and conservation. He has presented guest lectures at Chaffey; and has involved students in banding BUOW and other raptors on the Chino campus. Bloom Research (non-profit): <http://www.bloomresearch.org>; Bloom Biological, Inc.: <http://bloom.bio>; Email: petebloom@bloombiological.com
- Dave Woodward: (909) 783-2417; davegoodward@earthlink.net
- Marnie McKernan: (909) 384-2147
- Kristen Wasz: Inland Empire Biology Manager, Senior Biologist, ECorp Consulting, Inc., 215 N. 5th Street, Redlands, CA 92373, Office: 909.307.0046, kwasz@ecorpconsulting.com

The Chino Campus of Chaffey College Burrowing Owl (*Athene cunicularia*) Report - Spring 2021

By Tina Kuo, adjunct biology faculty

April, 2021



Figure 1. Active Burrowing Owl burrow entrances on Chaffey College's Chino Campus 2019 - 2021.

This report serves three purposes:

- (1) To show the active burrow entrances recorded from Fall 2018 to Spring 2021.
- (2) Based on collected data, describe owls' responses to different scenarios which appear on-site annually.
- (3) To share valuable post survey questions asked by students and volunteers.

In 2018, a group of volunteers, general biology students, and biology professors at the Chaffey College (see Acknowledgments) started making periodic observations and surveys* of Burrowing Owls on the open land of Chaffey's Chino campus. Up to the Spring 2021, the group has identified 34 active burrow entrances (Figure 1). A survey on April 2nd, 2021, shows a pair of owls who re-occupied an old burrow (entrance E1 on Figure 1) close to the footprint of the new building site.

Part I The Estimated Active Burrow Entrances

1. A breeding pair can occupy more than two burrow entrances (sentinel burrows) that are connected to a nesting burrow. Therefore, the 34 active entrances are categorized into 27 clumps, which are labeled as E1, W1 to W11, C1 to C6, and S1 to S9 in Figure 1. At least one adult owl had been observed standing on each clump of entrances in between 2018 and 2021.
2. This means that there may be more than 26 breeding pairs plus a single male owl (banded # 17) on site of the Chino campus.
3. Each pair can have up to seven nestlings in April or May. By July, about half of nestlings will become fledglings. In August, there could be near 100 owls on this open field. By October, the parents will stay, but most of young owls will leave to find new breeding ground. (Peter Bloom, personal communication, November 16, 2019)

Part II The Observed Burrowing Owl Behavior

The owls react to the following routine activities/scenarios differently. (Biology: Burrowing Owl Resources of Chaffey College, 2021)

1. In response to human activities:
 - a. The western field is next to a busy and noisy park year-round. (Figure 2) Owls tolerate those loud noises, but they cannot tolerate deep vibration sound waves.
 - b. Owls are used to having the goat vender (keeper) and his assistants drive on the "well established routes" inside the open field to do daily check on the electric fence.
 - c. The goat vender and his assistants mow the grass in Spring and Summer, which is important for healthy Burrowing Owl habitat. **A major concern is that the mowing should be monitored.** Biological surveying and monitored mows are the required procedures when there is a burrowing owl colony on site (CDFW, 2012 p.4). Without knowing where owls are in their breeding cycle and the locations of nesting burrows, mowing can easily destroy or injure owls.
 - d. Nestlings are very vulnerable from early-mid March to mid-late June! It is recommended by experts to mow in February or early March, and then again after chicks can fly, which is around mid-late June.

* Students & volunteers performed the Burrowing Owls pedestrian transect survey & periodical perimeter survey.

Pedestrian transect survey – follow parallel transect lines 20 meter apart and Systematically scan for signs of active Burrowing Owl burrows when walking on the open field.

Periodical perimeter survey – Make bi-weekly or monthly observation of burrowing owls from spots (observation stations) outside of fence around the open field.

- e. A small number of students and volunteers will perform annual pedestrian surveys on site. Owls become agitated when anyone gets too close to their burrows and they quickly fly always close to the ground and duck into a burrow. The distances those owls fly before they dive into a burrow range from 20 m to 100 m. To have a clear display of elements on the Figure 1, only 19 of such ranges are shown as 100 m radius circles from the center of clumps.
 - f. During non-breeding season, when there are too many actions going on in the field, some owls will fly over to the other side of the prison wall, which could be a temporary refuge area. (Figure 1 and Figure 2)
2. In response to activities of goat, sheep dogs, squirrel, and other animals:
 - a. There are about 40 goats grazing freely during the day on this grass land. The pugs (the indentations of the animals' hooves into soil) and fouling (the urine and manure recycled into the soil) of those goats enrich the growth of vegetation and attract insects, small lizards, rabbits, and squirrels, which all aid to a stabilized ecosystem. (National Forage & Grassland Curriculum 2021) Burrowing Owls are used to the movements of goats. Owls of this small grass land are well fed, and the survival rate of fledglings is about 50%.
 - b. When there are sheep dogs on site, predatory birds are less active in the immediate area, but still active in the fields. Sheep dogs and owls get along fine. No sudden movements of owls escaping dogs observed.
 - c. The large number of squirrels on the field ensure the availability of new burrows and their complex underground networks both aid to a health burrowing owl habitat.
 3. In response to activities of predators:
 - a. One Red-tailed Hawk nest was observed on the field, and two large young female Red-tailed hawks were banded during the bird banding event in November 2019. There are also a group of ravens who prey on this open field. Those ravens are currently nesting under the eaves of the college buildings. Those predatory birds often sit on the tree in the goat venter resting area, or on the prison's tall wall, or on the edges of building tops on campus. Owls are on the constant look out and duck underground quickly when predators approach. So far, we have observed doves, finches, squirrels, rabbits, and rats being caught by predatory birds.
 - b. After the sheep dogs were removed in 2019, coyotes appeared on site. There is no observation record yet for the interaction of burrowing owls and coyotes.
 - c. Feral cats and the cats from the dense residential area on the east side of the open field pose a dangerous threat to Burrowing Owls.

Part III Post survey questions presented by Students & Volunteers

1. Every student or volunteer in observation team received a basic training to work around owls in the field. If the goat venter and his assistants are on the field all the time, should they have a basic training about owls as well?
2. Many poison rat traps were observed around the fence of the open field. Should a more environmentally friendly method be employed?
3. What is the College's plan for future study (student research project?) on this open land?

Part IV Where to find more information regarding issues in above scenarios?

1. The Library of Chaffey College (reference list/ database/ presentations)
2. The California Department of Fish and Game (CDFW)
3. U.S. Forest Service (standard procedures for different situations)
4. Pomona Valley Audubon Society's burrowing owl conservation group (Eyes and Ears on Burrowing Owls)



Figure 2. An overview of the open field of Chino Campus, adjacent fields, and the College Park Burrowing Owl Preserve of Neighborhood Communities.

Part V Acknowledgments

Work that has been done by the following groups to support Burring Owl conservation since 2017:

1. The College (includes management and faculty members)
 - Recognized the importance of Burrowing Owls on site as a Living Lab and conservation project for Chaffey students
 - Arranged meetings with experts to learn more about Burrowing owl conservation
 - Supported and hosted Burrowing Owl festivals and students' burrowing owl survey projects and owl banding events
 - Included the students and volunteers' survey results in the environmental impact assessment report for the new building design
 - Special thanks go to Professor Robin Ikeda (retired in 2019) who helped to build the Burrowing Owl studies at Chaffey College
2. Students & Volunteers
 - Performed the perimeter survey regularly, and the pedestrian survey annually.
 - Helped to host each of the Burrowing Owl festivals
 - Gave presentations in the outreach project to promote Burrowing Owl conservation status
 - Shared valuable post-event feedback to the College
3. The Goat Vender & his assistants
 - Cooperated with the College to corral the goats, which allowed the students to finish the survey in the field
 - Quickly responded to the College's requests for the removal of the coyote traps
4. Neighborhood Communities
 - Kept a watch and reported any issues regarding the appearance and condition of the owls, which they observed from the sidewalk of the open field

- Participated in the Burrowing Owl Festivals
5. Pomona Valley Audubon Society's burrowing owl conservation group (Eyes and Ears on Burrowing Owls)
 - Promoted the awareness and opportunities of Burrowing Owl conservation.
 - Led owl observation field trips
 - Organized Burrowing Owl Artificial Burrow Installation
 - Monitored Burrowing Owl nesting sites in Chino and Ontario during the nesting season
 - Worked on protecting the remaining nesting places to avoid the local extinctions of owls
 - Focused on how to improve the mitigation areas in Chino to do a better job of attracting nesting owls to those safe areas (Figure 2)

References

1. Biology: Burrowing Owl Resources of Chaffey College, 2021. Chino Campus Burrowing Owl Survey Data (2018-2021). Library of Chaffey College. Accessed on April 10, 2021.
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2. California Department of Fish and Game (CDFW). 2012. *Staff report on Burrowing Owl mitigation*. California Natural Resources Agency.
3. Google Earth Pro. 2019. Aerial image of Chaffey College Chino Campus. Google.
4. National Forage & Grassland Curriculum. 2021. Discuss how livestock interaction impacts grass growth. Oregon State University Department of Crop and Soil Science. Accessed on April 10, 2021.
<https://forages.oregonstate.edu/nfgc/eo/onlineforagecurriculum/instructormaterials/availabletopics/management/livestock>
5. Pomona Audubon Society. 2021. Conservation - Pomona Valley Audubon. Accessed on April 10, 2021.
<http://www.pomonavalleyaudubon.org/conservation.html>
6. Peter Bloom, a well-respected zoologist, and a professional environmental consultant in California, explained the factors that influence the survival rate of Burrowing Owl nestlings (personal communication, November 16, 2019)

7. CONTRACT APPENDIX, SUBPART P

Geotechnical Report

Note: Geocon West Inc. Geotechnical Investigation for Chino Campus
Proposed Instructional Building, Dated February 14, 2020 attached.

GEOTECHNICAL INVESTIGATION

**CHAFFEY COLLEGE - CHINO
CAMPUS
PROPOSED INSTRUCTIONAL
BUILDING (CHIB)
5897 COLLEGE PARK AVENUE
CHINO, CALIFORNIA**



GEOCON
WEST, INC.

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR

**CHAFFEY COMMUNITY COLLEGE DISTRICT
RANCHO CUCAMONGA, CALIFORNIA**

PROJECT NO. T2746-99-11

FEBRUARY 14, 2020



Project No. T2746-99-11

February 14, 2020

Chaffey Community College District
5885 Haven Avenue
Rancho Cucamonga, CA 91737

Subject: GEOTECHNICAL INVESTIGATION
CHAFFEY COLLEGE – CHINO CAMPUS
PROPOSED INSTRUCTIONAL BUILDING (CHIB)
5897 COLLEGE PARK AVENUE, CHINO, CALIFORNIA

Ladies and Gentlemen:

In accordance with your authorization of our proposal dated November 18, 2019, we have performed a geotechnical investigation for the proposed Instructional Building (CHIB) at Chaffey College in the City of Chino, California. The accompanying report presents the findings of our study, and our conclusions and recommendations pertaining to the geotechnical aspects of proposed design and construction. Based on the results of our investigation, it is our opinion that the site can be developed as proposed, provided the recommendations of this report are followed and implemented during design and construction.

If you have any questions regarding this report, or if we may be of further service, please contact the undersigned.

Very truly yours,

GEOCON WEST, INC.



Petrina Zen
PE 87489



Neal D. Berliner
GE 2576



Susan F. Kirkgard
CEG 1754

(EMAIL) Addressee

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LIMITATIONS AND UNIFORMITY OF CONDITIONS

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FIELD INVESTIGATION

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GEOTECHNICAL INVESTIGATION

1. PURPOSE AND SCOPE

This report presents the results of a geotechnical investigation for the proposed Instructional Building (CHIB) at Chaffey College in the City of Chino, California (see Vicinity Map, Figure 1). The purpose of the investigation was to evaluate subsurface soil and geologic conditions underlying the site and, based on conditions encountered, to provide conclusions and recommendations pertaining to the geotechnical aspects of design and construction.

The scope of this investigation included a site reconnaissance, field exploration, laboratory testing, engineering analysis, and the preparation of this report. The site was explored on January 20 and 21, 2020 by drilling eight 8-inch diameter borings utilizing a truck-mounted hollow-stem auger drilling machine. The borings were excavated to depths of approximately 20½ to 50½ feet below the existing ground surface. The approximate locations of the exploratory borings are depicted on the Site Plan (see Figure 2). A detailed discussion of the field investigation, including boring logs, is presented in Appendix A.

Laboratory tests were performed on selected soil samples obtained during the investigation to determine pertinent physical and chemical soil properties. Appendix B presents a summary of the laboratory test results.

The recommendations presented herein are based on analysis of the data obtained during the investigation and our experience with similar soil and geologic conditions. References reviewed to prepare this report are provided in the *List of References* section.

If project details vary significantly from those described herein, Geocon should be contacted to determine the necessity for review and possible revision of this report.

2. SITE AND PROJECT DESCRIPTION

The subject site is located to the southeast of the existing Main Instructional Building (CHMB) and west of Eucalyptus Avenue within the Chaffey College Chino campus. The site is currently a vacant lot with no developments. The site is relatively level, with no pronounced highs or lows. Surface water drainage at the site appears to be by sheet flow along the existing ground contours to the area drains. Vegetation onsite consists of grass and low-height overgrowth.

It is our understanding that the proposed project is consists of a new two-story, 23,540 square foot instructional building (CHIB) and miscellaneous landscaping and paving improvements. The proposed development and associated improvements will be constructed at or near present site grade (see Site Plan, Figure 2).

Based on the preliminary nature of the design at this time, wall and column loads were not available. It is anticipated that column loads for the proposed structure will be up to 300 kips, and wall loads will be up to 3 kips per linear foot.

Once the design phase and foundation loading configuration proceeds to a more finalized plan, the recommendations within this report should be reviewed and revised, if necessary. Any changes in the design, location or elevation of any structure, as outlined in this report, should be reviewed by this office. Geocon should be contacted to determine the necessity for review and possible revision of this report.

3. GEOLOGIC SETTING

The subject site is located within the Chino Basin within the Upper Santa Ana River Watershed. The Chino Basin is located within the southwestern portion of the San Bernardino Valley that is bounded by the Chino Hills on the west and southwest, by the San Gabriel and San Bernardino Mountains on the north, by the San Jacinto Mountains on the east, and the Temescal Mountains and Santa Ana Mountains on the south. The valley is an alluvial-filled basin and the thickness of the alluvial sediments in the central portion of the valley is on the order of several hundred feet. Elevations on the valley floor range from approximately 600 feet near Chino to approximately 1,400 feet near San Bernardino and Redlands. Regionally, the site is located within the northern portion of the Peninsular Ranges geomorphic province characterized by northwest-trending physiographic and geologic features such as the Chino Fault, located approximately 2 miles to the west-southwest (CGS, 2003).

4. SOIL AND GEOLOGIC CONDITIONS

Based on our field investigation and published geologic maps of the area, the site is underlain by artificial fill and Holocene age alluvial deposits consisting interbedded sand and silt. The local geologic conditions with respect to the site location are shown on Figure 3, Local Geologic Map. Detailed stratigraphic profiles of the materials encountered at the site are provided on the boring logs in Appendix A.

4.1 Artificial Fill

Artificial fill was encountered in our field explorations to a maximum depth of 2 feet below existing ground surface. The artificial fill generally consists dark brown or dark gray sand with silt, sandy silt, and silt. The artificial fill is characterized as slightly moist, and firm to stiff or medium dense. The fill is likely the result of past grading or construction activities at the site. Deeper fill may exist between excavations and in other portions of the site that were not directly explored.

4.2 Alluvium

Holocene age alluvial deposits were encountered beneath the fill and consist primarily of light brown to dark brown, grayish brown to olive brown, or light yellowish brown to dark yellowish brown interbedded poorly graded sand, sand with silt, silty sand, sandy silt and silt. The alluvial deposits are characterized as slightly moist to moist, and very loose to very dense or soft to hard.

5. GROUNDWATER

The site is located in the Chino Basin (Chino Hydrologic Subarea of the Santa Ana River Hydrologic Unit). Historic groundwater water level information for the site and site vicinity was obtained from Mendenhall (1904), the California Geological Survey (CGS, formerly the California Division of Mines and Geology [CDMG], 1976), and the Chino Basin Watermaster (2017).

Mendenhall indicates the site was located within an area of artesian groundwater in the early 1900's (Mendenhall, 1904). CDMG (1974) also indicate the site was historically in an area of artesian groundwater. However, the depth to groundwater in 1960 was reported to be at a depth of 100 feet beneath the ground surface at the site and in the immediate site vicinity (CDMG, 1974).

More recently, the groundwater is reported to be at a depth of approximately 100 feet beneath the ground surface in 2000, 2012, and 2016 (Chino Basin Watermaster, 2017). Based on the information from CDMG (1974) and the Chino Basin Watermaster (2017), groundwater levels have remained at a depth of approximately 100 feet beneath the ground surface for the last 60 years. Current groundwater basin management practices are designed to keep groundwater levels consistent and it is highly unlikely that groundwater levels will ever rise significantly above the current groundwater levels (Chino Basin Watermaster, 2017).

Groundwater was not encountered in our field explorations, drilled to a maximum depth of 50½ feet below the existing ground surface. Based on the lack of groundwater in our borings, the reported depth to groundwater over last 60 years (CDMG, 1974; Chino Basin Watermaster, 2017), and the depth of proposed construction, groundwater is neither expected to be encountered during construction, nor have a detrimental effect on the project. However, it is not uncommon for groundwater levels to vary seasonally or for groundwater seepage conditions to develop where none previously existed, especially in impermeable fine-grained soils which are heavily irrigated or after seasonal rainfall. In addition, recent requirements for stormwater infiltration could result in shallower seepage conditions in the immediate site vicinity. Proper surface drainage of irrigation and precipitation will be critical for future performance of the project. Recommendations for drainage are provided in the *Surface Drainage* section of this report (see Section 7.18).

6. GEOLOGIC HAZARDS

6.1 Surface Fault Rupture

The numerous faults in Southern California include Holocene-active, pre-Holocene, and inactive faults. The criteria for these major groups are based on criteria developed by the California Geological Survey (CGS, formerly known as CDMG) for the Alquist-Priolo Earthquake Fault Zone Program (CGS, 2018). By definition, a Holocene-active fault is one that has had surface displacement within Holocene time (about the last 11,700 years). A pre-Holocene fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years) but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive.

As shown on Figure 4, Seismic Hazard Zone Map, the site is not located within a state-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards (CGS, 2020a; CGS, 2020b; CGS, 2003). No active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low. However, the site is located in the seismically active Southern California region, and could be subjected to moderate to strong ground shaking in the event of an earthquake on one of the many active Southern California faults. The faults in the vicinity of the site are shown on Figure 4 and Figure 5, Regional Fault Map.

The nearest Holocene-active fault to the site, with the potential for surface fault rupture, is the Chino Fault located approximately 2 miles to the west-southwest (CDMG, 2003). Other nearby active faults are the Whittier Fault Zone, the Elsinore Fault Zone, and the Sierra Madre Fault Zone, located approximately 7.9 miles southwest, 8.9 miles south, and 9.7 miles north-northeast of the site, respectively (USGS, 2006). The active San Jacinto Fault Zone and the San Andreas Fault Zone are located approximately 20 and 23 miles northeast of the site, respectively.

Several buried thrust faults, commonly referred to as blind thrusts, underlie the Southern California region at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than 3.0 kilometers. The October 1, 1987, M_w 5.9 Whittier Narrows earthquake and the January 17, 1994, M_w 6.7 Northridge earthquake were a result of movement on the Puente Hills Blind Thrust and the Northridge Thrust, respectively. These thrust faults and others in the greater Los Angeles area are not exposed at the surface and do not present a potential surface fault rupture hazard at the site; however, these deep thrust faults are considered active features capable of generating future earthquakes that could result in moderate to significant ground shaking at the site.

6.2 Seismicity

As with all of Southern California, the site has experienced historic earthquakes from various regional faults. The seismicity of the region surrounding the site was formulated based on research of an electronic database of earthquake data. The epicenters of recorded earthquakes with magnitudes equal to or greater than 5.0 in the site vicinity are depicted on Figure 6, Regional Seismicity Map. A partial list of moderate to major magnitude earthquakes that have occurred in the Southern California area within the last 100 years is included in the following table.

LIST OF HISTORIC EARTHQUAKES

Earthquake (Oldest to Youngest)	Date of Earthquake	Magnitude	Distance to Epicenter (Miles)	Direction to Epicenter
Near Redlands	July 23, 1923	6.3	24	E
Long Beach	March 10, 1933	6.4	31	SW
Tehachapi	July 21, 1952	7.5	103	NW
San Fernando	February 9, 1971	6.6	50	WNW
Whittier Narrows	October 1, 1987	5.9	24	W
Sierra Madre	June 28, 1991	5.8	26	NW
Landers	June 28, 1992	7.3	72	E
Big Bear	June 28, 1992	6.4	51	ENE
Northridge	January 17, 1994	6.7	51	WNW
Hector Mine	October 16, 1999	7.1	91	ENE
Ridgecrest	July 5, 2019	7.1	122	N

The site could be subjected to strong ground shaking in the event of an earthquake. However, this hazard is common in Southern California and the effects of ground shaking can be mitigated if the proposed structures are designed and constructed in conformance with current building codes and engineering practices.

6.3 Site-Specific Ground Motion Hazard Analysis

A site-specific ground motion hazard analyses was performed in accordance with ASCE 7-16 Chapter 21 and Section 1613A of the 2019 CBC using the online applications developed by USGS.

6.3.1 Probabilistic Seismic Hazard Analysis

The risk-targeted Maximum Considered Earthquake (MCE_R) probabilistic response spectrum consists of the spectral response accelerations which are expected to achieve a 1 percent probability of collapse within a 50-year period, evaluated at 5 percent damping.

The mean spectral response accelerations having a 2 percent chance of exceedance in 50 years were evaluated at 5 percent damping using the USGS Unified Hazard Tool (UHT). The Dynamic U.S. 2014 (v4.2.0) edition was used within the analysis, which is based on the UCERF-3 fault model. The soil underlying the site was modeled as a Site Class “D” with a corresponding average shear wave velocity (V_{s30}) of 260 meters per second. The site class definition is based on Standard Penetration Test blow count data.

The web application uses the ground motion prediction equations (GMPEs) from the NGA-West 2 project: Abrahamson-et al. (2014) NGA West 2, Boore et al. (2014) NGA West 2, Campbell-Bozorgnia (2014) NGA West 2, and Chiou-Youngs (2014) NGA West 2. Each GMPE was assigned an equal weight and the mean value of the four GMPEs was evaluated. The mean spectral accelerations were rotated to maximum direction using the period specific ratios from Shahi et al. (2013 & 2014).

The GMPE of Campbell and Borzorgnia requires that the depth to where the shear wave velocity reaches 2.5 kilometers per second ($Z_{2.5}$) be defined. Additionally, the GMPEs of Abrahamson-et al., Boore et al. and Chiou-Youngs require that the depth to where the shear wave velocity reaches 1 kilometer per second ($Z_{1.0}$) be defined. The values of $Z_{2.5}$ and $Z_{1.0}$ are internally calculated by the Uniform Hazard Tool.

The MCE uniform hazard response spectra was adjusted to risk-targeted spectral accelerations corresponding to a 1 percent chance of collapse in 50 years by using the USGS Risk-Targeted Ground Motion Calculator and following ASCE 7-16 Section 21.2.1.2 Method 2.

The risk-targeted Maximum Considered Earthquake (MCE_R) probabilistic response spectrum is provided on Figure 7.

6.3.2 Deterministic Seismic Hazard Analysis

In order to define the deterministic scenario events, deaggregation of the uniform hazard probabilistic response spectrum was performed using the USGS Uniform Hazard Tool. The inversion approach used by UCERF-3 allows for a large number of variations for each source scenario, including multi-fault ruptures. Therefore, deaggregation of UCERF-3 consists of the contributions from multi-fault ruptures rather than individual source contributions. To address this, the USGS Unified Hazard Tool aggregates the contributions on a per-fault-section basis, with rupture contributions only ever counted once. The Unified Hazard Tool deaggregation contributor list shows the fault sections which contribute most to hazard at a site and report a mean earthquake magnitude for each section identified by a 'parent' fault name and section index. Based on the deaggregation, we have considered faults which have a contribution of 10 percent or greater to the total hazard as potential scenario events. Although ASCE 7-16 Section 21.2.2 indicates that all known active faults be considered, it is our understanding that future ASCE 7 editions will specify the 10 percent contribution threshold for the deterministic scenario earthquakes. Therefore, we have adopted this approach as it is our opinion that it reasonably captures the earthquake events likely to control the deterministic analysis.

The characteristics of the deterministic scenario events were defined using the closest distance (Rrup) from the Uniform Hazard Tool deaggregation results and supplemented by the fault source parameters specified in the BSSC2014 Scenario Catalog. The values of Z2.5 and Z1.0 were estimated using data from the Community Velocity Model (CVM) Version 4 developed by Southern California Earthquake Data Center (SCEDC) accessed by the OpenSHA Site Data Application (v1.4.0).

A single deterministic scenario event was considered for this analysis and consisted of a magnitude 6.61 event occurring on the Chino alt 2 fault at a closest distance of 4.73 km.

The deterministic median and standard deviation (sigma) for the scenario event was evaluated using the USGS NSHMP-HAZ-WS Response Spectra application. The deterministic analysis used the same four GMPEs, equally weighted, to generate the median and standard deviation of ground motion which were then used to calculate the 84th percentile at 5% damping. The geometric median spectral accelerations were rotated to maximum direction using the period specific ratios from Shahi et al. (2013 & 2014).

The resulting 84th percentile maximum rotated component deterministic response spectra for the controlling deterministic event was compared to the deterministic lower bound envelope as defined by ASCE 7-16, Section 21.2.2, and the maximum values taken as the deterministic MCE_R response spectrum (see Figure 8).

6.3.3 Site-Specific Response Spectrum

The lesser of the probabilistic and deterministic MCE_R response spectrums is the Site-Specific MCE_R. Two thirds of the Site-Specific MCE_R is the Design Earthquake (DE) Response Spectrum, provided the results are not less than 80 percent of the General Design Response Spectrum determined by ASCE 7-16 Section 11.4.6 with Fa and Fv determined as specified in Section 21.3.

Graphical representations of the analyses are presented on Figures 7 and 8. The Site-Specific Design Earthquake response spectrum at 5 percent damping is presented on Figure 8 and as Table 1.

6.3.4 Mapped Acceleration Parameters

The following table summarizes the mapped acceleration parameters obtained from the 2019 California Building Code (CBC; Based on the 2018 International Building Code [IBC] and ASCE 7-16), Chapter 16A Structural Design, Section 1613A Earthquake Loads. The data was calculated using the computer program U.S. Seismic Design Maps, provided by the USGS. The short spectral response uses a period of 0.2 second.

MAPPED SPECTRAL ACCELERATIONS

Parameter	Value	2019 CBC Reference
MCE _R Ground Motion Spectral Response Acceleration – Class B (short), S _S	1.689g	Figure 1613A.3.1(1)
MCE _R Ground Motion Spectral Response Acceleration – Class B (1 sec), S ₁	0.6g	Figure 1613A.3.1(2)

6.3.5 Site-Specific Seismic Design Criteria

Based the site-specific ground motion hazard analysis performed, and in accordance with the ASCE 7-16 Section 21.4, site-specific design acceleration parameters shall be derived using the results of the site-specific ground motion hazard analysis.

The parameter S_{DS} shall be taken as equal to 90 percent of the maximum spectral acceleration obtained from the site-specific analysis at any period within the range from 0.2 to 5 seconds, inclusive. The parameter S_{D1} shall be taken as the maximum value of the product of the spectral acceleration and period for periods from 1 to 5 seconds, inclusive. The values of S_{MS} and S_{M1} shall be taken as 1.5 times the site-specific values of S_{DS} and S_{D1}. The site-specific design acceleration parameters shall not be less than 80 percent of the general seismic design values determined by ASCE 7-16 Section 11.4.

The following table presents the site-specific seismic design parameters based on the site-specific ground motion hazard analysis.

SITE-SPECIFIC DESIGN ACCELERATION PARAMETERS

Parameter	Value
Site Class Modified MCE _R Spectral Response Acceleration (short), S _{MS}	1.873g
Site Class Modified MCE _R Spectral Response Acceleration – (1 sec), S _{M1}	1.355g
5% Damped Design Spectral Response Acceleration (short), S _{DS}	1.249g
5% Damped Design Spectral Response Acceleration (1 sec), S _{D1}	0.903g

6.3.6 Site-Specific Peak Ground Acceleration

The site-specific Maximum Considered Earthquake (MCE_G) geometric mean peak ground acceleration was evaluated in accordance with ASCE 7-16 Section 21.5.

The probabilistic geometric mean peak ground acceleration and the deterministic 84th percentile geometric mean peak ground acceleration were analyzed using the same approaches as described above. The analysis used the same Site Class and scenario earthquake.

The deterministic MCE_G shall not be less than $0.5F_{PGA}$, where F_{PGA} is determined from ASCE 7-16 Table 11.8-1 with the value of PGA taken as 0.5g. The site-specific MCE_G peak ground acceleration is taken as the lesser of the probabilistic and deterministic MCE_G , provided the value is not less than 80 percent of the value of PGA_M as determined by ASCE 7-16 Equation 11.8.1.

ASCE 7-16 SITE-SPECIFIC PEAK GROUND ACCELERATION

Parameter	Value	ASCE 7-16 Reference
Site-Specific MCE_G Peak Ground Acceleration, PGA_M	0.7g	Section 21.5

6.3.7 Deaggregated Seismic Source Parameters

The Maximum Considered Earthquake Ground Motion (MCE) is the level of ground motion that has a 2 percent chance of exceedance in 50 years, with a statistical return period of 2,475 years. According to the 2019 California Building Code and ASCE 7-16, the MCE is to be utilized for the evaluation of liquefaction, lateral spreading, seismic settlements, and it is our understanding that the intent of the Building code is to maintain “Life Safety” during a MCE event. The Design Earthquake Ground Motion (DE) is the level of ground motion that has a 10 percent chance of exceedance in 50 years, with a statistical return period of 475 years.

Deaggregation of the MCE peak ground acceleration was performed using the USGS online Unified Hazard Tool, 2014 Conterminous U.S. Dynamic edition (v4.2.0). The result of the deaggregation analysis indicates that the predominant earthquake contributing to the MCE peak ground acceleration is characterized as a 6.65 magnitude event occurring at a hypocentral distance of 11.75 kilometers from the site.

Deaggregation was also performed for the Design Earthquake (DE) peak ground acceleration, and the result of the analysis indicates that the predominant earthquake contributing to the DE peak ground acceleration is characterized as a 6.67 magnitude occurring at a hypocentral distance of 15.66 kilometers from the site.

Conformance to the criteria in the above tables for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a large earthquake occurs. The primary goal of seismic design is to protect life, not to avoid all damage, since such design may be economically prohibitive.

6.4 Liquefaction Potential

Liquefaction is a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Primary factors controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to groundwater. Liquefaction is typified by a loss of shear strength in the liquefied layers due to rapid increases in pore water pressure generated by earthquake accelerations.

The current standard of practice, as outlined in the “Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction in California” and “Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California” requires liquefaction analysis to a depth of 50 feet below the lowest portion of the proposed structure. Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

A review of the San Bernardino County Countywide Plan, Hazards Element (2019) indicates that the site is not located within an area identified as having a potential for liquefaction. Also, the groundwater level in the immediate area has been at a depth of approximately 100 feet since the 1960’s (CDMG, 1974; Chino Basin Watermaster, 2017). Based on these considerations, it is our opinion that the potential for liquefaction and associated ground deformations beneath the site is very low.

6.5 Seismically Induced Settlement

Dynamic compaction of dry and loose sands may occur during a major earthquake. Typically, settlements occur in thick beds of such soils. The seismically-induced settlement calculations were performed in accordance with the American Society of Civil Engineers, Technical Engineering and Design Guides as adapted from the US Army Corps of Engineers, No. 9.

The seismically induced settlement calculations were performed for the Design Earthquake level by using a magnitude 6.67 earthquake, and a peak horizontal acceleration of 0.467g ($\frac{2}{3}PGA_M$). The calculations provided herein for boring B5 indicate that the soils to a depth of 50 feet below the ground surface would be prone to less than 0.43 inches of settlement as a result of the Design Earthquake peak ground acceleration ($\frac{2}{3}PGA_M$).

It is our understanding that the intent of the Building Code is to maintain “Life Safety” during Maximum Considered Earthquake level events. Therefore, additional analysis was performed to evaluate the potential for seismically induced settlement during a MCE event. The structural engineer should evaluate the proposed structure for the anticipated MCE induced settlements and verify that anticipated deformations would not cause the foundation system to lose the ability to support the gravity loads and/or cause collapse of the structure.

The seismically induced settlement calculations were performed for the Maximum Considered Earthquake level by using a magnitude 6.65 earthquake, and a peak horizontal acceleration of 0.7g (PGA_M). The calculations provided herein for boring B5 indicate that the soils to a depth of 50 feet below the ground surface would be prone to less than 0.73 inches of settlement as a result of the Maximum Considered Earthquake peak ground acceleration (PGA_M), respectively.

Calculation of the anticipated seismically-induced settlements is provided as Figures 9 through 12.

6.6 Slope Stability

The site is located on the valley floor and topography at the site is relatively level to gently sloping to the south. The San Bernardino County Countywide Plan, Hazards Element (2019) indicates the site is not within an area identified as having a potential for slope instability. There are no known landslides near the site, nor is the site in the path of any known or potential landslides. Therefore, the potential for slope stability hazards to adversely affect the proposed development is considered low.

6.7 Earthquake-Induced Flooding

Earthquake-induced flooding is inundation caused by failure of dams or other water-retaining structures due to earthquakes. Based on a review of the San Bernardino County Countywide Plan, Hazards Element (2019), the site is not located within a potential inundation area for an earthquake-induced dam failure. Therefore, the probability of earthquake-induced flooding is considered very low.

6.8 Tsunamis, Seiches, and Flooding

The project property is not located in a coastal area. Therefore, tsunamis are not considered a significant hazard at the property.

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. No major water-retaining structures are located immediately up gradient from the project site. Therefore, flooding resulting from a seismically-induced seiche is considered unlikely.

The site is not within an area of 100-year or 500-year flooding hazard (San Bernardino County, 2019).

6.9 Oil Fields & Methane Potential

Information on the California Geologic Energy Management Division (CalGEM) Well Finder Website indicates the site is not located within the limits of an oilfield and oil or gas wells are not located in the immediate site vicinity (CalGEM, 2020). However, due to the voluntary nature of record reporting by the oil well drilling companies, wells may be improperly located or not shown on the location map and undocumented wells could be encountered during construction. Any wells encountered during construction will need to be properly abandoned in accordance with the current requirements of the DOGGR.

Since the site is not located within the boundaries of a known oil field, the potential for the presence of methane or other volatile gases at the site is considered low. However, should it be determined that a methane study is required for the proposed development; it is recommended that a qualified methane consultant be retained to perform the study and provide mitigation measures as necessary.

6.10 Subsidence

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. The site is located near an area of known ground subsidence. The Chino Basin has had up to 20 centimeters of subsidence and approximately 1 inch of subsidence and associated ground fissures have been documented approximately ½-mile west of the site (Wildermuth Environmental, Inc. 2012). The fissures were first documented in the early 1970s. In 2007, the MZ1 groundwater management plan was initiated to mitigate long-term subsidence. The MZ1 plan includes monitoring of piezometric levels, aquifer-system deformation, vertical ground level monitoring, and horizontal ground-surface deformation monitoring and has reduced the subsidence to a manageable level (Chino Basin Watermaster, 2017). Therefore, the potential for regional subsidence to adversely impact the proposed structure is considered low.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 General

- 7.1.1 It is our opinion that neither soil nor geologic conditions were encountered during the investigation that would preclude the construction of the proposed project provided the recommendations presented herein are followed and implemented during design and construction.
- 7.1.2 Up to 2 feet of existing artificial fill was encountered during the site investigation. The existing fill encountered is believed to be the result of past grading and construction activities at the site. Deeper fill may exist in other areas of the site that were not directly explored. It is our opinion that the existing fill, in its present condition, is not suitable for direct support of proposed foundations or slabs. The existing fill and site soils are suitable for re-use as engineered fill provided the recommendations in the Grading section of this report are followed (see Section 7.4).
- 7.1.3 The enclosed seismically-induced settlement analyses indicate that the site soils could be susceptible to approximately 0.43 inches of settlement as a result of the Design Earthquake peak ground acceleration ($\frac{2}{3}PG_{AM}$). Differential settlement at the ground surface is anticipated to be less than $\frac{1}{4}$ inch over a distance of 30 feet.
- 7.1.4 Based on these considerations, it is recommended that the upper 5 feet of existing earth materials within the building footprint areas be excavated and properly compacted for foundation and slab support. Deeper excavations should be conducted as needed to remove any encountered fill or soft soils as necessary at the direction of the Geotechnical Engineer (a representative of Geocon). The excavation should extend laterally a minimum distance of 3 feet beyond the building footprint areas, including building appurtenances, or a distance equal to the depth of fill below the foundation, whichever is greater. Proposed building foundations should be underlain by a minimum of 3 feet of newly placed engineered fill. The limits of existing fill and/or soft soil removal will be verified by the Geocon representative during site grading activities. Recommendations for earthwork are provided in the *Grading* section of this report (see Section 7.4).
- 7.1.5 Subsequent to the recommended grading, the proposed structures may be supported on a conventional foundation system deriving support in newly placed engineered fill. Recommendations for the design of a conventional foundation system are provided in Section 7.6.
- 7.1.6 All excavations must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon). Prior to placing any fill, the excavation bottom must be proof-rolled with heavy equipment in the presence of the Geotechnical Engineer (a representative of Geocon West, Inc.).

- 7.1.7 It is anticipated that stable excavations for the recommended grading associated with the proposed structures can be achieved with sloping measures. However, if excavations in close proximity to an adjacent structure or improvement are required, special excavation measures may be necessary in order to maintain lateral support of existing improvements. Excavation recommendations are provided in the *Temporary Excavations* section of this report (Section 7.16).
- 7.1.8 Foundations for small outlying structures, such as block walls up to 6 feet high, planter walls or trash enclosures, which will not be tied to proposed structures, may be supported on conventional foundations bearing on a minimum of 12 inches of newly placed engineered fill which extends laterally at least 12 inches beyond the foundation area. Where excavation and proper compaction cannot be performed or is undesirable, foundations may derive support directly in the undisturbed alluvial soils, and should be deepened as necessary to maintain a minimum 12-inch embedment into the recommended bearing materials. If the soils exposed in the excavation bottom are soft or loose, compaction of the soils will be required prior to placing steel or concrete. Compaction of the foundation excavation bottom is typically accomplished with a compaction wheel or mechanical whacker and must be observed and approved in writing by a Geocon representative.
- 7.1.9 Where new paving is to be placed, it is recommended that all existing fill soils and soft alluvial soils be excavated and properly compacted for paving support. The client should be aware that excavation and compaction of all existing fill in the area of new paving is not required, however, paving constructed over existing uncertified fill or unsuitable soils may experience increased settlement and/or cracking, and may therefore have a shorter design life and increased maintenance costs. As a minimum, the upper 12 inches of soil should be scarified and properly compacted. Paving recommendations are provided in the *Preliminary Pavement Recommendations* section of this report (see Section 7.11).
- 7.1.10 Based on the results of percolation testing performed at the site, a stormwater infiltration system is considered feasible for this project. Recommendations for infiltration are provided in the *Stormwater Infiltration* section of this report (see Section 7.17).
- 7.1.11 Once the design and foundation loading configuration for the proposed structure proceeds to a more finalized plan, the recommendations within this report should be reviewed and revised, if necessary. Based on the final foundation loading configurations, the potential for settlement should be reevaluated by this office.
- 7.1.12 Any changes in the design, location or elevation of improvements, as outlined in this report, should be reviewed by this office. Geocon should be contacted to determine the necessity for review and possible revision of this report.

7.2 Soil and Excavation Characteristics

- 7.2.1 The in-situ soils can be excavated with moderate effort using conventional excavation equipment. Some caving should be anticipated in unshored excavations, especially if granular soils are encountered.
- 7.2.2 It is the responsibility of the contractor to ensure that all excavations and trenches are properly shored and maintained in accordance with applicable OSHA rules and regulations to maintain safety and maintain the stability of existing adjacent improvements.
- 7.2.3 All onsite excavations must be conducted in such a manner that potential surcharges from existing structures, construction equipment, and vehicle loads are resisted. The surcharge area may be defined by a 1:1 projection down and away from the bottom of an existing foundation or vehicle load. Penetrations below this 1:1 projection will require special excavation measures such as sloping or shoring. Excavation recommendations are provided in the *Temporary Excavations* section of this report (see Section 7.16).
- 7.2.4 The upper 5 feet of existing site soils encountered during this investigation are considered to have a “very low” expansive potential ($EI = 0$); and are classified as “non-expansive” based on the 2019 California Building Code (CBC) Section 1803.5.3. Recommendations presented herein assume that the building foundations and slabs will derive support in these materials.

7.3 Minimum Resistivity, pH, and Water-Soluble Sulfate

- 7.3.1 Potential of Hydrogen (pH) and resistivity testing as well as chloride content testing were performed on representative samples of soil to generally evaluate the corrosion potential to surface utilities. The tests were performed in accordance with California Test Method Nos. 643 and 422 and indicate that the soils are considered “corrosive” with respect to corrosion of buried ferrous metals on site. The results are presented in Appendix B (Figure B17) and should be considered for design of underground structures.
- 7.3.2 Laboratory tests were performed on representative samples of the site materials to measure the percentage of water-soluble sulfate content. Results from the laboratory water-soluble sulfate tests are presented in Appendix B (Figure B17) and indicate that the on-site materials possess “S0” sulfate exposure to concrete structures as defined by 2019 CBC Section 1904 and ACI 318-14 Table 19.3.1.1.
- 7.3.3 Geocon West, Inc. does not practice in the field of corrosion engineering and mitigation. If corrosion sensitive improvements are planned, it is recommended that a corrosion engineer be retained to evaluate corrosion test results and incorporate the necessary precautions to avoid premature corrosion of buried metal pipes and concrete structures in direct contact with the soils.

7.4 Grading

- 7.4.1 Earthwork should be observed, and compacted fill tested by representatives of Geocon West, Inc. The existing fill and alluvial soils encountered during exploration are suitable for re-use as engineered fill, provided any encountered oversize material (greater than 6 inches) and any encountered deleterious debris are removed.
- 7.4.2 A preconstruction conference should be held at the site prior to the beginning of grading operations with the owner, contractor, civil engineer, geotechnical engineer, and building official in attendance. Special soil handling requirements can be discussed at that time.
- 7.4.3 Grading should commence with the removal of all existing vegetation and existing improvements from the area to be graded. Deleterious debris such as wood and root structures should be exported from the site and should not be mixed with the fill soils. Asphalt and concrete should not be mixed with the fill soils unless approved by the Geotechnical Engineer. All existing underground improvements planned for removal should be completely excavated and the resulting depressions properly backfilled in accordance with the procedures described herein. Once a clean excavation bottom has been established it must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon West, Inc.).
- 7.4.4 As a minimum, it is recommended that the upper 5 feet of existing earth materials within the proposed building footprint areas be excavated and properly compacted for foundation and slab support. Deeper excavations should be conducted as necessary to remove all artificial fill or soft alluvial soil at the direction of the Geotechnical Engineer (a representative of Geocon). The excavation should extend laterally a minimum distance of 3 feet beyond the building footprint area, including building appurtenances, or a distance equal to the depth of fill below the foundation, whichever is greater. Proposed building foundations should be underlain by a minimum of 3 feet of newly placed engineered fill. The limits of existing fill and/or soft alluvial soils removal will be verified by the Geocon representative during site grading activities.
- 7.4.5 Based on the requirement that all foundations be underlain by a minimum of 3 feet of newly placed engineered fill, it is recommended that the grading contractor review the structural plans and establish bottom of footing elevations prior to commencement of grading activities in order to ensure that grading is conducted deep enough to achieve the required fill blanket.
- 7.4.6 All excavations must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon). Prior to placing any fill, the excavation bottom must be proof-rolled with heavy equipment in the presence of the Geotechnical Engineer (a representative of Geocon West, Inc.).

- 7.4.7 The upper alluvial soils are currently very moist and the grading contractor should be aware that the existing soils are currently above optimum moisture content. However, conditions can change seasonally. If the soils are more than 3 percent above the optimum moisture content at the time of construction the soils will likely require some spreading and drying activities in order to achieve proper compaction.
- 7.4.8 If construction is performed during the rainy season and the excavation bottom becomes saturated, stabilization measures may have to be implemented to prevent excessive disturbance the excavation bottom. Should this condition exist, rubber tire equipment should not be allowed in the excavation bottom until it is stabilized or extensive soil disturbance could result.
- 7.4.9 Subgrade stabilization may be accomplished by placing a thin lift of 3- to 6-inch-diameter crushed angular rock into the soft excavation bottom. The use of crushed concrete will also be acceptable. The crushed rock should be spread thinly across the excavation bottom and pressed into the soils by track rolling or wheel rolling with heavy equipment. It is very important that voids between the rock fragments are not created so the rock must be thoroughly pressed or blended into the soils. All subgrade soils must be properly compacted and proof-rolled in the presence of the Geotechnical Engineer (a representative of Geocon West, Inc.).
- 7.4.10 All fill and backfill soils should be placed in horizontal loose layers approximately 6 to 8 inches thick, moisture conditioned to optimum moisture content, and properly compacted to a minimum 90 percent of the maximum dry density in accordance with ASTM D 1557 (latest edition).
- 7.4.11. Where new paving is to be placed, it is recommended that all existing fill and soft alluvium be excavated and properly compacted for paving support. As a minimum, the upper 12 inches of soil should be scarified, moisture conditioned to optimum moisture content, and compacted to at least 95 percent relative compaction, as determined by ASTM Test Method D 1557 (latest edition). Paving recommendations are provided in *Preliminary Pavement Recommendations* section of this report (see Section 7.11).

- 7.4.12 Foundations for small outlying structures, such as block walls up to 6 feet high, planter walls or trash enclosures, which will not be tied to the proposed building, may be supported on conventional foundations deriving support on a minimum of 12 inches of newly placed engineered fill which extends laterally at least 12 inches beyond the foundation area. Where excavation and proper compaction cannot be performed or is undesirable, foundations may derive support directly in the undisturbed alluvial soils, and should be deepened as necessary to maintain a minimum 12 inch embedment into the recommended bearing materials. If the soils exposed in the excavation bottom are soft or loose, compaction of the soils will be required prior to placing steel or concrete. Compaction of the foundation excavation bottom is typically accomplished with a compaction wheel or mechanical whacker and must be observed and approved by a Geocon representative.
- 7.4.13 All imported fill shall be observed, tested, and approved by Geocon West, Inc. prior to bringing soil to the site. Rocks larger than 6 inches in diameter shall not be used in the fill. Import soils used as structural fill should have an expansion index less than 20 and corrosivity properties that are equally or less detrimental to that of the existing onsite soils (see Figure B17). Import soils placed in the building area should be placed uniformly across the building pad or in a manner that is approved by the Geotechnical Engineer (a representative of Geocon).
- 7.4.14 Utility trenches should be properly backfilled in accordance with the requirements of the Green Book (latest edition). The pipe should be bedded with clean sands (Sand Equivalent greater than 30) to a depth of at least 1 foot over the pipe, and the bedding material must be inspected and approved in writing by the Geotechnical Engineer (a representative of Geocon). The use of gravel is not acceptable unless used in conjunction with filter fabric to prevent the gravel from having direct contact with soil. The remainder of the trench backfill may be derived from onsite soil or approved import soil, compacted as necessary, until the required compaction is obtained. The use of minimum 2-sack slurry as backfill is also acceptable. Prior to placing any bedding materials or pipes, the trench excavation bottom must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon).
- 7.4.15 All trench and foundation excavation bottoms must be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon), prior to placing bedding sands, fill, steel, gravel, or concrete.

7.5 Shrinkage

- 7.5.1 Shrinkage results when a volume of material removed at one density is compacted to a higher density. A shrinkage factor of between 5 and 10 percent should be anticipated when excavating and compacting the upper 5 feet of existing earth materials on the site to an average relative compaction of 92 percent.
- 7.5.2 If import soils will be utilized in the building pads, the soils must be placed uniformly and at equal thickness at the direction of the Geotechnical Engineer (a representative of Geocon West, Inc.). Soils can be borrowed from non-building pad areas and later replaced with imported soils.

7.6 Foundation Design

- 7.6.1 Subsequent to the recommended grading, a conventional shallow spread foundation system may be utilized for support of the proposed structures provided foundations derive support in newly placed engineered fill. Proposed building foundations should be underlain by a minimum of 3 feet of newly placed engineered fill.
- 7.6.2 Continuous footings may be designed for an allowable bearing capacity of 2,500 pounds per square foot (psf), and should be a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- 7.6.3 Isolated spread foundations may be designed for an allowable bearing capacity of 3,000 psf, and should be a minimum of 24 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- 7.6.4 The allowable soil bearing pressure above may be increased by 250 psf and 500 psf for each additional foot of foundation width and depth, respectively, up to a maximum allowable soil bearing pressure of 4,000 psf.
- 7.6.5 The allowable bearing pressures may be increased by one-third for transient loads due to wind or seismic forces.
- 7.6.6 If depth increases are utilized for the perimeter foundations, this office should be provided a copy of the final construction plans so that the excavation recommendations presented herein could be properly reviewed and revised if necessary. Additional grading should be performed as-necessary in order to maintain the required 3-foot-thick blanket of engineered fill below foundations.

- 7.6.7 Continuous footings should be reinforced with four No. 4 steel reinforcing bars, two placed near the top of the footing and two near the bottom. Reinforcement for spread footings should be designed by the project structural engineer.
- 7.6.8 The above foundation dimensions and minimum reinforcement recommendations are based on soil conditions and building code requirements only, and are not intended to be used in lieu of those required for structural purposes.
- 7.6.9 No special subgrade presaturation is required prior to placement of concrete. However, the moisture in the foundation subgrade should be sprinkled as necessary to maintain a moist condition at the time of concrete placement.
- 7.6.10 Foundation excavations should be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon West, Inc.), prior to the placement of reinforcing steel and concrete to verify that the excavations and exposed soil conditions are consistent with those anticipated. If unanticipated soil conditions are encountered, foundation modifications may be required.
- 7.6.11 This office should be provided a copy of the final construction plans so that the excavation recommendations presented herein could be properly reviewed and revised if necessary.

7.7 Foundation Settlement

- 7.7.1 The enclosed seismically-induced settlement analyses indicate that the site soils could be susceptible up to approximately 0.43 inches of total settlement as a result of the Design Earthquake peak ground acceleration ($\frac{2}{3}PGA_M$). Differential settlement at the ground surface is anticipated to be less than $\frac{1}{4}$ inch over a distance of 30 feet. These settlements are in addition to the static settlements indicated below and must be considered in the structural design.
- 7.7.2 The maximum expected settlement for a structure supported on a conventional foundation system with a maximum allowable bearing value of 4,000 psf and deriving support in the recommended bearing material is estimated to be approximately 1 inch and occur below the heaviest loaded structural element. A majority of the settlement of the foundation system is expected to occur on initial application of loading. Differential settlement is expected to be less than $\frac{1}{2}$ inch over a distance of 20 feet. Based on seismic considerations, the proposed structures supported on a conventional foundation system should be designed for a combined static and seismically-induced differential settlement of $\frac{3}{4}$ inch over a distance of 20 feet.

- 7.7.3 Once the design and foundation loading configurations for the proposed structures proceeds to a more finalized plan, the estimated settlements presented in this report should be reviewed and revised, if necessary. If the final foundation loading configurations are greater than the assumed loading conditions, the potential for settlement should be reevaluated by this office.

7.8 Lateral Design

- 7.8.1 Resistance to lateral loading may be provided by friction acting at the base of foundations, slabs and by passive earth pressure. An allowable coefficient of friction of 0.35 may be used with the dead load forces in the competent alluvial soils or in properly compacted engineered fill.
- 7.8.2 Passive earth pressure for the sides of foundations and slabs poured against properly compacted engineered fill or competent alluvial soils may be computed as an equivalent fluid having a density of 250 pcf with a maximum earth pressure of 2,500 psf. When combining passive and friction for lateral resistance, the passive component should be reduced by one-third. A one-third increase in the passive value may be used for wind or seismic loads.

7.9 Miscellaneous Foundations

- 7.9.1 Foundations for small outlying structures, such as block walls up to 6 feet in height, planter walls or trash enclosures which will not be tied to the proposed structure may be supported on conventional foundations bearing on a minimum of 12 inches of newly placed engineered fill which extends laterally at least 12 inches beyond the foundation area. Where excavation and compaction cannot be performed or is undesirable, such as adjacent to property lines, foundations may derive support in the undisturbed alluvial soils, and should be deepened as necessary to maintain a minimum 12 inch embedment into the recommended bearing materials.
- 7.9.2 If the soils exposed in the excavation bottom are soft, compaction of the soft soils will be required prior to placing steel or concrete. Compaction of the foundation excavation bottom is typically accomplished with a compaction wheel or mechanical whacker and must be observed and approved by a Geocon representative. Miscellaneous foundations may be designed for a bearing value of 1,500 psf, and should be a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade and 12 inches into the recommended bearing material. The allowable bearing pressure may be increased by up to one-third for transient loads due to wind or seismic forces.

- 7.9.3 Foundation excavations should be observed and approved in writing by the Geotechnical Engineer (a representative of Geocon West, Inc.), prior to the placement of reinforcing steel and concrete to verify that the excavations and exposed soil conditions are consistent with those anticipated.

7.10 Concrete Slabs-on-Grade

- 7.10.1 Concrete slabs-on-grade subject to vehicle loading should be designed in accordance with the recommendations in the *Pavement Recommendations* section of this report (Section 7.11).
- 7.10.2 Subsequent to the recommended grading, concrete slabs-on-grade for structures, not subject to vehicle loading, should be a minimum of 4 inches thick and minimum slab reinforcement should consist of No. 3 steel reinforcing bars placed 18 inches on center in both horizontal directions. Steel reinforcing should be positioned vertically near the slab midpoint.
- 7.10.3 Slabs-on-grade at the ground surface that may receive moisture-sensitive floor coverings or may be used to store moisture-sensitive materials should be underlain by a vapor retarder placed directly beneath the slab. The vapor retarder and acceptable permeance should be specified by the project architect or developer based on the type of floor covering that will be installed. The vapor retarder design should be consistent with the guidelines presented in Section 9.3 of the American Concrete Institute's (ACI) Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials (ACI 302.2R-06) and should be installed in general conformance with ASTM E 1643 (latest edition) and the manufacturer's recommendations. A minimum thickness of 15 mils extruded polyolefin plastic is recommended; vapor retarders which contain recycled content or woven materials are not recommended. The vapor retarder should have a permeance of less than 0.01 perms demonstrated by testing before and after mandatory conditioning. The vapor retarder should be installed in direct contact with the concrete slab with proper perimeter seal. If the California Green Building Code requirements apply to this project, the vapor retarder should be underlain by 4 inches of clean aggregate. It is important that the vapor retarder be puncture resistant since it will be in direct contact with angular gravel. As an alternative to the clean aggregate suggested in the Green Building Code, it is our opinion that the concrete slab-on-grade may be underlain by a vapor retarder over 4 inches of clean sand (sand equivalent greater than 30), since the sand will serve a capillary break and will minimize the potential for punctures and damage to the vapor barrier.
- 7.10.4 For seismic design purposes, a coefficient of friction of 0.35 may be utilized between concrete slabs and subgrade soils without a moisture barrier, and 0.15 for slabs underlain by a moisture barrier.

- 7.10.5 Exterior slabs for walkways or flatwork, not subject to traffic loads, should be at least 4 inches thick and reinforced with No. 3 steel reinforcing bars placed 18 inches on center in both horizontal directions, positioned near the slab midpoint. Prior to construction of slabs, the upper 12 inches of subgrade should be moistened to optimum moisture content and properly compacted to at least 95 percent relative compaction, as determined by ASTM Test Method D 1557 (latest edition). Crack control joints should be spaced at intervals not greater than 10 feet and should be constructed using saw-cuts or other methods as soon as practical following concrete placement. Crack control joints should extend a minimum depth of one-fourth the slab thickness. The project structural engineer should design construction joints as necessary.
- 7.10.6 The recommendations of this report are intended to reduce the potential for cracking of slabs due to settlement. However, even with the incorporation of the recommendations presented herein, foundations, stucco walls, and slabs-on-grade may exhibit some cracking due to minor soil movement and/or concrete shrinkage. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics. Their occurrence may be reduced and/or controlled by limiting the slump of the concrete, proper concrete placement and curing, and by the placement of crack control joints at periodic intervals, in particular, where re-entrant slab corners occur.

7.11 Preliminary Pavement Recommendations

- 7.11.1 Where new paving is to be placed, it is recommended that all existing fill and soft or unsuitable alluvial materials be excavated and properly recompacted for paving support. The client should be aware that excavation and compaction of all existing artificial fill and soft alluvium in the area of new paving is not required; however, paving constructed over existing unsuitable material may experience increased settlement and/or cracking, and may therefore have a shorter design life and increased maintenance costs. As a minimum, the upper 12 inches of paving subgrade should be scarified, moisture conditioned to optimum moisture content, and properly compacted to at least 95 percent relative compaction, as determined by ASTM Test Method D 1557 (latest edition).
- 7.11.2 The following pavement sections are based on an assumed R-Value of 20. Once site grading activities are complete an R-Value should be obtained by laboratory testing to confirm the properties of the soils serving as paving subgrade, prior to placing pavement.

- 7.11.3 The Traffic Indices listed below are estimates. Geocon does not practice in the field of traffic engineering. The actual Traffic Index for each area should be determined by the project civil engineer. If pavement sections for Traffic Indices other than those listed below are required, Geocon should be contacted to provide additional recommendations. Pavement thicknesses were determined following procedures outlined in the *California Highway Design Manual* (Caltrans). It is anticipated that the majority of traffic will consist of automobile and large truck traffic.

PRELIMINARY PAVEMENT DESIGN SECTIONS

Location	Estimated Traffic Index (TI)	Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)
Automobile Parking And Driveways	4.0	3.0	4.0
Trash Truck & Fire Lanes	7.0	4.0	12.0

- 7.11.4 Asphalt concrete should conform to Section 203-6 of the “*Standard Specifications for Public Works Construction*” (Green Book). Class 2 aggregate base materials should conform to Section 26-1.02A of the “*Standard Specifications of the State of California, Department of Transportation*” (Caltrans). The use of Crushed Miscellaneous Base in lieu of Class 2 aggregate base is acceptable. Crushed Miscellaneous Base should conform to Section 200-2.4 of the “*Standard Specifications for Public Works Construction*” (Green Book).
- 7.11.5 Unless specifically designed and evaluated by the project structural engineer, where exterior concrete paving will be utilized for support of vehicles, it is recommended that the concrete be a minimum of 6 inches of concrete reinforced with No. 3 steel reinforcing bars placed 18 inches on center in both horizontal directions. Concrete paving supporting vehicular traffic should be underlain by a minimum of 4 inches of aggregate base and a properly compacted subgrade. The subgrade and base material should be compacted to 95 percent relative compaction as determined by ASTM Test Method D 1557 (latest edition).
- 7.11.6 The performance of pavements is highly dependent upon providing positive surface drainage away from the edge of pavements. Ponding of water on or adjacent to the pavement will likely result in saturation of the subgrade materials and subsequent cracking, subsidence and pavement distress. If planters are planned adjacent to paving, it is recommended that the perimeter curb be extended at least 12 inches below the bottom of the aggregate base to minimize the introduction of water beneath the paving.

7.12 Retaining Wall Design

- 7.12.1 The recommendations presented below are generally applicable to the design of rigid concrete or masonry retaining walls having a maximum height of 5 feet. In the event that walls significantly higher than 5 feet are planned, Geocon should be contacted for additional recommendations.
- 7.12.2 Retaining wall foundations may be designed in accordance with the recommendations provided in the *Foundation Design* sections of this report (see Section 7.6).
- 7.12.3 Retaining walls with a level backfill surface that are not restrained at the top should be designed utilizing a triangular distribution of pressure (active pressure) of 30 pcf.
- 7.12.4 Restrained walls are those that are not allowed to rotate more than $0.001H$ (where H equals the height of the retaining portion of the wall in feet) at the top of the wall. Where walls are restrained from movement at the top, walls may be designed utilizing a triangular distribution of pressure (at-rest pressure) of 63 pcf.
- 7.12.5 The wall pressures provided above assume that the proposed retaining walls will support relatively undisturbed alluvial soils or engineered fill derived from onsite soils. If import soil will be used to backfill proposed retaining walls, revised earth pressures may be required to account for the geotechnical properties of the import soil used as engineered fill. This should be evaluated once the use of import soil is established. All imported fill shall be observed, tested, and approved by Geocon West, Inc. prior to bringing soil to the site.
- 7.12.6 The wall pressures provided above assume that the retaining wall will be properly drained preventing the buildup of hydrostatic pressure. If retaining wall drainage is not implemented, the equivalent fluid pressure to be used in design of undrained walls is 90 pcf. The value includes hydrostatic pressures plus buoyant lateral earth pressures.
- 7.12.7 Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic or adjacent structures and should be designed for each condition as the project progresses.

7.13 Retaining Wall Drainage

- 7.13.1 Retaining walls should be provided with a drainage system. At the base of the drain system, a subdrain covered with a minimum of 12 inches of gravel should be installed, and a compacted fill blanket or other seal placed at the surface (see Figure 13). The clean bottom and subdrain pipe, behind a retaining wall, should be observed by the Geotechnical Engineer (a representative of Geocon), prior to placement of gravel or compacting backfill.

- 7.13.2 As an alternative, a plastic drainage composite such as Miradrain or equivalent may be installed in continuous, 4-foot-wide columns along the entire back face of the wall, at 8 feet on center. The top of these drainage composite columns should terminate approximately 18 inches below the ground surface, where either hardscape or a minimum of 18 inches of relatively cohesive material should be placed as a cap (see Figure 14).
- 7.13.3 Subdrainage pipes at the base of the retaining wall drainage system should outlet to an acceptable location via controlled drainage structures. Drainage should not be allowed to flow uncontrolled over descending slopes.
- 7.13.4 Moisture affecting below grade walls is one of the most common post-construction complaints. Poorly applied or omitted waterproofing can lead to efflorescence or standing water. Particular care should be taken in the design and installation of waterproofing to avoid moisture problems, or actual water seepage into the structure through any normal shrinkage cracks which may develop in the concrete walls, floor slab, foundations and/or construction joints. The design and inspection of the waterproofing is not the responsibility of the geotechnical engineer. A waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to subterranean walls, floor slabs and foundations.

7.14 Elevator Pit Design

- 7.14.1 The elevator pit slab and retaining wall should be designed by the project structural engineer. As a minimum the slab-on-grade for the elevator pit bottom should be at least 4 inches thick and reinforced with No. 4 steel reinforcing bars placed 16 inches on center in both horizontal directions, positioned near the slab midpoint. Elevator pit walls may be designed in accordance with the recommendations in the *Foundation Design and Retaining Wall Design* section of this report (see Sections 7.6 and 7.12). The elevator slab and retaining wall footings may derive support in either newly placed engineered fill or the alluvial soils found at or below a depth of 5 feet, if exposed in the elevator pit excavation bottom.
- 7.14.2 Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic or adjacent foundations and should be designed for each condition as the project progresses.
- 7.14.3 If retaining wall drainage is to be provided, the drainage system should be designed in accordance with the *Retaining Wall Drainage* section of this report (see Section 7.13).

- 7.14.4 It is suggested that the exterior walls and slab be waterproofed to prevent excessive moisture inside of the elevator pit. Waterproofing design and installation is not the responsibility of the geotechnical engineer.

7.15 Elevator Piston

- 7.15.1 If a plunger-type elevator piston is installed for this project, a deep drilled excavation will be required. It is important to verify that the drilled excavation is not situated immediately adjacent to a foundation, or the drilled excavation could compromise the existing foundation, especially if the drilling is performed subsequent to the foundation construction.
- 7.15.2 Casing may be required if caving is experienced in the drilled excavation. The contractor should be prepared to use casing and should have it readily available at the commencement of drilling activities. Continuous observation of the drilling and installation of the elevator piston by the Geotechnical Engineer (a representative of Geocon West, Inc.) is required.
- 7.15.3 The annular space between the piston casing and drilled excavation wall should be filled with a minimum of 1½-sack slurry pumped from the bottom up. As an alternative, pea gravel may be utilized. The use of soil to backfill the annular space is not acceptable.

7.16 Temporary Excavations

- 7.16.1 Excavations on the order of 5 feet in height may be required during grading operations. The excavations are expected to expose artificial fill and alluvial soils, which are suitable for vertical excavations up to 5 feet in height where loose soils or caving sands are not present, and where not surcharged by adjacent traffic or structures.
- 7.16.2 Vertical excavations greater than 5 feet or where surcharged by existing structures will require sloping or shoring measures in order to provide a stable excavation. Where sufficient space is available, temporary unsurcharged embankments could be sloped back at a uniform 1:1 slope gradient or flatter up to maximum height of 10 feet. A uniform slope does not have a vertical portion.
- 7.16.3 If excavations in close proximity to an adjacent property line and/or structure are required, special excavation measures such as slot-cutting or shoring may be necessary in order to maintain lateral support of offsite improvements. If necessary, alternative temporary excavation recommendations can be provided in an addendum.

- 7.16.4 Where temporary construction slopes are utilized, the top of the slope should be barricaded to prevent vehicles and storage loads at the top of the slope within a horizontal distance equal to the height of the slope. If the temporary construction slopes are to be maintained during the rainy season, berms are suggested along the tops of the slopes where necessary to prevent runoff water from entering the excavation and eroding the slope faces. Geocon personnel should inspect the soils exposed in the cut slopes during excavation so that modifications of the slopes can be made if variations in the soil conditions occur. All excavations should be stabilized within 30 days of initial excavation.

7.17 Stormwater Infiltration

- 7.17.1 During the January 20, 2020 site exploration, boring B1 was utilized to perform percolation testing. The boring was advanced to the depths listed in the table below. Slotted casing was placed in the boring, and the annular space between the casing and excavation was filled with gravel. The boring was then filled with water to pre-saturate the soils. The casing was refilled with water and percolation test readings were performed after repeated flooding of the cased excavation. Based on the test results, the average infiltration rate (adjusted percolation rate), for the earth materials encountered, is provided in the following table. The field-measured percolation rate has been adjusted to infiltration rates in accordance with the County of San Bernardino Technical Guidance Document for Water Quality Management Plans (June 2013). Additional correction factors may be required and should be applied by the engineer in responsible charge of the design of the stormwater infiltration system and based on applicable guidelines. The percolation test data sheet is provided as Figure 15.

Boring	Soil Type	Infiltration Depth (ft)	Average Infiltration Rate (in / hour)
B1	Sand (SP)	5 - 10	2.8

- 7.17.2 The results of the percolation testing indicate that the soils at depths in the above table are conducive to infiltration. It is our opinion that the soil zone encountered at the depth and location as listed in the table above are suitable for infiltration of stormwater.
- 7.17.3 It is our further opinion that infiltration of stormwater and will not induce excessive hydro-consolidation (see Figures B3 through B12), will not create a perched groundwater condition, will not affect soil structure interaction of existing or proposed foundations due to expansive soils, will not saturate soils supported by existing or proposed retaining walls, and will not increase the potential for liquefaction. Resulting settlements are anticipated to be less than ¼ inch, if any.

- 7.17.4 The infiltration system must be located such that the closest distance between an adjacent foundation is at least 10 feet in all directions from the zone of saturation. The zone of saturation may be assumed to project downward from the discharge of the infiltration facility at a gradient of 1:1. Additional property line or foundation setbacks may be required by the governing jurisdiction and should be incorporated into the stormwater infiltration system design as necessary.
- 7.17.5 Where the 10-foot horizontal setback cannot be maintained between the infiltration system and an adjacent footing, and the infiltration system penetrates below the foundation influence line, the proposed stormwater infiltration system must be designed to resist the surcharge from the adjacent foundation. The foundation surcharge line may be assumed to project down away from the bottom of the foundation at a 1:1 gradient. The stormwater infiltration system must still be sufficiently deep to maintain the 10-foot vertical offset between the bottom of the footing and the zone of saturation.
- 7.17.6 Subsequent to the placement of the infiltration system, it is acceptable to backfill the resulting void space between the excavation sidewalls and the infiltration system with minimum two-sack slurry provided the slurry is not placed in the infiltration zone. It is recommended that pea gravel be utilized adjacent to the infiltration zone so communication of water to the soil is not hindered.
- 7.17.7 Due to the preliminary nature of the project at this time, the type of stormwater infiltration system and location of the stormwater infiltration systems has not yet been determined. The design drawings should be reviewed and approved by the Geotechnical Engineer. The installation of the stormwater infiltration system should be observed and approved by the Geotechnical Engineer (a representative of Geocon).

7.18 Surface Drainage

- 7.18.1 Proper surface drainage is critical to the future performance of the project. Uncontrolled infiltration of irrigation excess and storm runoff into the soils can adversely affect the performance of the planned improvements. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change in the original designed engineering properties. Proper drainage should be maintained at all times.

- 7.18.2 All site drainage should be collected and controlled in non-erosive drainage devices. Drainage should not be allowed to pond anywhere on the site, and especially not against any foundation or retaining wall. The site should be graded and maintained such that surface drainage is directed away from structures in accordance with 2019 CBC 1804.4 or other applicable standards. In addition, drainage should not be allowed to flow uncontrolled over any descending slope. Discharge from downspouts, roof drains and scuppers are not recommended onto unprotected soils within 5 feet of the building perimeter. Planters which are located adjacent to foundations should be sealed to prevent moisture intrusion into the soils providing foundation support. Landscape irrigation is not recommended within 5 feet of the building perimeter footings except when enclosed in protected planters.
- 7.18.3 Positive site drainage should be provided away from structures, pavement, and the tops of slopes to swales or other controlled drainage structures. The building pad and pavement areas should be fine graded such that water is not allowed to pond.
- 7.18.4 Landscaping planters immediately adjacent to paved areas are not recommended due to the potential for surface or irrigation water to infiltrate the pavement's subgrade and base course. Either a subdrain, which collects excess irrigation water and transmits it to drainage structures, or an impervious above-grade planter boxes should be used. In addition, where landscaping is planned adjacent to the pavement, it is recommended that consideration be given to providing a cutoff wall along the edge of the pavement that extends at least 12 inches below the base material.

7.19 Plan Review

- 7.19.1 Grading, foundation, and shoring plans should be reviewed by the Geotechnical Engineer (a representative of Geocon West, Inc.), prior to finalization to verify that the plans have been prepared in substantial conformance with the recommendations of this report and to provide additional analyses or recommendations.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The recommendations of this report pertain only to the site investigated and are based upon the assumption that the soil conditions do not deviate from those disclosed in the investigation. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that anticipated herein, Geocon West, Inc. should be notified so that supplemental recommendations can be given. The evaluation or identification of the potential presence of hazardous or corrosive materials was not part of the scope of services provided by Geocon West, Inc.
2. This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project and incorporated into the plans, and the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
3. The findings of this report are valid as of the date of this report. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of three years.
4. The firm that performed the geotechnical investigation for the project should be retained to provide testing and observation services during construction to provide continuity of geotechnical interpretation and to check that the recommendations presented for geotechnical aspects of site development are incorporated during site grading, construction of improvements, and excavation of foundations. If another geotechnical firm is selected to perform the testing and observation services during construction operations, that firm should prepare a letter indicating their intent to assume the responsibilities of project geotechnical engineer of record. A copy of the letter should be provided to the regulatory agency for their records. In addition, that firm should provide revised recommendations concerning the geotechnical aspects of the proposed development, or a written acknowledgement of their concurrence with the recommendations presented in our report. They should also perform additional analyses deemed necessary to assume the role of Geotechnical Engineer of Record.

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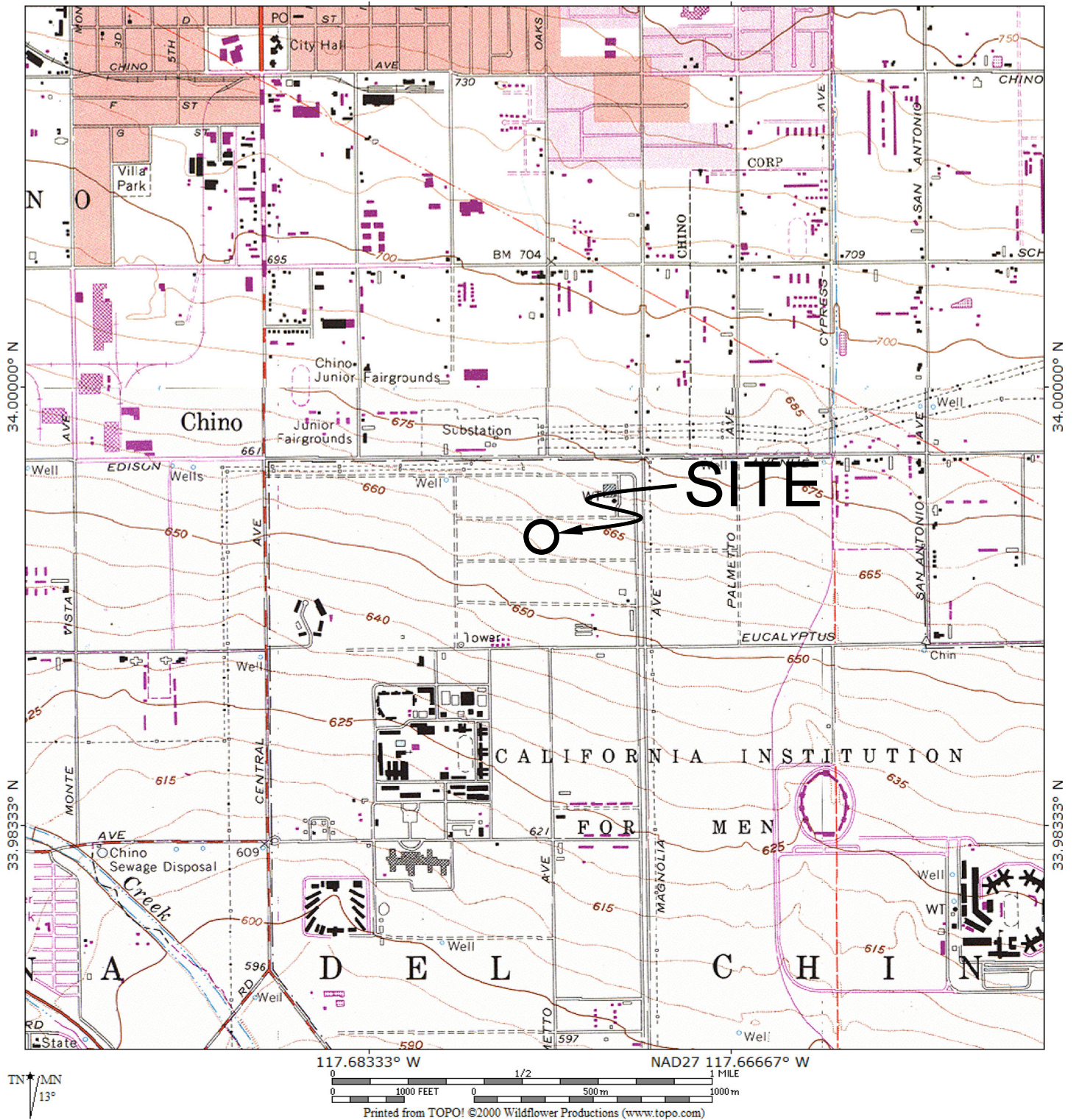
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117.68333° W

NAD27 117.66667° W



LATITUDE : 33.992788
LONGITUDE : -117.675409

U.S.G.S. TOPOGRAPHIC MAPS, 7.5 MINUTE SERIES, PRADO DAM, CA QUADRANGLE

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CHECKED BY: SFK

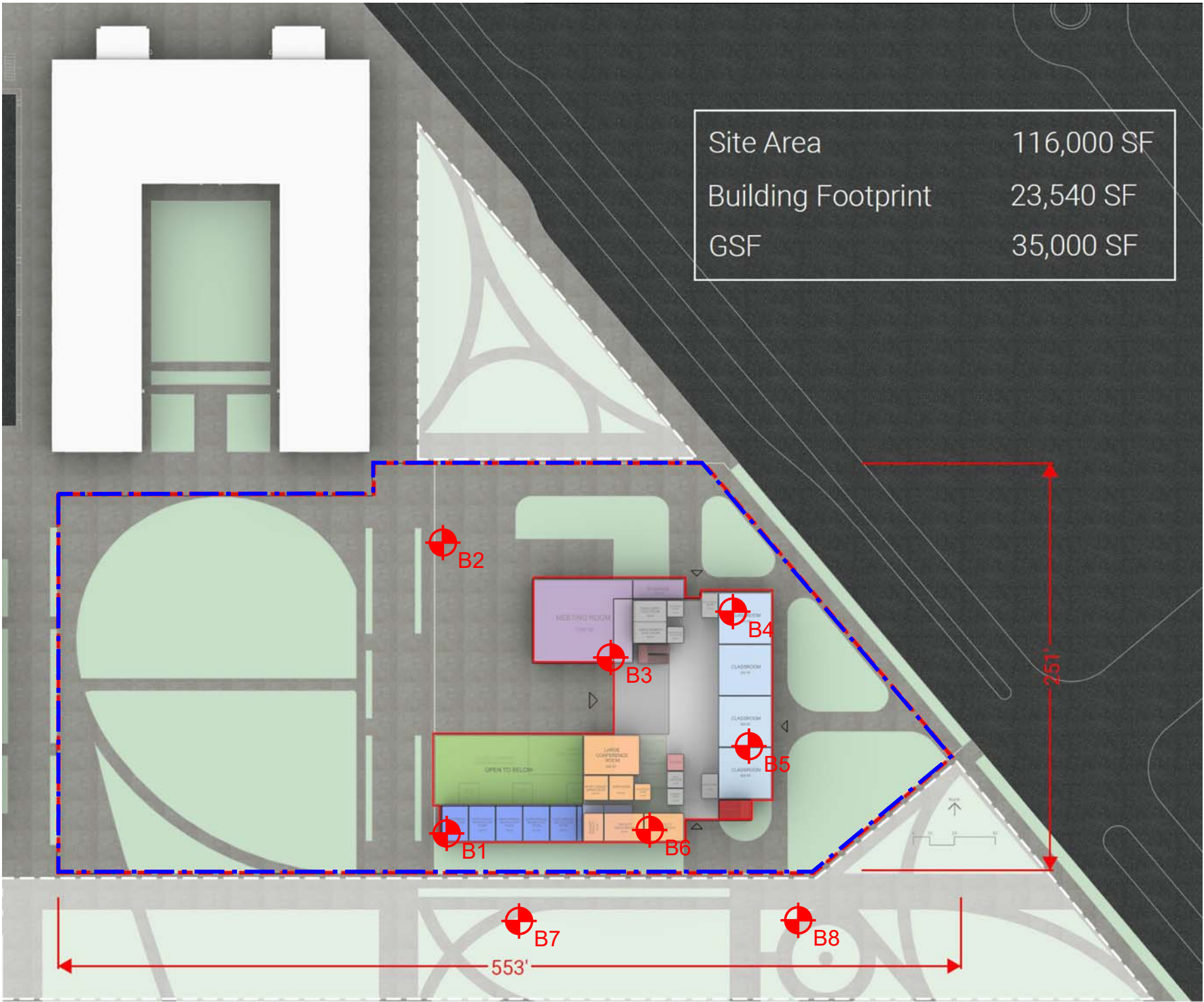
VICINITY MAP

CHAFFEY COLLEGE - CHINO
5897 COLLEGE PARK AVENUE
CHINO, CALIFORNIA

FEB. 2020

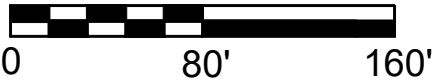
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FIG. 1



LEGEND

- Approximate Location of Boring
- Approximate Limits of Proposed Project



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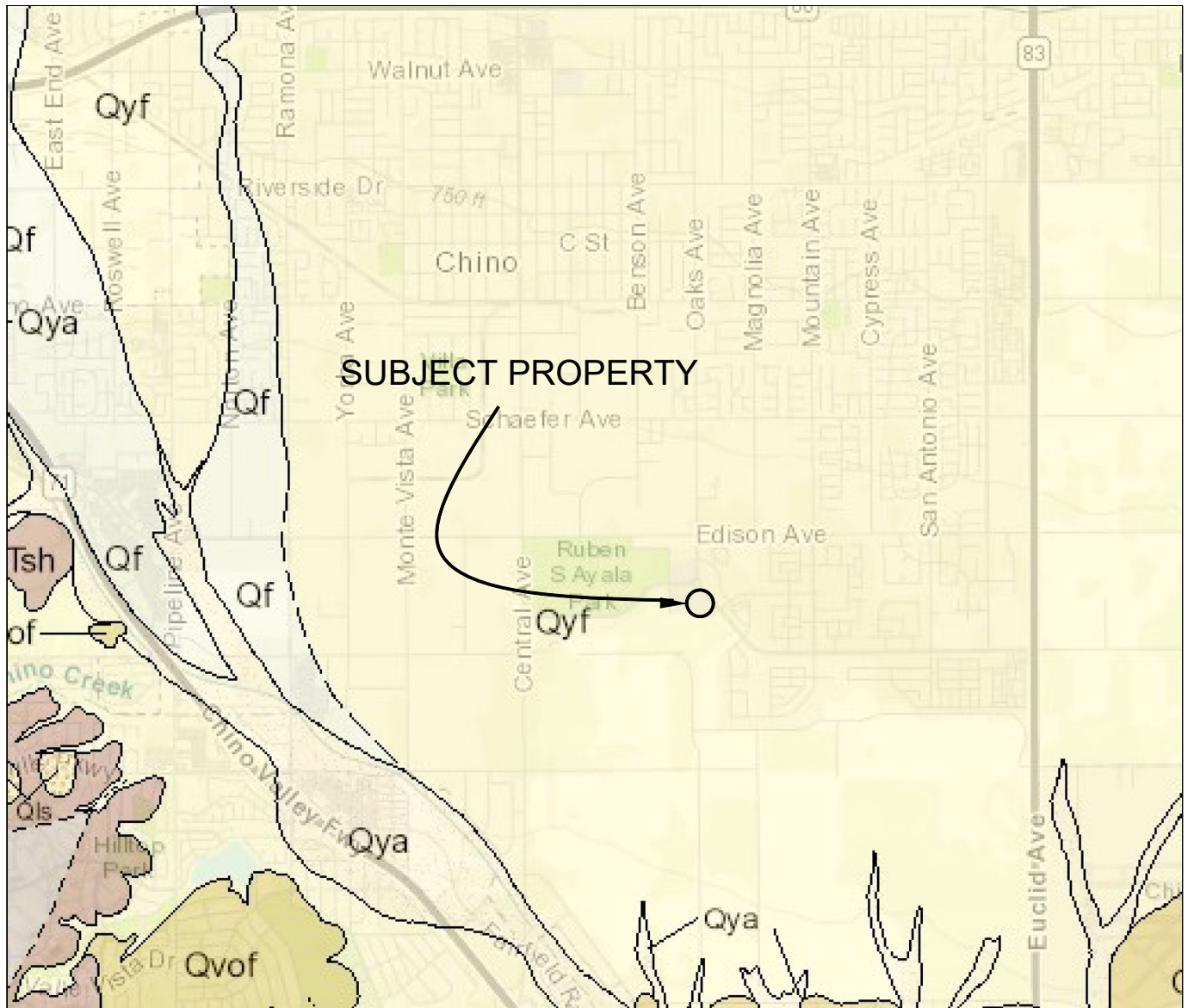
SITE PLAN

CHAFFEY COLLEGE - CHINO CAMPUS
5897 COLLEGE PARK AVENUE
CHINO, CALIFORNIA

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PROJECT NO. T2746-99-11

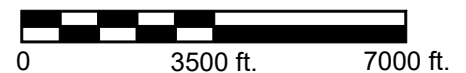
FIG. 2



LATITUDE = 33.992788
LONGITUDE = -117.675409

LEGEND

Qf	Alluvial Fan Deposits
Qyf	Young Alluvial Fan Deposits
Qya	Young Alluvial Valley Deposits
Qvof	Very Old Alluvial Fan Deposits
Tsh	Fine-grained Tertiary age formations



MAP REFERENCE: C.G.S., SAN BERNARDINO AND SANTA ANA MAPS,
30' x 60' QUADRANGLES GEOLOGIC MAPS QUADRANGLE MAP, 2010 - 2012

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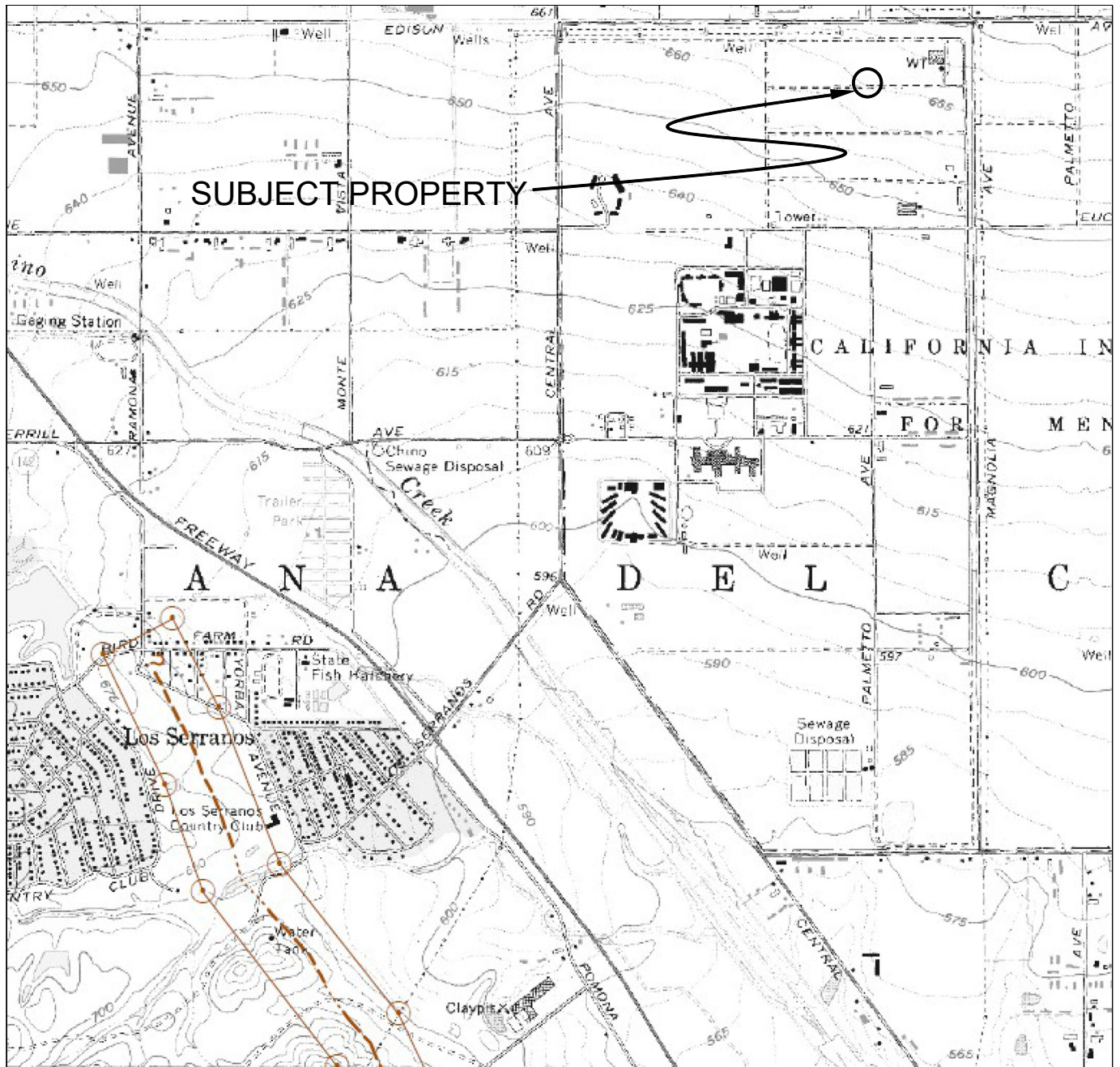
LOCAL GEOLOGIC MAP

CHAFFEY COLLEGE - CHINO
5897 COLLEGE PARK AVENUE
CHINO CALIFORNIA

FEB. 2020

PROJECT NO. T2746-99-11

FIG. 3

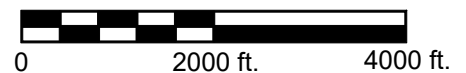


MAP EXPLANATION

- Active Faults**
- 1906 C
 Faults considered to have been active during Holocene time and have potential for surface rupture; solid line where accurately located, long dash where approximately located, short dash where inferred, dotted where concealed, query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by fault creep.
- Earthquake Fault Zone Boundaries**
- These are delineated as straight-line segments that connect encircled turning points so as to define Earthquake Fault Zone segments.

MAP REFERENCE: C.G.S., EARTHQUAKE FAULT ZONES MAP PRADO DAM QUADRANGLE, 2003

LATITUDE = 33.992788
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SEISMIC HAZARD ZONE MAP

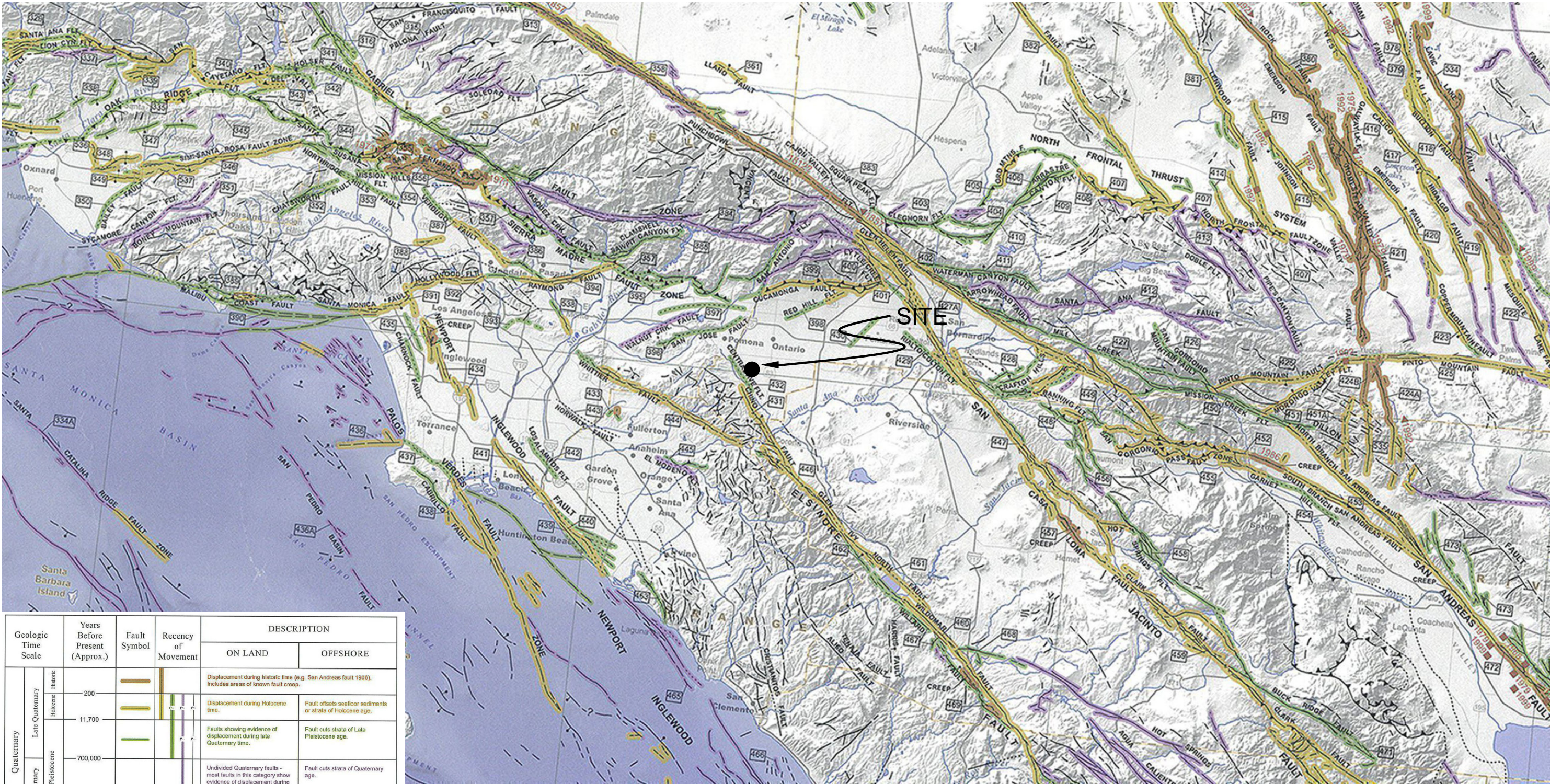
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FIG. 4

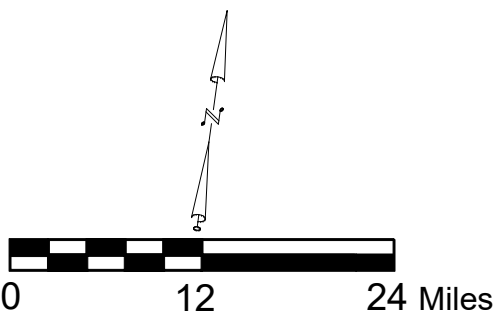
Reference: Jennings, C.W. and Bryant, W. A., 2010, Fault Activity Map of California, California Geological Survey Geologic Data Map No. 6.



Geologic Time Scale		Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION	
					ON LAND	OFFSHORE
Quaternary	Late Quaternary	200			Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
	Holocene	11,700			Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
	Pleistocene	700,000			Faults showing evidence of displacement during late Quaternary time.	Fault cuts strata of Late Pleistocene age.
Pre-Quaternary	Early Quaternary	1,600,000			Undivided Quaternary faults - most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age.	Fault cuts strata of Quaternary age.
		4.5 billion (Age of Earth)			Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.

* Quaternary now recognized as extending to 2.6 Ma (Walker and Geissman, 2009). Quaternary faults in this map were established using the previous 1.6 Ma criterion.

LATITUDE = 33.992788
LONGITUDE = -117.675409



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REGIONAL FAULT MAP

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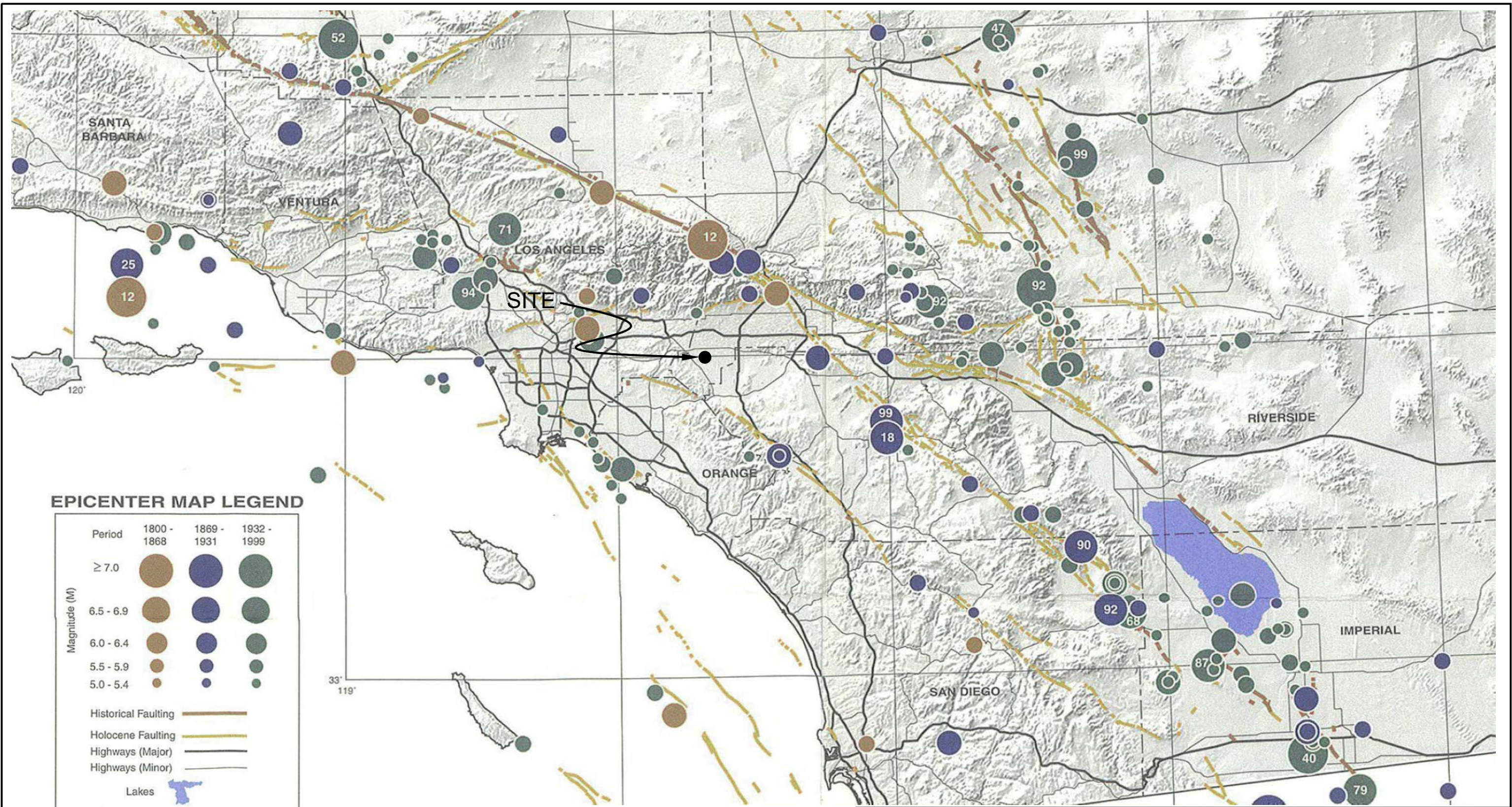
5897 COLLEGE PARK AVENUE

CHINO, CALIFORNIA

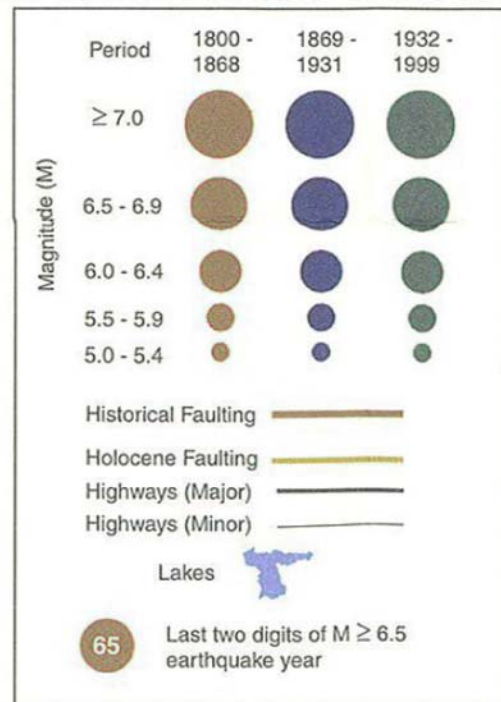
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PROJECT NO. T2746-99-11

FIG. 5

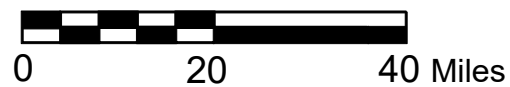


EPICENTER MAP LEGEND



ATITUDE = 33.992788
ONGITUDE = -117.675409

Reference: Topozada, T., Branum, D., Petersen, M., Hallstrom, C., Cramer, C., and Reichle, M., 2000, Epicenters and Areas Damaged by $M \geq 5$ California Earthquakes, 1800 - 1999, California Geological Survey, Map Sheet 49.



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CHECKED BY: SFK

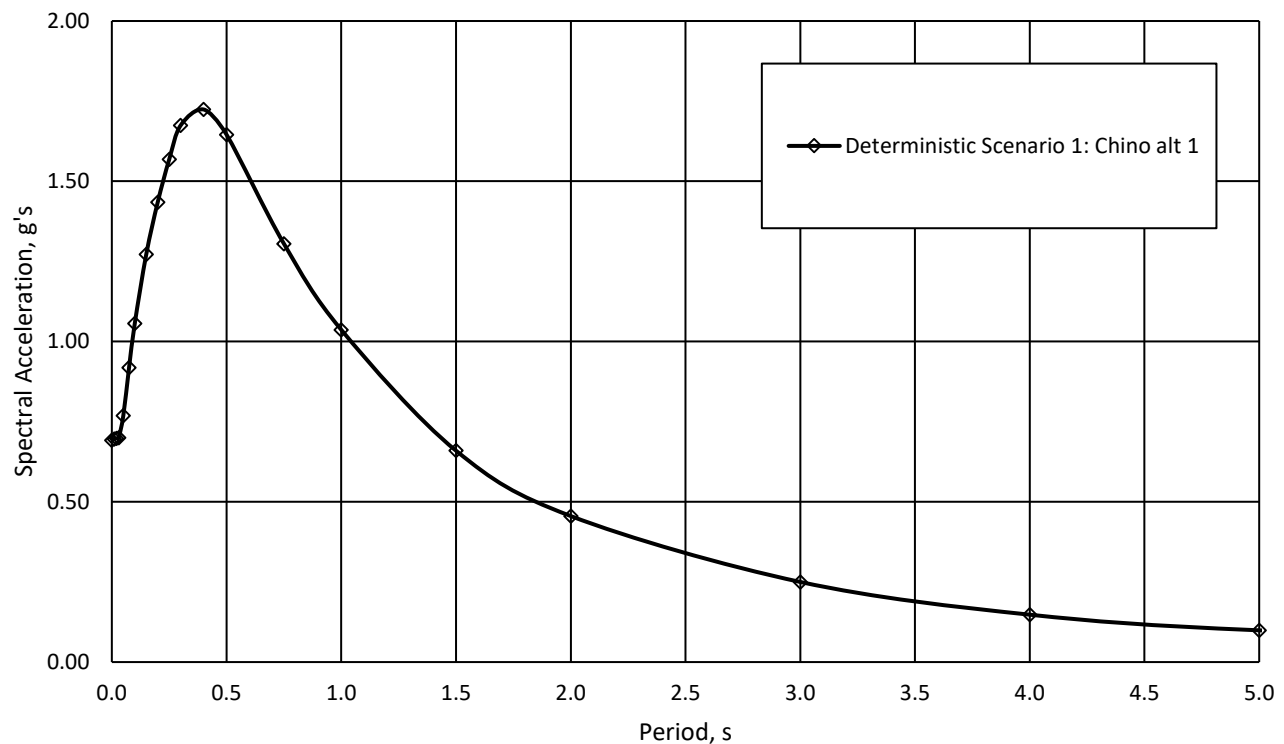
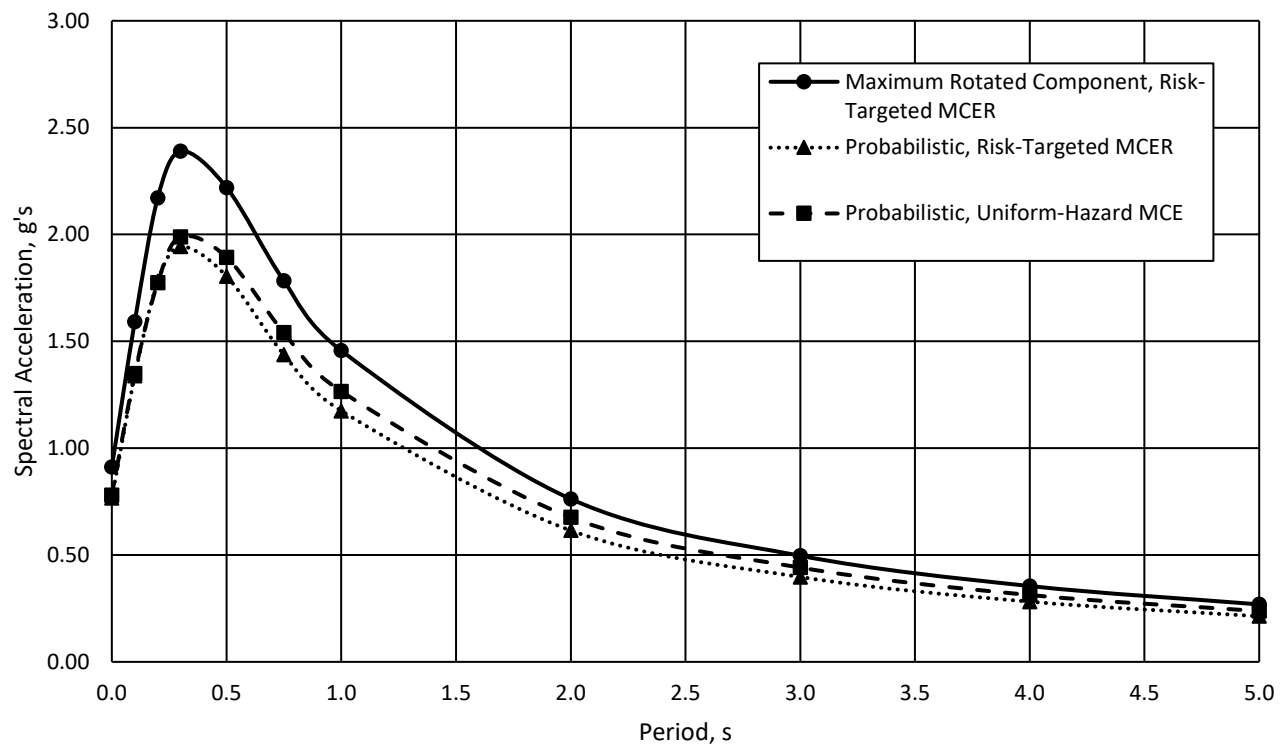
REGIONAL SEISMICITY MAP

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FIG. 6



DESIGN RESPONSE SPECTRUM

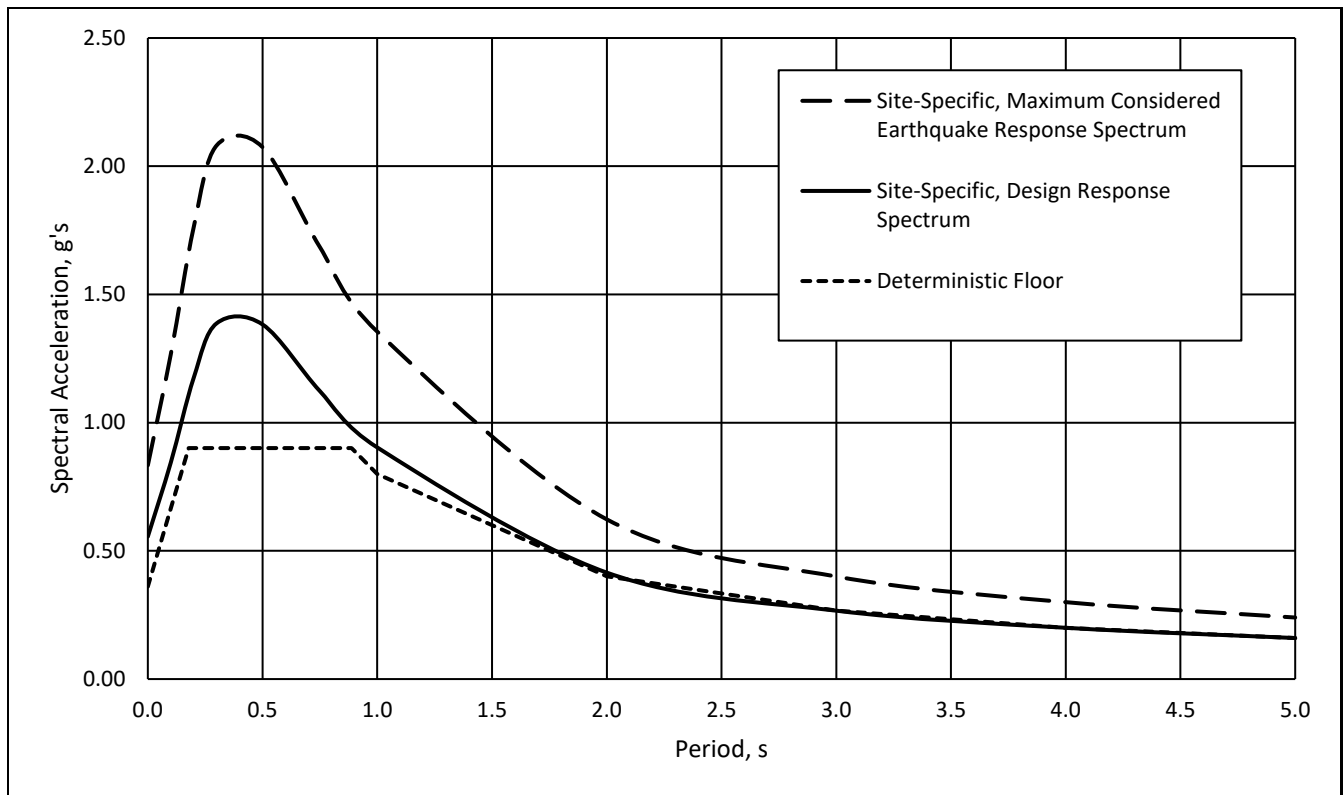
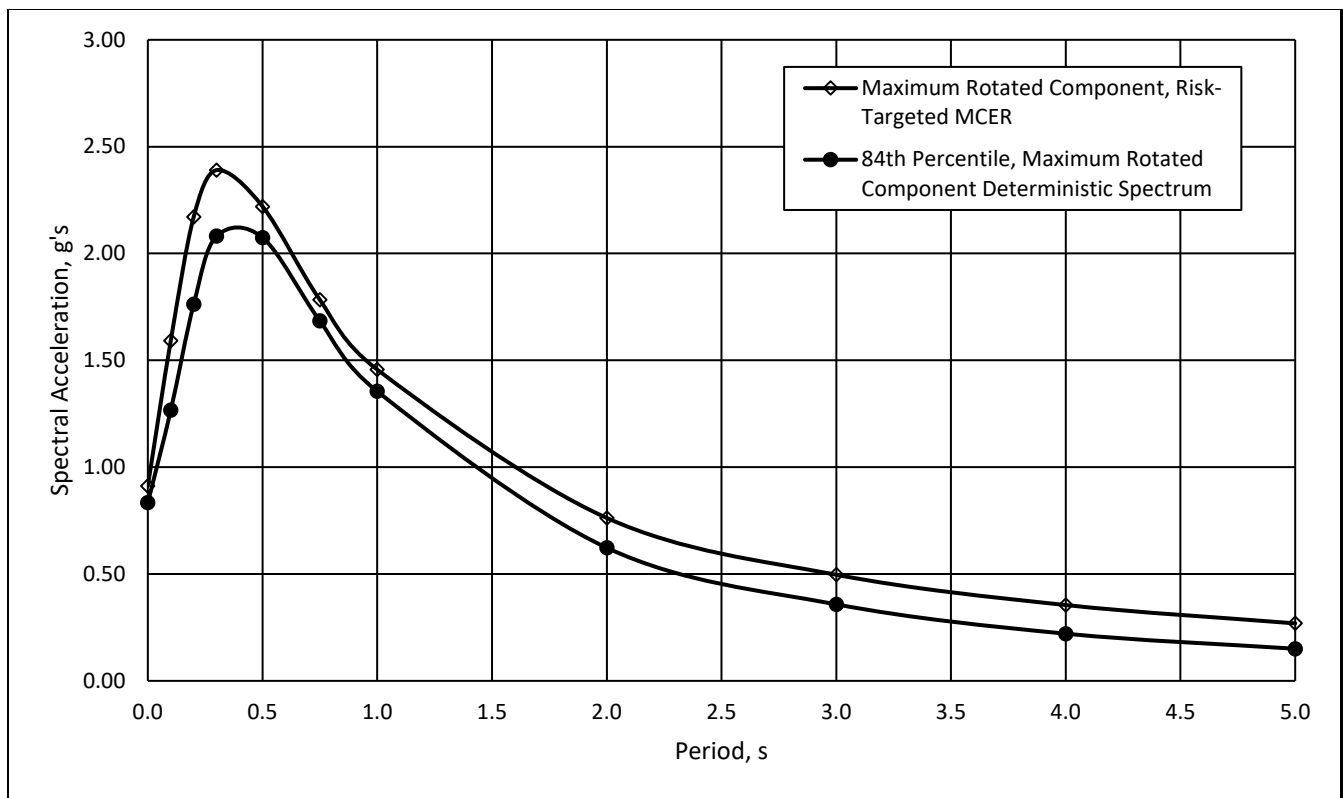
Checked by: PZ

Project No.: T2746-99-11

Chaffey College - Chino Campus
5897 College Park Avenue
Chino, California

Feb. 2020

Figure 7



DESIGN RESPONSE SPECTRUM

Checked by: PZ

Project No.: T2746-99-11

Chaffey College - Chino Campus
5897 College Park Avenue
Chino, California

Feb. 2020

Figure 8

EMPIRICAL ESTIMATION OF LIQUEFACTION POTENTIAL DESIGN EARTHQUAKE

**NCEER (1996) METHOD
EARTHQUAKE INFORMATION:**

Earthquake Magnitude:	6.67
Peak Horiz. Acceleration PGA_M (g):	0.700
2/3 PGA_M (g):	0.467
Calculated Mag.Wtg.Factor:	0.744
Historic High Groundwater:	100.0
Groundwater Depth During Exploration:	100.0

**By Thomas F. Blake (1994-1996)
ENERGY & ROD CORRECTIONS:**

Energy Correction (CE) for N60:	1.25
Rod Len.Corr.(CR)(0-no or 1-yes):	1.0
Bore Dia. Corr. (CB):	1.00
Sampler Corr. (CS):	1.20
Use Ksigma (0 or 1):	1.0

LIQUEFACTION CALCULATIONS:

Unit Wt. Water (pcf):		62.4												
Depth to Base (ft)	Total Unit Wt. (pcf)	Water (0 or 1)	FIELD SPT (N)	Depth of SPT (ft)	Liq.Sus. (0 or 1)	-200 (%)	Est. Dr (%)	CN Factor	Corrected (N1)60	Eff. Unit Wt. (psf)	Resist. CRR	rd Factor	Induced CSR	Liquefac. Safe.Fact.
1.0	128.7	0	12.0	1.0	1		84	1.700	23.0	128.7	0.255	0.998	0.225	--
2.0	128.7	0	12.0	2.0	1		81	1.700	23.0	128.7	0.255	0.993	0.224	--
3.0	128.7	0	12.0	3.0	1	32	79	1.700	29.1	128.7	0.393	0.989	0.223	--
4.0	128.7	0	12.0	4.0	1	32	77	1.700	29.1	128.7	0.393	0.984	0.222	--
5.0	128.7	0	12.0	5.0	1	32	75	1.700	29.1	128.7	0.393	0.979	0.221	--
6.0	128.7	0	12.0	6.0	1	32	73	1.700	29.1	128.7	0.393	0.975	0.220	--
7.0	128.7	0	12.0	7.5	1	46	70	1.580	28.3	128.7	0.360	0.970	0.219	--
8.0	128.7	0	12.0	7.5	1	46	70	1.471	26.9	128.7	0.321	0.966	0.218	--
9.0	128.7	0	12.0	7.5	1	46	70	1.382	25.7	128.7	0.297	0.961	0.217	--
10.0	103.9	0	12.0	7.5	1	46	70	1.314	24.7	103.9	0.281	0.957	0.216	--
11.0	103.9	0	12.0	7.5	1	46	70	1.261	24.0	103.9	0.270	0.952	0.215	--
12.0	103.9	0	4.0	12.5	1	36	37	1.214	12.5	103.9	0.136	0.947	0.214	--
13.0	103.9	0	4.0	12.5	1	36	37	1.171	12.3	103.9	0.134	0.943	0.213	--
14.0	103.9	0	4.0	12.5	1	36	37	1.133	12.1	103.9	0.132	0.938	0.212	--
15.0	123.7	0	20.0	17.5	1	7	77	1.096	28.7	123.7	0.371	0.934	0.211	--
16.0	123.7	0	20.0	17.5	1	7	77	1.059	27.7	123.7	0.341	0.929	0.210	--
17.0	123.7	0	20.0	17.5	1	7	77	1.025	26.9	123.7	0.320	0.925	0.209	--
18.0	123.7	0	20.0	17.5	1	7	77	0.995	26.1	123.7	0.304	0.920	0.208	--
19.0	123.7	0	20.0	17.5	1	7	77	0.967	25.4	123.7	0.291	0.915	0.207	--
20.0	118.3	0	39.0	20.0	1	7	104	0.942	49.9	118.3	Inf.	0.911	0.206	--
21.0	118.3	0	39.0	20.0	1	7	104	0.919	48.7	118.3	Inf.	0.906	0.205	--
22.0	118.3	0	21.0	22.5	1	6	73	0.898	26.5	118.3	0.303	0.902	0.204	--
23.0	118.3	0	21.0	22.5	1	6	73	0.878	25.9	118.3	0.292	0.897	0.203	--
24.0	118.3	0	21.0	22.5	1	6	73	0.859	25.4	118.3	0.282	0.893	0.202	--
25.0	117.1	0	50.0	25.0	1	6	111	0.842	60.6	117.1	Inf.	0.888	0.201	--
26.5	117.1	0	50.0	25.0	1	6	111	0.822	59.2	117.1	Inf.	0.882	0.199	--
27.0	118.0	0	7.0	27.5	1	69	40	0.814	15.4	118.0	0.157	0.878	0.198	--
28.0	118.0	0	7.0	27.5	1	69	40	0.796	15.2	118.0	0.155	0.874	0.197	--
29.0	118.0	0	7.0	27.5	1	69	40	0.782	15.0	118.0	0.153	0.870	0.196	--
30.0	118.0	0	32.0	30.0	1	60	84	0.769	43.9	118.0	Inf.	0.865	0.195	--
31.5	118.0	0	32.0	30.0	1	60	84	0.753	43.1	118.0	Inf.	0.859	0.194	--
32.0	117.6	0	1.0	32.5	1	46	14	0.747	8.1	117.6	0.082	0.855	0.193	--
33.0	117.6	0	1.0	32.5	1	46	14	0.733	8.1	117.6	0.082	0.851	0.192	--
34.0	117.6	0	1.0	32.5	1	46	14	0.722	8.1	117.6	0.082	0.847	0.191	--
35.0	117.6	0	8.0	37.5	1	46	39	0.712	15.5	117.6	0.149	0.842	0.190	--
36.0	117.6	0	8.0	37.5	1	46	39	0.702	15.4	117.6	0.148	0.838	0.189	--
37.0	117.6	0	8.0	37.5	1	46	39	0.692	15.3	117.6	0.147	0.833	0.188	--
38.0	117.6	0	8.0	37.5	1	46	39	0.683	15.2	117.6	0.146	0.829	0.187	--
39.0	117.6	0	8.0	37.5	1	46	39	0.674	15.1	117.6	0.145	0.824	0.186	--
40.0	111.7	0	8.0	37.5	1	46	39	0.666	15.0	111.7	0.144	0.819	0.185	--
41.0	111.7	0	8.0	37.5	1	46	39	0.658	14.9	111.7	0.143	0.815	0.184	--
42.0	111.7	0	1.0	42.5	1	42	13	0.651	8.0	111.7	0.076	0.810	0.183	--
43.0	111.7	0	1.0	42.5	1	42	13	0.643	8.0	111.7	0.076	0.806	0.182	--
44.0	111.7	0	1.0	42.5	1	42	13	0.636	8.0	111.7	0.076	0.801	0.181	--
45.0	136.8	0	1.0	42.5	1	42	13	0.629	7.9	136.8	0.076	0.797	0.180	--
46.0	136.8	0	1.0	42.5	1	42	13	0.621	7.9	136.8	0.076	0.792	0.179	--
47.0	136.8	0	1.0	42.5	1	42	13	0.613	7.9	136.8	0.076	0.787	0.178	--
48.0	122.8	0	14.0	47.5	1	51	47	0.606	19.7	122.8	0.178	0.783	0.177	--
49.0	122.8	0	14.0	47.5	1	51	47	0.600	19.6	122.8	0.177	0.778	0.176	--
50.5	122.8	0	14.0	47.5	1	54	47	0.592	19.4	122.8	0.175	0.773	0.174	--



TECHNICAL ENGINEERING AND DESIGN GUIDES AS ADAPTED FROM THE US ARMY CORPS OF ENGINEERS, NO. 9
EVALUATION OF EARTHQUAKE-INDUCED SETTLEMENTS IN DRY SANDY SOILS
DESIGN EARTHQUAKE

DE EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.67
Peak Horiz. Acceleration (g):	0.467

Fig 4.1 Fig 4.2

Fig 4.4

Depth of Base of Strata (ft)	Thickness of Layer (ft)	Depth of Mid-point of Layer (ft)	Soil Unit Weight (pcf)	Overburden Pressure at Mid-point (tsf)	Mean Effective Pressure at Mid-point (tsf)	Average Cyclic Shear Stress [Tav]	Field SPT [N]	Correction Factor [Cer]	Relative Density [Dr] (%)	Correction Factor [Cn]	Corrected [N1]60	rd Factor	Maximum Shear Mod. [Gmax] (tsf)	[yeff]*[Geff] [Gmax]	yeff Shear Strain	[yeff]*100%	Volumetric Strain M7.5 [E15] (%)	Number of Strain Cycles [Nc]	Corrected Vol. Strains [Ec]	Estimated Settlement [S] (inches)
1.0	1.0	0.5	128.7	0.03	0.02	0.010	12	1.25	83.8	1.7	23.0	1.0	186.497	5.18E-05	7.80E-05	0.008	6.61E-03	8.4242	5.10E-03	0.00
2.0	1.0	1.5	128.7	0.10	0.06	0.029	12	1.25	81.3	1.7	23.0	1.0	323.022	8.80E-05	1.60E-04	0.016	1.36E-02	8.4242	1.05E-02	0.00
3.0	1.0	2.5	128.7	0.16	0.11	0.049	12	1.25	79.0	1.7	29.1	1.0	451.536	1.03E-04	1.70E-04	0.017	1.08E-02	8.4242	8.35E-03	0.00
4.0	1.0	3.5	128.7	0.23	0.15	0.068	12	1.25	76.9	1.7	29.1	1.0	534.264	1.19E-04	1.70E-04	0.017	1.08E-02	8.4242	8.35E-03	0.00
5.0	1.0	4.5	128.7	0.29	0.19	0.088	12	1.25	75.0	1.7	29.1	1.0	605.799	1.33E-04	1.70E-04	0.017	1.08E-02	8.4242	8.35E-03	0.00
6.0	1.0	5.5	128.7	0.35	0.24	0.107	12	1.25	73.2	1.7	29.1	1.0	669.736	1.44E-04	1.50E-04	0.015	9.55E-03	8.4242	7.37E-03	0.00
7.0	1.0	6.5	128.7	0.42	0.28	0.126	12	1.25	69.9	1.6	28.3	1.0	721.321	1.55E-04	1.50E-04	0.015	9.88E-03	8.4242	7.62E-03	0.00
8.0	1.0	7.5	128.7	0.48	0.32	0.146	12	1.25	69.9	1.5	26.9	1.0	761.156	1.66E-04	1.50E-04	0.015	1.05E-02	8.4242	8.12E-03	0.00
9.0	1.0	8.5	128.7	0.55	0.37	0.165	12	1.25	69.9	1.4	25.7	1.0	798.012	1.77E-04	1.50E-04	0.015	1.11E-02	8.4242	8.58E-03	0.00
10.0	1.0	9.5	103.9	0.61	0.41	0.182	12	1.25	69.9	1.3	24.7	1.0	829.212	1.85E-04	1.50E-04	0.015	1.16E-02	8.4242	8.97E-03	0.00
11.0	1.0	10.5	103.9	0.66	0.44	0.197	12	1.25	69.9	1.3	24.0	1.0	855.654	1.91E-04	1.50E-04	0.015	1.20E-02	8.4242	9.29E-03	0.00
12.0	1.0	11.5	103.9	0.71	0.47	0.212	4	1.25	37.0	1.2	12.5	0.9	714.204	2.42E-04	4.50E-04	0.045	7.94E-02	8.4242	6.12E-02	0.01
13.0	1.0	12.5	103.9	0.76	0.51	0.227	4	1.25	37.0	1.2	12.3	0.9	736.128	2.48E-04	3.70E-04	0.037	6.65E-02	8.4242	5.13E-02	0.01
14.0	1.0	13.5	103.9	0.81	0.54	0.242	4	1.25	37.0	1.1	12.1	0.9	757.281	2.53E-04	3.70E-04	0.037	6.76E-02	8.4242	5.22E-02	0.01
15.0	1.0	14.5	123.7	0.87	0.58	0.258	20	1.25	76.7	1.1	28.7	0.9	1044.425	1.93E-04	1.60E-04	0.016	1.04E-02	8.4242	8.01E-03	0.00
16.0	1.0	15.5	123.7	0.93	0.62	0.276	20	1.25	76.7	1.1	27.7	0.9	1068.859	1.98E-04	1.60E-04	0.016	1.08E-02	8.4242	8.34E-03	0.00
17.0	1.0	16.5	123.7	0.99	0.67	0.293	20	1.25	76.7	1.0	26.9	0.9	1092.247	2.03E-04	3.70E-04	0.037	2.60E-02	8.4242	2.00E-02	0.00
18.0	1.0	17.5	123.7	1.06	0.71	0.311	20	1.25	76.7	1.0	26.1	0.9	1114.696	2.08E-04	3.70E-04	0.037	2.69E-02	8.4242	2.07E-02	0.00
19.0	1.0	18.5	123.7	1.12	0.75	0.328	20	1.25	76.7	1.0	25.4	0.9	1136.294	2.12E-04	3.70E-04	0.037	2.78E-02	8.4242	2.15E-02	0.01
20.0	1.0	19.5	118.3	1.18	0.79	0.344	39	1.25	104.0	0.9	49.9	0.9	1461.298	1.71E-04	1.60E-04	0.016	5.35E-03	8.4242	4.12E-03	0.00
21.0	1.0	20.5	118.3	1.24	0.83	0.360	39	1.25	104.0	0.9	48.7	0.9	1485.514	1.74E-04	1.60E-04	0.016	5.50E-03	8.4242	4.25E-03	0.00
22.0	1.0	21.5	118.3	1.30	0.87	0.376	21	1.25	73.4	0.9	26.5	0.9	1241.890	2.15E-04	3.70E-04	0.037	2.64E-02	8.4242	2.04E-02	0.00
23.0	1.0	22.5	118.3	1.36	0.91	0.391	21	1.25	73.4	0.9	25.9	0.9	1260.612	2.17E-04	3.70E-04	0.037	2.71E-02	8.4242	2.09E-02	0.01
24.0	1.0	23.5	118.3	1.41	0.95	0.407	21	1.25	73.4	0.9	25.4	0.9	1278.800	2.20E-04	3.70E-04	0.037	2.78E-02	8.4242	2.14E-02	0.01
25.0	1.0	24.5	117.1	1.47	0.99	0.422	50	1.25	110.5	0.8	60.6	0.9	1744.243	1.65E-04	1.60E-04	0.016	4.23E-03	8.4242	3.26E-03	0.00
26.5	1.5	25.8	117.1	1.55	1.04	0.440	50	1.25	110.5	0.8	59.2	0.9	1772.733	1.67E-04	1.30E-04	0.013	3.54E-03	8.4242	2.73E-03	0.00
27.0	0.5	26.8	118.0	1.60	1.08	0.455	7	1.25	40.0	0.8	15.4	0.9	1152.426	2.63E-04	3.00E-04	0.030	4.12E-02	8.4242	3.17E-02	0.00
28.0	1.0	27.5	118.0	1.65	1.10	0.465	7	1.25	40.0	0.8	15.2	0.9	1163.393	2.65E-04	3.00E-04	0.030	4.18E-02	8.4242	3.22E-02	0.01
29.0	1.0	28.5	118.0	1.71	1.14	0.479	7	1.25	40.0	0.8	15.0	0.9	1180.308	2.66E-04	3.00E-04	0.030	4.22E-02	8.4242	3.26E-02	0.01
30.0	1.0	29.5	118.0	1.77	1.18	0.493	32	1.25	83.6	0.8	43.9	0.9	1715.718	1.86E-04	1.30E-04	0.013	5.06E-03	8.4242	3.90E-03	0.00
31.5	1.5	30.8	118.0	1.84	1.23	0.510	32	1.25	83.6	0.8	43.1	0.9	1741.175	1.88E-04	1.30E-04	0.013	5.17E-03	8.4242	3.99E-03	0.00
32.0	0.5	31.8	117.6	1.90	1.27	0.524	1	1.25	14.3	0.7	8.1	0.9	1013.699	3.28E-04	5.20E-04	0.052	1.53E-01	8.4242	1.18E-01	0.01
33.0	1.0	32.5	117.6	1.94	1.30	0.534	1	1.25	14.3	0.7	8.1	0.9	1024.495	3.28E-04	5.20E-04	0.052	1.54E-01	8.4242	1.19E-01	0.03
34.0	1.0	33.5	117.6	2.00	1.34	0.546	1	1.25	14.3	0.7	8.1	0.8	1039.178	3.28E-04	5.20E-04	0.052	1.54E-01	8.4242	1.19E-01	0.03
35.0	1.0	34.5	117.6	2.06	1.38	0.559	8	1.25	38.6	0.7	15.5	0.8	1310.969	2.64E-04	3.00E-04	0.030	4.06E-02	8.4242	3.13E-02	0.01
36.0	1.0	35.5	117.6	2.12	1.42	0.571	8	1.25	38.6	0.7	15.4	0.8	1326.125	2.64E-04	3.00E-04	0.030	4.10E-02	8.4242	3.16E-02	0.01
37.0	1.0	36.5	117.6	2.18	1.46	0.584	8	1.25	38.6	0.7	15.3	0.8	1341.055	2.65E-04	3.00E-04	0.030	4.14E-02	8.4242	3.19E-02	0.01
38.0	1.0	37.5	117.6	2.24	1.50	0.595	8	1.25	38.6	0.7	15.2	0.8	1355.769	2.65E-04	3.00E-04	0.030	4.17E-02	8.4242	3.22E-02	0.01
39.0	1.0	38.5	117.6	2.30	1.54	0.607	8	1.25	38.6	0.7	15.1	0.8	1370.276	2.65E-04	3.00E-04	0.030	4.21E-02	8.4242	3.24E-02	0.01
40.0	1.0	39.5	111.7	2.35	1.58	0.618	8	1.25	38.6	0.7	15.0	0.8	1384.225	2.65E-04	3.00E-04	0.030	4.24E-02	8.4242	3.27E-02	0.01
41.0	1.0	40.5	111.7	2.41	1.61	0.628	8	1.25	38.6	0.7	14.9	0.8	1397.638	2.65E-04	3.00E-04	0.030	4.27E-02	8.4242	3.29E-02	0.01
42.0	1.0	41.5	111.7	2.47	1.65	0.638	1	1.25	13.1	0.7	8.0	0.8	1147.945	3.26E-04	5.20E-04	0.052	1.57E-01	8.4242	1.21E-01	0.03
43.0	1.0	42.5	111.7	2.52	1.69	0.648	1	1.25	13.1	0.6	8.0	0.8	1160.341	3.25E-04	5.20E-04	0.052	1.57E-01	8.4242	1.21E-01	0.03
44.0	1.0	43.5	111.7	2.58	1.73	0.658	1	1.25	13.1	0.6	8.0	0.8	1172.600	3.24E-04	5.20E-04	0.052	1.57E-01	8.4242	1.21E-01	0.03
45.0	1.0	44.5	136.8	2.64	1.77	0.669	1	1.25	13.1	0.6	7.9	0.8	1186.083	3.23E-04	5.20E-04	0.052	1.57E			

Figure 10

EMPIRICAL ESTIMATION OF LIQUEFACTION POTENTIAL MAXIMUM CONSIDERED EARTHQUAKE

NCEER (1996) METHOD

EARTHQUAKE INFORMATION:

Earthquake Magnitude:	6.65
Peak Horiz. Acceleration PGA_M (g):	0.700
Calculated Mag.Wtg.Factor:	0.739
Historic High Groundwater:	100.0
Groundwater Depth During Exploration:	100.0

By Thomas F. Blake (1994-1996)

ENERGY & ROD CORRECTIONS:

Energy Correction (CE) for N60:	1.25
Rod Len.Corr.(CR)(0-no or 1-yes):	1.0
Bore Dia. Corr. (CB):	1.00
Sampler Corr. (CS):	1.20
Use Ksigma (0 or 1):	1.0

LIQUEFACTION CALCULATIONS:

Unit Wt. Water (pcf):		62.4												
Depth to Base (ft)	Total Unit Wt. (pcf)	Water (0 or 1)	FIELD SPT (N)	Depth of SPT (ft)	Liq.Sus. (0 or 1)	-200 (%)	Est. Dr (%)	CN Factor	Corrected (N1)60	Eff. Unit Wt. (psf)	Resist. CRR	rd Factor	Induced CSR	Liquefac. Safe.Fact.
1.0	128.7	0	12.0	1.0	1		84	1.700	23.0	128.7	0.255	0.998	0.335	--
2.0	128.7	0	12.0	2.0	1		81	1.700	23.0	128.7	0.255	0.993	0.334	--
3.0	128.7	0	12.0	3.0	1	32	79	1.700	29.1	128.7	0.393	0.989	0.332	--
4.0	128.7	0	12.0	4.0	1	32	77	1.700	29.1	128.7	0.393	0.984	0.331	--
5.0	128.7	0	12.0	5.0	1	32	75	1.700	29.1	128.7	0.393	0.979	0.329	--
6.0	128.7	0	12.0	6.0	1	32	73	1.700	29.1	128.7	0.393	0.975	0.328	--
7.0	128.7	0	12.0	7.5	1	46	70	1.580	28.3	128.7	0.360	0.970	0.326	--
8.0	128.7	0	12.0	7.5	1	46	70	1.471	26.9	128.7	0.321	0.966	0.325	--
9.0	128.7	0	12.0	7.5	1	46	70	1.382	25.7	128.7	0.297	0.961	0.323	--
10.0	103.9	0	12.0	7.5	1	46	70	1.314	24.7	103.9	0.281	0.957	0.321	--
11.0	103.9	0	12.0	7.5	1	46	70	1.261	24.0	103.9	0.270	0.952	0.320	--
12.0	103.9	0	4.0	12.5	1	36	37	1.214	12.5	103.9	0.136	0.947	0.318	--
13.0	103.9	0	4.0	12.5	1	36	37	1.171	12.3	103.9	0.134	0.943	0.317	--
14.0	103.9	0	4.0	12.5	1	36	37	1.133	12.1	103.9	0.132	0.938	0.315	--
15.0	123.7	0	20.0	17.5	1	7	77	1.096	28.7	123.7	0.371	0.934	0.314	--
16.0	123.7	0	20.0	17.5	1	7	77	1.059	27.7	123.7	0.341	0.929	0.312	--
17.0	123.7	0	20.0	17.5	1	7	77	1.025	26.9	123.7	0.320	0.925	0.311	--
18.0	123.7	0	20.0	17.5	1	7	77	0.995	26.1	123.7	0.304	0.920	0.309	--
19.0	123.7	0	20.0	17.5	1	7	77	0.967	25.4	123.7	0.291	0.915	0.308	--
20.0	118.3	0	39.0	20.0	1	7	104	0.942	49.9	118.3	Infin.	0.911	0.306	--
21.0	118.3	0	39.0	20.0	1	7	104	0.919	48.7	118.3	Infin.	0.906	0.305	--
22.0	118.3	0	21.0	22.5	1	6	73	0.898	26.5	118.3	0.303	0.902	0.303	--
23.0	118.3	0	21.0	22.5	1	6	73	0.878	25.9	118.3	0.292	0.897	0.301	--
24.0	118.3	0	21.0	22.5	1	6	73	0.859	25.4	118.3	0.282	0.893	0.300	--
25.0	117.1	0	50.0	25.0	1	6	111	0.842	60.6	117.1	Infin.	0.888	0.298	--
26.5	117.1	0	50.0	25.0	1	6	111	0.822	59.2	117.1	Infin.	0.882	0.296	--
27.0	118.0	0	7.0	27.5	1	69	40	0.814	15.4	118.0	0.157	0.878	0.295	--
28.0	118.0	0	7.0	27.5	1	69	40	0.796	15.2	118.0	0.155	0.874	0.294	--
29.0	118.0	0	7.0	27.5	1	69	40	0.782	15.0	118.0	0.153	0.870	0.292	--
30.0	118.0	0	32.0	30.0	1	60	84	0.769	43.9	118.0	Infin.	0.865	0.291	--
31.5	118.0	0	32.0	30.0	1	60	84	0.753	43.1	118.0	Infin.	0.859	0.289	--
32.0	117.6	0	1.0	32.5	1	46	14	0.747	8.1	117.6	0.082	0.855	0.287	--
33.0	117.6	0	1.0	32.5	1	46	14	0.733	8.1	117.6	0.082	0.851	0.286	--
34.0	117.6	0	1.0	32.5	1	46	14	0.722	8.1	117.6	0.082	0.847	0.285	--
35.0	117.6	0	8.0	37.5	1	46	39	0.712	15.5	117.6	0.149	0.842	0.283	--
36.0	117.6	0	8.0	37.5	1	46	39	0.702	15.4	117.6	0.148	0.838	0.281	--
37.0	117.6	0	8.0	37.5	1	46	39	0.692	15.3	117.6	0.147	0.833	0.280	--
38.0	117.6	0	8.0	37.5	1	46	39	0.683	15.2	117.6	0.146	0.829	0.278	--
39.0	117.6	0	8.0	37.5	1	46	39	0.674	15.1	117.6	0.145	0.824	0.277	--
40.0	111.7	0	8.0	37.5	1	46	39	0.666	15.0	111.7	0.144	0.819	0.275	--
41.0	111.7	0	8.0	37.5	1	46	39	0.658	14.9	111.7	0.143	0.815	0.274	--
42.0	111.7	0	1.0	42.5	1	42	13	0.651	8.0	111.7	0.076	0.810	0.272	--
43.0	111.7	0	1.0	42.5	1	42	13	0.643	8.0	111.7	0.076	0.806	0.271	--
44.0	111.7	0	1.0	42.5	1	42	13	0.636	8.0	111.7	0.076	0.801	0.269	--
45.0	136.8	0	1.0	42.5	1	42	13	0.629	7.9	136.8	0.076	0.797	0.268	--
46.0	136.8	0	1.0	42.5	1	42	13	0.621	7.9	136.8	0.076	0.792	0.266	--
47.0	136.8	0	1.0	42.5	1	42	13	0.613	7.9	136.8	0.076	0.787	0.265	--
48.0	122.8	0	14.0	47.5	1	51	47	0.606	19.7	122.8	0.178	0.783	0.263	--
49.0	122.8	0	14.0	47.5	1	51	47	0.600	19.6	122.8	0.177	0.778	0.262	--
50.5	122.8	0	14.0	47.5	1	54	47	0.592	19.4	122.8	0.175	0.773	0.260	--



TECHNICAL ENGINEERING AND DESIGN GUIDES AS ADAPTED FROM THE US ARMY CORPS OF ENGINEERS, NO. 9
EVALUATION OF EARTHQUAKE-INDUCED SETTLEMENTS IN DRY SANDY SOILS
MAXIMUM CONSIDERED EARTHQUAKE

MCE EARTHQUAKE INFORMATION:

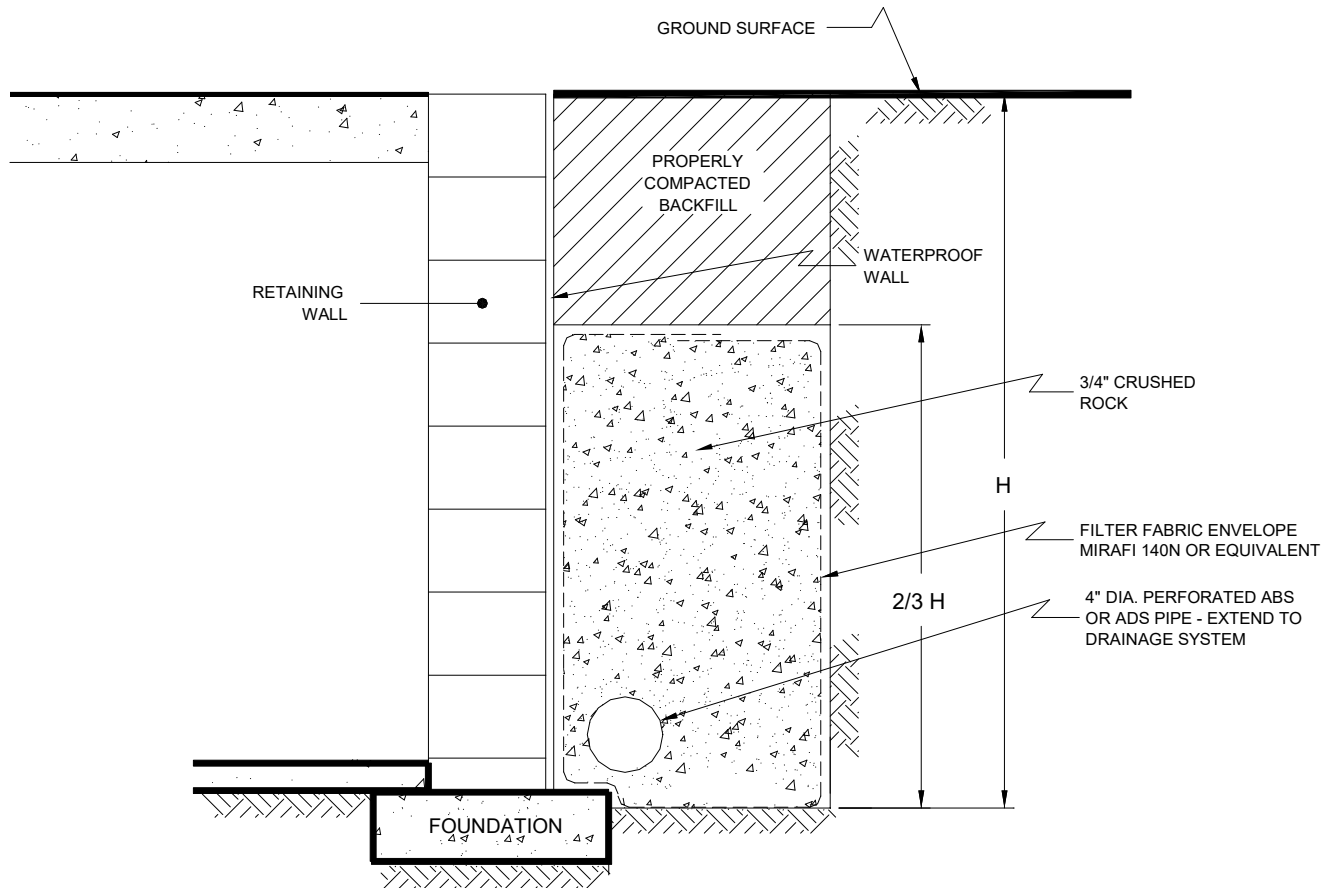
Earthquake Magnitude:	6.65
Peak Horiz. Acceleration (g):	0.700

Fig 4.1 Fig 4.2

Fig 4.4

Depth of Base of Strata (ft)	Thickness of Layer (ft)	Depth of Mid-point of Layer (ft)	Soil Unit Weight (pcf)	Overburden Pressure at Mid-point (tsf)	Mean Effective Pressure at Mid-point (tsf)	Average Cyclic Shear Stress [Tav]	Field SPT [N]	Correction Factor [C _{er}]	Relative Density [D _r] (%)	Correction Factor [C _n]	Corrected [N1] ₆₀	rd Factor	Maximum Shear Mod. [G _{max}] (tsf)	[y _{eff}]*[G _{eff}] [G _{max}]	y _{eff} Shear Strain	[y _{eff}]*100%	Volumetric Strain M7.5 [E15] (%)	Number of Strain Cycles [N _c]	Corrected Vol. Strains [E _c]	Estimated Settlement [S] (inches)
1.0	1.0	0.5	128.7	0.03	0.02	0.015	12	1.25	83.8	1.7	23.0	1.0	186.497	7.77E-05	1.40E-04	0.014	1.19E-02	8.2879	9.09E-03	0.00
2.0	1.0	1.5	128.7	0.10	0.06	0.044	12	1.25	81.3	1.7	23.0	1.0	323.022	1.32E-04	2.30E-04	0.023	1.95E-02	8.2879	1.49E-02	0.00
3.0	1.0	2.5	128.7	0.16	0.11	0.073	12	1.25	79.0	1.7	29.1	1.0	451.536	1.54E-04	1.70E-04	0.017	1.08E-02	8.2879	8.29E-03	0.00
4.0	1.0	3.5	128.7	0.23	0.15	0.102	12	1.25	76.9	1.7	29.1	1.0	534.264	1.79E-04	1.70E-04	0.017	1.08E-02	8.2879	8.29E-03	0.00
5.0	1.0	4.5	128.7	0.29	0.19	0.131	12	1.25	75.0	1.7	29.1	1.0	605.799	1.99E-04	1.70E-04	0.017	1.08E-02	8.2879	8.29E-03	0.00
6.0	1.0	5.5	128.7	0.35	0.24	0.161	12	1.25	73.2	1.7	29.1	1.0	669.736	2.16E-04	4.50E-04	0.045	2.87E-02	8.2879	2.19E-02	0.00
7.0	1.0	6.5	128.7	0.42	0.28	0.189	12	1.25	69.9	1.6	28.3	1.0	721.321	2.33E-04	4.50E-04	0.045	2.96E-02	8.2879	2.27E-02	0.01
8.0	1.0	7.5	128.7	0.48	0.32	0.218	12	1.25	69.9	1.5	26.9	1.0	761.156	2.50E-04	4.50E-04	0.045	3.16E-02	8.2879	2.42E-02	0.01
9.0	1.0	8.5	128.7	0.55	0.37	0.247	12	1.25	69.9	1.4	25.7	1.0	798.012	2.65E-04	4.50E-04	0.045	3.34E-02	8.2879	2.56E-02	0.01
10.0	1.0	9.5	103.9	0.61	0.41	0.273	12	1.25	69.9	1.3	24.7	1.0	829.212	2.77E-04	4.50E-04	0.045	3.49E-02	8.2879	2.67E-02	0.01
11.0	1.0	10.5	103.9	0.66	0.44	0.296	12	1.25	69.9	1.3	24.0	1.0	855.654	2.86E-04	4.50E-04	0.045	3.61E-02	8.2879	2.77E-02	0.01
12.0	1.0	11.5	103.9	0.71	0.47	0.318	4	1.25	37.0	1.2	12.5	0.9	714.204	3.63E-04	1.00E-03	0.100	1.76E-01	8.2879	1.35E-01	0.03
13.0	1.0	12.5	103.9	0.76	0.51	0.341	4	1.25	37.0	1.2	12.3	0.9	736.128	3.72E-04	7.10E-04	0.071	1.28E-01	8.2879	9.77E-02	0.02
14.0	1.0	13.5	103.9	0.81	0.54	0.363	4	1.25	37.0	1.1	12.1	0.9	757.281	3.79E-04	7.10E-04	0.071	1.30E-01	8.2879	9.94E-02	0.02
15.0	1.0	14.5	123.7	0.87	0.58	0.388	20	1.25	76.7	1.1	28.7	0.9	1044.425	2.89E-04	3.70E-04	0.037	2.40E-02	8.2879	1.84E-02	0.00
16.0	1.0	15.5	123.7	0.93	0.62	0.414	20	1.25	76.7	1.1	27.7	0.9	1068.859	2.97E-04	3.70E-04	0.037	2.50E-02	8.2879	1.91E-02	0.00
17.0	1.0	16.5	123.7	0.99	0.67	0.440	20	1.25	76.7	1.0	26.9	0.9	1092.247	3.05E-04	7.10E-04	0.071	4.98E-02	8.2879	3.81E-02	0.01
18.0	1.0	17.5	123.7	1.06	0.71	0.466	20	1.25	76.7	1.0	26.1	0.9	1114.696	3.12E-04	7.10E-04	0.071	5.16E-02	8.2879	3.95E-02	0.01
19.0	1.0	18.5	123.7	1.12	0.75	0.491	20	1.25	76.7	1.0	25.4	0.9	1136.294	3.19E-04	7.10E-04	0.071	5.34E-02	8.2879	4.09E-02	0.01
20.0	1.0	19.5	118.3	1.18	0.79	0.516	39	1.25	104.0	0.9	49.9	0.9	1461.298	2.57E-04	3.70E-04	0.037	1.24E-02	8.2879	9.47E-03	0.00
21.0	1.0	20.5	118.3	1.24	0.83	0.540	39	1.25	104.0	0.9	48.7	0.9	1485.514	2.61E-04	3.70E-04	0.037	1.27E-02	8.2879	9.75E-03	0.00
22.0	1.0	21.5	118.3	1.30	0.87	0.564	21	1.25	73.4	0.9	26.5	0.9	1241.890	3.22E-04	7.10E-04	0.071	5.06E-02	8.2879	3.88E-02	0.01
23.0	1.0	22.5	118.3	1.36	0.91	0.587	21	1.25	73.4	0.9	25.9	0.9	1260.612	3.26E-04	7.10E-04	0.071	5.20E-02	8.2879	3.98E-02	0.01
24.0	1.0	23.5	118.3	1.41	0.95	0.610	21	1.25	73.4	0.9	25.4	0.9	1278.800	3.30E-04	7.10E-04	0.071	5.33E-02	8.2879	4.08E-02	0.01
25.0	1.0	24.5	117.1	1.47	0.99	0.632	50	1.25	110.5	0.8	60.6	0.9	1744.243	2.48E-04	3.70E-04	0.037	9.78E-03	8.2879	7.49E-03	0.00
26.5	1.5	25.8	117.1	1.55	1.04	0.660	50	1.25	110.5	0.8	59.2	0.9	1772.733	2.51E-04	3.00E-04	0.030	8.17E-03	8.2879	6.25E-03	0.00
27.0	0.5	26.8	118.0	1.60	1.08	0.681	7	1.25	40.0	0.8	15.4	0.9	1152.426	3.94E-04	5.20E-04	0.052	7.13E-02	8.2879	5.46E-02	0.01
28.0	1.0	27.5	118.0	1.65	1.10	0.698	7	1.25	40.0	0.8	15.2	0.9	1163.393	3.97E-04	5.20E-04	0.052	7.24E-02	8.2879	5.54E-02	0.01
29.0	1.0	28.5	118.0	1.71	1.14	0.719	7	1.25	40.0	0.8	15.0	0.9	1180.308	3.99E-04	5.20E-04	0.052	7.32E-02	8.2879	5.61E-02	0.01
30.0	1.0	29.5	118.0	1.77	1.18	0.740	32	1.25	83.6	0.8	43.9	0.9	1715.718	2.79E-04	3.00E-04	0.030	1.17E-02	8.2879	8.94E-03	0.00
31.5	1.5	30.8	118.0	1.84	1.23	0.765	32	1.25	83.6	0.8	43.1	0.9	1741.175	2.81E-04	3.00E-04	0.030	1.19E-02	8.2879	9.13E-03	0.00
32.0	0.5	31.8	117.6	1.90	1.27	0.785	1	1.25	14.3	0.7	8.1	0.9	1013.699	4.91E-04	8.10E-04	0.081	2.39E-01	8.2879	1.83E-01	0.02
33.0	1.0	32.5	117.6	1.94	1.30	0.800	1	1.25	14.3	0.7	8.1	0.9	1024.495	4.92E-04	8.10E-04	0.081	2.40E-01	8.2879	1.84E-01	0.04
34.0	1.0	33.5	117.6	2.00	1.34	0.819	1	1.25	14.3	0.7	8.1	0.8	1039.178	4.92E-04	8.10E-04	0.081	2.40E-01	8.2879	1.84E-01	0.04
35.0	1.0	34.5	117.6	2.06	1.38	0.838	8	1.25	38.6	0.7	15.5	0.8	1310.969	3.96E-04	5.20E-04	0.052	7.04E-02	8.2879	5.39E-02	0.01
36.0	1.0	35.5	117.6	2.12	1.42	0.857	8	1.25	38.6	0.7	15.4	0.8	1326.125	3.96E-04	5.20E-04	0.052	7.10E-02	8.2879	5.44E-02	0.01
37.0	1.0	36.5	117.6	2.18	1.46	0.875	8	1.25	38.6	0.7	15.3	0.8	1341.055	3.97E-04	5.20E-04	0.052	7.17E-02	8.2879	5.49E-02	0.01
38.0	1.0	37.5	117.6	2.24	1.50	0.893	8	1.25	38.6	0.7	15.2	0.8	1355.769	3.97E-04	5.20E-04	0.052	7.23E-02	8.2879	5.54E-02	0.01
39.0	1.0	38.5	117.6	2.30	1.54	0.910	8	1.25	38.6	0.7	15.1	0.8	1370.276	3.98E-04	5.20E-04	0.052	7.29E-02	8.2879	5.58E-02	0.01
40.0	1.0	39.5	111.7	2.35	1.58	0.927	8	1.25	38.6	0.7	15.0	0.8	1384.225	3.98E-04	5.20E-04	0.052	7.35E-02	8.2879	5.63E-02	0.01
41.0	1.0	40.5	111.7	2.41	1.61	0.942	8	1.25	38.6	0.7	14.9	0.8	1397.638	3.97E-04	5.20E-04	0.052	7.40E-02	8.2879	5.67E-02	0.01
42.0	1.0	41.5	111.7	2.47	1.65	0.957	1	1.25	13.1	0.7	8.0	0.8	1147.945	4.88E-04	8.10E-04	0.081	2.44E-01	8.2879	1.87E-01	0.04
43.0	1.0	42.5	111.7	2.52	1.69	0.972	1	1.25	13.1	0.6	8.0	0.8	1160.341	4.87E-04	8.10E-04	0.081	2.45E-01	8.2879	1.87E-01	0.04
44.0	1.0	43.5	111.7	2.58	1.73	0.986	1	1.25	13.1	0.6	8.0	0.8	1172.600	4.86E-04	8.10E-04	0.081	2.45E-01	8.2879	1.88E-01	0.05
45.0	1.0	44.5	136.8	2.64	1.77	1.003	1	1.25	13.1	0.6										

Figure 12



NO SCALE

GEOCON
WEST, INC.



ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

DRAFTED BY: PZ

CHECKED BY: NDB

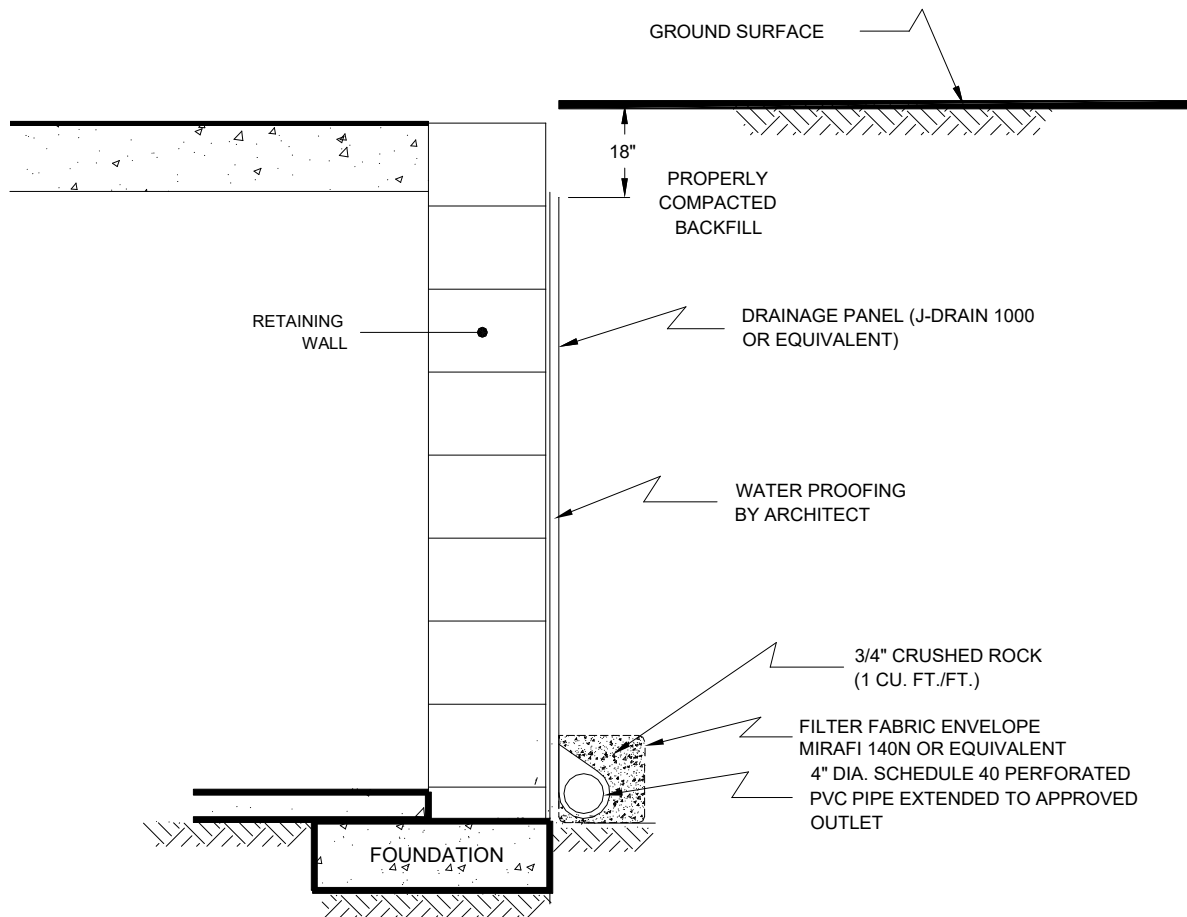
RETAINING WALL DRAIN DETAIL

CHAFFEY COLLEGE - CHINO CAMPUS
5897 COLLEGE PARK AVENUE
CHINO, CALIFORNIA

FEB. 2020

PROJECT NO. T2746-99-11

FIG. 13



NO SCALE

GEOCON
WEST, INC.



ENVIRONMENTAL GEOTECHNICAL MATERIALS
3303 N. SAN FERNANDO BLVD. - SUITE 100 - BURBANK, CA 91504
PHONE (818) 841-8388 - FAX (818) 841-1704

DRAFTED BY: PZ

CHECKED BY: NDB

RETAINING WALL DRAIN DETAIL

CHAFFEY COLLEGE - CHINO CAMPUS
5897 COLLEGE PARK AVENUE
CHINO, CALIFORNIA

FEB. 2020

PROJECT NO. T2746-99-11

FIG. 14

PERCOLATION TEST DATA SHEET

Project:	Chaffey College		Project No:	T2746-99-11		Date:	1/20/2020
Test Hole No:		B1	Tested By:	RMA			
Depth of Test Hole, D _T :		10	USCS Soil Classification:		SP		
Test Hole Dimensions (inches)					Length	Width	
Diameter (if round) =		8	Sides (if rectangular) =		---	---	
Trial No.	Start Time	Stop Time	Δt Time Interval (min)	D ₀ Initial Depth to Water (in)	D _f Final Depth to Water (in)	ΔD Change in Water Level (in)	Percolation Rate (min/in)
1	8:50	9:20	30	60.0	102.0	42.0	1029
2	9:30	10:00	30	60.0	97.4	37.4	1154
3	10:10	10:40	30	60.0	96.0	36.0	1200
4	10:50	11:20	30	60.0	95.8	35.8	1208
5	11:30	12:00	30	60.0	94.2	34.2	1263
6	12:30	13:00	30	60.0	94.0	34.0	1272
7	13:30	14:00	30	60.0	92.4	32.4	1333
8	14:00	14:30	30	60.0	92.0	32.0	1348

Infiltration Rate Calculation:

Time Interval, Δt =	30	minutes	Ho =	60.0	inches
Final Depth to Water, D _f =	92.0	inches	H _f =	28.0	inches
Test Hole Radius, r =	4	inches	ΔH =	32.0	inches
Initial Depth to Water, D ₀ =	60.0	inches	H _{avg} =	44.0	inches
Total Depth of Test Hole, D _T =	120.0	inches			

$$I_t = \frac{\Delta H(60r)}{\Delta t(r + 2H_{avg})}$$

Infiltration Rate, I_t = **2.8** inches/hour

Spectral Period (seconds)	Probabilistic Uniform-Hazard	Risk-Targeted, Probabilistic	Risk Factor, C_r	Maximum-Rotated Component Scale Factor	MRC, Risk-Targeted Probabilistic	84th Percentile, Deterministic
0	0.780	0.766	0.982	1.190	0.912	0.833
0.1	1.349	1.338	0.992	1.190	1.592	1.266
0.2	1.774	1.780	1.003	1.220	2.171	1.763
0.3	1.989	1.943	0.977	1.230	2.390	2.081
0.5	1.893	1.805	0.953	1.230	2.220	2.074
0.75	1.540	1.438	0.933	1.240	1.783	1.684
1	1.266	1.175	0.928	1.240	1.457	1.355
2	0.676	0.615	0.909	1.240	0.762	0.623
3	0.441	0.397	0.901	1.250	0.497	0.358
4	0.313	0.282	0.900	1.260	0.355	0.221
5	0.238	0.213	0.898	1.260	0.269	0.150

Site-Specific Design Earthquake	Design Earthquake Floor	Site-Specific Maximum Considered Earthquake
0.556	0.360	0.833
0.844	0.665	1.266
1.175	0.901	1.763
1.387	0.901	2.081
1.383	0.901	2.074
1.123	0.901	1.684
0.903	0.800	1.355
0.415	0.400	0.623
0.267	0.267	0.400
0.200	0.200	0.300
0.160	0.160	0.240

$$SM_5 = \frac{1.873}{1.355} g$$

$$SM_1 = \frac{1.355}{1.355} g$$

$$SD_5 = \frac{1.249}{0.903} g$$

$$SD_1 = \frac{0.903}{0.903} g$$



DESIGN RESPONSE SPECTRUM

Checked by: PZ

Project No.: T2746-99-11

Chaffey College - Chino Campus
5897 College Park Avenue
Chino, California

Feb. 2020

Table 1

APPENDIX

A

APPENDIX A

FIELD INVESTIGATION







The site was explored on January 20 and 21, 2020 by excavating eight 8-inch-diameter borings using a truck-mounted hollow-stem auger drilling machine. The borings were drilled to depths of approximately 20½ to 50½ feet below the existing ground surface. Representative and relatively undisturbed samples were obtained by driving a 3-inch O. D., California Modified Sampler into the “undisturbed” soil mass with blows from a 140-pound auto-hammer falling 30 inches. The California Modified Sampler was equipped with 1-inch high by 2³/₈-inch diameter brass sampler rings to facilitate soil removal and testing. Bulk samples were also obtained.

The soil conditions encountered in the borings were visually examined, classified and logged in general accordance with the Unified Soil Classification System (USCS). The logs of the borings are presented on Figures A1 through A8. The logs depict the soil and geologic conditions encountered and the depth at which samples were obtained. The logs also include our interpretation of the conditions between sampling intervals. Therefore, the logs contain both observed and interpreted data. We determined the lines designating the interface between soil materials on the logs using visual observations, penetration rates, excavation characteristics and other factors. The transition between materials may be abrupt or gradual. Where applicable, the logs were revised based on subsequent laboratory testing. The location of the borings are shown on Figure 2.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 1 ELEV. (MSL.) -- DATE COMPLETED <u>1/20/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	BULK 0-5'				MATERIAL DESCRIPTION			
2	B1@2.5'			ML	ARTIFICIAL FILL Sandy Silt, firm, slightly moist, dark brown, fine- to medium-grained. ALLUVIUM Sandy Silt, stiff, slightly moist, dark brown, fine-grained.	35	102.0	25.4
4	B1@5'					21	116.2	11.1
6	B1@7.5'			SP	Sand, poorly graded, dense, slightly moist, light grayish brown, fine- to medium grained.	61	120.2	8.4
8	B1@10'				- medium dense	19	113.7	4.9
10	B1@12.5'			ML	Silt, firm, slightly moist, dark brown.	19	109.5	15.8
12	B1@15'				- hard	56	123.3	9.4
14								
16								
18								
20	B1@20'			SP	Sand, poorly graded, very dense, slightly moist, light yellowish brown, fine-to medium-grained.	50 (6")	109.9	11.7
Total depth of boring: 20.5 feet Fill to 1 foot. No groundwater encountered. Backfilled with soil cuttings and tamped. * Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer.								

Figure A1,
Log of Boring 1, Page 1 of 1

T2746-99-11 BORING LOGS.GPJ







SAMPLE SYMBOLS					
	... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
	... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 2 ELEV. (MSL.) -- DATE COMPLETED <u>1/20/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					MATERIAL DESCRIPTION			
					ARTIFICIAL FILL Sand with Silt, poorly graded, medium dense, slightly moist, dark brown, fine-to medium- grained.			
2					ALLUVIUM Silt, stiff, slightly moist, light grayish brown.			
4	B2@3'					23	104.3	23.0
6	B2@6'			ML	- firm, light grayish brown, some sand	12	115.8	14.5
8								
10	B2@9'				- dark brown	16	104.1	24.5
12	B2@12'			SP	Sand, poorly graded, loose, slightly moist, yellowish brown, fine- to medium-grained.	17	107.4	13.7
14								
16	B2@15'				Sandy Silt, stiff, slightly moist, yellowish brown, fine-grained.	31	118.0	14.9
18				ML				
20	B2@20'					31	102.3	24.5
					Total depth of boring: 20.5 feet Fill to 1 foot. No groundwater encountered. Backfilled with soil cuttings and tamped. Surface restored. * Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer. - loose			

Figure A2,
Log of Boring 2, Page 1 of 1

T2746-99-11 BORING LOGS.GPJ







SAMPLE SYMBOLS					
	... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
	... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 3 ELEV. (MSL.) -- DATE COMPLETED <u>1/21/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					MATERIAL DESCRIPTION			
					ARTIFICIAL FILL Silt, firm, slightly moist, dark brown.			
2					ALLUVIUM Silty Sand, medium dense, slightly moist, light brown, fine-graded.			
4	B3@3'			SM		20	102.5	24.9
6	B3@6'				Sand, poorly graded, medium dense, slightly moist, light yellowish brown, fine-grained.	31	132.5	4.1
8				SP				
10	B3@9'				- loose	12	110.8	3.6
12	B3@12'				Silty Sand, loose, slightly moist, light yellowish brown, fine-grained.	9	112.7	15.2
14				SM				
16	B3@15'				- medium dense	30	113.1	14.2
18					Sand, poorly graded, dense, slightly moist, dark yellowish brown, fine-grained.			
20	B3@20'					54	104.0	10.4
22				SP				
24								
26	B3@25'				- loose	14	99.4	26.8
28								

Figure A3,
Log of Boring 3, Page 1 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS		... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
		... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 3 ELEV. (MSL.) -- DATE COMPLETED <u>1/21/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	B3@30'			SP	MATERIAL DESCRIPTION Total depth of boring: 30.5 feet Fill to 1 foot. No groundwater encountered. Backfilled with soil cuttings and tamped. Surface restored. * Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer.	50 (4")	111.6	16.6

Figure A3,
Log of Boring 3, Page 2 of 2

T2746-99-11 BORING LOGS.GPJ







SAMPLE SYMBOLS	<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>	... STANDARD PENETRATION TEST	<input type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)
	<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input checked="" type="checkbox"/>	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 4 ELEV. (MSL.) -- DATE COMPLETED <u>1/21/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	BULK 0-5'				MATERIAL DESCRIPTION			
					ARTIFICIAL FILL Silt, firm, slightly moist, dark brown.			
2					ALLUVIUM Silt, firm, slightly moist, light grayish brown, trace fine-grained sand.			
4	B4@3'			ML		18	109.6	15.7
6	B4@6'					19	110.5	15.2
8	B4@9'			SP	Sand, poorly graded, loose, slightly moist, light yellowish brown, fine-grained.	7	101.2	12.1
10								
12	B4@12'			SM	Silty Sand, loose, slightly moist, grayish brown with orange mottles, fine-grained.	10	112.7	17.1
14								
16	B4@15'				Sand, poorly graded, medium dense, slightly moist, yellowish brown, fine-grained.	28	129.7	11.1
18				SP				
20	B4@20'				- very dense	50 (6")	115.4	5.9
22								
24	B4@25'			SM	Silty Sand, loose, slightly moist, olive brown, fine grained.	17	101.1	24.1
26								
28				SP	Sand, poorly graded, medium dense, slightly moist, yellowish brown, fine-grained.			

Figure A4,
Log of Boring 4, Page 1 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS	 ... SAMPLING UNSUCCESSFUL	 ... STANDARD PENETRATION TEST	 ... DRIVE SAMPLE (UNDISTURBED)
	 ... DISTURBED OR BAG SAMPLE	 ... CHUNK SAMPLE	 ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 4 ELEV. (MSL.) -- DATE COMPLETED <u>1/21/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	B4@30'			SP	MATERIAL DESCRIPTION Total depth of boring: 30.5 feet Fill to 1 foot. No groundwater encountered. Backfilled with soil cuttings and tamped. Surface restored. * Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer.	25	120.1	7.7

Figure A4,
Log of Boring 4, Page 2 of 2

T2746-99-11 BORING LOGS.GPJ







SAMPLE SYMBOLS	<input type="checkbox"/> ... SAMPLING UNSUCCESSFUL	<input type="checkbox"/> ... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/> ... DRIVE SAMPLE (UNDISTURBED)
	<input checked="" type="checkbox"/> ... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/> ... CHUNK SAMPLE	<input checked="" type="checkbox"/> ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 5 ELEV. (MSL.) -- DATE COMPLETED <u>1/21/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0	BULK 0-5'				MATERIAL DESCRIPTION			
2	B5@2.5'				ARTIFICIAL FILL Sandy Silt, firm, slightly moist, dark gray, fine-grained.			
4	B5@5'				ALLUVIUM Silty Sand, medium dense, slightly moist, light grayish brown, fine-grained.	12		
6	B5@7.5'				- loose	15	106.0	21.4
8	B5@10'				- medium dense, yellowish brown, fine- to medium-grained	12		
10	B5@12.5'			SM	- loose	10	105.0	14.0
12	B5@15'				- olive brown	4		
14	B5@17.5'				Sand with Silt, poorly graded, medium dense, slightly moist, yellowish brown, fine- to medium-grained.	35	124.8	12.2
16	B5@20'				- olive brown	20		
18	B5@22.5'				- dense	71	113.9	3.9
20	B5@25'			SP-SM	- medium dense	21		
22	B5@27.5'				- very dense	91	112.6	4.0
24	B5@29.5'				Sandy Silt, soft, moist, olive brown, fine-grained.	7		
26	B5@31.5'			ML				
28	B5@33.5'							

Figure A5,
Log of Boring 5, Page 1 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS	 ... SAMPLING UNSUCCESSFUL	 ... STANDARD PENETRATION TEST	 ... DRIVE SAMPLE (UNDISTURBED)
	 ... DISTURBED OR BAG SAMPLE	 ... CHUNK SAMPLE	 ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.


DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 5 ELEV. (MSL.) -- DATE COMPLETED <u>1/21/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
30	B5@30'			ML	- hard	58	99.6	18.5	
32	B5@32.5'			SM	Silty Sand, very loose, moist, olive brown, fine-grained.	1			
34									
36	B5@35'				- loose	10	103.8	13.3	
38	B5@37.5'					8			
40	B5@40'					9	93.6	19.3	
42	B5@42.5'				- very loose	1			
44									
46	B5@45'			- medium dense	28	114.0	20.0		
48	B5@47.5'				ML	Sandy Silt, medium dense, slightly moist, dark yellowish brown, fine-grained.	14		
50	B5@50'				Total depth of boring: 50.5 feet Fill to 2 feet. No groundwater encountered. Backfilled with soil cuttings and tamped. Surface restored. * Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer.	27	104.1	18.0	

Figure A5,
Log of Boring 5, Page 2 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS	□ ... SAMPLING UNSUCCESSFUL	▤ ... STANDARD PENETRATION TEST	■ ... DRIVE SAMPLE (UNDISTURBED)
	▨ ... DISTURBED OR BAG SAMPLE	▩ ... CHUNK SAMPLE	▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 6 ELEV. (MSL.) -- DATE COMPLETED <u>1/20/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					MATERIAL DESCRIPTION			
2	B6@3'			ML	ARTIFICIAL FILL Sand with Silt, poorly graded, medium dense, slightly moist, dark brown, fine- to medium-grained.	23	101.7	21.5
4					ALLUVIUM Silt, stiff, slightly moist, light brown.			
6	B6@6'			SP	Sand, poorly graded, medium dense, slightly moist, light yellowish brown, fine- to medium-grained.	25	111.8	4.1
8	B6@9'			ML	Sandy Silt, soft, slightly moist, light brown, fine-grained.	10	89.1	17.4
10					- firm	13	115.1	17.5
12	B6@12'			ML	- increase in sand	15	109.6	14.3
14	B6@15'							
16	B6@20'			SP	Sand, poorly graded, dense, slightly moist, light yellowish brown, fine-grained.	76	114.0	2.6
18								
20	B6@25'			SM	Silty Sand, medium dense, slightly moist, dark yellowish brown, fine-grained, some oxidation mottles.	24	112.4	17.6
22								
24				SP	Sand, poorly graded, medium dense, slightly moist, light yellowish brown, fine- to medium-grained.			
26								
28								

Figure A6,
Log of Boring 6, Page 1 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS		... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
		... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 6 ELEV. (MSL.) -- DATE COMPLETED <u>1/20/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	B6@30'			SP	MATERIAL DESCRIPTION Total depth of boring: 30.5 feet Fill to 1 foot. No groundwater encountered. Backfilled with soil cuttings and tamped. Surface restored. * Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer.	21	110.3	7.8

Figure A6,
Log of Boring 6, Page 2 of 2

T2746-99-11 BORING LOGS.GPJ







SAMPLE SYMBOLS	<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>	... STANDARD PENETRATION TEST	<input type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)
	<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input checked="" type="checkbox"/>	... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 7		PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) --	DATE COMPLETED <u>1/20/2020</u>			
					EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>				
					MATERIAL DESCRIPTION				
0	BULK 0-5'				ARTIFICIAL FILL Silt with Sand, stiff, slightly moist, dark brown, fine-grained.				
2				SM	ALLUVIUM Silty Sand, medium dense, slightly moist, dark brown, fine-grained.				
	B7@3'						30	98.6	25.6
4				SP	Sand, poorly graded, loose, slightly moist, light brown, fine- to medium-grained.				
6	B7@6'						17	124.1	4.8
8				ML	Silt with Sand, soft, slightly moist, light brown, fine-grained.				
10	B7@9'						9	92.5	29.5
12	B7@12'						9	112.1	14.9
14				SP	Sand, poorly graded, medium dense, slightly moist, light yellowish brown, fine- to medium-grained.				
16	B7@15'						28	128.6	8.7
18				SP					
20	B7@20'				- dense		59	108.7	3.6
22				ML	Silt, stiff, slightly moist, light yellowish brown.				
24	B7@25'						23	105.6	20.3
26				SP					
28					Sand, poorly graded, medium dense, slightly moist, light yellowish brown, fine-grained.				

Figure A7,
Log of Boring 7, Page 1 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS	 ... SAMPLING UNSUCCESSFUL	 ... STANDARD PENETRATION TEST	 ... DRIVE SAMPLE (UNDISTURBED)
	 ... DISTURBED OR BAG SAMPLE	 ... CHUNK SAMPLE	 ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.








DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	<div>BORING 7</div> <div>ELEV. (MSL.) -- DATE COMPLETED <u>1/20/2020</u></div> <div>EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u></div>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30					MATERIAL DESCRIPTION			
	B7@30'			SP	<div>Total depth of boring: 30.5 feet</div> <div>Fill to 1 foot.</div> <div>No groundwater encountered.</div> <div>Backfilled with soil cuttings and tamped.</div> <div>Surface restored.</div> <div> </div> <div>* Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer.</div>	29	111.0	5

Figure A7,
Log of Boring 7, Page 2 of 2

T2746-99-11 BORING LOGS.GPJ






SAMPLE SYMBOLS		... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
		... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 8		PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) --	DATE COMPLETED <u>1/21/2020</u>			
					EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>				
0					MATERIAL DESCRIPTION				
					ARTIFICIAL FILL Silt, firm, slightly moist, dark brown.				
2					ALLUVIUM Sandy Silt, firm, slightly moist, dark brown, fine-grained.				
4	B8@3'						15	97.7	26.2
6	B8@6'			ML	- stiff		27	110.6	18.6
8									
10	B8@9'				- firm, decrease in sand		14	84.1	35.6
12	B8@12'				- increase in sand		15	118.9	16.6
14									
16	B8@15'			SM	Silty Sand, medium dense, moist, dark yellowish brown, fine- to medium-grained.		19	114.8	14.3
18									
20	B8@20'			SP	Sand, poorly graded, medium dense, slightly moist, light yellowish brown, fine-grained, some coarse-grained, some fine gravel (to 1").		34	111.2	5.2
22									
24				ML	Sandy Silt, stiff, slightly moist, yellowish brown, fine-grained.				
26	B8@25'						25	103.6	24.3
28				SP-SM	Sand with Silt, poorly graded, medium dense, moist, dark brown, fine- to medium-grained, some coarse-grained, some fine gravel.				

Figure A8,
Log of Boring 8, Page 1 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS			
	... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST
	... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE
			... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.








DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING 8 ELEV. (MSL.) -- DATE COMPLETED <u>1/21/2020</u> EQUIPMENT <u>HOLLOW STEM AUGER</u> BY: <u>RMA</u>	PENETRATION RESISTANCE (BLOWS/FT*)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
30	B8@30'			SP-SM	MATERIAL DESCRIPTION Total depth of boring: 30.5 feet Fill to 1 foot. No groundwater encountered. Backfilled with soil cuttings and tamped. Surface restored. * Penetration resistance for 140-pound hammer falling 30 inches by auto-hammer.	20	110.8	8.4

Figure A8,
Log of Boring 8, Page 2 of 2

T2746-99-11 BORING LOGS.GPJ

SAMPLE SYMBOLS		... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
		... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

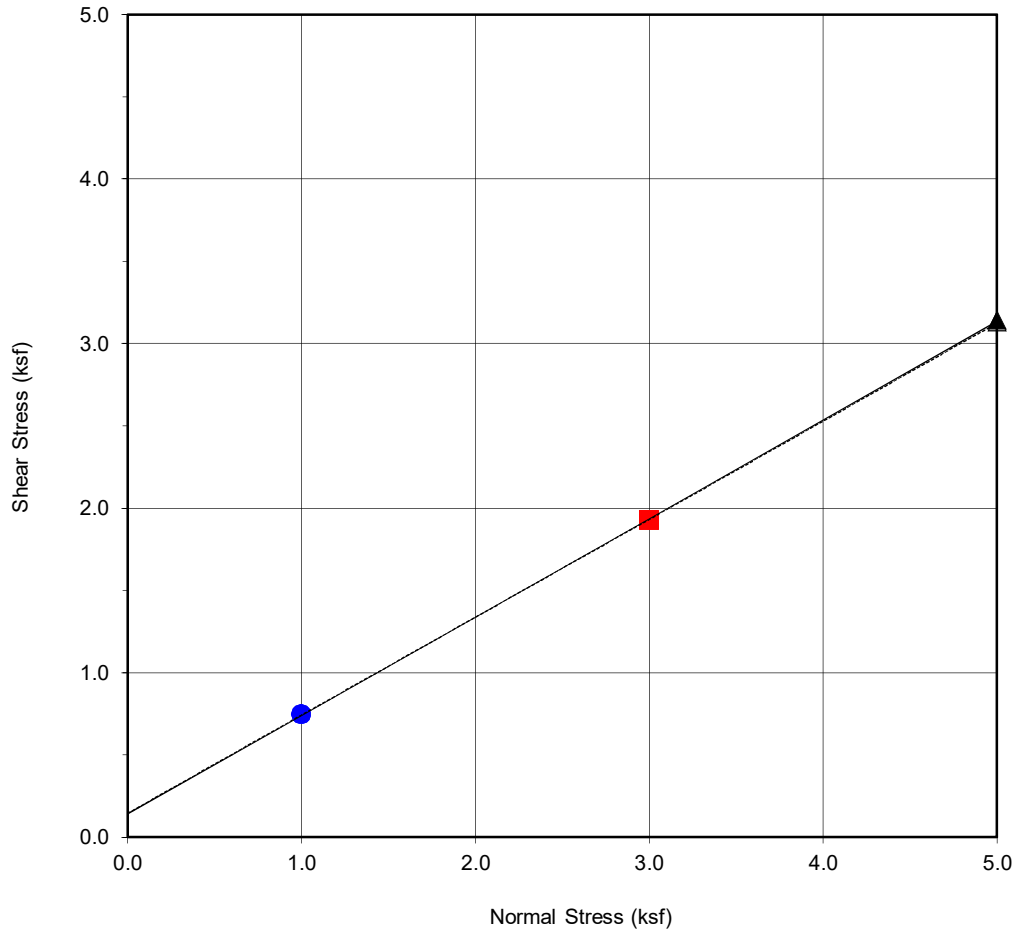
APPENDIX

B

APPENDIX B

LABORATORY TESTING

Laboratory tests were performed in accordance with generally accepted test methods of the “American Society for Testing and Materials (ASTM)”, or other suggested procedures. Selected samples were tested for direct shear strength, consolidation and expansion characteristics, grain-size, corrosivity, in-place dry density and moisture content. The results of the laboratory tests are summarized in Figures B1 through B17. The in-place dry density and moisture content of the samples tested are presented on the boring logs, Appendix A.



Boring No.	B5
Sample No.	B5@0-5'
Depth (ft)	0-5'
<u>Sample Type:</u>	Ring

<u>Soil Identification:</u>		
Grayish Brown Silty Sand (SM)		
Strength Parameters		
	C (psf)	ϕ ($^{\circ}$)
Peak	140	30.9
Ultimate	145	30.8

Normal Stress (kip/ft ²)	1	3	5
Peak Shear Stress (kip/ft ²)	● 0.75	■ 1.93	▲ 3.14
Shear Stress @ End of Test (ksf)	○ 0.75	□ 1.93	△ 3.13
Deformation Rate (in./min.)	0.05	0.05	0.05
Initial Sample Height (in.)	1.0	1.0	1.0
Ring Inside Diameter (in.)	2.375	2.375	2.375
Initial Moisture Content (%)	17.6	17.7	17.7
Initial Dry Density (pcf)	96.0	96.0	96.0
Initial Degree of Saturation (%)	62.9	63.0	63.2
Soil Height Before Shearing (in.)	1.2	1.2	1.2
Final Moisture Content (%)	26.4	23.9	21.5



DIRECT SHEAR TEST RESULTS

Consolidated Drained ASTM D-3080

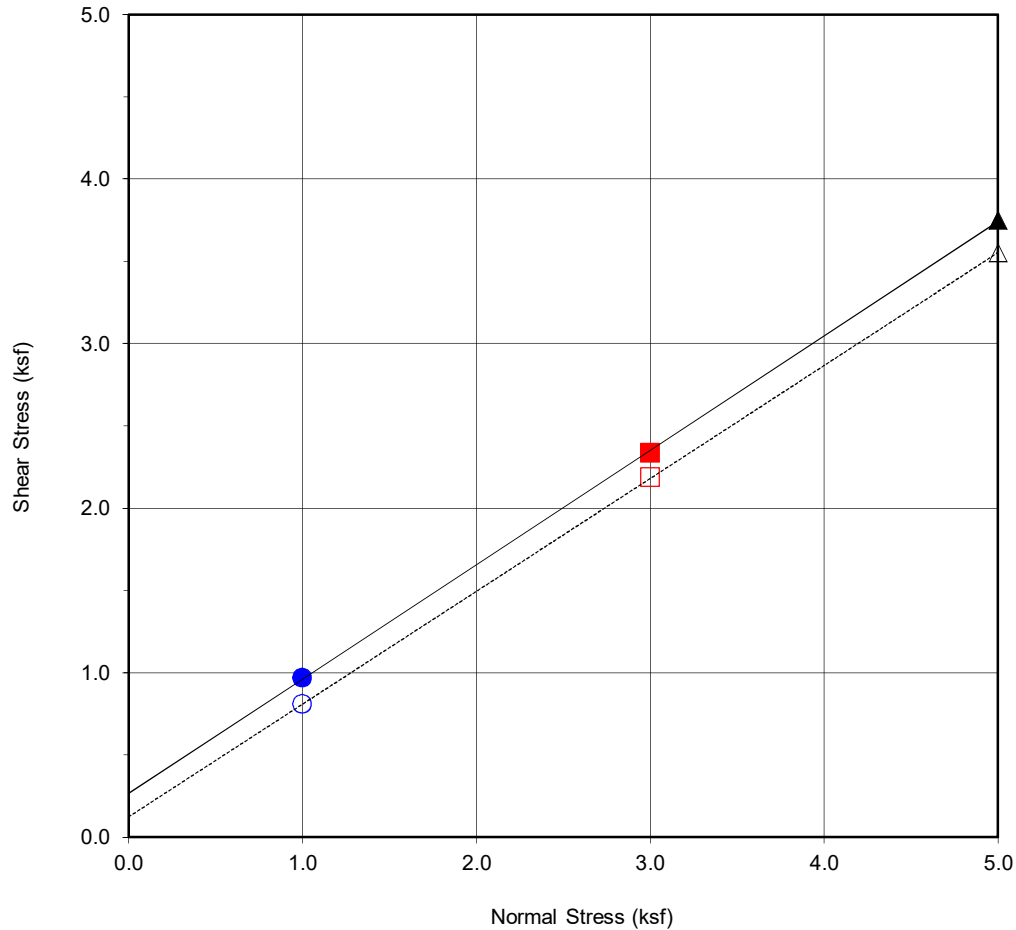
Checked by: PZ

Project No.: T2746-99-11

Chaffey College - Chino Campus
5897 College Park Avenue
Chino, California

Feb. 2020

Figure B1



Boring No.	B1
Sample No.	B1@2.5'
Depth (ft)	2.5'
<u>Sample Type:</u>	Ring

<u>Soil Identification:</u>		
Dark Brown Sandy Silt (ML)		
Strength Parameters		
	C (psf)	ϕ ($^{\circ}$)
Peak	265	34.8
Ultimate	123	34.5

Normal Stress (kip/ft ²)	1	3	5
Peak Shear Stress (kip/ft ²)	● 0.97	■ 2.33	▲ 3.75
Shear Stress @ End of Test (ksf)	○ 0.81	□ 2.19	△ 3.55
Deformation Rate (in./min.)	0.05	0.05	0.05
Initial Sample Height (in.)	1.0	1.0	1.0
Ring Inside Diameter (in.)	2.375	2.375	2.375
Initial Moisture Content (%)	22.2	25.4	24.3
Initial Dry Density (pcf)	100.1	101.5	102.3
Initial Degree of Saturation (%)	87.5	104.0	101.2
Soil Height Before Shearing (in.)	1.2	1.2	1.2
Final Moisture Content (%)	25.4	24.3	22.8



DIRECT SHEAR TEST RESULTS

Consolidated Drained ASTM D-3080

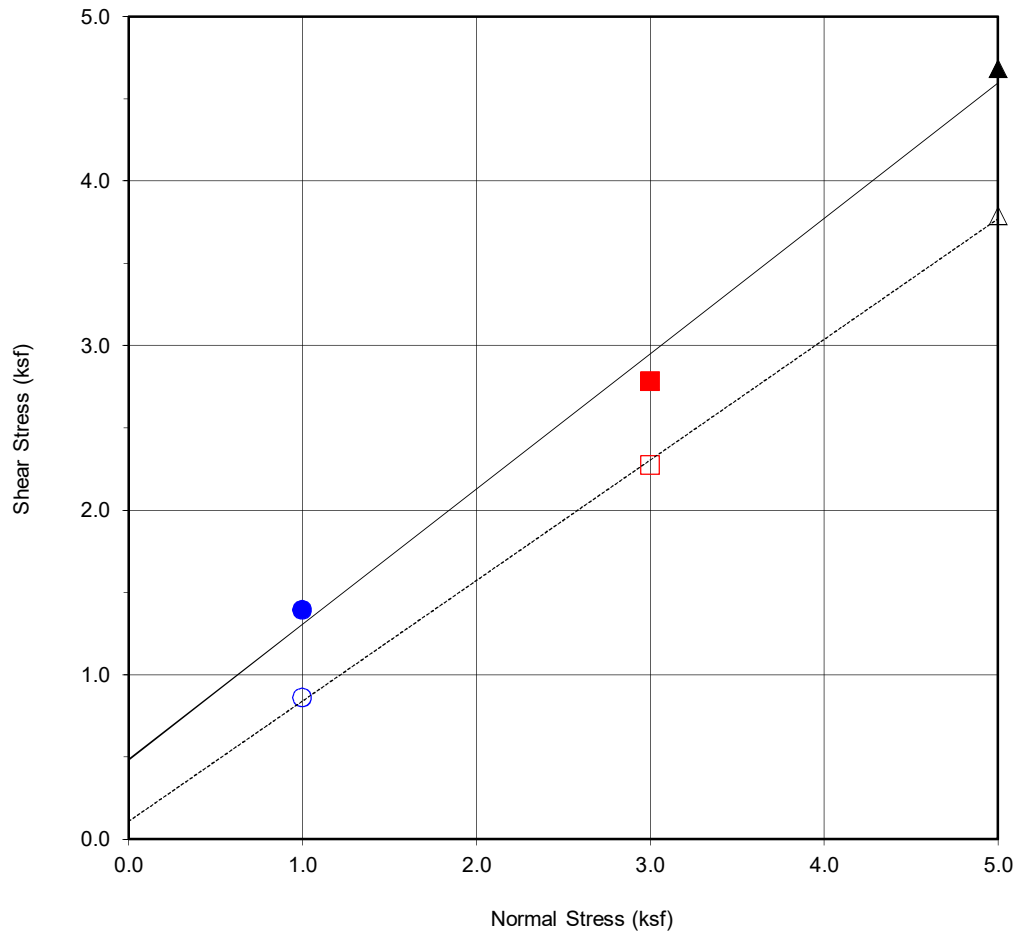
Checked by: PZ

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Chino, California

Feb. 2020

Figure B2



Boring No.	B5
Sample No.	B5@5'
Depth (ft)	5
<u>Sample Type:</u>	Ring

<u>Soil Identification:</u>		
Light Grayish Brown Silty Sand (SM)		
Strength Parameters		
	C (psf)	ϕ ($^{\circ}$)
Peak	484	39.4
Ultimate	108	36.2

Normal Stress (kip/ft ²)	1	3	5
Peak Shear Stress (kip/ft ²)	● 1.39	■ 2.78	▲ 4.68
Shear Stress @ End of Test (ksf)	○ 0.86	□ 2.27	△ 3.79
Deformation Rate (in./min.)	0.05	0.05	0.05
Initial Sample Height (in.)	1.0	1.0	1.0
Ring Inside Diameter (in.)	2.375	2.375	2.375
Initial Moisture Content (%)	25.6	21.4	23.3
Initial Dry Density (pcf)	102.6	104.6	103.5
Initial Degree of Saturation (%)	107.5	94.5	100.0
Soil Height Before Shearing (in.)	1.2	1.2	1.2
Final Moisture Content (%)	25.6	24.4	24.4



DIRECT SHEAR TEST RESULTS

Consolidated Drained ASTM D-3080

Checked by: PZ

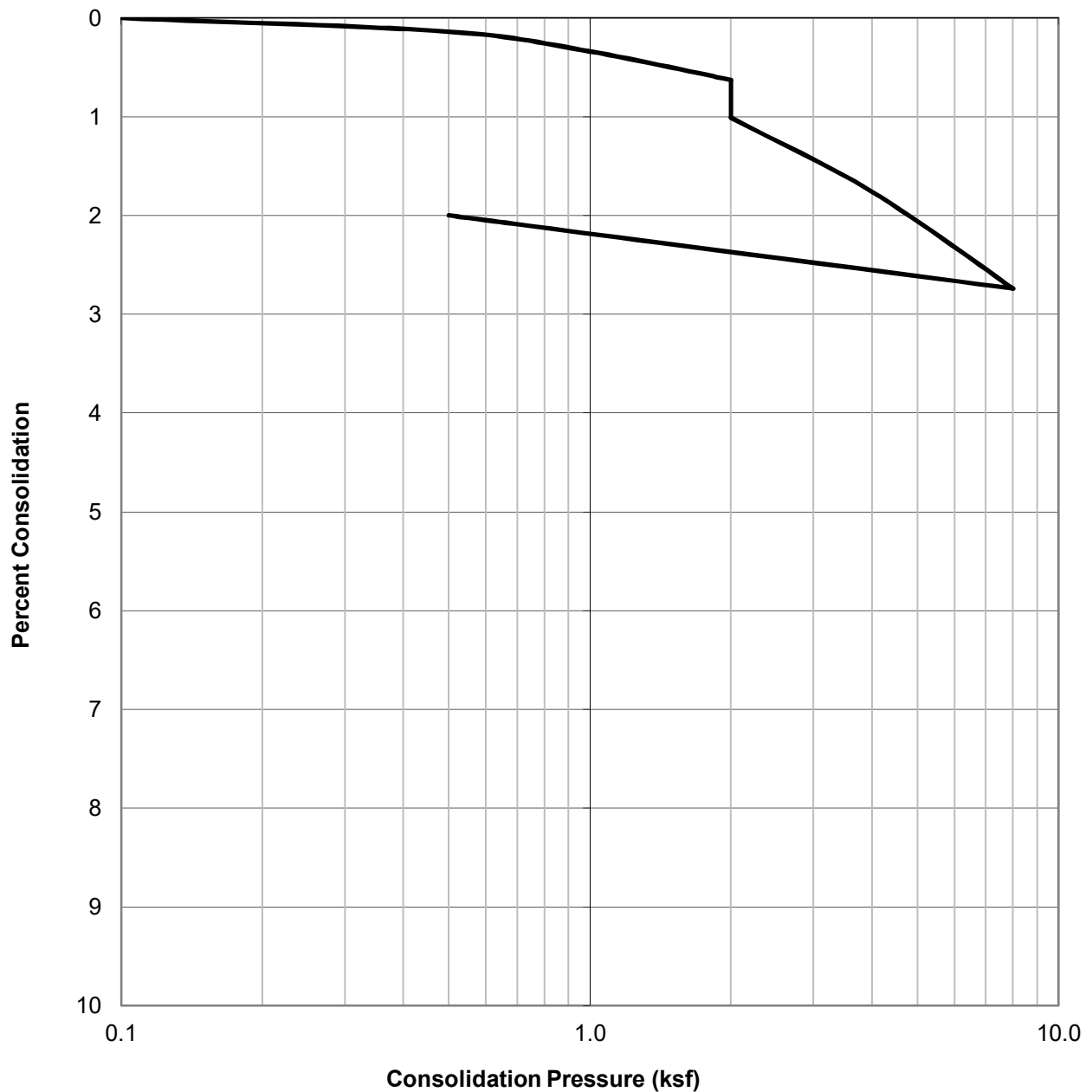
Project No.: T2746-99-11

Chaffey College - Chino Campus
5897 College Park Avenue
Chino, California

Feb. 2020

Figure B3

WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B1@5	Dark Brown Sandy Silt (ML)	113.3	11.1	16.0



CONSOLIDATION TEST RESULTS

ASTM D-2435

Checked by: PZ

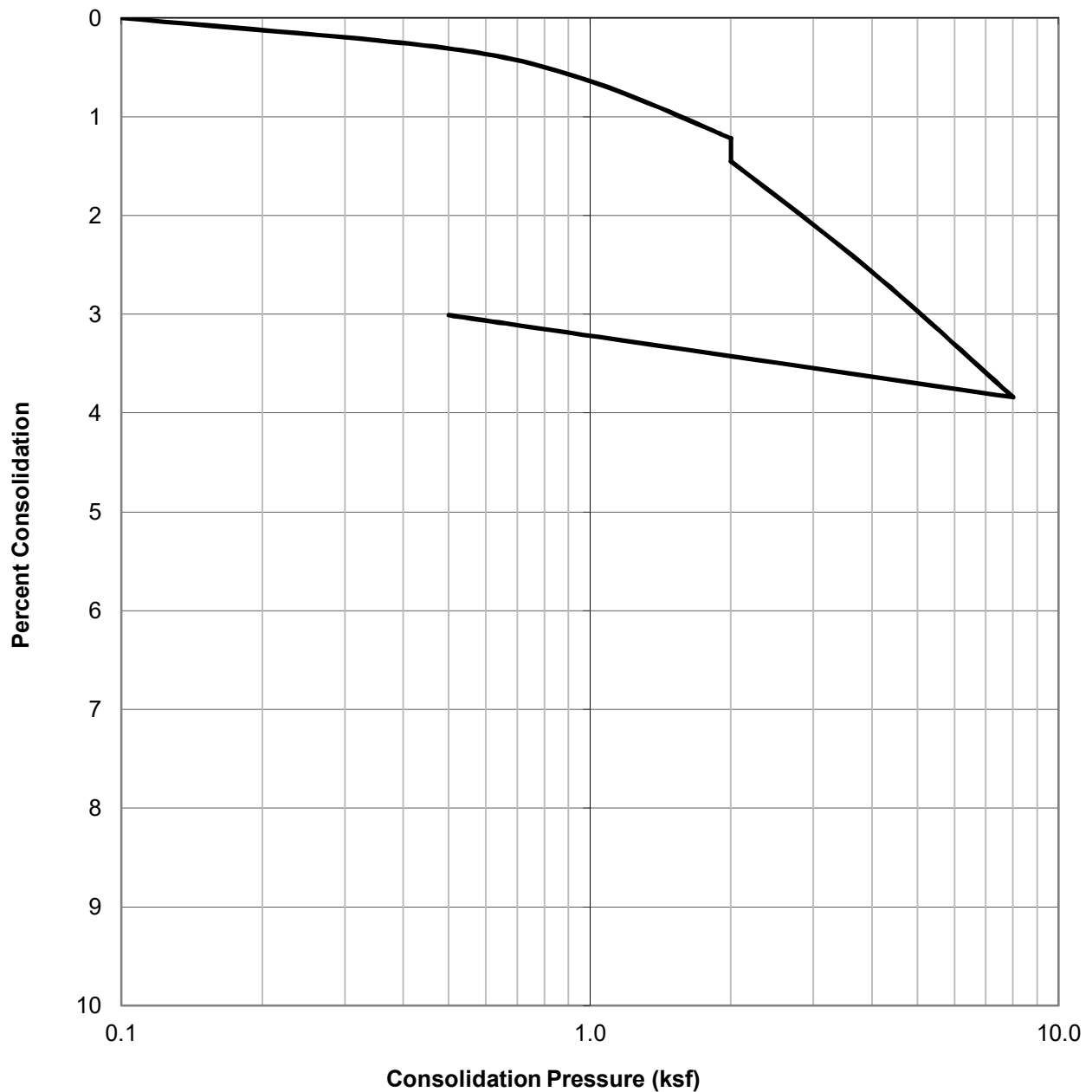
Project No.: T2746-99-11

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Figure B4

WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B4@6	Light Grayish Brown Silt (ML)	112.9	15.2	16.3

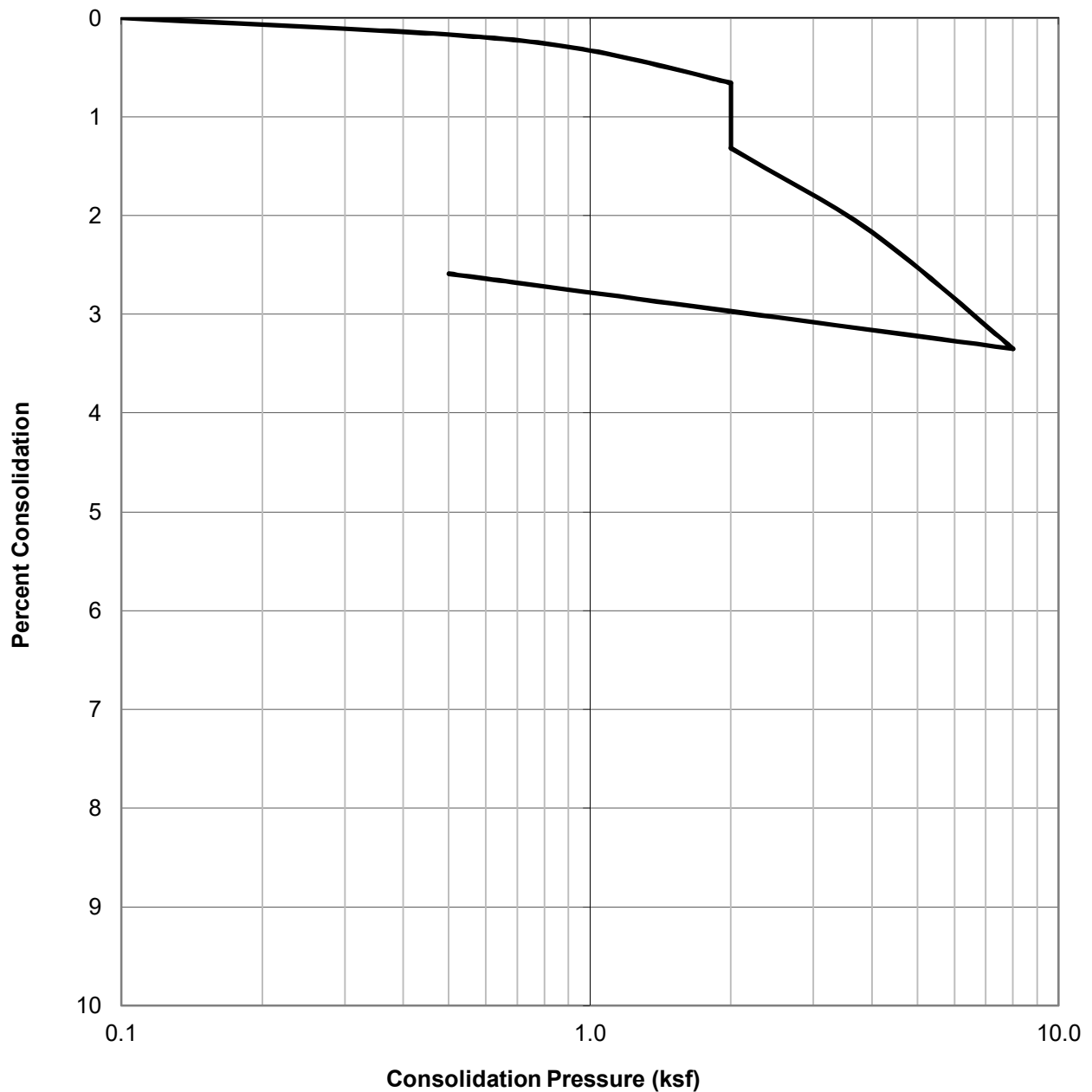


CONSOLIDATION TEST RESULTS
ASTM D-2435

Checked by: PZ

Project No.: T2746-99-11
Chaffey College - Chino Campus
5897 College Park Avenue
Chino, California
Feb. 2020 Figure B5

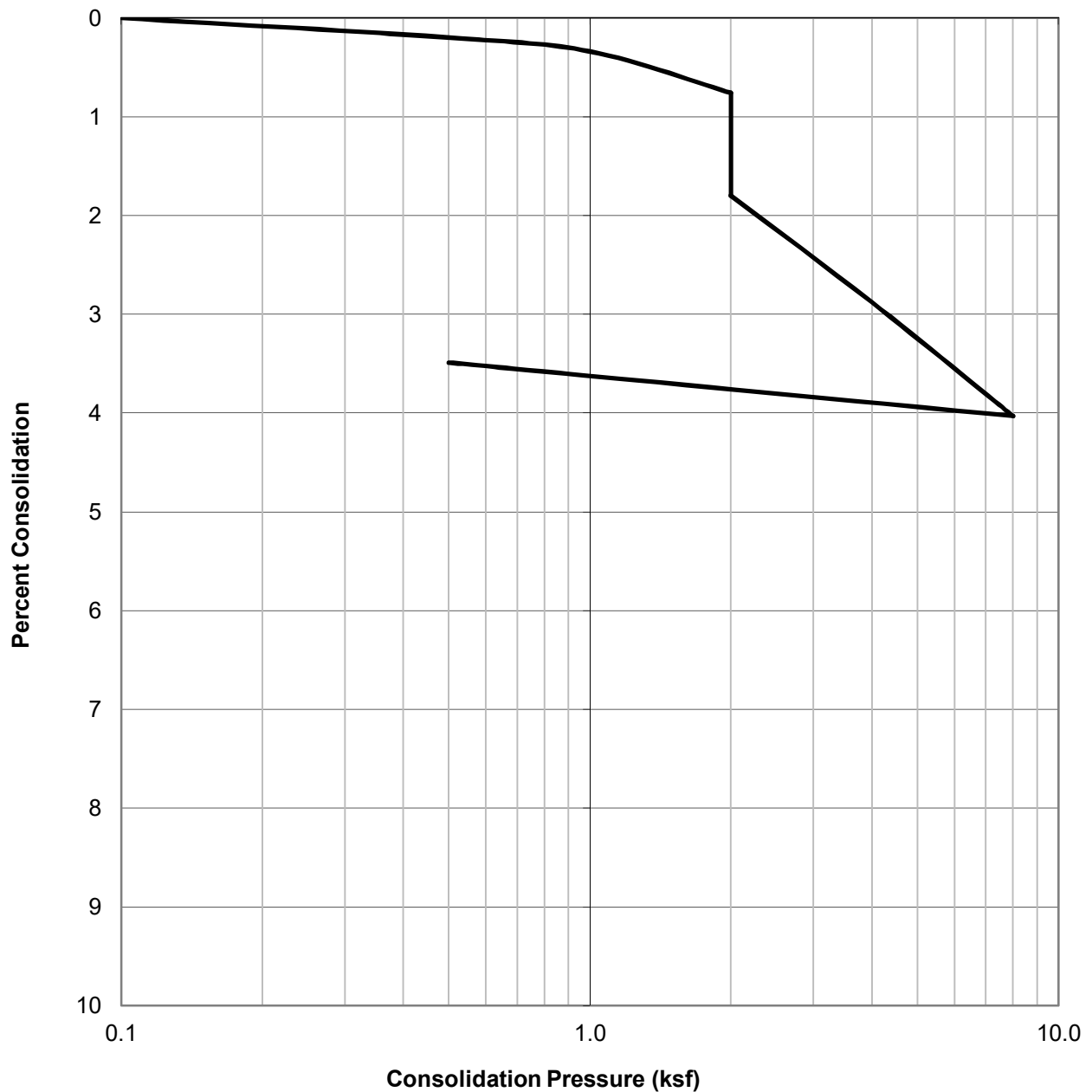
WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B1@7.5	Light Gray Poorly Graded Sand (SP)	116.9	8.4	13.9

	CONSOLIDATION TEST RESULTS ASTM D-2435	Project No.: T2746-99-11	
		Chaffey College - Chino Campus 5897 College Park Avenue Chino, California	
	Checked by: PZ	Feb. 2020	Figure B6

WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B1@10	Light Gray Poorly Graded Sand (SP)	105.0	4.9	17.5

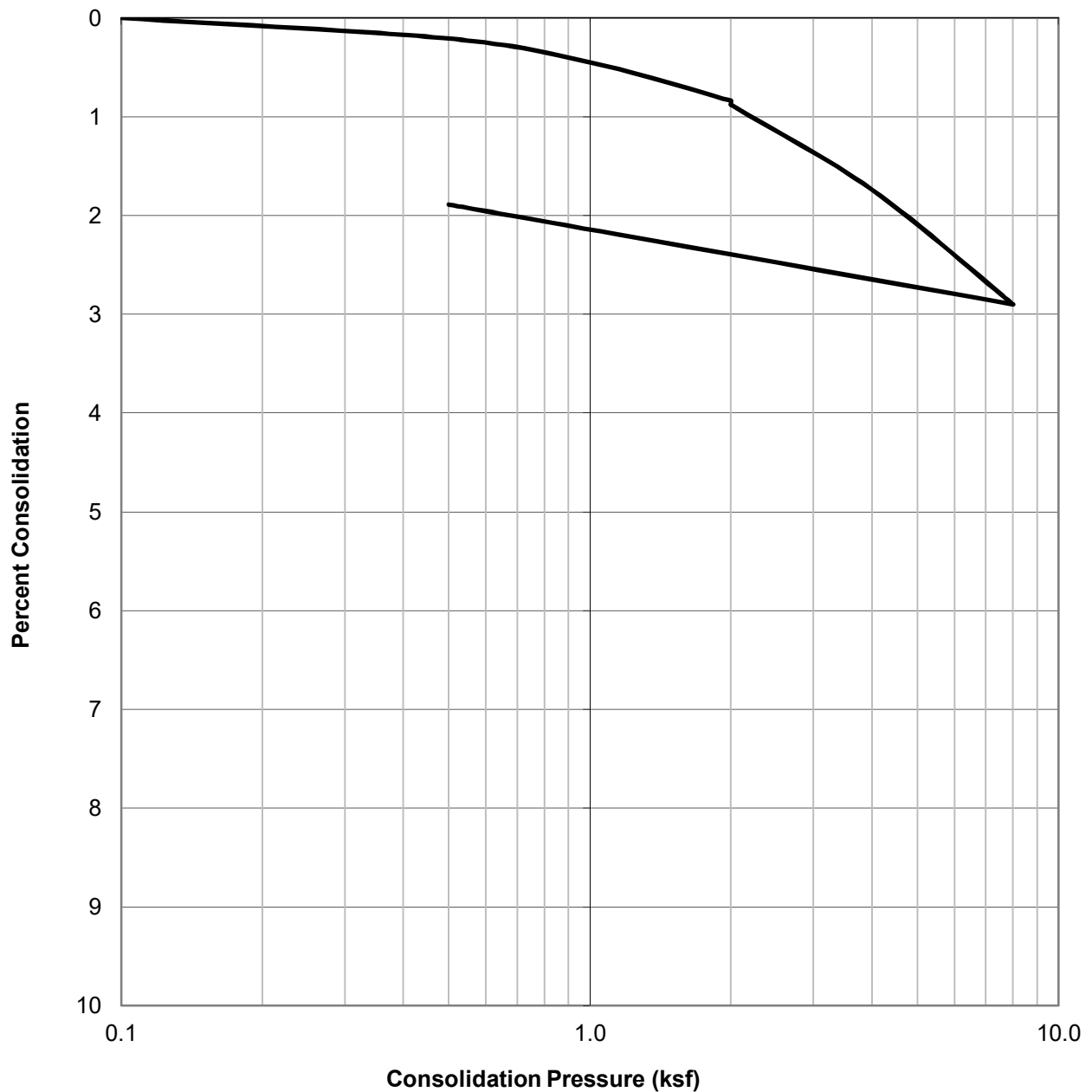


CONSOLIDATION TEST RESULTS
ASTM D-2435

Checked by: PZ

Project No.: T2746-99-11
Chaffey College - Chino Campus
5897 College Park Avenue
Chino, California
Feb. 2020 Figure B7

WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B4@12	Grayish Brown Silty Sand (SM)	112.0	17.1	17.6

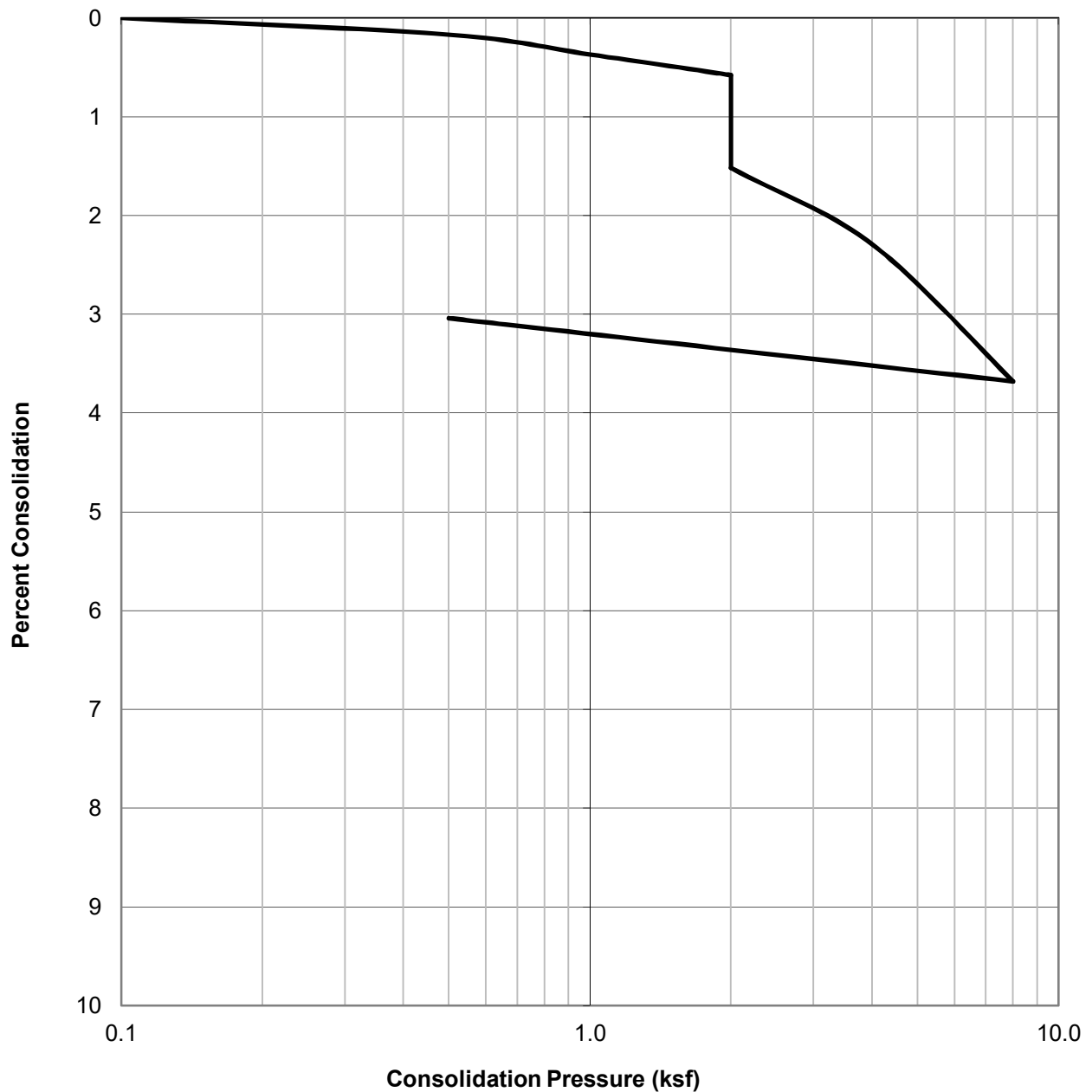


CONSOLIDATION TEST RESULTS
ASTM D-2435

Checked by: PZ

Project No.: T2746-99-11
Chaffey College - Chino Campus
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Chino, California
Feb. 2020 Figure B8

WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B1@15	Dark Brown Silt (ML)	115.8	9.4	14.0



CONSOLIDATION TEST RESULTS

ASTM D-2435

Checked by: PZ

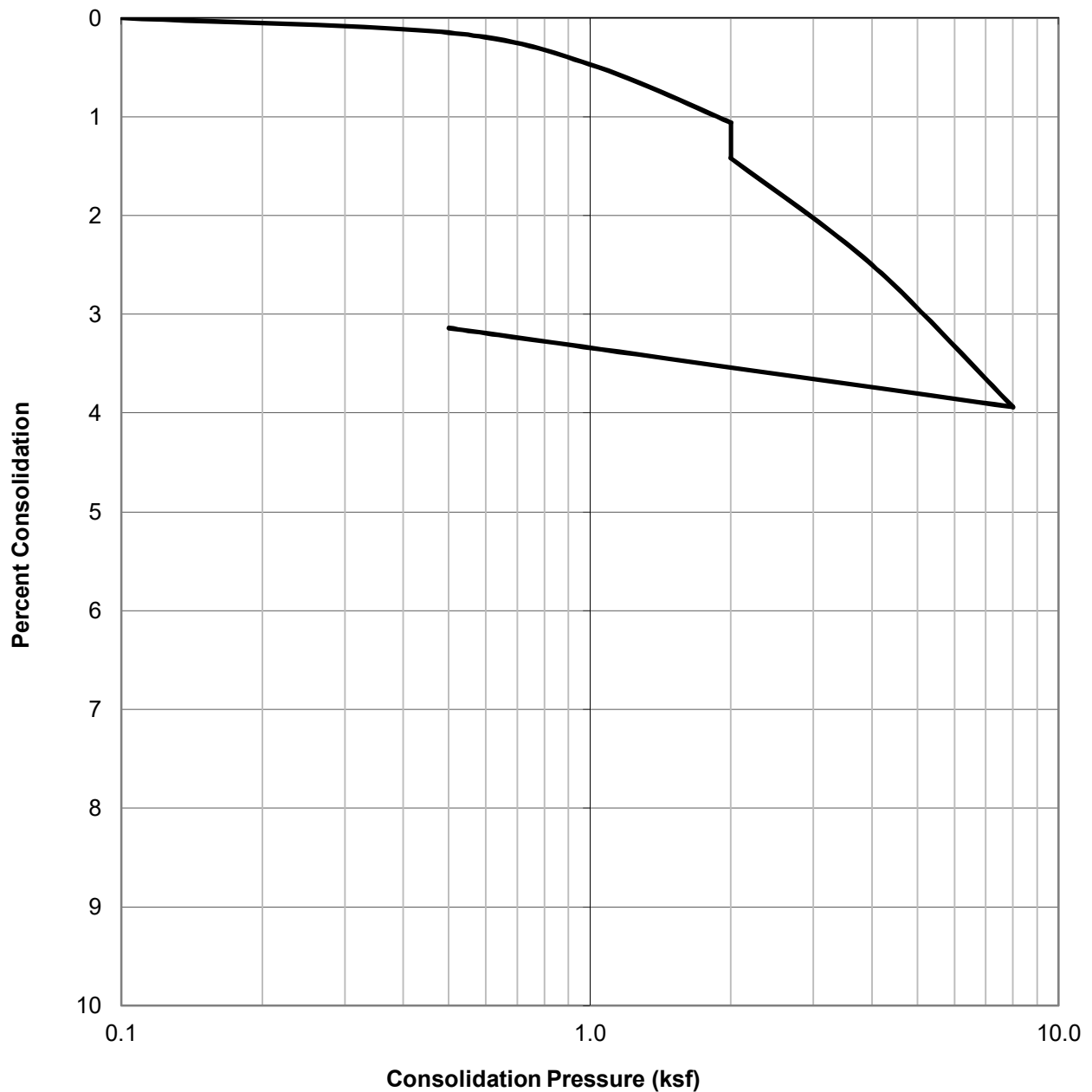
Project No.: T2746-99-11

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Figure B9

WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B1@20	Light Yellowish Brown Sand (SP)	107.4	11.7	18.2



CONSOLIDATION TEST RESULTS

ASTM D-2435

Checked by: PZ

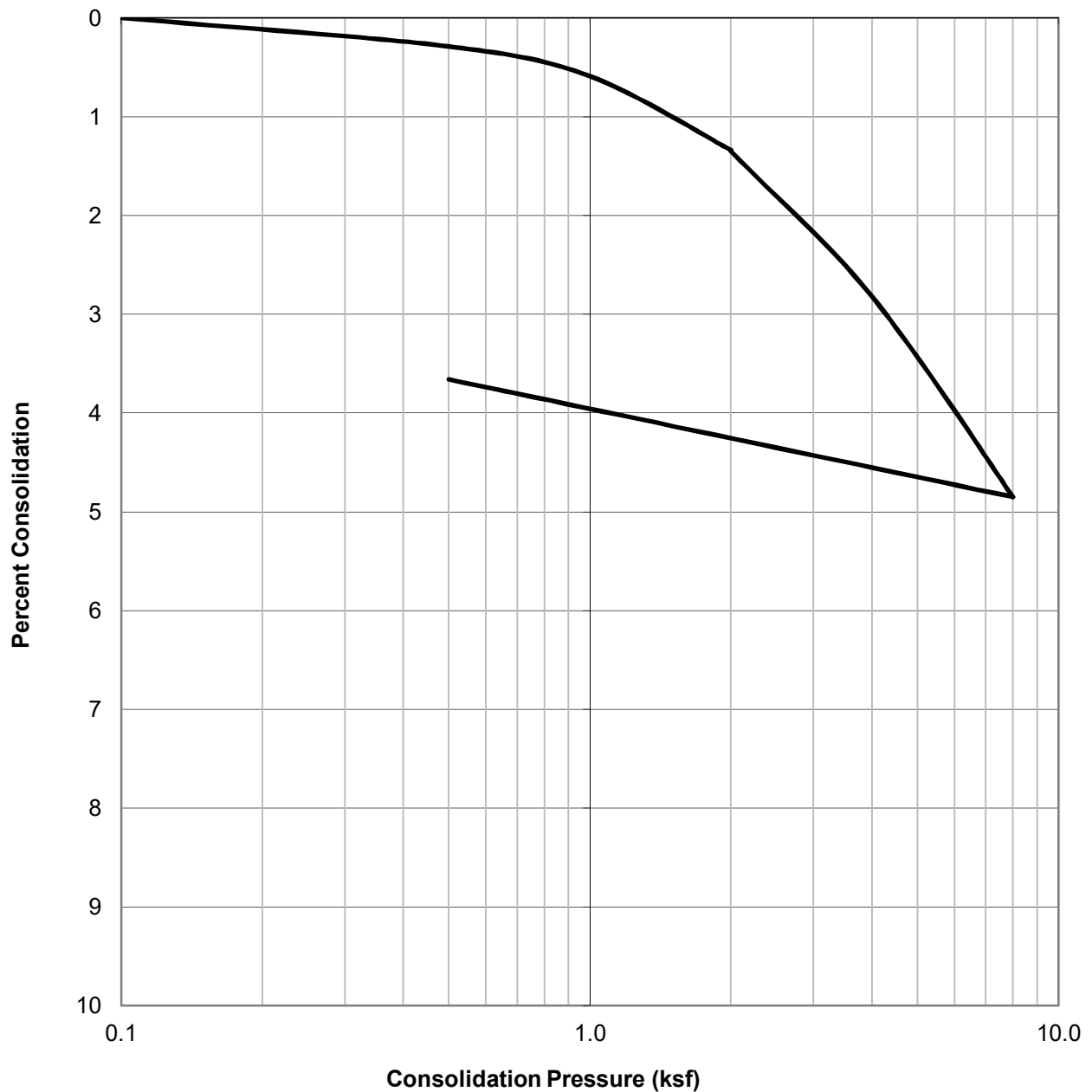
Project No.: T2746-99-11

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Feb. 2020

Figure B10

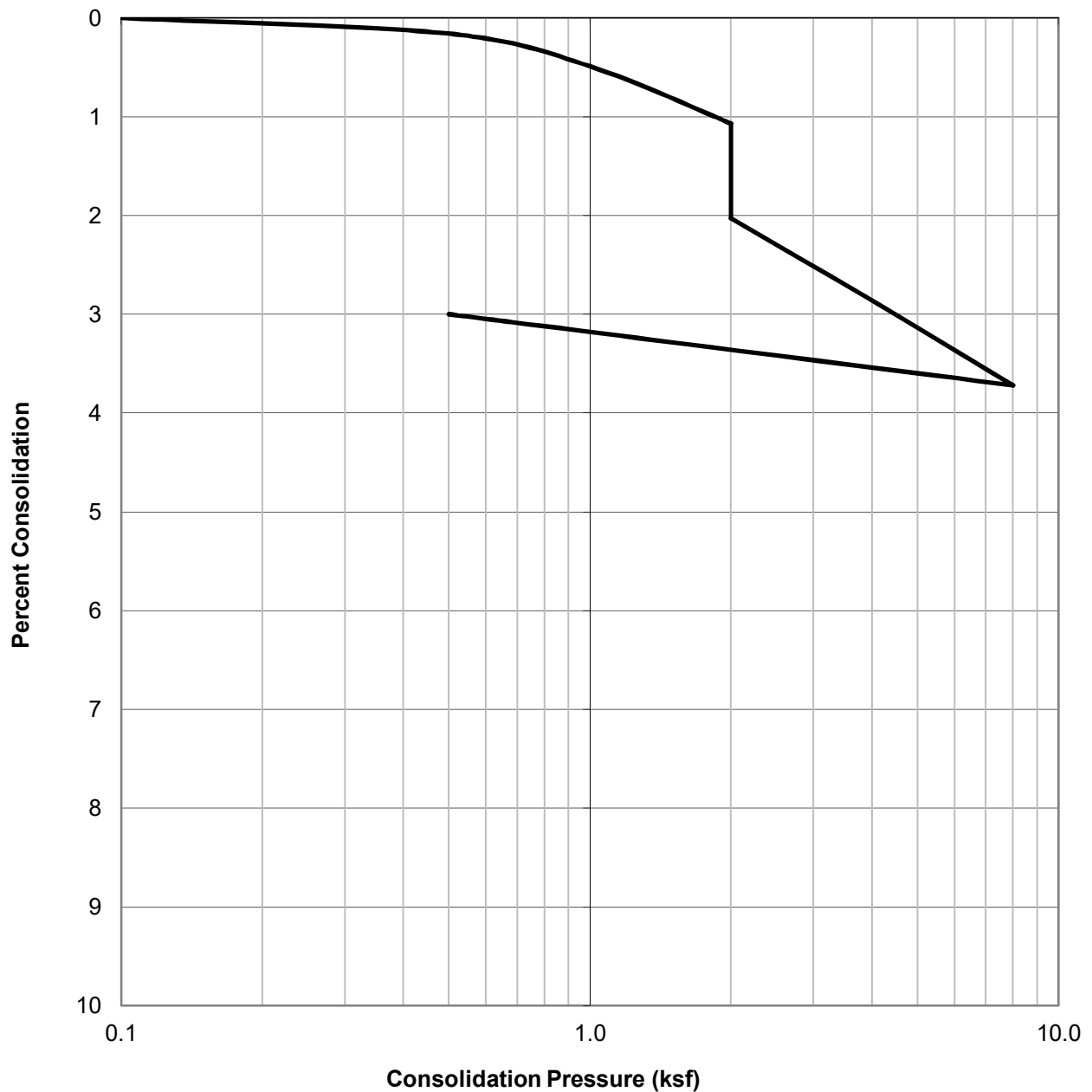
WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B4@25	Yellowish Brown Sand (SP)	100.8	24.1	23.6

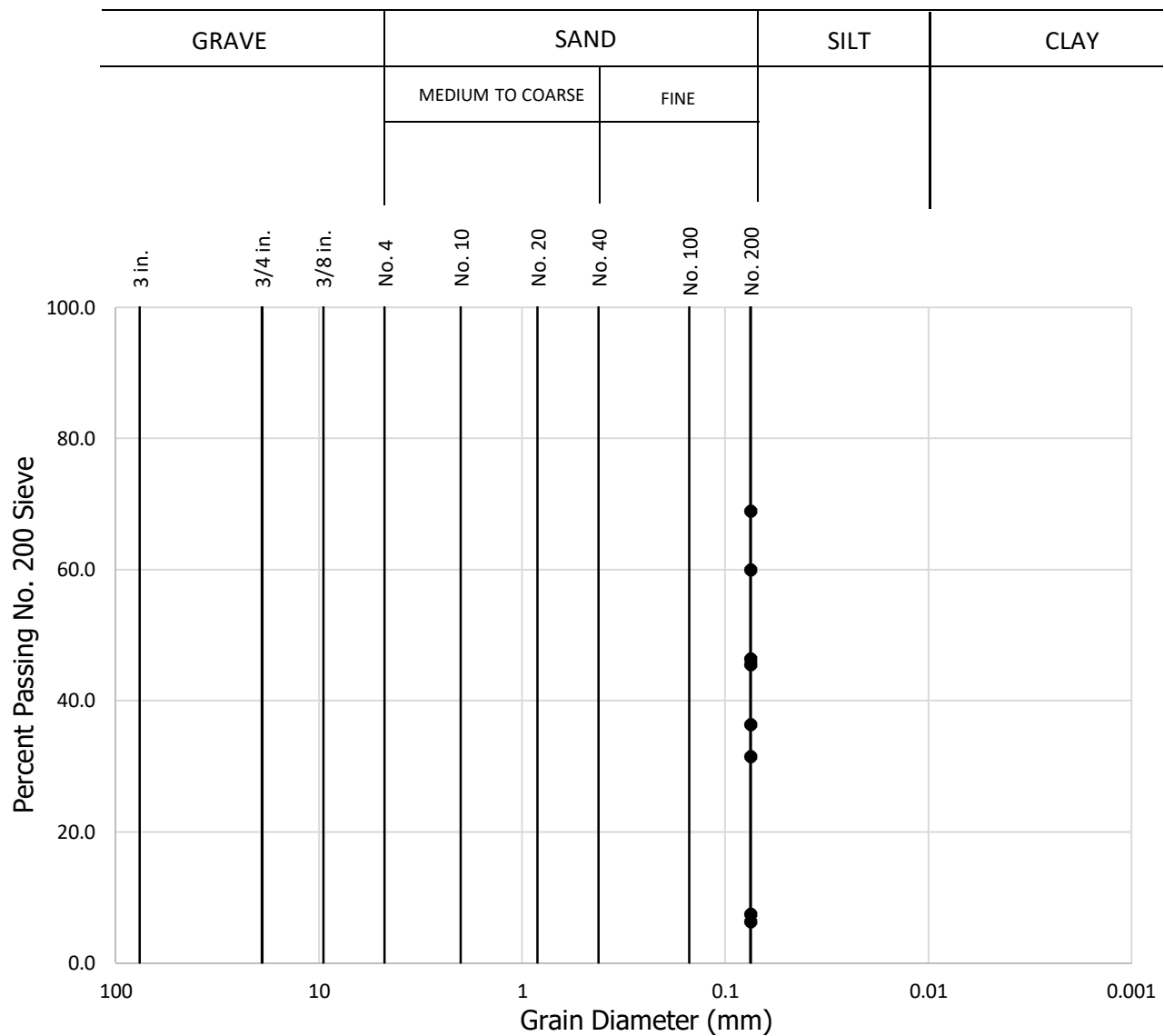
	CONSOLIDATION TEST RESULTS ASTM D-2435	Project No.:	T2746-99-11
		Chaffey College - Chino Campus 5897 College Park Avenue Chino, California	
	Checked by: PZ	Feb. 2020	Figure B11

WATER ADDED AT 2.0 KSF



SAMPLE ID.	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)
B4@30	Yellowish Brown Sand (SP)	108.7	7.6	15.6

	CONSOLIDATION TEST RESULTS ASTM D-2435	Project No.: T2746-99-11
		Chaffey College - Chino Campus 5897 College Park Avenue Chino, California
	Checked by: PZ	Feb. 2020 Figure B12



Sample No.	Percent Passing No. 200 Sieve
B5 @ 2.5'	31.5
B5 @ 7.5'	46.4
B5 @ 12.5'	36.3
B5 @ 17.5'	7.4
B5 @ 22.5'	6.2
B5 @ 27.5'	68.9
B5 @ 30'	60.0
B5 @ 32.5'	45.5



GRAIN SIZE ANALYSIS
ASTM D-1140

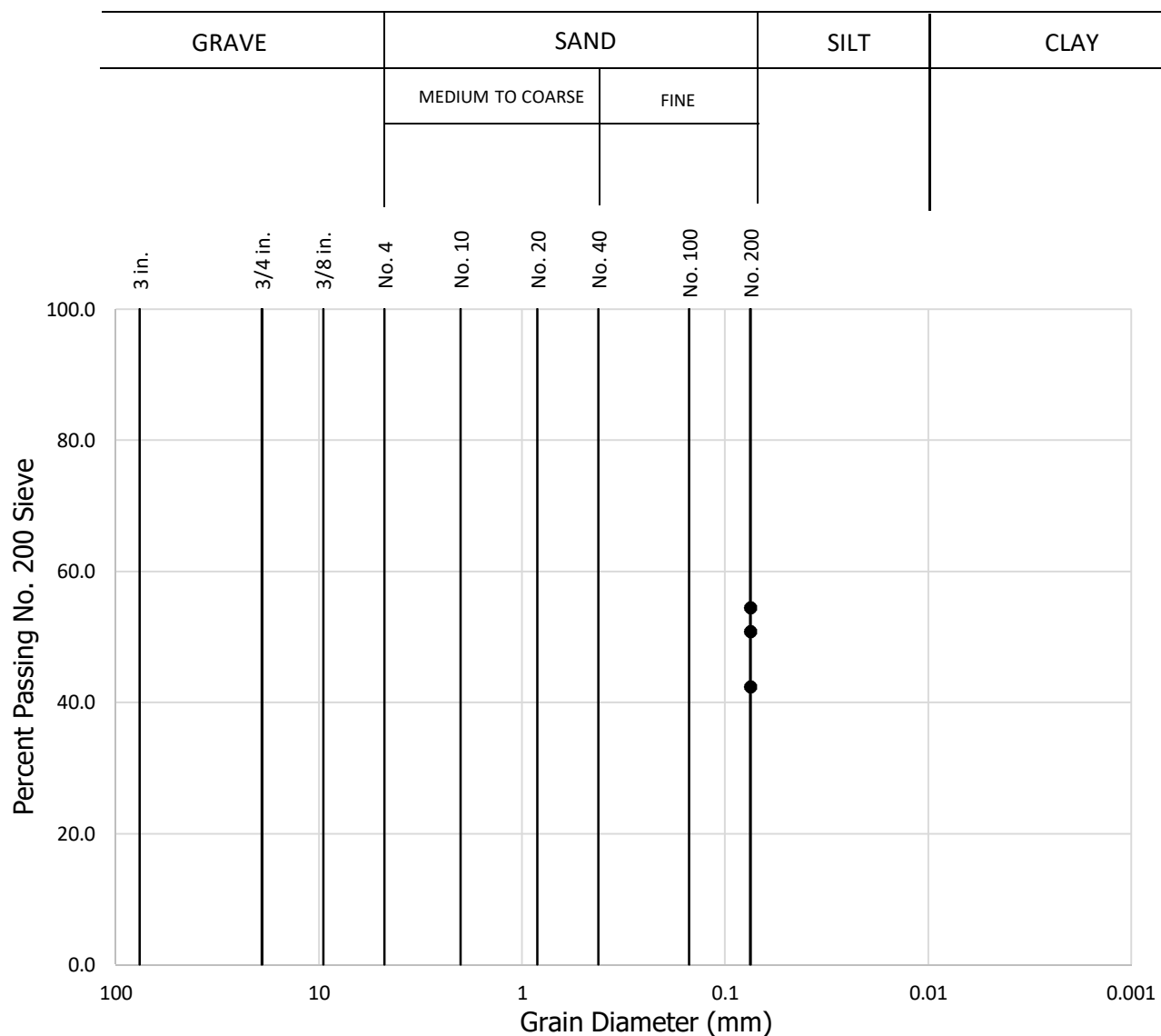
Checked by: PZ

Project No.: T2746-99-11

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Figure B13



Sample No.	Percent Passing No. 200 Sieve
B5 @ 42.5'	42.4
B5 @ 47.5'	50.8
B5 @ 50'	54.4



GRAIN SIZE ANALYSIS
ASTM D-1140

Checked by: PZ

Project No.: T2746-99-11

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Figure B14

B5@0-5'

MOLDED SPECIMEN		BEFORE TEST	AFTER TEST
Specimen Diameter	(in.)	4.0	4.0
Specimen Height	(in.)	1.0	1.0
Wt. Comp. Soil + Mold	(gm)	724.1	763.8
Wt. of Mold	(gm)	367.9	367.9
Specific Gravity	(Assumed)	2.7	2.7
Wet Wt. of Soil + Cont.	(gm)	487.5	763.8
Dry Wt. of Soil + Cont.	(gm)	447.0	308.1
Wt. of Container	(gm)	187.5	367.9
Moisture Content	(%)	15.6	28.5
Wet Density	(pcf)	107.4	119.3
Dry Density	(pcf)	92.9	92.8
Void Ratio		0.8	0.8
Total Porosity		0.4	0.4
Pore Volume	(cc)	92.9	92.9
Degree of Saturation	(%) [S_{meas}]	52.2	94.5

Date	Time	Pressure (psi)	Elapsed Time (min)	Dial Readings (in.)
1/28/2020	10:00	1.0	0	0.1785
1/28/2020	10:10	1.0	10	0.178
Add Distilled Water to the Specimen				
1/29/2020	10:00	1.0	1430	0.178
1/29/2020	11:00	1.0	1490	0.178

Expansion Index (EI meas) =	0
Expansion Index (Report) =	0

Expansion Index, EI_{50}	CBC CLASSIFICATION *	UBC CLASSIFICATION **
0-20	Non-Expansive	Very Low
21-50	Expansive	Low
51-90	Expansive	Medium
91-130	Expansive	High
>130	Expansive	Very High

* Reference: 2016 California Building Code, Section 1803.5.3

** Reference: 1997 Uniform Building Code, Table 18-I-B.

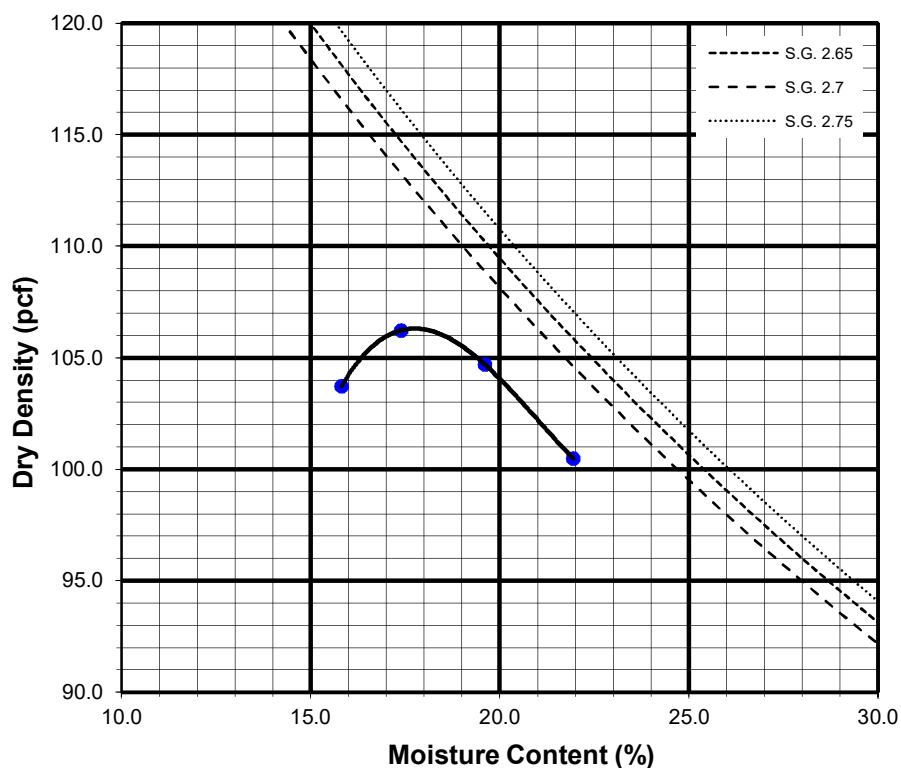
	EXPANSION INDEX TEST RESULTS ASTM D-4829	Project No.:	T2746-99-11
		Chaffey College - Chino Campus 5897 College Park Avenue Chino, California	
	Checked by: PZ	Feb. 2020	Figure B15

Sample No:


B5@0-5'	Grayish Brown Silty Sand (SM)
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TEST NO.		1	2	3	4	5	6
Wt. Compacted Soil + Mold	(g)	5962	6031	6039	5998		
Weight of Mold	(g)	4148	4148	4148	4148		
Net Weight of Soil	(g)	1814	1883	1891	1851		
Wet Weight of Soil + Cont.	(g)	604.3	669.1	658.8	623.8		
Dry Weight of Soil + Cont.	(g)	538.9	591.9	574.6	535.8		
Weight of Container	(g)	125.3	147.7	145.2	134.7		
Moisture Content	(%)	15.8	17.4	19.6	21.9		
Wet Density	(pcf)	120.1	124.7	125.2	122.5		
Dry Density	(pcf)	103.7	106.2	104.7	100.5		

Maximum Dry Density (pcf)	106.5	Optimum Moisture Content (%)	18.0
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Preparation Method: A

	MODIFIED COMPACTION TEST OF SOILS		Project No.: T2746-99-11
	ASTM D-1557		Chaffey College - Chino Campus 5897 College Park Avenue Chino, California
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SUMMARY OF LABORATORY POTENTIAL
OF HYDROGEN (pH) AND RESISTIVITY TEST RESULTS
CALIFORNIA TEST NO. 643

Sample No.	pH	Resistivity (ohm centimeters)
B5 @ 0-5'	7.6	1700 (Corrosive)

SUMMARY OF LABORATORY CHLORIDE CONTENT TEST RESULTS
EPA NO. 325.3

Sample No.	Chloride Ion Content (%)
B5@0-5'	0.009

SUMMARY OF LABORATORY WATER SOLUBLE SULFATE TEST RESULTS
CALIFORNIA TEST NO. 417

Sample No.	Water Soluble Sulfate (% SQ ₄)	Sulfate Exposure*
B5@0-5'	0.000	S0

	CORROSIVITY TEST RESULTS		Project No.: T2746-99-11
			Chaffey College - Chino Campus 5897 College Park Avenue Chino, California
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