

PROJECT MANUAL CCC-041

Public Safety Building UG Electrical Pathways

Compton Community College District
Compton, California

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NOTICE TO CONTRACTORS CALLING FOR BIDS

DISTRICT	COMPTON COMMUNITY COLLEGE DISTRICT
PROJECT DESCRIPTION	Public Safety Building – UG Electrical Pathway CCC-041
LATEST TIME/DATE FOR SUBMISSION OF BID PROPOSALS	2:00 PM Tuesday, October 24, 2017
LOCATION FOR SUBMISSION OF BID PROPOSALS	COMPTON COMMUNITY COLLEGE DISTRICT 1111 East Artesia Boulevard Compton, CA 90221 Building: _Business Services Office/Room:
LOCATION FOR OBTAINING BID AND CONTRACT DOCUMENTS	The District website for no charge – see link below.

NOTICE IS HEREBY GIVEN that the above-named Compton Community College District, through its Board of Trustees ("the District") will accept Bid Proposals for the Contract for **Campus Public Safety Building – UG Electrical Pathway** ("the Work").

- 1. <u>Submittal of Bid Proposals</u>. All Bid Proposals shall be submitted on forms furnished by the District at or prior to the date and time set forth above.
- 2. <u>Bid and Contract Documents</u>. The Bid and Contract Documents can be obtained at the Districts website (link below) for no charge:

http://district.compton.edu/administration/businessadmin/Bid_Proposal_Requests.asp

- 3. <u>Documents Accompanying Bid Proposal</u>. Each Bid Proposal shall be accompanied by: (i) the required Bid Security; (ii) Subcontractors List; (iii) Non-Collusion Affidavit; (iv) Statement of Bidder's Qualifications; and (v) Verification of Contractor and Subcontractor DIR Registration.
- 4. Prevailing Wage Rates. The Contractor and all Subcontractors shall pay not less than the applicable prevailing wage rate for the classification(s) of labor provided by their respective workers; prevailing wage rates are available for review at http://www.dir.ca.gov/dlsr/statistics research.html. During the Work, the Department of Industrial Relations ("DIR") will monitor compliance with prevailing wage rate requirements and enforce the Contractor's prevailing wage rate obligations.
- 5. <u>Bidder and Subcontractors DIR Registered Contractor Status</u>. Each Bidder must be a DIR Registered Contractor when submitting a Bid Proposal. The Bid Proposal of a Bidder who is not a DIR Registered Contractor will be rejected for non-responsiveness. All Subcontractors identified in a Bidder's Subcontractors' List must be DIR Registered contractors at the time the Bid Proposal is submitted. The foregoing notwithstanding, a Bid Proposal is not subject to rejection for non-responsiveness for listing Subcontractor(s) on the Subcontractors List who is/are not DIR Registered contractors if such Subcontractor(s) complete DIR Registration pursuant to Labor Code §1771.1(c)(1) or (2). If any listed Subcontractor(s) who is/are not DIR Registered contractors and

such Subcontractor(s) do not become DIR Registered pursuant to Labor Code §1771.1(c)(1) or (2), but the Bidder, if awarded the Contract, must request consent of the District to substitute a DIR Registered Subcontractor for the non-DIR Registered Subcontractor pursuant to Labor Code §1771.1(c)(3), without adjustment of the Contract Price or the Contract Time.

- 6. <u>Contractors' License Classification</u>. The District requires that Bidders possess the following classification(s) of California Contractors License at the time that the Contract for the Work is awarded C-10, A and/or B General Building.
- 7. <u>Contract Time</u>. Substantial Completion of the Work shall be achieved as set forth in the Contract Documents; Liquidated Damages will be assessed for delayed Substantial Completion.
- 8. <u>Bid Security</u>. Each Bid Proposal shall be accompanied by Bid Security in an amount not less than ten percent (10%) of the maximum amount of the Bid Proposal, inclusive of any additive Alternate Bid Item(s). A Bid Proposal not accompanied by the required Bid Security is non-responsive and will be rejected by the District.
- 9. <u>Alternate Bid Items</u>. If the bidding include(s) Alternate Bid Items for which each Bidder must propose pricing for each Alternate Bid Item, the District's selection of Alternate Bid Items for determination of the lowest bid shall be as set forth in the Instructions to Bidders.
- 10. <u>No Withdrawal of Bid Proposals</u>. Bid Proposals shall not be withdrawn by any Bidder for sixty (60) days after the opening of Bid Proposals. During this time, all Bidders shall guarantee prices quoted in their respective Bid Proposals.
- 11. <u>Job-Walk</u>. The District will conduct a Non-Mandatory Job Walk on Thursday, October 12, 2017 beginning at 2:00 PM Bidders are to meet at the flag pole next to the Administration Building for the Job Walk. If the Job Walk is mandatory, the Bid Proposal submitted by a Bidder whose representative(s) did not attend the entirety of the Mandatory Job Walk will be rejected by the District as being non-responsive.
- 12. <u>Pre-Bid Inquiries</u>. Bidders may submit pre-bid inquiries or clarification requests no later than 2:00 PM on October 16, 2017. Pre-bid inquiries or clarification requests shall be submitted via email only to: ckober@pcm3.com with a copy to jbedoya@pcm3.com
- 13. <u>Copies of Agreement and Bonds</u>. The number of required executed copies of the Agreement are THREE (3) The number of required executed copies of the Performance Bond and the Labor & Materials Payment are THREE (3).
- 14. Award of Contract; Waiver of Irregularities. The Contract, if awarded, will be by action of the District's Board of Trustees to the responsible Bidder submitting the lowest priced responsive Bid Proposal. If Alternate Bid Items are included in the bidding, the lowest priced Bid Proposal will be determined on the basis of the Base Bid Proposal or on the Base Bid Proposal and the combination of Alternate Bid Items selected in accordance with the above. The District reserves the right to reject any or all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding.

Advertisement publication dates:

Monday, October 02, 2017 Monday, October 09, 2017

[END OF SECTION]

INSTRUCTIONS FOR BIDDERS

- 1. <u>Bid Proposal</u>. Bid Proposals not conforming to these Instructions for Bidders and the Notice to Contractors Calling for Bids ("Call for Bids") may be deemed non-responsive and rejected.
 - 1.1. Completion of Bid Proposal. Where required, numbers shall be stated by words and figures; words; conflicts between numbers stated in words and in figures are governed by the words. Bid Proposals are non-responsive and will be rejected if: (i) partially completed; (ii) submitted on forms other than those required by the District; (iii) erasures, interlineations or other corrections are not suitably authenticated by the initials of the person(s) signing the Bid Proposal adjacent to such erasure, interlineations or correction; (iv) a Bid Proposal, or portions thereof, is/are determined by the District to be illegible, ambiguous or inconsistent.
 - 1.2. <u>Submittal</u>. Bid Proposals shall be submitted in sealed envelopes bearing on the outside the Bidder's name and address along with an identification of the Work for which the Bid Proposal is submitted. A Bid Proposal is deemed submitted only if the outer envelope containing the Bid Proposal is stamped by the District's date/time stamp machine at the location where Bid Proposals are to be submitted.
 - 1.3. Withdrawal; Modification. No oral modification or withdrawal of a submitted Bid Proposal will be considered; a written request to modify or withdraw a submitted Bid Proposal will be considered only if the written request is received by the District before the public opening of Bid Proposals.
- 2. <u>Bid Security</u>. Each Bid Proposal shall be accompanied by Bid Security in the form of: (i) cash; (ii) certified or cashier's check payable to the District; or (iii) a Bid Bond, in the form and content incorporated into the Contract Documents (the "Bid Security") in an amount not less than ten percent (10%) of the maximum amount of the Bid Proposal. Bid Bonds must conform to the following: (i) the Bid Bond is in the form and content included herein; and (ii) the Surety is an Admitted Surety Insurer under Code of Civil Procedure §995.120; (iii) authorized employees or representatives of the Bidder and Surety execute the Bid Bond and their signatures are duly notarized; (iv) the Surety's representative's authority to bind the Surety is attached to the Bid Bond and duly attested to by the Surety; and (v) all other information required by the form of the Bid Bond is completely and accurately provided.
- 3. <u>Erasures; Inconsistent or Illegible Bid Proposals</u>. Bid Proposals must not contain any erasures, interlineations or other corrections unless the same are suitably authenticated by affixing in the margin immediately opposite such erasure, interlineations or correction the initials of the person(s) signing the Bid Proposal. If a Bid Proposal, or portions thereof, are determined by the District to be illegible, ambiguous or inconsistent, whether by virtue of any erasures, interlineations, corrections or otherwise, the District may reject such a Bid Proposal as being non-responsive.
- 4. Examination of Site and Contract Documents. Each Bidder shall, at its sole cost and expense, inspect the Site and to become fully acquainted with the Contract Documents prior to bid and conditions affecting the Work. The submission of a Bid Proposal is prima facie evidence of the Bidder's full compliance with the foregoing requirements.
- 5. Agreement and Bonds Upon Award of Contract. If the Bidder submitting this Bid Proposal is awarded the Contract, the undersigned will execute and deliver to the District the Contract in the form attached hereto within five (5) calendar days after notification of award of the Contract. Concurrently with delivery of the executed Agreement to the District, the Bidder awarded the Contract shall deliver to the District: (a) Certificates of Insurance evidencing all insurance coverage required under the Contract Documents; (b) the Performance Bond; (c) the Labor and Material Payment Bond; (d) the Certificate of Workers' Compensation Insurance; (e) the Drug-

Free Workplace Certificate; (f) Fingerprint Certificates; and (g) Roof Project Financial Disclosure Certificates, if required. Failure of the Bidder awarded the Contract to strictly comply with the preceding may result in the District's rescission of the award of the Contract and/or forfeiture of the Bidder's Bid Security. In such event, the District may, in its sole and exclusive discretion elect to award the Contract to the responsible Bidder submitting the next lowest Bid Proposal, or to reject all Bid Proposals. The required number of executed copies of the Agreement and the form and content of the Performance Bond and the Payment Bond and other documents or instruments required at the time of execution of the Agreement are specified in the Contract Documents.

- 6. Pre-Bid Questions; Contract Document Interpretation and Modifications. Any Bidder in doubt as to the true meaning of any part of the Contract Documents; finds discrepancies, errors or omissions therein; or finds variances in any of the Contract Documents with the Laws ("Pre-Bid Questions"), shall submit a request for an clarification, interpretation or correction thereof using the form of Pre-Bid Inquiry included with the Contract Documents. Bidders are solely and exclusively responsible for submitting Pre-Bid Questions no later than the time/date designated in the Call for Bids. Responses to Pre-Bid Questions will be by written addendum issued by, or on behalf of, the District. A copy of any such addendum will be mailed or otherwise delivered to each Bidder receiving a set of the Contract Documents. Failure to request interpretation or clarification of any portion of the Contract Documents pursuant to the foregoing is a waiver of any discrepancy, defect or conflict therein.
- 7. <u>Interpretation of Drawings, Specifications or Contract Documents</u>. Interpretations, modifications or corrections of the Contract Documents will be by written addendum issued by or on behalf of the District. No person is authorized to render an oral interpretation or correction of any portion of the Contract Documents to any Bidder, and no Bidder is authorized to rely on any such oral interpretation or correction.
- 8. <u>Bidder's Assumptions</u>. The District is not responsible for any assumptions made or used by the Bidder in calculating its Bid Proposal Amount including, without limitation, assumptions regarding costs of labor, materials, equipment or substitutions/alternatives for any material, equipment, product, item or system incorporated into or forming a part of the Work which have not been previously expressly approved and accepted by the District. The successful Bidder, upon award of the Contract by the District, if any, will be required to complete the Work for the amount bid in the Bid Proposal within the Contract Time and in accordance with the Contract Documents.
- 9. <u>District's Right to Modify Contract Documents</u>. Before the public opening and reading of Bid Proposals, the District may modify the Work, the Contract Documents, or portion(s) thereof by the issuance of written addenda disseminated to all Bidders who have obtained a copy of the Specifications, Drawings and Contract Documents pursuant to the Call for Bids. Failure of a Bidder to acknowledge addenda in its Bid Proposal will render the Bid Proposal non-responsive and rejected.
- 10. <u>Bidders Interested in More Than One Bid Proposal; Non-Collusion Affidavit</u>. No person, firm, corporation or other entity shall submit or be interested in more than one Bid Proposal for the same Work; provided, however, that a person, firm or corporation that has submitted a sub-proposal to a Bidder or who has quoted prices for materials to a Bidder is not thereby disqualified from submitting a sub-proposal, quoting prices to other Bidders or submitting a Bid Proposal for the proposed Work to the District. Failure of a Bidder to submit a completed and executed Non-Collusion Affidavit with its Bid Proposal will render the Bid Proposal non-responsive.

- 11. <u>Award of Contract</u>. The District reserves the right to reject any and all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding. Award of the Contract, if made by the District through action of its Board of Trustees, will be to the responsible Bidder submitting the lowest priced responsive Bid Proposal on the basis of the Base Bid Proposal or the Base Bid Proposal and Alternate Bid Items, if any, selected in accordance with these Instructions for Bidders.
 - 11.1. Selection of Alternate Bid Items.
 - ☐ The lowest bid shall be the lowest bid price on the base contract without consideration of the prices on the additive or deductive alternate items.
 - 11.2. <u>Alternate Bid Items Not Included in Award of Contract</u>. Bidders are referred to the provisions of the Contract Documents permitting the District, during performance of the Work, add or delete from the scope of the Work any or all of the Alternate Bid Items with the cost or credit of the same being the amount(s) set forth by the successful Bidder in its Alternate Bid Items Proposal.
 - 11.3. <u>Responsive Bid Proposal</u>. A responsive Bid Proposal shall mean a Bid Proposal which conforms, in all material respects, to the Bid and Contract Documents.
 - 11.4. Responsible Bidder. A responsible Bidder is a Bidder who has the capability in all respects, to perform fully the requirements of the Contract Documents and the moral and business integrity and reliability which will assure good faith performance. In determining responsibility, the following criteria will be considered: (i) the ability, capacity and skill of the Bidder to perform the Work of the Contract Documents; (ii) whether the Bidder can perform the Work promptly and within the time specified, without delay or interference; (iii) the character, integrity, reputation, judgment, experience and efficiency of the Bidder; (iv) the quality of performance of the Bidder on previous contracts, by way of example only, the following information will be considered: (a) the administrative, consultant or other cost overruns incurred by the District on previous contracts with the Bidder; (b) the Bidder's compliance record with contract general conditions on other projects; (c) the submittal by the Bidder of excessive and/or unsubstantiated extra cost proposals and claims on other projects; (d) the Bidder's record for completion of work within the contract time and the Bidder's compliance with the scheduling and coordination requirements on other projects; (e) the Bidder's demonstrated cooperation with the District and other contractors on previous contracts; (f) whether the work performed and materials furnished on previous contracts was in accordance with the Contract Documents; (v) the previous and existing compliance by the Bidder with laws and ordinances relating to contracts; (vi) the sufficiency of the financial resources and ability of the Bidder to perform the work of the Contract Documents; (vii) the quality, availability and adaptability of the goods or services to the particular use required; (viii) the ability of the Bidder to provide future maintenance and service for the warranty period of the Contract; (ix) whether the Bidder is in arrears on debt or contract or is a defaulter on any surety bond; (x) such other information as may be secured by the District having a bearing on the decision to award the Contract, to include without limitation the ability, experience and commitment of the Bidder to properly and reasonably plan, schedule, coordinate and execute the Work of the Contract Documents and whether the Bidder has ever been debarred from bidding or found ineligible for bidding on any other projects. The ability of a Bidder to provide the required bonds will not of itself demonstrate responsibility of the Bidder.
- 12. <u>Subcontractors</u>. Each Bidder shall submit a list of its Subcontractors for the Work as required by

California Public Contract Code §§4100 et seq. on the form furnished. If a Bidder requires bonds of its Subcontractor(s), such requirements shall be specified in the Bidder's written or published request for sub-bids.

- 13. <u>Workers' Compensation Insurance</u>. Pursuant to California Labor Code §3700, the successful Bidder shall secure Workers' Compensation Insurance for its employees engaged in the Work of the Contract. The successful Bidder shall sign and deliver to the District the Certificate of Workers Compensation Insurance incorporated into the Contract Documents.
- 14. <u>Bid Security Return</u>. The Bid Security of the Bidders submitting the three (3) lowest priced responsive Bid Proposals will be held by the District for ten (10) days after the period for which Bid Proposals must be held open, as set forth the Call for Bids, or until posting by the successful Bidder(s) of the bonds, certificates of insurance required and return of executed copies of the Agreement, whichever first occurs, at which time the Bid Security of such other Bidders will be returned to them.
- 15. Forfeiture of Bid Security. If the Bidder awarded the Contract fails or refuses to execute the Agreement within five (5) calendar days from the date of receiving notification that it is the Bidder to whom the Contract has been awarded, the District may declare the Bidder's Bid Security forfeited as damages caused by the failure of the Bidder to enter into the Contract and may thereupon award the Contract for the Work to the responsible Bidder submitting the next lowest priced Bid Proposal or may call for new bids, in its sole and exclusive discretion.
- 16. <u>Contractor's License</u>. No Bid Proposal will be considered from a Bidder who, at the time Bid Proposals are opened, is not licensed to perform the Work of the Contract Documents, in accordance with the Contractors' License Law, California Business & Professions Code §§7000 et seq. This requirement will not be waived by the District or its Board of Trustees.
- 17. <u>Bidder's Qualifications</u>. Each Bidder shall submit with its Bid Proposal the form of Statement of Qualifications, which is included within the Contract Documents. All information required by Statement of Qualifications shall be completely and fully provided. Any Bid Proposal not accompanied by the Statement of Qualifications completed with all information required and bearing the signature of the Bidder's duly authorized representative under penalty of perjury will render the Bid Proposal non-responsive and rejected. The Bid Proposal of a Bidder whose response to any question in the Essential Requirements section of the Statement of Qualifications resulted in a "Not Qualified" status will be rejected for non-responsiveness. If the District determines that any information provided by a Bidder in the Statement of Qualifications is false or misleading, or is incomplete so as to be false or misleading, the District may reject the Bid Proposal submitted by such Bidder as being non-responsive.
- 18. <u>Job-Walk</u>. The District will conduct a Job-Walk at the time(s) and place(s) designated in the Call for Bids. Attendance by representatives of the Bidder's Subcontractors at a Mandatory Job Walk without attendance by a representative of the Bidder is not sufficient to meet the Bidder's obligations hereunder and will render the Bid Proposal of such Bidder to be non-responsive. Notwithstanding the non-compulsory attendance of Bidders at a Non-Mandatory Job Walk, all Bidders are encouraged to attend Non-Mandatory Job Walks.
- 19. <u>Public Records</u>. Bid Proposals and other documents responding to the Call for Bids become the exclusive property of the District upon submittal to the District. At such time as the District issues he Notice of Intent to award the Contract pursuant to these Instructions for Bidders, all Bid Proposals and other documents submitted in response to the Call for Bids become a matter of

public record and shall be thereupon be considered public records, except for information contained in such Bid Proposals deemed to be Trade Secrets (as defined in California Civil Code §3426.1) confidential or proprietary. The District is not liable or responsible for the disclosure of such records, including those exempt from disclosure if disclosure is deemed required by law, by an order of Court, or which occurs through inadvertence, mistake or negligence on the part of the District or its officers, employees or agents. When Bid Proposals are deemed a matter of public record, pursuant to the above, any Bidder or other party shall be afforded access for inspection and/or copying of such Bid Proposals pursuant to the California Access to Public Records Act, California Government Code §§6250, et. seq. If the District is required to defend or otherwise respond to any action or proceeding wherein request is made for the disclosure of the contents of any portion of a Bid Proposal deemed exempt from disclosure hereunder, the Bidder submitting the materials sought by such action or proceeding agrees to defend, indemnify and hold harmless the District in any action or proceeding from and against any liability, including without limitation attorneys' fees arising there from. The party submitting materials sought by any other party shall be solely responsible for the cost and defense in any action or proceeding seeking to compel disclosure of such materials; the District's sole involvement in any such action shall be that of a stakeholder, retaining the requested materials until otherwise ordered by a court of competent jurisdiction.

- 20. <u>Drug Free Workplace Certificate</u>. The successful Bidder will be required to execute a Drug Free Workplace Certificate pursuant to California Government Code §§8350 et seq., concurrently with execution of the Agreement.
- 21. <u>Notice of Intent to Award Contract</u>. Following the public opening and reading of Bid Proposals, the District will issue a Notice of Intent to Award the Contract, identifying the Bidder to whom the District intends to award the Contract and the date/time/place of the District's Board of Trustees meeting at which award of the Contract will be considered.
- 22. Bid Protest. Any Bidder submitting a Bid Proposal to the District may file a protest of the District's intent to award the Contract provided that each and all of the following are complied with: (i) the bid protest is in writing; (ii) the bid protest is filed and received by the District's Chief Business Officer, not more than five (5) calendar days following the date of bid opening; and (iii) the written bid protest sets forth, in detail, all grounds for the bid protest, including without limitation all facts, supporting documentation, legal authorities and argument in support of the grounds for the bid protest; any matters not set forth in the written bid protest shall be deemed waived. All factual contentions must be supported by competent, admissible and credible evidence. Any bid protest not conforming to the foregoing shall be rejected by the District as invalid. Provided that a bid protest is filed in strict conformity with the foregoing, the District's Chief Business Officer, or such individual(s) as may be designated by him/her, shall review and evaluate the basis of the bid protest. Either the Chief Business Officer, or other individual designated by him/her shall provide the bidder submitting the bid protest with a written statement concurring with or denying the bid protest. The rendition of a written statement by the District's Chief Business Officer, (or his/her designee) is an express conditions precedent to the institution of any judicial proceedings relative to the bidding process, the District's intent to award the Contract, the District's disposition of any bid protest or the District's decision to reject all Bid Proposals. If any such judicial proceedings are instituted and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising there from.

[END OF SECTION]

BID PROPOSAL PROJECT: Campus Public Safety Building – UG Electrical Pathway ("the Work")

Bidder Name				
Bidder				
Representative(s)	Name and Title			
Bidder Representative(s) Contact Information	Name and Title Email ———————————————————————————————————	Phone/Fax () Telephone () Fax		
Bidder Mailing Address				
	Address			
	City/State/Zip Code			
California Contractors'	Newstern			
	Number Classification and Expiration Date			
equipment and service		eses to furnish all labor, materials, tools ecordance with the Contract Documents		
	ŕ	Dollars (\$)		
The Bidder confirms that it has checked all of the above figures and understands that neither the District nor any of its agents, employees or representatives shall be responsible for an errors or omissions in this Bid Proposal.				
and is inclusive of, all	items or other matters contained	rms that this Bid Proposal incorporates d in Bid Addenda issued by or on behal ated into this Bid Proposal the following		

1.3. <u>Alternate Bid Items</u>. If the bidding includes Alternate Bid Items, the Bidder's price proposal(s) for Alternate Bid Items is/are set forth in the form of Alternate Bid Item Proposal attached to this Bid Proposal. Price proposal(s) for Alternate Bid Item(s) will not form the basis for the District's award of the Contract unless an Alternate Bid Item is incorporated into the scope of Work of the Contract awarded.

(Initials of Bidder's Representative)

2. <u>Documents Accompanying Bid Proposal</u>. The Bidder has submitted with this Bid Proposal the following: (i) Bid Security; (ii) Subcontractors List; (iii) Statement of Qualifications; (iv) Non-Collusion Affidavit; and (v) DIR Registration Verification. The Bidder acknowledges that if this Bid Proposal and the foregoing documents are not fully in compliance with applicable requirements

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(List Addenda)

- set forth in the Call for Bids, the Instructions for Bidders and in each of the foregoing documents, the Bid Proposal may be rejected for non-responsiveness.
- 3. Award of Contract. Within five (5) days after notification of award of the Contract, the Bidder awarded the Contract shall execute and deliver to the District the Contract in the form attached hereto along with: (i) Certificates of Insurance evidencing all insurance coverages required under the Contract Documents; (ii) the Performance Bond; (iii) the Labor and Material Payment Bond; (iv) the Certificate of Workers' Compensation Insurance; and (v) the Drug-Free Workplace Certificate. Failure of the Bidder awarded the Contract to strictly comply with the preceding may result in the District's recession of the award of the Contract and/or forfeiture of the Bidder's Bid Security. In such event, the District may, in its sole and exclusive discretion elect to award the Contract to the responsible Bidder submitting the next lowest priced Bid Proposal, or to reject all Bid Proposals.
- 4. <u>Contractors' License</u>. The Bidder certifies that: (i) it is duly licensed, in the necessary class(es), for performing the Work of the Contract Documents, as designated by the District; (ii) that such license shall be in full force and effect throughout the duration of the performance of the Work under the Contract Documents; and (iii) that all Subcontractors providing or performing any portion of the Work are and shall remain properly licensed to perform or provide such portion of the Work.
- 5. Agreement to Bidding Requirements and Attorneys' fees. The undersigned Bidder acknowledges and confirms its receipt, review and agreement with, the contractual requirements set forth in this Bid Proposal and the Contract Documents. By executing this Bid Proposal hereinbelow, the Bidder expressly acknowledges and agrees that if the Bidder institutes any legal or equitable proceedings in connection with this Bid Proposal and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising therefrom. This provision shall constitute a binding attorneys' fee agreement in accordance with and pursuant to California Civil Code §1717 which shall be enforceable against the Bidder and the District. This attorney fee provision shall be solely limited to legal or equitable proceedings arising out of a bid protest or the bidding process and shall not extend to or have any force and effect on the Contract for the Work or to modify the terms of the Contract Documents for the Work.
- 6. Acknowledgment and Confirmation. The undersigned Bidder acknowledges its receipt, review and understanding of the Drawings, the Specifications and other Contract Documents pertaining to the proposed Work. By submitting this Bid Proposal, the undersigned Bidder certifies that the Contract Documents are, in its opinion, adequate, feasible, accurate and complete for the Bidder to complete the Work in a workmanlike manner within the Contract Time and for the price proposed herein. The undersigned Bidder warrants and represents to the District that it has, or has available, all necessary equipment, personnel, materials, facilities and technical and financial ability to complete the Work for the amount bid herein, within the Contract Time and in accordance with the Contract Documents.

Dated:	
By:	
,	(Signature of Bidder's Authorized Officer or Representative)
	(Typed or Printed Name)
Title:	

ALTERNATE BID ITEMS PROPOSAL

Camp	ous Public Safety Building – UG Electrical Pathway		
Bidde	r Name:	<u></u>	
result	rs must provide a proposal price for each Alternate Bid Ite in rejection of the Bid Proposal for non-responsivene ate Bid Item by the above-identified Bidder is set forth he	ess. The amount prop	
Altern	nate Bid Item No. 1. [DESCRIPTION]		
	cone of the following and indicate the additive or deducate Bid Item.	ctive proposed price for	the foregoing
	AddProposal Amount.	Dollars (\$) to Base Bid
	DeductBid Proposal Amount.	_ Dollars (\$) from Base
Altern	nate Bid Item No. 2. [DESCRIPTION]		
	cone of the following and indicate the additive or deductivate Bid Item.	ve proposed price for th	e foregoing
	AddProposal Amount.	Dollars (\$) to Base Bid
	DeductBid Proposal Amount.	Dollars (\$	_) from Base
Dated			
Ву: _	(Signature of Bidder's Authorized Officer or Representative)		
	(Typed or Printed Name)	-	
Title:		-	

PRE-BID INQUIRY FORM

Projec	t: Campus Public Safety Building – UG Electrical	Pathway	
Submi	ttal Date		
comple inquirie	inquiries will be responded to only if: (i) submitted ted Pre-Bid Inquiry Form is submitted prior to the s as set forth in the Call for Bids; and (ii) this compleson or entity noted in the Call for Bids.	latest date/time for	submittal of pre-bid
Item No.	•	Drawing Sheet No. & Detail No. Reference	Specifications Section and Paragraph No. Reference
Submit	ted By:		
(Signature Represen	e of Bidder's Authorized Employee, Officer or		
	Contact Information:		
	ontact Name)		
(Phone ar			
(Email Ad	ui <i>ess)</i>		

SUBCONTRACTORS LIST

Project ("the Work")	Campus Public Safety Building – UG Electrical Pathway
Bidder Name	
Bidder's Representative Signature	(Signature) (Typed or Printed Name)

Licensed Name of Subcontractor	Address of Office, Mill or Shop	Contractor's License Number	Trade or Portion of Work	DIR Registration Number

[DUPLICATE THIS FORM FOR ADDITIONAL SUBCONTRACTORS]

VERIFICATION OF CONTRACTOR AND SUBCONTRACTORS' DIR REGISTRATION

(Title/Position) (Bidder Name) submitting the accompanying Bid Proposal for the Work described as Campus Public Safety Building – UG Electrical Pathway.	the
Building – UG Electrical Pathway.	the
	the
	the
	the
 The Bidder is currently registered as a contractor with the Department of Industrial Relations ("DIR"). 	the
2. The Bidder's DIR Registration Number is: The expiration date of Bidder's DIR Registration is, 20	
3. If the expiration date of the Bidder's DIR Registration will occur prior to expiration of the ConTime for the Work and the Bidder is awarded the Contract for the Work, prior to the Bidder's Registration expiration, the Bidder will take all measures necessary to renew the Bidder's Registration so that there is no lapse in the Bidder's DIR Registration.	DIR
 The Bidder, if awarded the Contract for the Work will remain a DIR registered contractor for the entire duration of the Work. 	ne
The Bidder has independently verified that each Subcontractor identified in the Subcontractor List is a DIR registered contractor.	rs
6. The Bidder's solicitation of Subcontractor bids included notice to prospective Subcontractors (i) all sub-tier subcontractors must be DIR registered contractors at all times during performs of the Work; and (ii) prospective subcontractors may only solicit sub-bids from and contract lower-tier subcontractors who are DIR registered contractors.	ance
 If any of the statements herein are false or omit material facts rendering a statement to be fals misleading, the Bidder's Bid Proposal is subject to rejection for non-responsiveness. 	e or
8. I have personal first hand-knowledge of all of the foregoing.	
I declare under penalty of perjury under California law that the foregoing is true and correct.	
Executed this day of , 20 at .	
(City and State)	
(Signature)	
(Name, typed or printed)	

STATEMENT OF QUALIFICATIONS

1. Bidder Information.

1.1. Contact Information

Mailing Address	Street Address City, State, Zip Code
Physical Location (if different from mailing address)	Street Address City, State, Zip Code
Telephone/Fax	Telephone Tax

1.2. Bidder Contacts.

Name		
Contact Information	Telephone: () Fax () Email	

1.3. California Contractors' License.

License Number(s)		-
License Classification(s)		-
Responsible Managing Employee; Responsible Managing Officer	-	-
Expiration Date(s)	-	-

1.4. Bidder Form of Entity.

	_ Limited Liability Partnership
J General Partnership	Joint Venture
Limited Partnership	
Limited Liability Company	

[CONTINUED NEXT PAGE]

2. <u>Revenue</u>. Complete the following for the Applicant's construction operations; if any portion of the revenue disclosed is generated by non-construction operations or activities, the Applicant must identify the portion of revenue attributed to construction operations and generally describe business activities of the Applicant that generates non-construction operations related revenue.

Calendar Year/ Fiscal Year	Annual Gross Revenue	Average Dollar Value of all Contracts	Dollar Value of Largest Contract
Choose an item.			
Choose an item.			

3. References.

DSA Project Inspectors					
Firm Name	Address	Telephone No.	Contact Name		
(K-12 schoo	Owners I districts or communit	y colleges preferre	d)		
Owner Name	Address	Telephone No.	Contact Name		
Architects (K-12 or Community College Projects)					
Architect Firm Name & Architect Firm Contact Name	Address	Telephone No.	Contact Name		

[CONTINUED NEXT PAGE]

4. <u>Insurance</u>.

Commercial General Liability Insurance	Insurer:
	Policy No.
	Broker
Commercial General Liability Insurance Broker	(Contact Name)
	(Street Address)
	(City, State & Zip Code)
	()() Telephone Fax
	(Email address)
Bid, Performance and Labor & Materials Payment Bond Surety	Surety:
	Surety Broker
	(Surety Broker Contact Name)
	(Street Address)
	(City, State & Zip Code)
	()
	(Email address)
Workers Compensation Insurance	
·	Insurer:
	Policy No.
	Broker
Workers Compensation Insurance Broker	(Contact Name)
	(Street Address)
	(City, State & Zip Code)
	()
	(Email address)

[CONTINUED NEXT PAGE]

5.	<u>Essential Requirements</u> . A Bidder will not be deemed qualified if the answer to any of the following questions results in a "not qualified" response and the Bid Proposal submitted by such a Bidder will be rejected for non-responsiveness.
	5.1. Bidder possesses a valid and currently in good standing California Contractors' license for the Classification(s) of Contractors' License required by the Call for Bids.
	Yes No (Not Qualified)
	5.2. The Bidder is a DIR Registered Contractor.
	Yes No (Not Qualified)
	5.3. Bidder has a current commercial general liability insurance policy with coverage limits which are equal to or exceed the minimum coverage limit required by the Contract Documents.
	Yes No (Not Qualified)
	5.4. Bidder has a current workers' compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code § 3700.
	Yes No (Not Qualified)Bidder is exempt from this requirement, because it has no employees
	5.5. Certificates of Insurance evidencing the Bidder's current commercial general liability insurance policy and workers compensation insurance are attached to the response to this Qualifications Statement. Commercial General Liability Certificate of Insurance Yes No (Not Qualified)
	Workers Compensation Certificate of Insurance Yes No (Not Qualified) No, Applicant is exempt from this requirement, because it has no employees
	5.6. Is the Bidder ineligible or debarred from submitting Bid Proposals for public works projects or public works contracts pursuant Labor Code §1777.1 or Labor Code §1777.7?
	Yes (Not Qualified) No
	5.7. Has any public agency, within the past five (5) years conducted proceedings that resulted in a finding that the Bidder, or any predecessor to the Bidder, is not a "responsible" bidder for a public works project or a public works contract?
	Yes (Not Qualified) No
	5.8. At any time during the last five (5) years, has the Bidder or any predecessor to the Bidder, or any of the equity owners of the Bidder been convicted of a federal or state crime involving fraud, theft, or any other act of dishonesty?
	Yes (Not Qualified) No

	obligations under a construction contract?
	Yes (Not Qualified) No
	5.10. At any time during the past five (5) years has the Bidder been declared in default under any construction contract to which the Bidder was a party?
	Yes (Not Qualified) No
	5.11. Is the Bidder's Worker's Compensation Insurance average Experience Modification Rating ("EMR") rating over the past five (5) years more than 1.5?
	Yes (Not Qualified) No
6.	Accuracy and Authority. The undersigned is duly authorized to execute this Statement of Qualifications under penalty of perjury on behalf of the above-identified Bidder. The undersigned warrants and represents that he/she has personal knowledge of each of the responses to this Statement of Qualifications and/or that he/she has conducted all necessary and appropriate inquiries to determine the truth, completeness and accuracy of responses to this Statement of Qualifications. The undersigned declares and certifies that the responses to this Statement of Qualifications are complete and accurate; there are no omissions of material fact or information that render any response to be false or misleading and there are no misstatements of fact in any of the responses. The above-identified Bidder acknowledges and agrees that if the District determines that any response herein is false or misleading or contains misstatements of fact so as to be false or misleading, the Bidder's Bid Proposal may be rejected by the District for non-responsiveness.
Exe	ecuted thisday of20 at(City and State)
l de	eclare under penalty of perjury under California law that the foregoing is true and correct.
Ву:	
,	(Signature of Bidder's Authorized Officer or Representative)
	(Typed or Printed Name)
Titl	e:

NON-COLLUSION AFFIDAVIT

STATE OF CALIFORNIA) COUNTY OF)
PROJECT: Campus Public Safety Building – UG Electrical Pathway
I,, being first duly sworn, deposes and says that I am the of, the party submitting, (Bidder Name)
(Title) (Bidder Name) the foregoing Bid Proposal ("the Bidder"). In connection with the foregoing Bid Proposal, the undersigned declares, states and certifies that:
The Bid Proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership company, association, organization or corporation.
The Bid Proposal 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 shambid, and has not directly or indirectly colluded, conspired, connived, or agreed with any other bidder or anyone else to put in sham bid, or to refrain from bidding.
The bidder has not in any manner, directly or indirectly, sought by agreement, communication, o conference with anyone to fix the bid price, or that of any other bidder, or to fix any overhead, profit o cost element of the bid price or that of any other bidder, or to secure any advantage against the public body awarding the contract or of anyone interested in the proposed contract.
All statements contained in the Bid Proposal and related documents are true.
The bidder has not, directly or indirectly, submitted the bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any person, corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.
Executed this day of, 20 at (City, County and State)
I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.
Dated
By:(Signature of Bidder's Authorized Officer or Representative)
(Typed or Printed Name) Title:

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

I,	the		of
(Name)		(Title) , declare state	and certify that:
(Contractor Name))		
I am aware that California Labor Co	de §3700(a) and (b) pr	ovides:	
"Every employer except the state sh following ways:	nall secure the payment	t of compensation in or	ne or more of the
(a) By being insured agair authorized to write compens		•	more insurers duly
(b) By securing from the Directioneither as an individual emploupon furnishing proof satisfaand to pay any compensation	yer, or one employer in actory to the Director of	n a group of employers, f Industrial Relations of	which may be given ability to self-insure
I am aware that the provisions of Ca against liability for workers' compe provisions of that code, and I will con this Contract.	ensation or to undertal	ike self-insurance in a	ccordance with the
I am authorized to execute this Certifidentified Contractor.	ficate of Workers Comp	ensation Insurance on I	behalf of the above-
Dated:			
Ву:			
(Name Printed or Typed)			

Title: _____

	DRUG-FREE WORKPLACE CERTIFICATION				
I,	, a	m the		of	
	(Print Name)	`	le)	(Contractor Name	e)
I de	eclare, state and certify to all of t	he following:			
1.	I am aware of the provisions at the Drug Free Workplace Act of	•	of California	Government Code §§	8350 et seq.,
2.	I am authorized to certify, and d provided by Contractor by doing	o certify, on beh		or that a drug free wo	rkplace will be
	2.1. Publishing a statement no dispensation, possession workplace and specifying a prohibition.	or use of a co	ontrolled substa	ance is prohibited in	Contractor's
	2.2. Establishing a drug-free aw (i) the dangers of drug abu free workplace; (ii) the avai programs; and (iii) the pe violations.	se in the workpl lability of drug c	ace; (ii) Contra ounseling, reha	actor's policy of maintabilitation and employ	aining a drug- ee-assistance
	2.3. Requiring that each employ of the statement required b Contractor in connection witerms of the statement.	y Paragraph 2.1	above, and th	at as a condition of e	mployment by
3.	Contractor agrees to fulfill and requirements of California Gove employees concerning: (i) the establishing a drug-free awarer the performance of the Work of t Government Code §8355(a) an statement.	rnment Code §6 prohibition of ness program, a he Contract be g	3355 by, inter a any controlled and (iii) requirir given a copy of	lia, publishing a state I substance in the vong that each employe the statement required	ment notifying vorkplace, (ii) ee engaged in d by California
4.	Contractor and I understand the false certification herein, or (ii) v requirements of California Gove termination, suspension of pay Contractor violate the terms of	iolated this certi ernment Code § ments, or both. the Drug-Free V	fication by failir §8355, the Co Contractor an Vorkplace Act o	ng to carry out and to intract awarded hereind I further understand 1990, Contractor m	implement the n is subject to d that, should hay be subject
5.	to debarment in accordance wit Contractor and I acknowledge Government Code §§8350, et s satisfy and discharge all provision	that Contractor seq. and hereby	and I are aw certify that Co	rare of the provisions ontractor and I will ad	of California here to, fulfill,
l de tru	eclare under penalty of perjury under and correct. Execute			alifornia that all of the	• •
By:	(City and State) (Signature of Bidder's Authorized Office)	_	<u>.</u>		
	(Signature of Bidder's Authorized Office	er or Representative)			

(Typed or Printed Name)

Title:

AGREEMENT

Ca	THIS AGREEMENT is entered into as of in the City of Compton, County of Los Angeles, State of alifornia, by and between COMPTON COMMUNITY COLLEGE DISTRICT, a California Community bllege District hereinafter "District" and("Contractor").
	ITNESSETH, that the District and the Contractor in consideration of the mutual covenants contained rein agree as follows:
1.	The Work . Within the Contract Time and for the Contract Price, subject to adjustments thereto pursuant to the Contract Documents, the Contractor shall perform and provide all necessary labor, materials, tools, equipment, utilities, services and transportation to complete in a workmanlike manner all of the Work required in connection with the work of improvement commonly referred to as Site Concrete Work. The Contractor shall complete all Work covered by the Contract Documents, including without limitation, the Drawings and Specifications prepared by the Architect and other Contract Documents enumerated in Paragraph 5 of this Agreement, along with all modifications and addenda thereto issued in accordance with the Contract Documents. The Architect for the Work is
2.	Contract Time . The Work shall be commenced on the date stated in the District's Notice to Proceed. The Contractor shall achieve Substantial Completion of the Work() days after the commencement date of the Work set forth in the Notice to Proceed.
3.	Contract Price. The District shall pay the Contractor as full consideration for the Contractor's full, complete and faithful performance of the Contractor's obligations under the Contract Documents, subject to adjustments of the Contract Price in accordance with the Contract Documents, the Contract Price of Dollars (\$). The Contract Price is based upon the Contractor's Base Bid Proposal for the Work and the following Alternate Bid Items, if any: The District's Progress Payments of the Contract Price shall be subject to retention withholdings equal to five percent (5%) of each Progress Payment ("Retention"). Retention withheld by the District shall be disbursed to the Contractor as part of the Final Payment due the Contractor.
4.	Liquidated Damages . The Contractor shall be subject to assessment of Liquidated Damages if the Contractor: (i) fails to achieve Substantial Completion of the Work within the Contract Time, including adjustments thereto authorized by the Contract Documents; (ii) fails to submit Submittals in accordance with the Submittal Schedule; or (iii) fails to complete Punchlist items noted upon Substantial Completion within the time established to complete the Punchlist items. The per diem rate of Liquidated Damages assessed for each of the foregoing events is set forth in the Contract Documents.
5.	Limitation on Damages . If the District breaches or defaults in its performance of its obligations under the Contract Documents, the damages, if any, recoverable by the Contractor shall be limited to general damages which are directly and proximately caused by said breach or default of the District and shall exclude any and all special or consequential damages. By executing this Agreement, the Contractor expressly acknowledges the foregoing limitation to the recovery only of general damages from the District if the District is in breach or default of its obligations under

the Contract Documents. The Contractor expressly waives any right to and foregoes the recovery of any special or consequential damages from the District including, without limitation, damages for: (i) lost or impaired bonding capacity; and/or, (ii) lost profits arising out of or in connection with any past, present, or future work of improvement, except for the Project which is the subject of the

Contract Documents.

6.	The Contract Documents. The documents forming a part of the Contract Documents consist of
	the following, all of which are component parts of the Contract Documents:

00 01 10 Table of Contents
00 11 13 Notice Calling for Bids, including Bid Addenda Nos.
00 21 13 Instructions for Bidders
00 41 00 Bid Proposal
00 42 13 Alternate Bid Items Proposal Form
00 43 24 Pre-Bid Inquiry Form
00 43 36 Subcontractors List
00 45 13 Statement of Qualifications
00 45 19 Non-Collusion Affidavit

- 00 45 26 Certificate of Workers Compensation Insurance
- 00 45 27 Drug-Free Workplace Certification
- 00 52 00 Agreement
- 00 61 10 Bid Bond
- 00 61 13 Performance Bond
- 00 61 14 Labor and Material Payment Bond
- 00 62 90 Verification of Certified Payroll Records
 Submittal to Labor Commission
- 00 65 36 Guarantee Form
- 00 72 00 General Conditions
- 00 73 00 Special Conditions
- 7. Notices. Notices of the District and Contractor to the other shall be transmitted in accordance with the Contract Documents. The effective date of notices transmitted in accordance with the Contract Documents shall be as set forth in the Contract Documents. Notices under the Contract Documents shall be addressed as follows:

If to the District:	If to
Vice President of Administrative Services	
Compton Community College District	
1111 East Artesia Boulevard	
Compton, CA 90221	
•	

If to the Contractor:	

8. Authority to Execute. The individual(s) executing this Agreement on behalf of the Contractor is/are duly and fully authorized to execute this Agreement on behalf of Contractor and to bind the Contractor to each and every term, condition and covenant of the Contract Documents.

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 2600, SACRAMENTO, CALIFORNIA 95826

IN WITNESS WHEREOF, this Agreement has been duly executed by the District and the Contractor as of the date set forth above

	DISTRICT" Compton Community College District	Title:	
Ву:			
	(Name Printed or Typed)		

"CONTRACTOR" [Contractor Name]

Ву: _		
_	(Name Printed or Typed)	
Title:		

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BID BOND

KNOW ALL MEN BY THESE PRESENTS that we,	-	, as Surety
and	as Principal, are jointly and severally,	along with
their respective heirs, executors, administrators, s	successors and assigns, held and firmly b	ound unto
COMPTON COMMUNITY COLLEGE DISTRICT	("the Obligee") for payment of the penal s	sum hereof
in lawful money of the United States, as more par	ticularly set forth herein.	

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Obligee for the Work commonly described as **Campus Public Safety Building – UG Electrical Pathway.**

.

WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Obligee in the penal sum equal to Ten Percent (10%) of the maximum amount of the Bid Proposal submitted by the Principal to the Obligee, inclusive of amounts proposed for Alternate Bid Items, if any.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for sixty (60) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within five (5) days after the prescribed forms are presented to him for signature, enter into a written contract with the Obligee, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified for the holding open of the Bid Proposal or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Obligee the difference between the amount specified in said Bid Proposal and the amount for which the Obligee may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Obligee in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

In the event suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee all costs, expenses and

[CONTINUED NEXT PAGE]

_		COMPTON COMMUNITY C	
ees incu	rred by the Obligee in connection therewith, includ	ing without limitation, attorneys	' fees.
	ESS WHEREOF, the Principal and Surety have ex- , 20by their duly authorized agents		da
-	(Bidder-Principal Name)		
Ву:			
	(Signature)		
	(Typed or Printed Name)		
Title:			
(Attach	Notary Public Acknowledgement of Principal's Signature)		
		·	
	(Surety Name)		
By:			
	(Signature of Attorney-In-Fact for Surety)		
	(Typed or Printed Name of Attorney-In-Fact)		
Acknow Certifica	: (i) Attorney-In-Fact Certification; (ii) Notary Public vledgment of Authorizing Signature on Attorney-Fact ation; and (iii) Notary Public Acknowledgement of Attorney-In-		
racis	orginature)		
Cor	ntact name, address, telephone number and email address for notices to the Surety		
(Contact	t Name)		
(Street A	Address)		
(City, St	ate & Zip Code)		
,			

Telephone

(Email address)

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we	,	, as Surety
and	, as Principal, are jointly and severally,	along with
their respective heirs, executors, administrators,		
COMPTON COMMUNITY COLLEGE DISTRICT	("the Obligee") for payment of the pena	al sum the
penal sum of		Dollars
(\$) in lawful money of	of the United States, well and truly to be	made, we
bind ourselves, our heirs, executors, administrato	ors, successors and assigns, jointly and se	everally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as **Campus Public Safety Building – UG Electrical Pathway**.

WHEREAS, the Principal, has entered into an agreement with the Obligee for performance of the Work; the Agreement and all other Contract Documents set forth therein are incorporated herein and made a part hereof by this reference.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond ensuring the Principal's prompt, full and faithful performance of the Work of the Contract Documents.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully perform each and all of the obligations and things to be done and performed by the Principal in strict accordance with the terms of the Contract Documents as they may be modified or amended from time to time; and if the Principal shall indemnify and save harmless the Obligee and all of its officers, agents and employees from any and all losses, liability and damages, claims, judgments, liens, costs, and fees of every description, which may be incurred by the Obligee by reason of the failure or default on the part of the Principal in the performance of any or all of the terms or the obligations of the Contract Documents, including all modifications, and amendments, thereto, and any warranties or guarantees required thereunder; then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The Surety, for value received, hereby stipulates and agrees that no change, adjustment of the Contract Time, adjustment of the Contract Price, alterations, deletions, additions, or any other modifications to the terms of the Contract Documents, the Work to be performed thereunder, or to the Specifications or the Drawings shall limit, restrict or otherwise impair Surety's obligations or Obligee's rights hereunder; Surety hereby waives notice from the Obligee of any such changes, adjustments of Contract Time, adjustments of Contract Price, alterations, deletions, additions or other modifications to the Contract Documents, the Work to be performed under the Contract Documents, or the Drawings or the Specifications.

In the event of the Obligee's termination of the Contract due to the Principal's breach or default of the Principal's obligations thereunder, within twenty (20) days after written notice from the Obligee to the Surety of the Principal's breach or default of the Contract Documents and Obligee's termination of the Contract, the Surety shall notify Obligee in writing of Surety's assumption of obligations hereunder by its election to either remedy the default or breach of the Principal or to take charge of the Work of the Contract Documents and complete the Work at its own expense ("the Notice of Election"); provided, however, that the procedure by which the Surety undertakes to discharge its obligations under this Bond shall be subject to the advance written approval of the Obligee, which

[CONTINUED NEXT PAGE]

approval shall not be unreasonably withheld, limited or restricted. The insolvency of the Principal or the Principal's denial of a failure of performance or default under the Contract Documents shall not by itself, without the Surety's prompt, diligent inquiry and investigation of such denial, be justification for Surety's failure to give the Notice of Election or for its failure to promptly remedy the failure of performance or default of the Principal or to complete the Work.

In the event the Surety fails to issue its Notice of Election to Obligee within the time provided for hereinabove, the Obligee may thereafter cause the cure or remedy of the Principal's failure of performance or default or to complete the Work. The Principal and the Surety shall be jointly and severally liable to the Obligee for all damages and costs sustained by the Obligee as a result of the Principal's failure of performance under the Contract Documents or default in its performance of obligations thereunder, including without limitation the costs of cure or completion of the Work exceeding the then remaining balance of the Contract Price; provided that the Surety's liability hereunder for the costs of performance, damages and other costs sustained by the Obligee upon the Principal's failure of performance or default under the Contract Documents shall be limited to the penal sum hereof, which shall be deemed to include the costs or value of any Changes to the Work which increases the Contract Price.

In the event suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee of all costs, expenses and fees incurred by the Obligee therewith, including without limitation, attorneys' fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this day of _______, 20 by their duly authorized agent or representative

	(Contractor-Principal Name)
Ву:	(Signature)
	(Typed or Printed Name)
Title:	
(Attach	Notary Public Acknowledgement of Principal's Signature)

	(Surety Name)
By:	
	(Signature of Attorney-In-Fact for Surety)
	(Typed or Printed Name of Attorney-In-Fact)
Certific	n: (i) Attorney-In-Fact Certification; (ii) Notary Public wledgment of Authorizing Signature on Attorney-Fact cation; and (iii) Notary Public Acknowledgement of Attorney-In-Signature)

Contact name, address, telephone number and email address for notices to the Surety
(Contact Name)
(Street Address)
(City, State & Zip Code)
()()
(Email address)

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we	,	, as Surety
and	, as Principal, are jointly and severally,	along with
their respective heirs, executors, administrators,	successors and assigns, held and firmly b	ound unto
COMPTON COMMUNITY COLLEGE DISTRICT	("the Obligee") for payment of the pena	I sum the
penal sum of		_Dollars
(\$) in lawful money of	of the United States, well and truly to be	made, we
bind ourselves, our heirs, executors, administrato	ors, successors and assigns, jointly and se	verally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as **Campus Public Safety Building – UG Electrical Pathway.**

WHEREAS, the Principal, has entered into an Agreement with the Obligee for performance of the Work, the Agreement and all other Contract Documents set forth therein are incorporated herein by this reference and made a part hereof.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond for the prompt, full and faithful payment to any Claimant, as hereinafter defined, for all labor materials or services used, or reasonably required for use, in the performance of the Work.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully make payment to any Claimant for all labor, materials or services used or reasonably required for use in the performance of the Work then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The term "Claimant" shall refer to any person, corporation, partnership, proprietorship or other entity including without limitation, all persons and entities described in California Civil Code §9100, providing or furnishing labor, materials or services used or reasonably required for use in the performance of the Work under the Contract Documents, without regard for whether such labor, materials or services were sold, leased or rented. This Bond shall inure to the benefit of all Claimants so as to give them, or their assigns and successors, a right of action upon this Bond.

In the event suit is brought on this Bond by any Claimant for amounts due such Claimant for labor, materials or services provided or furnished by such Claimant, the Surety shall pay for the same and reasonable attorneys' fees pursuant to California Civil Code §9554.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, deletion, addition, or any other modification to the terms of the Contract Documents, the Work to be performed thereunder, the Specifications or the Drawings, or any other portion of the Contract Documents, shall in any way limit, restrict or otherwise affect its obligations under this Bond; the Surety hereby waives notice from the Obligee of any such change, extension of time, alteration, deletion, addition or other modification to the Contract Documents, the Work to be performed under the Contract Documents, the Drawings or the Specifications of any other portion of the Contract Documents.

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_day

	NESS WHEREOF, the Principal and Surety have e	
f	, 20 by their duly authorized agent or rep	resentative.
	(Contractor-Principal Name)	
	(contractor rimolparitamo)	
By:	(Signature)	
	(Typed or Printed Name)	
Title:		
(Attach	Notary Public Acknowledgement of Principal's Signature)	5
	(Surety Name)	
Ву:		
_ ,.	(Signature of Attorney-In-Fact for Surety)	
	(Typed or Printed Name of Attorney-In-Fact)	
Acknov Certific	: (i) Attorney-In-Fact Certification; (ii) Notary Public wledgment of Authorizing Signature on Attorney-Fact ation; and (iii) Notary Public Acknowledgement of Attorney-In-Signature)	
Cor	ntact name, address, telephone number and email address for notices to the Surety	
(Contac	t Name)	
	Address)	
(City, St	rate & Zip Code)	
(Telepho	_)() nne Fax	
(Email a	address)	

CERTIFICATION OF CERTIFIED PAYROLL RECORDS SUBMITTAL TO LABOR COMMISSION

I am th	the	for	in connection with
	the(Superintendent/Project Manager)	 . Th	(Contractor) is Certification is submitted to Compton
Payme		vith the Contrac	tor's submittal of an Application for Progress ress Payment No("the
1.			ursement of a Progress Payment covering, 20 and
2.		engaged in per	ecords ("CPR") to the Labor Commissioner formance of Work subject to prevailing wage y the Pay Application.
3.	Pay Application have submitted	their CPRs to	of payment to be disbursed pursuant to the the Labor Commissioner for all of their vage rate requirements for the period of time
4.		oner by the Co	ed to the Labor Commissioner; the CPRs ntractor are complete and accurate for the
5.		oner by the Sub	itted to the Labor Commissioner; the CPRs ocontractors are complete and accurate for
l decla this	Certification on the	ılifornia law that day oʻ 	the foregoing is true and correct. I executed f, 20 at
	(City and State)		
Ву: _			
	(Typed or Printed Name)		

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GUARANTEE

Project: Campus Public Safety Building – UG Electrical Pathway

The Contractor hereby warrants and guarantees to the District that all work, materials, equipment and workmanship provided, furnished or installed by or on behalf of Contractor in connection with the above referenced Project (the "Work") have been provided, furnished and installed in strict conformity with the Contract Documents for the Work, including without limitation, the Drawings and the Specifications. Contractor further warrants and guarantees that all work, materials, equipment and workmanship as provided, furnished and/or installed are fit for use as specified and fulfill all applicable requirements of the Contract Documents including without limitation, the Drawings and the Specifications. Contractor shall, at its sole cost and expense, repair, correct and/or replace any or all of the work, materials, equipment and/or workmanship of the Work, together with any other items which may be affected by any such repairs, corrections or replacement, that may be unfit for use as specified or defective within a period of two (2) years from the date of the District's Final Acceptance of the Work, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of the Contractor's failure and/or refusal to comply with the provisions of this Guarantee, within the period of time set forth in the Contract Documents after the District's issuance of the Notice to the Contractor of any defect(s) in the Work, materials, equipment or workmanship, Contractor authorizes the District, without further notice to Contractor, to repair, correct and/or replace any such defective item at the expense of the Contractor. The Contractor shall reimburse the District for all costs, expenses or fees incurred by the District in providing or performing such repairs, corrections or replacements within ten (10) days of the District's presentation of a demand to the Contractor for the same.

The provisions of this Guarantee and the provisions of the Contract Documents for the Work relating to the Contractor's Guarantee(s) and warranty(ies) relating to the Work shall be binding upon the Contractor's Performance Bond Surety and all successors or assigns of Contractor and/or Contractor's Performance Bond Surety.

The provisions of this Guarantee are in addition to, and not in lieu of, any provisions of the Contract Documents for the Work relating to the Contractor's guarantee(s) and warranty(ies) or any guarantee(s) or warranty(ies) provided by any material supplier or manufacturer of any equipment, materials or other items forming a part of, or incorporated into the Work, or any other guarantee or warranty obligation of the Contractor, prescribed, implied or imposed by law.

The undersigned individual executing this Guarantee on behalf of Contractor warrants and represents that he/she is duly authorized to execute this Guarantee on behalf of Contractor and to bind Contractor to each and every provision hereof.

(Contractor Name) (Signature of Contractor's Authorized Employee, Officer Or Representative) (Printed Name and Title)

Contractor

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GENERAL CONDITIONS

1. Definitions

- 1.1. <u>The Work</u>. The "Work" is the construction and services required by the Contract Documents, and includes all labor, materials, equipment or services to fulfill the Contractor's obligations under the Contract Documents.
- 1.2. <u>Surety</u>. The Surety is the person or entity that executes, as surety, the Contractor's Labor and Material Payment Bond and/or Performance Bond.
- 1.3. <u>Subcontractors</u>. A Subcontractor is a person or entity who has a direct contract with the Contractor for a portion of the Work; Subcontractors include lower tier subcontractors, who are in direct privity of contract with a Subcontractor.
- 1.4. <u>Material Supplier</u>. A Material Supplier only furnishes materials, equipment or supplies for the Work without fabricating, installing or consuming them in the Work.
- 1.5. <u>Drawings and Specifications</u>. The Drawings are the graphic and pictorial portions of the Contract Documents, showing generally, the design, location and dimensions of the Work and may include plans, elevations, sections, details, schedules or diagrams. The Specifications are the written requirements for materials, equipment, construction systems, standards, criteria and workmanship.
- 1.6. Intent and Correlation of Contract Documents. The Contract Documents are complementary and what is required by one portion shall be by all; performance by the Contractor is required to the extent consistent with the Contract Documents and reasonably inferable therefrom as being necessary to produce the intended results. If a portion of the Contract Documents is silent and information appears elsewhere in the Contract Documents, such other portions of the Contract Documents shall control. Words or terms with well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Conflicts, inconsistencies or ambiguities in the Contract Documents shall be resolved by the Architect based on the following standards: the Drawings are intended to describe matters relating to placement, type, quantity and the like; the Specifications are intended to describe matters relating to quality, materials, compositions, manufacturers and the like. If conflicts exist between parts of the Contract Documents regarding the quality of any product, equipment or materials, the Contractor shall provide the product, equipment or material of the highest or more stringent quality.
- 1.7. Shop Drawings; Samples; Product Data ("Submittals"). Shop Drawings are diagrams, schedules and other data specially prepared for the Work to illustrate the installation, assembly or similar matters for a portion of the Work. Samples are physical examples of materials, equipment or workmanship to be incorporated into the Work. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information to illustrate materials or equipment for a portion of the Work. Shop Drawings, Samples and Product Data prepared by the Contractor or any Subcontractors/Material Suppliers are collectively referred to as "Submittals."
- 1.8. <u>Division of State Architect ("DSA")</u>. DSA is the California Division of the State Architect; references to "DSA" include its offices, employees and agents. The authority of the DSA over the Work and the performance thereof shall be as set forth in the Contract Documents and the Laws
- 1.9. <u>Project Inspector</u>. The Project Inspector is employed by the District in accordance with the requirements of Title 24 of the California Code of Regulations. The Project Inspector is authorized to act on behalf of the District as provided for in the Contract Documents and in Title 24 of the California Code of Regulations.
- 1.10. Contract Document Terms. The term "provide" means "provide complete in place" or to "furnish and install" such item. Unless otherwise provided in the Contract Documents, the terms "approved;" "directed;" "satisfactory;" "accepted;" "acceptable;" "proper;" "required;" "necessary" and "equal" means as approved, directed, satisfactory, accepted, acceptable,

- proper, required, necessary and equal, in the opinion of the Architect. The term "typical" as used in the Drawings shall require the installation or furnishing of such item(s) of the Work designated as "typical" in all other areas similarly marked as "typical"; Work in such other areas shall conform to that shown as "typical" or as reasonably inferable therefrom.
- 1.11. <u>Record Drawings</u>. The Record Drawings are the Drawings marked by the Contractor during the Work to indicate completely and accurately actual as-built conditions of the Work.
- 1.12. Construction Manager. The Construction Manager, if any, is designated in the Special Conditions and is authorized to act on behalf of the District in accordance with the Contract Documents. If a Construction Manager is not designated in the Special Conditions, the District may designate a Construction Manager during performance of the Work without adjustment of the Contract Price or the Contract Time or otherwise affect, limit or restrict Contractor's obligations hereunder.
- 1.13. <u>Construction Equipment</u>. "Construction Equipment" is equipment utilized for the performance of any portion of the Work, but which is not incorporated into the Work.
- 1.14. <u>Site</u>. The Site is the physical area designated in the Contract Documents for Contractor's performance, construction and installation of the Work.
- 1.15. <u>Field Clarifications</u>. A written or graphic document consisting of supplementary details, instructions or information issued on behalf of the District which clarifies or supplements the Contract Documents and which becomes a part of the Contract Documents upon issuance. Field Clarifications do not constitute Changes, unless a Change Order relating to a Field Clarification is authorized and issued.
- 1.16. <u>Defective or Non-Conforming Work.</u> Defective or Non-Conforming Work is any Work which is unsatisfactory, faulty or deficient by: (i) not conforming to the requirements of the Contract Documents; (ii) not conforming to the standards of workmanship of the applicable trade; (iii) not in compliance with the requirements of any inspection, reference, standard, test, or approval required by the Contract Documents; or (iv) damage occurring prior to Final Acceptance.
- 1.17. <u>Notice to Proceed</u>. The Notice to Proceed is the written notice issued by or on behalf of the District to the Contractor authorizing the Contractor to proceed with commencement of the Work and which establishes the date for commencement of the Contract Time.
- 1.18. Progress Reports; Verified Reports. Progress Reports are written reports prepared by the Contractor and its Subcontractors on a daily basis. Progress Reports must include: (i) the number of labor and supervising personnel at the Site; (ii) the labor/work classification of each laborer; (iii) a detailed description of the Work in progress and completed; (iv) weather/environmental conditions; and (v) problems encountered with a potential impact to the Contract Time or the Contract Price. Verified Reports are periodic written reports prepared by the Contractor and submitted to the DSA; Verified Reports shall be in such form and content as required by Title 24 of the California Code of Regulations.
- 1.19. <u>Laws</u>. "Laws" refer to all laws, ordinances, codes, rules and/or regulations promulgated by any governmental or quasi-governmental agency with jurisdiction over any portion of the Work and which apply to any portion of the Work, including those in effect as of the execution of the Agreement, amendments thereto and subsequently enacted Laws that take effect during the performance of the Work. No adjustment of the Contract Time or the Contract Price shall be allowed for the Contractor's compliance with the Laws.

2. District

2.1. <u>Information Required of District</u>.

2.1.1. <u>Surveys; Site Information</u>. Information, if any, concerning physical characteristics of the Site, including without limitation, surveys, soils reports, and utility locations is set forth in the Contract Documents. Information not provided by the District but required to complete the Work shall be obtained by Contractor without adjustment to the Contract Price or the Contract Time.

The Contractor shall verify all information provided by the District. Variations between conditions or existing improvements depicted in the Contract Documents and those actually encountered in the performance of the Work shall not result in any District liability therefor, nor shall any such variations result in an adjustment of the Contract Time or the Contract Price.

- 2.1.2. <u>Permits; Fees</u>. Except as otherwise provided in the Contract Documents, the District shall secure and pay for necessary approvals, easements, assessments and charges required for construction of the Work.
- 2.1.3. <u>Drawings and Specifications</u>. The District shall furnish the Contractor, without cost to the Contractor, the number of copies of the Drawings and the Specifications as set forth in the Special Conditions. All of the Drawings and the Specifications provided by the District to the Contractor remain the property of the District; the Contractor shall not use the Drawings or the Specifications other than the Work of the Project.
- 2.2. <u>District's Right to Stop the Work</u>. The District may, by written order, direct the Contractor to stop any portion of the Work if the Contractor: (i) fails to correct Defective or Non-Conforming Work; or (ii) fails to carry out the Work in conformity to the Contract Documents. The right of the District to stop the Work hereunder shall not: (i) be deemed a duty of the District to exercise such right for the benefit of the Contractor; (ii) waive or limit the exercise of any other right or remedy of the District under the Contract Documents or the Laws; or (iii) result in adjustment of the Contract Time or the Contract Price.
- 2.3. Partial Occupancy or Use. The District may occupy or use any completed or partially completed portion of the Work. Immediately prior to such partial occupancy or use of the Work, the District, Project Inspector, Contractor, Construction Manager and Architect shall jointly inspect the portion of Work to be used or occupied by the District to record the condition of the Work. Corrective action noted in such inspection shall be promptly performed and completed by the Contractor so the Work conforms to requirements of the Contract Documents and the District's occupancy or use thereof is not impaired. The District's use or occupancy of the Work or portions thereof is not "completion" of the Work pursuant to Public Contract Code §7107 nor constitute the District's acceptance Defective or Non-Conforming Work.

2.4. The Project Inspector.

2.4.1. Authority. All Work shall be performed under the observation of the Project Inspector, whose authority is established by the Laws and the Contract Documents. Duties of the Project Inspector shall not relieve or limit the Contractor's performance of its obligations under the Contract Documents. The Project Inspector does not have authority: (i) to interpret the Contract Documents or to modify the Work depicted in the Contract Documents; or (ii) relating to the Contractor's safety plan. Upon the Project Inspector's issuance of a report or other similar statement identifying Defective or Non-Conforming Work, the Contractor shall promptly repair, replace or correct the same so that it conforms to requirements of the Contract Documents. If the Contractor fails or refuses to promptly remedy Defective or Non-Conforming Work, the District may remedy such Defective or Non-Conforming Work at the expense of the Contractor. 2.4.2. Facilities and Information for the Project Inspector. The Contractor shall provide to the Project Inspector all information, data and similar materials as necessary or appropriate for the Project Inspector's purposes of fulfilling the Project Inspector's obligations relating to observations and inspections of the Work. The Contractor shall provide, without adjustment of the Contract Price, for use by the Project Inspector, the District and Construction Manager the facilities, equipment, furnishings and services set forth in the Special Conditions. If the Contractor does not provide the facilities, furnishings, equipment and services set forth in the Special Conditions, or fails to pay timely any charges or fees arising out of the use of the same, the District may, as applicable, procure facilities, furnishings, equipment and services required

by the Contract Documents or pay outstanding charges, at the expense of the Contractor.

2.5. <u>Communications Software</u>. The District reserves the right to implement electronic data and/or communications software (such as Primavera Expedition®) for data and communications relating to the Work ("Communications Software"). The Contractor's use of Communications Software will be as directed by the District without charge or expense to the Contractor and without adjustment of the Contract Price or the Contract Time.

3. Architect

- 3.1. Architect's Administration of the Contract. The Architect will provide administration of the Contract and will be one of the District's representatives during construction until the time that Final Payment is due the Contractor under the Contract Documents. The Architect is authorized to act on behalf of the District as provided for in the Contract Documents and shall have the responsibilities and authority over the Work as established by the Laws.
- 3.2. Periodic Site Inspections. The Architect will visit the Site at intervals appropriate to the stage of construction to: (i) become generally familiar with the progress and quality of the completed Work; and (ii) determine if the Work is being performed so that when completed will be in accordance with the Contract Documents. On the basis of Site observations as an architect, the Architect will keep the District informed of the progress of the Work, and endeavor to guard the District against defects and deficiencies in the Work. The Architect is authorized to reject Defective or Non-Conforming Work. The Architect may require additional inspections or tests, whether or not the Work is fabricated, installed or completed.
- 3.3. Contractor Responsibility for Construction Means, Methods and Sequences. The Architect will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, these being solely the Contractor's responsibility.
- 3.4. Submittals. The Architect will review and accept or take other appropriate action relating to Submittals for the limited purpose of checking for general conformance with information given and the design concept expressed in the Contract Documents. The Architect's review of Submittals shall not: (i) relieve the Contractor of its obligations under the Contract Documents; (ii) constitute approval of safety measures, programs or precautions; or (iii) constitute the direction of construction means, methods, techniques, sequences or procedures. The Architect's review and return of reviewed Submittals will conform to the time limits set forth in the Specifications, the Construction Schedule or other provisions of the Contract Documents. If no time limits are established in the foregoing, the Architect shall have fourteen (14) days for review and return of Submittals.
- 3.5. <u>Changes: Change Orders.</u> The Architect will prepare Change Orders, and may authorize minor Changes in the Work which do not result in adjustment of the Contract Time or the Contract Price. The Architect may issue Field Clarifications and Construction Change Directives.
- 3.6. <u>Interpretation of Contract Documents</u>. The Architect will interpret and decide matters concerning the requirements of the Contract Documents on written request of either the District or the Contractor. The Architect's response to such requests will be made promptly and within the time limits agreed upon; if agreement establishing the time for the Architect's review and response to requests is not reached, the Architect shall have fifteen (15) days after receipt of such request to respond thereto. Interpretations and decisions of the Architect will be

consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. The Architect's decisions on matters relating to aesthetic effect are final if consistent with the intent expressed in the Contract Documents.

- 3.7. Contractor Request for Information. If the Contractor encounters any condition which the Contractor believes, in good faith and with reasonable basis, is the result of an ambiguity, conflict, error or omission in the Contract Documents (collectively "the Conditions"), the Contractor must request information from the Architect necessary to address and resolve any such Conditions before proceeding with any portion of the Work affected or which may be affected by such Conditions. If the Architect reasonably determines that any of Contractor's request(s) for information: (i) does not reflect adequate or competent supervision or coordination by the Contractor or any Subcontractor; or (ii) does not reflect the Contractor's adequate or competent knowledge of the requirements of the Work or the Contract Documents; or (iii) is not justified for any other reason, Contractor shall be liable to the District for all costs incurred by the District to process, review, evaluate and respond to such request for information, including without limitation, fees of the Architect.
- 3.8. Communications; Architect's Role. All communications regarding the Work, the performance thereof or the Contract Documents shall be in writing; verbal communications shall be reduced to writing. Communications between the Contractor and the District shall be through the Architect or Construction Manager. All written communications between the Contractor and any Subcontractor, Material Supplier or others shall be available to the District for review, inspection and reproduction as requested from time to time.

4. The Contractor

- 4.1. Contractor Review of Contract Documents.
 - 4.1.1. <u>Examination of Contract Documents</u>. The Contractor shall carefully study Contract Documents and information furnished by the District and shall immediately notify the Architect in writing of errors, inconsistencies or omissions discovered. If the Contractor performs any Work knowing, or with reasonable diligence should have known that, it involves an error, inconsistency or omission in the Contract Documents without prior notice to the Architect, the Contractor shall bear the costs for correction of the same.
 - 4.1.2. <u>Measurements, Layouts and Field Engineering</u>. The Contractor shall take field measurements and verify field conditions at the Site. All field engineering required for laying out the Work and establishing grades for earthwork operations shall be by an engineer registered under the Laws and without adjustment of the Contract Price. The Contractor shall complete all surveys necessary for performance of the Work and for establishment, location, maintenance and preservation of benchmarks, reference points and stakes for the Work.
 - 4.1.3. <u>Drawings; Dimensions</u>. Unless otherwise expressly provided, dimensions indicated in the Drawings are: (i) intended for reference only; and (ii) diagrammatic and schematic in nature. The Contractor is solely responsible for dimensioning and coordinating the Work of the Contract Documents. No Contract Price adjustment will be allowed on account of differences between actual dimensions and the dimensions indicated on the Drawings.
 - 4.1.4. Work in Accordance With Contract Documents. The Contractor shall perform all of the Work in strict conformity with the Contract Documents and the Laws.
- 4.2. <u>Site Investigation; Subsurface Conditions.</u>
 - 4.2.1. <u>Subsurface Data</u>. By executing the Agreement, the Contractor acknowledges that it has examined the boring data and other available subsurface data and has satisfied itself as to the character, quality and quantity of surface and subsurface materials, including without limitation, obstacles which may be encountered in performance of the Work. Subsurface data or other

soils investigation report provided by the District hereunder are not a part of the Contract Documents. Information contained in such data or report regarding subsurface conditions, elevations of existing grades, or below grade elevations are approximate only and is neither guaranteed or warranted by the District to be complete and accurate. The District assumes no responsibility for any conclusions or interpretations of the Contractor on the basis of available subsurface data or other information furnished by District under the Contract Documents.

4.2.2. Subsurface Conditions. If the Work involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, the Contractor shall promptly and before the following conditions are disturbed, notify the Project Inspector, in writing, of any: (i) material that the Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code §25117, that is required to be removed to a Class I or Class II or Class III disposal site in accordance with provisions of existing law; (ii) subsurface or latent physical conditions at the site differing from those indicated; or (iii) unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the Work or the character provided for in the Contract Documents. If the District determines that the conditions so materially differ or involve such hazardous materials requiring an adjustment to the Contract Price or the Contract Time, the District shall issue a Change Order in accordance with Article 9 hereof. Pursuant to California Public Contract Code §7104, disputes between the Contractor and the District as to any of the conditions listed in (i), (ii) or (iii) above, shall not excuse the Contractor from the completion of the Work within the Contract Time and the Contractor shall proceed with all Work to be performed under the Contract Documents.

4.3. Supervision and Construction Procedures.

- 4.3.1. <u>Supervision of the Work</u>. The Contractor shall supervise and direct performance of the Work, using the Contractor's best skill and attention. The Contractor is responsible to the District for acts and omissions of the employees, agents and representatives of the Contractor and Subcontractors.
- 4.3.2. <u>Noise and Dust Control</u>. The Contractor shall implement all measures necessary for noise and dust control during Work at the Site, including specific care to avoid deposits of airborne dust or airborne elements.
- 4.3.3. <u>Clean-Up</u>. The Contractor shall at all times keep the Site and all adjoining areas free from the accumulation of any waste material or rubbish. The Contractor shall maintain the Site in a "rake-clean" standard on a daily basis. The Project Inspector or Construction Manager may direct the Contractor's clean-up obligations hereunder. If the Contractor fails to clean up as provided for in the Contract Documents, the District may do so at the Contractor's expense. 4.3.4. <u>Cutting and Patching</u>. The Contractor is responsible for cutting, fitting or patching required to complete the Work or to make the component parts thereof fit together properly. The Contractor shall not damage or endanger any portion of the Work, or the fully or partially completed construction of the District or separate contractors by cutting, patching, excavation
- or other alteration.
 4.3.5. <u>Construction Utilities</u>. The District will furnish and pay the costs of utility services for the Work as set forth in the Special Conditions; all other utilities necessary to complete the Work shall be obtained by the Contractor without adjustment of the Contract Price. The Contractor shall furnish and install temporary distributions of utilities at the Site as necessary for the Work, including utilities furnished by the District. All temporary distributions shall be removed by the Contractor upon completion of the Work. The costs of utility services obtained by the Contractor and the installation and removal of temporary distributions thereof are included in the Contract Price.
- 4.3.6. Existing Utilities; Removal, Relocation and Protection. Pursuant to California Government Code §4215, the District assumes responsibility for timely removal, relocation, or

protection of existing main or trunkline utility facilities located on the Site which are not identified in the Contract Documents. The Contractor shall be compensated for the costs of locating, repairing damage not due to the Contractor's failure to exercise reasonable care, and removing or relocating such utility facilities not indicated in the Contract Documents with reasonable accuracy and for Construction Equipment on the Site necessarily idled during such work. The Contractor shall not be assessed Liquidated Damages for delay in completion of the Work when such delay is caused by the failure of the District or the utility owner to provide for removal or relocation of such utility facilities. The District is not required to indicate existing service laterals or appurtenances if presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, meters and junction boxes, on or adjacent to the Site. If the Contractor encounters utility facilities not identified in the Contract Documents, the Contractor shall immediately notify, in writing, the District, Project Inspector, Architect, Construction Manager and the utility owner. If such utility facilities are owned by a public utility, the public utility shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

4.4. Conferences and Meetings. A material obligation of the Contractor is the attendance by the Contractor's supervisory and/or management personnel (who shall be authorized to act on behalf of the Contractor) at meetings relating to the Work, including weekly progress meetings. The Contractor is responsible for arranging for attendance by Subcontractors, Material Suppliers at meetings and conferences relating to the Work as necessary, appropriate or as requested by the District. All costs, expenses, charges or fees incurred by the Contractor in connection with attendance and participation meetings relating to the Work shall be without adjustment of the Contract Time or the Contract Price. The Architect or Construction Manager will prepare and distribute minutes reflecting the items addressed and actions taken at a meeting or conference. The Contractor shall have five (5) days after the date of distribution of minutes to notify the Construction Manager and Architect in writing of objections to such minutes. Failure of the Contractor to interpose objections within said five (5) days will result the minutes as distributed constituting the official record of the meeting or conference. Objections of Subcontractors or Material Suppliers to minutes shall be submitted to the Architect or Construction Manager through the Contractor. If the Contractor timely interposes objections or notes corrections, the resolution of such matters shall be addressed at the next scheduled meeting.

4.5. Labor and Materials.

- 4.5.1. <u>Payment for Labor, Materials and Services</u>. The Contractor shall provide and pay for labor, materials, equipment, tools, Construction Equipment and machinery, water, heat, utilities, transportation, and other facilities and/or services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated in the Work.
- 4.5.2. <u>Employee Discipline and Competency</u>. The Contractor shall enforce strict discipline and good order among employees of the Contractor, Subcontractors and all other persons performing any part of the Work at the Site. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. The Contractor shall dismiss from its employ and direct any Subcontractor to dismiss from their employment any person deemed by the District to be unfit or incompetent to perform Work.
- 4.5.3. <u>Contractor's Superintendent</u>. The Contractor's superintendent shall at the Site at all times during the Work. The superintendent shall represent the Contractor and communications given to the superintendent shall be binding as if given to the Contractor. The Contractor shall submit to the District a written statement of the qualifications of the Contractor's proposed Superintendent. Acceptance of the Contractor's proposed Superintendent is subject to

establishing the Superintendent's: (i) skills, experience and other capabilities of the proposed Superintendent to supervise, coordinate and manage the Work; (ii) fluent verbal and written English language capabilities; (iii) competency in reading, comprehending and understanding Drawings, Specifications and other technical construction-related materials; and (iv) recent experience in completing construction projects similar to the Work within the budget and time established for such other construction projects. Upon acceptance of the Contractor's Superintendent, the Contractor shall not be change the Superintendent without prior consent of the District, unless the Superintendent: (i) is unsatisfactory to the Contractor; or (ii) is determined by the District to be unfit, incompetent or incapable of performing functions and responsibilities assigned.

4.5.4. Prohibition on Harassment. Any person engaging in a prohibited form of harassment is subject to immediate removal and thereafter excluded from the Site. Upon the District's receipt of any notice or complaint that a person performing Work at the Site has engaged in a prohibited form of harassment ("Worker"), the District will promptly undertake an investigation of such notice or complaint. If the District, after such investigation, reasonably determines that a prohibited form of harassment has occurred, the District will notify the Contractor of the same and direct that the Worker be immediately removed from the Site. Unless the District's determination is grossly negligent or without reasonable cause, District shall have no liability for directing the removal of any Worker determined to have engaged in a prohibited form of harassment nor shall the Contract Price or the Contract Time be adjusted on account thereof. The Contractor and the Surety shall defend, indemnify and hold harmless the Indemnified Parties from any and all claims, liabilities, judgments, awards, actions or causes of actions, including without limitation, attorneys' fees, which arise out of, or pertain in any manner to: (i) the assertion by any Worker that the direction of the District pursuant to the foregoing was improper; or (ii) the assertion by any person that a Worker has engaged in a prohibited form of harassment directed to or affecting such person.

4.5.5. <u>Taxes</u>. The Contractor shall pay, without adjustment of the Contract Price, all sales, consumer, use and other taxes for the Work or portions thereof provided by the Contractor under the Contract Documents.

4.6. Permits, Fees and Notices; Compliance With Laws.

4.6.1. Payment of Permits, Fees. Unless otherwise provided in the Contract Documents, the District shall secure and pay for the building permits, other permits, governmental fees, licenses and inspections necessary or required for the proper execution and completion of the Work. The foregoing notwithstanding: (i) the Contractor shall pay all fees, costs or other expenses associated with or arising in connection with Deferred Approval Items without adjustment of the Contract Price; and (ii) the Contractor shall obtain the following permits/approvals if applicable to the Work without adjustment of the Contract Price: (a) Temporary Fire Department plan check and permits for temporary material handling, storage and/or dispensing facilities for fuel, oil, liquid or gases; (b) industrial waste and AQMD permits relating to temporary facilities used in connection with any portion of the Work; (c) local business license; (d) traffic control, OSHA and offsite improvement permits; and (e) sewer, water, storm drain, gas tie plan check permits.

4.6.2. Compliance With Laws. The Contractor shall comply with and give notices required by the Laws and other orders of public authorities bearing on performance of the Work. All Work completed by the Contractor shall be in compliance with the Laws.

4.6.3. Notice of Variation From Laws. If the Contractor knows, or has reason to believe, that any portion of the Contract Documents are at variance with applicable Laws, the Contractor shall promptly notify the Architect, Construction Manager and the Project Inspector, in writing, of the same. If the Contractor performs Work knowing, or with reasonable diligence should have known, it to be contrary to the Laws without such notice to the Architect, Construction Manager and the Project Inspector, the Contractor shall assume full responsibility for such Work

- and shall bear the attributable costs arising or associated therefrom, including without limitation, the removal, replacement or correction of the same.
- 4.6.4. <u>DIR Registration</u>. At all times during the Work, the Contractor shall be a DIR registered contractor. Performance of any Work by the Contractor without the Contractor being a DIR registered contractor at the time Work is performed is the Contractor's default in performance of a material obligation of the Contractor under the Contract Documents.
- 4.7. <u>Submittals</u>. Submittals are not part of the Contract Documents. Submittals shall demonstrate, for those portions of the Work for which Submittals are required, the manner in which the Contractor proposes to furnish, install or incorporate such Work in conformity with the information given and the design concept expressed in the Contract Documents.
 - 4.7.1. Contractor's Submittals.
 - 4.7.1.1. <u>Prompt Submittals</u>. All Submittals required by the Contract Documents shall be prepared, assembled and submitted by the Contractor to the Architect in a timely manner or within the time indicated in the Submittal Schedule incorporated into the Accepted Construction Schedule.
 - 4.7.1.2. Contractor Approval of Subcontractor Submittals. All Submittals prepared by Subcontractors or Material Suppliers shall bear the written approval of the Contractor prior to submission to the Architect for review, with the approval indicating that the Contractor has verified materials, field measurements, field construction criteria, catalog numbers and similar data related thereto and has verified that the information contained within such Submittals conform to the requirements the Contract Documents. Any Submittal submitted without the Contractor's written approval will be returned to the Contractor for re-submittal in conformity herewith, with the same being deemed to not have been submitted. Submittals shall be numbered consecutively and include the following: (i) date of submission; (ii) project name; (iii) name of submitting Subcontractor; and (iv) if applicable, the revision number. The foregoing information is in addition to, and not in lieu of, any other information required for the Architect's review of Submittals.
 - 4.7.1.3. <u>Contractor Responsibility for Deviations</u>. The Contractor is not relieved of responsibility for correcting deviations from the Contract Documents by the Architect's review of Submittals unless the Contractor specifically informs the Architect in writing of such deviation at the time of submission of the Submittal and the Architect accepts the specific deviation.
 - 4.7.1.4. No Performance of Work Without Architect Review. The Contractor shall perform no portion of the Work requiring the Architect's review of Submittals until the Architect has completed its review and accepted the Submittal. The Contractor shall not perform any portion of the Work affected by a related Submittal until the related Submittal is reviewed and accepted by the Architect.
 - 4.7.2. Architect Review of Submittals. If the Architect returns a Submittal as rejected or requiring correction(s) with re-submission, the Contractor shall promptly resubmit a Submittal conforming to the requirements of the Contract Documents; the resubmitted Submittal shall indicate the portions thereof modified in accordance with the Architect's direction. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the Architect may rely on the accuracy and completeness of such calculations and certifications accompanying Submittals. The following notations or notations of a similar nature noted on a reviewed Submittal will require the Contractor action noted below.

Submittal Notation	Required Contractor Action
No Exceptions Taken	No formal revision required
Make Corrections Noted	Make revision noted; re-submission of

	revised Submittal not required.
Revise and Re-Submit	Revise Submittal in accordance with notations and re-submit for review.
Rejected Re-Submit	Prepare new alternative Submittal and re-submit for review.

4.7.3. Deferred Approval Items. If any portion of the Work is designated in the Contract Documents as a "Deferred Approval" item, Contractor is responsible for preparing Submittals for Deferred Approval Items. Where required by the Laws or the nature of a Deferred Approval, the Deferred Approval Design shall be completed and stamped by a California licensed architect or California registered engineer. The Deferred Approval Design shall: (i) incorporate all requirements of the Deferred Approval as set forth in the Contract Documents; (ii) be coordinated with other portions of the Work; (iii) be completed in a timely manner so as not to delay, disrupt or interfere with completion of the Work within the Contract Time; and (iv) be completed in accordance with the applicable professional standard of care. The Contractor shall submit each completed Deferred Approval Design to the Architect for review and acceptance. Upon the Architect's acceptance of a Deferred Approval Design, the Contractor shall be responsible for: (i) submittal of the Deferred Approval Design to DSA for review and approval; (ii) modifications to the Deferred Approval Design as necessary to obtain DSA approval; and (iii) payment of fees or charges imposed by DSA for review and approval of a Deferred Approval Design without adjustment of the Contract Price. Notwithstanding review and acceptance of a Deferred Approval Design by the Architect or DSA issuance of approval to construct pursuant to the Contractor's Deferred Approval Design, the Contractor remains liable to the District for all losses, damages, costs, or other consequences of the failure of any Contractor's Deferred Approval Design to: (i) conform to the applicable design professional standard of care; (ii) conform to design intent and/or aesthetic requirements established in the Contract Documents; or (iii) perform and function in accordance with requirements established in the Contract Documents.

4.8. Materials and Equipment.

4.8.1. Approval of Substitutions or Alternatives. The Contractor may propose alternatives or substitutes for items specified in the Contract Documents ("Alternative Products"), provided that: (i) the Alternative Products comply with the requirements of the specified item; (ii) the Contractor certifies that the quality, performance capability and functionality (including aesthetics) of the Alternative Products meet or exceed the quality, performance capability and functionality of the specified item; and (iii) use of the Alternative Product will not delay completion of the Work or increase the Contract Price. The Contractor shall submit engineering, construction, dimension, visual, aesthetic and performance data ("Substantiating Data") to the Architect to permit evaluation of the Alternative Products. The Contractor shall not furnish or install any Alternative Products without the Architect's acceptance of the Alternative Products. The Architect's decision evaluating the Contractor's proposed Alternative Products shall be final. Neither the Contract Time nor the Contract Price shall be increased on account of any Alternative Products accepted by the Architect. The Contract Price shall be reduced by the actual cost savings realized by the Contractor's furnishing and/or installation of accepted Alternative Products. The Contractor is solely responsible for all costs and fees incurred by the District to review proposed Alternative Products, including without limitation fees of the Architect, design consultants to the Architect and/or governmental agencies to review and/or approve any proposed substitution or alternative. All requests for the Architect's review and approval of any Alternative Products and all Substantiating Data shall be submitted by Contractor not later than thirty-five (35) days following the date of the District's award of the Contract to Contractor; any request for approval of Alternative Products submitted thereafter may be rejected summarily.

The foregoing process and time limits shall apply to any proposed Alternative Products regardless of whether the Alternative Products are furnished or installed by the Contractor, a Subcontractor or Material Supplier.

- 4.8.2. <u>District Standard Products</u>; "Sole Source" Products. If any material, equipment, product or other item ("Product") is designated in the Contract Documents as a "District Standard" or by similar words/terms, the District is deemed to have made a finding that such Product is designated and specified to match other Products in use in a completed or to be completed work of improvement and not subject to Alternative Products.
- 4.8.3. <u>Placement of Material and Equipment Orders</u>. The Contractor and Subcontractors shall promptly place all orders for materials and/or equipment for completion of the Work so that delivery of the same shall be made without delay or interruption to the Work. When requested by or on behalf of the District, the Contractor shall furnish written evidence of the placement of orders for materials and/or equipment necessary for completion of the Work, including without limitation, orders for materials and/or equipment to be provided, furnished or installed by any Subcontractor.
- 4.8.4. <u>District's Right to Place Orders for Materials and/or Equipment</u>. If the District determines, in its sole discretion, that orders for materials and/or equipment have not been placed in a manner so Substantial Completion is achieved within the Contract Time, the District shall have the right, but not the obligation, to place such orders on behalf of the Contractor. The Contractor shall reimburse the District for all costs and fees incurred by the District in placing such orders.
- 4.9. <u>Safety</u>. The Contractor is solely responsible for initiating, maintaining and supervising all safety programs required by the Laws or by the type or nature of the Work and for initiating and maintaining reasonable safety precautions to prevent damage, injury or loss to: (i) employees on the Work and other persons who may be affected thereby; (ii) the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site or in transit; and (iii) other property or items at the Site, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction. The foregoing includes, without limitation, posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities. Duties of the Contractor's Superintendent include prevention of accidents and the implementation of safety precautions and programs. In an emergency, the Contractor shall take necessary action to prevent or mitigate threatened damage, injury or loss.
- 4.10. Hazardous Materials; Prohibition on Use of Asbestos Construction Building Materials ("ACBMs"). If the Contractor or any Subcontractor uses, at the Site, or incorporates into the Work, any material or substance deemed to be hazardous or toxic under the Laws (collectively "Hazardous Materials"), the Contractor shall comply with the Laws relating to the use, storage or disposal thereof. It is the intent of the District that ACBMs not be used or incorporated into any portion of the Work. If any product or material forming a part of the Work or incorporated into the Work if found to contain ACBMs, the Contractor shall at its sole cost and expense: (i) remove such product or material in accordance with the Laws; (ii) replace such product or material with non-ACBM products or materials; and (iii) return the affected portion(s) of the Work to the finish condition depicted in the Contract Documents relating to such portion(s) of the Work. The foregoing obligations shall survive the termination of the Contract, the warranty period provided under the Contract Documents, completion of the Work or the District's acceptance of the Work. If the Contractor fails or refuses, for any reason, to commence the removal and replacement of any material or product containing ACBMs forming a part of, or incorporated into the Work, within ten (10) days of the date of the District's written notice to the Contractor, the District may thereafter proceed to cause the removal and replacement of such

materials or products; all costs, expenses and fees, including without limitation fees and costs of consultants and attorneys, shall be the joint and several responsibility of the Contractor and the Surety.

- 4.11. Maintenance of Record Drawings. During the Work, the Contractor shall continuously maintain Record Drawings consisting of a set of the Drawings marked to indicate all field changes to adapt the Work depicted in the Drawings to field conditions, Change Orders and all concealed or buried installations, including without limitation, piping, conduit and utility services. Record Drawings relating to the Structural, Mechanical, Electrical and Plumbing portions of the Work shall indicate without limitation, circuiting, wiring sizes, equipment/member sizing and shall depict the entirety of the as built conditions of such portions of the Work. If the District reasonably determines that the Contractor has not been, or is not, continuously maintaining the Record Drawings pursuant to the foregoing, the District may take appropriate action to cause the continuous maintenance of complete and accurate Record Drawings, at the Contractor's expense. Prior to receipt of the Final Payment, Contractor shall deliver the Record Drawings to the Architect.
- 4.12. <u>Use of Site</u>. The Contractor shall confine operations at the Site to areas permitted the Laws and the Contract Documents and shall not unreasonably encumber the Site or adjoining areas with materials or equipment. The Contractor is solely responsible for providing security at the Site with all such costs included in the Contract Price. Except in an emergency, no construction activities shall be permitted at or about the Site except during the hours and days set forth in the Special Conditions; Work performed at hours or on days not noted in the Special Conditions will not result in adjustment of the Contract Time or the Contract Price.
- 4.13. Access to the Work. The Contractor shall provide DSA, District, Construction Manager, the Project Inspector and Architect with access to the Work, whether in place, preparation and progress and wherever located.
- 4.14. <u>Patents and Royalties</u>. The Contractor and the Surety shall defend, indemnify and hold harmless the District and its agents, employees and officers from any claim, demand or legal proceeding arising out of or pertaining, in any manner, to any actual or claimed infringement of patent rights in connection with performance of the Work under the Contract Documents.
- 4.15. Wage Rates; Employment of Labor.
 - 4.15.1. <u>Payment of Prevailing Rates</u>. There shall be paid each worker of the Contractor and Subcontractors engaged in the Work, not less than the general prevailing wage rate, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such worker. During the Work and pursuant to Labor Code §1771.4(a)(4), the Department of Industrial Relations will monitor and enforce the obligation of the Contractor and Subcontractors to pay laborers at least the Prevailing Wage Rate established for the classification of work/labor performed.
 - 4.15.2. <u>Prevailing Rate Penalty</u>. If a worker of the Contractor or a Subcontractor is paid less than the prevailing wage rate for the work or craft provided by the worker, the Contractor and/or Subcontractor shall be subject all penalties and assessments established by the Laws.
 - 4.15.3. <u>Certified Payroll Records</u>. The Contractor and all Subcontractors shall prepare and submit Certified Payroll Records to the Labor Commissioner in compliance with requirements established in Labor Code §1771.4. The form and content of Certified Payroll Records shall be as established by the Labor Commissioner and the frequency of Certified Payroll Records submittal to the Labor Commissioner shall be pursuant to Labor Code §1771.4. Pursuant to California Labor Code §1776, the Contractor and each Subcontractor shall keep accurate

payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each person employed for the Work. The payroll records shall be certified and available for inspection at all reasonable hours at the principal office of the Contractor in accordance with the Laws. If the Contractor and/or Subcontractor fail or refuse to produce payroll records as required by the Laws, the Contractor and/or Subcontractor shall be subject to all penalties and assessments under the Laws as a result of such failure or refusal.

- 4.15.4. <u>Hours of Work</u>. The Contractor and Subcontractors shall limit the hours of work by their respective workers to those permitted by the Laws. Hours of work exceeding those permitted by the Laws shall be subject to additional premium wage payments as required by the Laws. Failure of the Contractor or Subcontractors to comply with the foregoing will subject the Contractor and/or Subcontractor to all penalties and assessments under the Laws.
- 4.16. <u>Apprentices</u>. Apprentices for the Work shall be in strict conformity with the Laws, including without limitation, Labor Code §§1777.5 through 1777.7, the provisions of which are incorporated herein by this reference. The responsibility for compliance with apprenticeship requirements is solely and exclusively that of the Contractor. If the Contractor willfully fails to comply with these provisions and California Labor Code §1777.5, pursuant to California Labor Code §1777.7, the Contractor shall be subject to all penalties and assessments established by the Laws.
- 4.17. Employment of Independent Contractors. Pursuant to California Labor Code §1021.5, Contractor shall not willingly and knowingly enter into any agreement with any person, as an independent contractor, to provide services for the Work where the services provided or to be provided requires the person to hold a valid California Contractors' license and such person does not meet the burden of proof of his/her independent contractor status pursuant to California Labor Code §2750.5. Employment of any person in violation of the foregoing, will subject the Contractor to the civil penalties under California Labor Code §1021.5 and any other penalty provided by the Laws. All Subcontractors shall comply with the foregoing.
- 4.18. Assignment of Antitrust Claims. The Contractor and all Subcontractors assign to the District all rights, title and interest in and to all causes of action they may have under Section 4 of the Clayton Act, (15 U.S.C. §15) or under the Cartwright Act (California Business and Professions Code §§16700 et seq.) pursuant to California Government Code §4551. This assignment shall be made and become effective at the time the District tenders Final Payment to the Contractor, without further acknowledgment by the parties.
- 4.19. Progress Reports; DSA Verified Reports.
 - 4.19.1. <u>DSA Verified Reports: Contractor Actions</u>. A material obligation of the Contractor is completion of all actions and activities which by the Contract Documents or by the Laws are the responsibility of the Contractor relating to DSA reporting requirements pursuant to Education Code §81141 (including amendments thereto) and issuance of DSA's Certificate of Compliance for the Project pursuant to Education Code §81147 (including amendments thereto) upon completion of the Work. The foregoing shall include without limitation, the timely preparation, completion and filing of Verified Reports during Project construction and the filing of the Final Verified Report with DSA within ten (10) days of the determination of Final Completion. Concurrently with submittal to DSA, the Contractor shall provide the District, Project Inspector and Architect with copies of all Verified Reports completed by the Contractor and submitted to DSA.
 - 4.19.2. <u>District Withholdings From Final Payment</u>. The completion and filing of the DSA Final Verified Report is an express condition precedent to the District's disbursement of the Final

Payment. If the Contractor fails to prepare and file the Final Verified Report within ten (10) days of the determination of Final Completion, the District may retain and withhold an amount not to exceed ten percent (10%) of the Final Payment from disbursement to the Contractor as damages for the failure of the Contractor to have timely and completely discharged its obligations hereunder. The Contractor acknowledges and agrees that the foregoing withholdings by the District is a reasonable estimate of the damages and other losses the District will sustain due to the failure of the Contractor to have timely and fully discharged its obligations hereunder.

4.19.3. <u>Progress Reports</u>. Progress Reports shall be submitted to the District or Construction Manager not later than 9:00 A.M. of the ensuing business day.

5. Subcontractors.

5.1. <u>Subcontracts</u>. Work performed by Subcontractors shall be pursuant to a written agreement between the Contractor and each Subcontractor which specifically incorporates by reference the Contract Documents and which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents, including without limitation, the policies of insurance required under Article 6 of these General Conditions and obligates the Subcontractor to assume toward the Contractor and Architect all the obligations and responsibilities of the Contractor which the Contractor assumes toward the District and the Architect. No contractual relationship shall exist, or deemed to exist, between any Subcontractor and the District, unless the Contract is terminated and District, in writing, elects to assume the Subcontract. Each Subcontract shall provide that such Subcontract may be assigned to the District if the Contract is terminated by the District pursuant to these General Conditions, subject to the prior rights, if any, of the Surety.

5.2. Subcontractor DIR Contractor Registration.

- 5.2.1. No Subcontractor Performance of Work Without DIR Registration. No portion of the Work is permitted to be performed by a Subcontractor unless the Subcontractor is a DIR Registered contractor. The foregoing DIR contractor registration requirement is applicable for all Subcontractors, including without limitation, lower tier Subcontractors and Subcontractors who are not identified in the Contractor's Subcontractors List.
- 5.2.2. Contractor Obligation to Verify Subcontractor DIR Registration Status. An affirmative and on-going obligation of the Contractor under the Contract Documents is the Contractor's verification that all Subcontractors are at all times during performance of the Work in full and strict compliance with DIR contractor registration requirements. The Contractor shall not permit or allow any Subcontractor to perform any Work without the Contractor's verification that the Subcontractor is in full and strict compliance with DIR contractor registration requirements.
- 5.2.3. Contractor Obligation to Request Substitution of Listed Subcontractor Who Is Not DIR Registered Contractor. If any Subcontractor identified in the Contractor's Subcontractors List submitted with the Contractor's proposal for the Work is not a DIR registered contractor at the time of opening of proposals for the Work or if a Subcontractor's DIR contractor registration lapses prior to or during a Subcontractor's performance of Work, the Contractor shall request the District's consent to substitute the Subcontractor who is not a DIR registered contractor pursuant to Labor Code §1771.1(c)(3) and/or Labor Code §1771.1(d).

5.3. Substitution of Listed Subcontractor.

5.3.1. <u>Substitution Process</u>. Any request of the Contractor to substitute a listed Subcontractor must be in strict conformity with this Article 5.2 and California Public Contract Code §4107. All costs, fees or expenses incurred by the District, including, those of the Project Inspector, Architect and/or Construction Manager or attorneys in review, evaluation or hearing relating to a request to substitute a listed Subcontractor shall be borne by the Contractor.

- 5.3.2. <u>Responsibilities of Contractor Upon Substitution of Subcontractor</u>. The District's consent to Contractor's substitution of a listed Subcontractor shall not result in any increase of the Contract Price or the Contract Time.
- 5.4. Subcontractors' Work. Whenever the Work of a Subcontractor is dependent upon the Work of the Contractor or another Subcontractor, the Contractor shall require the Subcontractor to: (i) coordinate its Work with the dependent Work; (ii) provide necessary dependent data and requirements; (iii) supply and/or install items to built into the dependent Work of others; (iv) make appropriate provisions for dependent Work of others; (v) carefully examine and understand the portions of the Contract Documents (including Drawings, Specifications and Field Clarifications) and Submittals relating to the dependent Work; and (vi) examine the existing dependent Work and verify that the dependent Work is in proper condition for the Subcontractor's Work.

6. Insurance, Indemnity and Bonds.

- 6.1. Workers' Compensation Insurance; Employer's Liability Insurance. The Contractor shall purchase and maintain: (i) Workers' Compensation Insurance covering claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts; and (ii) Employer's Liability Insurance covering bodily injury (including death) by accident or disease to any employee which arises out of the employee's employment by Contractor.
- 6.2. Commercial General Liability and Property Insurance. The Contractor shall purchase and maintain Commercial General Liability and Property Insurance covering the types of claims set forth below which may arise out of or result from Contractor's operations under the Contract Documents and for which the Contractor may be legally responsible: (i) claims for damages because of bodily injury, sickness or disease or death of any person other than the Contractor's employees; (ii) claims for damages insured by usual personal injury liability coverage which are sustained (a) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (b) by another person; (iii) claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; (iv) claims for damages because of bodily injury, death of a person or property damages arising out of ownership, maintenance or use of a motor vehicle; (v) contractor's pollution liability; (vi) contractual liability insurance applicable to the Contractor's obligations under the Contract Documents; and (vii) Completed Operations.
- 6.3. <u>Builder's Risk "All-Risk" Insurance</u>. The Contractor shall obtain Builder's Risk "All-Risk" Insurance covering vandalism and malicious mischief, fire, sprinkler leakage, civil authority, sonic boom, collapse and flood upon the entire Work, including completed Work and Work in progress to the full insurable value thereof. Contractor's Builders Risk Insurance shall include seismic coverage if so indicated in the Special Conditions. Such insurance shall include the District as an additional named insured, and any other person with an insurable interest designated by the District as an additional named insured. The risk of damage to the Work due to the perils covered by the Builder's Risk "All Risk" Insurance, as well as any other hazard which might result in damage to the Work, is that of the Contractor and the Surety, and no claims for such loss or damage shall be recognized by the District, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.
- 6.4. <u>Coverage Amounts</u>. The insurance required of the Contractor hereunder shall be written for not less than any limits of liability specified in the Contract Documents, or required by the Laws, whichever is greater.

- 6.5. Evidence of Insurance; Subcontractor's Insurance.
 - 6.5.1. Certificates of Insurance. Prior to commencing the Work, Contractor shall deliver Certificates of Insurance to the District evidencing the insurance coverages required by the Contract Documents. The Certificates of Insurance shall contain a provision that coverages under such policies will not be canceled or expire until at least thirty (30) days prior written notice has been given to the District. The insurance policies required of Contractor hereunder shall also name the District as an additional insured as its interests may appear.
 - 6.5.2. <u>Subcontractors' Insurance</u>. Each Subcontractor shall obtain and maintain the policies of insurance set forth in Articles 6.1 and 6.2 with minimum coverage limits as set forth in the Special Conditions. The policies of insurance to be obtained and maintained by Subcontractors hereunder are in addition to, and not in lieu of, the Contractor's insurance obligations. Each policy of insurance of a Subcontractor shall conform to the requirements of this Article 6. The Contractor shall promptly deliver Certificates of Insurance to the District evidencing that the Subcontractors have obtained and maintained policies of insurance in conformity with the requirements of this Article 6.
 - 6.5.3. <u>Insurer Requirements</u>. Policies of insurance required of the Contractor and Subcontractors hereunder shall be acceptable to the District only if the insurer issuing each such policy of insurance is A.M. Best rated at least A-/VII and authorized by the Laws to issue policies of insurance in California.
- 6.6. Contractor's Insurance Primary; Contractor Liability for Deductibles. All insurance coverages maintained by Contractor hereunder, if overlapping with any policy of insurance maintained by the District, shall be deemed to be primary and non-contributing with any policy maintained by the District and any policy or coverage thereunder maintained by District shall be deemed excess insurance. If the District maintains a policy of insurance covering property damage arising out of the perils of fire or other casualty covered by the Contractor's Builder's Risk Insurance or the Comprehensive General Liability Insurance of the Contractor or any Subcontractor, the District, Contractor and all Subcontractors waive rights of subrogation against the others. The costs for obtaining and maintaining the insurance coverages required of the Contractor and Subcontractors shall be included in the Contract Price. The Contractor is solely and exclusively responsible for payment of deductibles under any policy of insurance obtained and maintained by the Contractor or any Subcontractor.
- 6.7. Indemnity. Unless arising solely out of the active negligence, gross negligence or willful misconduct the District, Construction Manager, Project Inspector or Architect, the Contractor shall indemnify, defend and hold harmless the Indemnified Parties who are: (i) the District, its Board of Trustees and each individual member thereof, and the officers, employees, agents and representatives of the District; (ii) the Architect and its consultants for the Work and their respective agents and employees; (iii) the Project Inspector; and (iv) the Construction Manager and its agents and employees. The Contractor's obligations hereunder includes indemnity, defense and hold harmless of the Indemnified Parties from and against any and all damages, losses, claims, demands or liabilities whether for damages, losses or other relief, including, without limitation attorneys' fees and costs which arise, in whole or in part, from the Work, the Contract Documents or the acts, omissions or other conduct of the Contractor, Subcontractor or any person or entity engaged by them for the Work. The Contractor's obligations under the foregoing include without limitation: (i) injuries to or death of persons; (ii) damage to property; (iii) theft, loss or destruction of property; (iv) Stop Payment Notice claims asserted in connection with the Work; and (v) other losses, liabilities, damages or costs resulting from, in whole or part, any acts, omissions or other conduct of Contractor, any Subcontractor, or any other person or entity employed directly or indirectly by Contractor or a Subcontractor in connection with the Work and their respective agents, representatives, officers or employees.

If any action or proceeding is commenced on account of any claim, demand or liability subject to Contractor's obligations hereunder, and any of the Indemnified Parties are a party thereto, the Contractor shall, at its sole cost and expense, defend the Indemnified Parties in such action or proceeding with counsel reasonably satisfactory to the named Indemnified Parties. If there is any judgment, award, ruling, settlement, or other relief arising out of any such action or proceeding to which any of the Indemnified Parties are bound by, the Contractor shall pay, satisfy or otherwise discharge any such judgment, award, ruling, settlement or relief; Contractor shall indemnify and hold harmless the Indemnified Parties from any and all liability or responsibility arising out of any such judgment, award, ruling, settlement or relief. The Contractor's obligations hereunder are binding upon Contractor's Performance Bond Surety and these obligations shall survive notwithstanding Contractor's completion of the Work or the termination of the Contract, until barred by the applicable Statute of Limitations.

6.8. Payment Bond; Performance Bond. Prior to commencing the Work, the Contractor shall obtain and deliver to the District a Performance Bond and a Labor and Material Payment Bond each in a penal sum equal to one hundred percent (100%) of the Contract Price and in the form and content set forth in the Contract Documents. The Surety issuing bonds shall be an Admitted Surety Insurer as defined in California Code of Civil Procedure §995.120 and A.M. Best rated at least A-/VII. Obligations of the Surety under the Performance Bond include without limitation, the Contractor's post-construction obligations, including timely and complete performance of warranty/guarantee obligations.

7. Contract Time

7.1. Substantial Completion of the Work Within Contract Time. The Contract Time is the period of time, including authorized adjustments thereto, for achieving Substantial Completion of the Work. The date for commencement of the Work is the date established in the Notice to Proceed issued by the District pursuant to the Agreement, which shall not be postponed by the failure to act of the Contractor or of persons or entities for which the Contractor is responsible. The date of Substantial Completion is the date certified by the Architect, Construction Manager and Project Inspector.

7.2. Progress and Completion of the Work.

- 7.2.1. <u>Time of Essence</u>. Time limits stated in the Contract Documents are of the essence. The Contractor shall employ and supply a sufficient force of workers, material and equipment, and prosecute the Work with diligence so as to maintain progress, to prevent Work stoppage and to achieve Substantial Completion of the Work within the Contract Time.
- 7.2.2. <u>Substantial Completion</u>. Substantial Completion is when the Work is complete in accordance with the Contract Documents so the District can occupy or use the Work for its intended purpose. Substantial Completion shall be determined by the Architect, Construction Manager and Project Inspector upon request by the Contractor. The good faith and reasonable determination of Substantial Completion by the Project Inspector, Construction Manager and the Architect shall be controlling and final.
- 7.2.3. Correction or Completion of the Work After Substantial Completion.
 - 7.2.3.1. <u>Punchlist</u>. Upon achieving Substantial Completion of the Work, the District, The Project Inspector, Construction Manager, Architect and Contractor shall jointly inspect the Work and prepare a comprehensive list of items of the Work to be corrected or completed by the Contractor ("the Punchlist"). The exclusion of an item on the Punchlist shall not limit the Contractor's obligation to complete or correct any portion of the Work in accordance with the Contract Documents.
 - 7.2.3.2. <u>Time for Completing Punchlist Items</u>. The Construction Manager, Contractor and Architect shall, establish a reasonable time for Contractor's completion of the

Punchlist. If mutual agreement is not reached, the Architect shall determine such time, which is final and binding upon the District and Contractor so long as the Architect's determination is made in good faith. The Contractor shall promptly and diligently complete all Punchlist items within the time established. If the Contractor fails to complete the Punchlist within the time established, the Contractor shall be subject to assessment of Liquidated Damages and the District may in its sole and exclusive discretion, without further notice to Contractor, elect to cause the completion of all remaining Punchlist items provided, however, that such election by the District is in addition to and not in lieu of any other right or remedy of the District under the Contract Documents or the Laws, including assessment of Liquidated Damages. If the District elects to complete Punchlist items of the Work, pursuant to the foregoing, the Contractor shall be responsible for all costs incurred by the District in connection herewith. If these costs exceed the remaining Contract Price due to the Contractor, the Contractor and the Performance Bond Surety are jointly and severally liable to District for any such excess costs.

- 7.2.3.3. Final Completion. Final Completion is when all Work has been completed in accordance with the Contract Documents, including without limitation, completion of the Punchlist, the Contractor's close-out responsibilities under the Contract Documents have been fully performed. Final Completion shall be determined by the Architect, Construction Manager and Project Inspector upon request of the Contractor. The good faith and reasonable determination of Final Completion by the Project Inspector, Construction Manager and Architect shall be controlling and final.
- 7.2.3.4. Contractor Responsibility for Multiple Inspections. If the Contractor requests determination of Substantial Completion or Final Completion and the Project Inspector, Construction Manager or Architect determine that the Work does not then justify certification of Substantial Completion or Final Completion and re-inspection is required at a subsequent time to make such determination, the Contractor shall be responsible for all costs of such re-inspection, including without limitation, the fees of the Architect, Construction Manager and Project Inspector.
- 7.2.4. <u>Final Acceptance</u>. Final Acceptance of the Work shall occur upon acceptance of the Work by the District's Board of Trustees; such acceptance shall be submitted for consideration at a regularly scheduled meeting of the District's Board of Trustees after the determination of Final Completion. The commencement of any warranty or guarantee period under the Contract Documents the date of Final Acceptance.

7.3. Construction Schedule.

- 7.3.1. Submittal of Preliminary Construction Schedule. Within five (5) days following execution of the Agreement, the Contractor shall prepare and submit to the District, Construction Manager and Architect a Preliminary Construction Schedule indicating, in graphic form, the estimated rate of progress and sequence of all Work required under the Contract Documents. As required by the District or Construction Manager, the Construction Schedules shall; (i) be prepared with a commercially available computer software program in a critical path format; (ii) indicate the date(s) for commencement and completion of various portions of the Work including without limitation, procurement, fabrication and delivery of major items, materials or equipment; (iii) identify each Submittal required by the Contract Documents, the date for the Contractor's submission of each Submittal and the date for the return of the reviewed Submittal to the Contractor. Any "float" time (the time between earliest finish date and the latest finish date of an activity shown on the Construction Schedule) incorporated into the Construction Schedules is jointly owned by the District and the Contractor.
- 7.3.2. Review of Preliminary Construction Schedule. The District and Construction Manager

will review the Preliminary Construction Schedule for conformity with the requirements of the Contract Documents. Comments of the District will be returned to the Contractor with the reviewed Preliminary Construction Schedule.

- 7.3.3. Accepted Construction Schedule. Within ten (10) days of the District's return of the Preliminary Construction Schedule to the Contractor, the Contractor shall prepare and submit to the District and Construction Manger a revised Construction Schedule incorporating therein the comments to the Preliminary Construction Schedule and submit the same to the District and the Construction Manager for review and acceptance. The review and revision of the Preliminary Construction Schedule shall continue until the District has accepted the entirety of the Construction Schedule, referred to herein as the "Accepted Construction Schedule."
- 7.3.4. Revisions to Accepted Construction Schedule. If the progress of the Work or the sequencing of the activities of the Work materially differs from that indicated in the Accepted Construction Schedule, as determined by the District in its reasonable discretion and judgment, the District may direct the Contractor to revise the Accepted Construction Schedule; within fifteen (15) days of the District's direction, the Contractor shall prepare and submit to the District and Construction Manager a revised Accepted Construction Schedule for review and acceptance by the District. If a Revised Accepted Construction Scheduled is accepted by the District, the Contractor's performance of Work shall conform to such Revised Accepted Construction Schedule.
- 7.3.5. Updates to Accepted Construction Schedule. The Contractor shall update the Accepted Construction Schedule on a monthly basis, or more frequently as required by the conditions or progress of the Work, or as requested by the District. On or before the fifth (5th) day of each month, the Contractor shall deliver to the District and Construction Manager an updated Accepted Construction Schedule indicating progress achieved and activities commenced or completed in the prior updated Accepted Construction Schedule. If requested by the District, the Contractor shall also submit, with its updated Accepted Construction Schedules a narrative statement describing current and anticipated problem areas of the Work, delaying factors and their impact, and an explanation of corrective action taken or proposed by the Contractor. If the progress of the Work is behind that indicated in the Accepted Construction Schedule, the Contractor's narrative statement shall indicate what measures will be taken to place the Work back on schedule. The Contractor's preparation and submittal of the narrative described above is a material obligation of the Contractor.
- 7.3.6. Contractor Responsibility for Construction Schedule. The Contractor is responsible for preparation, submittal and maintenance of the Construction Schedules required by the Contract Documents. Failure of the Contractor to do so is the Contractor's default in the performance of a material obligation of the Contractor under Contract Documents. All costs or expenses incurred relating to Construction Schedules shall be solely that of the Contractor without adjustment of the Contract Price.
- 7.4. <u>Adjustment of Contract Time</u>. If Substantial Completion is delayed, adjustment, if any, to the Contract Time on account of such delay shall be in accordance with this Article 7.4.
 - 7.4.1. Excusable Delays. If Substantial Completion of the Work is delayed by Excusable Delays, the Contract Time shall be subject to adjustment for such reasonable period of time as determined by the Architect; Excusable Delays shall not result in any increase in the Contract Price. Excusable Delays are unforeseeable and unavoidable casualties or causes beyond the control, and without fault or neglect, of the Contractor, or other person directly or indirectly engaged by the Contractor for any portion of the Work, including unanticipated and unavoidable labor disputes, unusual and unanticipated delays in transportation of equipment, materials or Construction Equipment reasonably necessary for completion and proper execution of the Work, unanticipated unusually severe weather conditions or DSA directive to stop the Work which is not the result of the failure of the Contractor to comply with the Contract Documents.

financial resources of the Contractor or any person or entity directly or indirectly engaged by the Contractor for the Work are not conditions beyond the control of the Contractor. If an Excusable Delay occurs, the Contract Time shall be subject to adjustment hereunder only if the Contractor establishes: (i) full compliance with all applicable provisions of the Contract Documents for Contractor's notice and request for adjustment of the Contract Time; (ii) that the event(s) justifying adjustment of the Contract Time are outside the reasonable control and without any fault or neglect of the Contractor or any person or entity directly or indirectly engaged by the Contractor or a for any portion of the Work; and (iii) that the event(s) justifying adjustment of the Contract Time directly and adversely impacted the progress of the Work on the critical path of the then current Accepted Construction Schedule relative to the date(s) of the claimed event(s) of Excusable Delay. If the Special Conditions set forth a number of "Rain Days" to be anticipated during performance of the Work, the Contract Time shall not be adjusted for rain-related unusually severe weather conditions until the actual number of Rain Days during performance of the Work exceeds those noted in the Special Conditions and such additional Rain Days shall have directly and adversely impacted the progress of the Work on the critical path of the then current Accepted Construction Schedule relative to the date(s) of such additional Rain Days.

- 7.4.2. Compensable Delays. If Substantial Completion of the Work is delayed by the acts or omissions of the District, the Construction Manager, the Architect, or separate contractor employed by the District (collectively "Compensable Delays"), upon Contractor's request and notice, in strict conformity with Articles 7 and 9 of these General Conditions, the Contract Time will be adjusted for such reasonable period of time as determined by the Construction Manager and District. Pursuant to California Public Contract Code §7102, if the Contractor's progress is delayed by any of the events described in the preceding sentence, Contractor shall not be precluded from the recovery of damages directly and proximately resulting therefrom, provided that the District is liable for the delay, the delay is unreasonable under the circumstances involved and the delay was not within the reasonable contemplation of the District and the Contractor at the time of execution of the Agreement. In such event, Contractor's damages, if any, shall be limited to direct, actual and unavoidable additional costs of labor, materials, equipment or Construction Equipment directly resulting from such delay, and shall exclude indirect or other consequential damages. Except as expressly provided for herein, Contractor shall not have any other claim, demand or right to adjustment of the Contract Price arising out of delay, interruption, hindrance or disruption to the progress of the Work. Adjustments to the Contract Price and the Contract Time, if any, on account of Changes to the Work or Suspension of the Work shall be governed by the applicable provisions of the Contract Documents.
- 7.4.3. <u>Inexcusable Delays</u>. Inexcusable Delays refer to any delay to the progress of the Work caused by events or factors other than those specifically identified in Articles 7.4.1 and 7.4.2 above. Neither the Contract Price nor the Contract Time shall be adjusted on account of Inexcusable Delays.
- 7.5. <u>Liquidated Damages</u>. If the Contractor fails to: (i) submit Submittals in accordance with the Accepted Construction Schedule or in a timely manner; (ii) achieve Substantial Completion of the Work within the Contract Time, (subject to adjustments authorized under the Contract Documents); or (iii) complete Punchlist items within the time established, the Contractor shall be liable to the District for per diem Liquidated Damages set forth in the Special Conditions, not as a penalty but as Liquidated Damages which are agreed upon because of the difficulty of fixing the District's actual damages. The Contractor and the District agree that said amounts are reasonable estimates of the District's damages in such event, and that such amounts do not constitute a penalty. The Contractor and the Surety shall be jointly and severally liable to the District for any Liquidated Damages liability of the Contractor exceeding the Contract Price then held or retained by the District. The Contractor and the District acknowledge and agree

that the provisions of this Article 7.5 are reasonable under the circumstances existing at the time of the Contractor's execution of the Agreement.

8. Contract Price

8.1. Cost Breakdown of Contract Price. Within fifteen (15) days of the execution of the Agreement by Contractor, Contractor shall furnish, on forms provided by the District, a detailed estimate and complete Cost Breakdown of the Contract Price. The Cost Breakdown shall be subject to the District's review and acceptance of the content thereof. If the District objects to any portion of the Cost Breakdown, within five (5) days of the Contractor's receipt of the District's written objection(s), Contractor shall submit a revised Cost Breakdown to the District for review and acceptance. The foregoing procedure shall continue until the District has accepted of the entirety of the Cost Breakdown. The Cost Breakdown accepted by the District shall not be modified by the Contractor without the prior consent of the District, which may be granted, conditioned or denied in the sole discretion of the District.

8.2. Progress Payments.

- 8.2.1. <u>Applications for Progress Payments ("Payment Applications")</u>. During performance of the Work, the Contractor shall submit monthly Payment Applications, on the first (1st) working day of each month, to the Construction Manager, Project Inspector and Architect, on forms approved by the District, setting forth an itemized estimate of Work completed in the preceding month for the purpose of the District's making of Progress Payments thereon. Values utilized in Payment Applications shall be based upon the District accepted Cost Breakdown.
- 8.2.2. District's Review of Payment Applications. In accordance with Public Contract Code §20104.50, upon receipt of a Payment Application, the District shall cause the same to be reviewed by the Project Inspector, Construction Manager and Architect, as soon as is practicable, for the purpose of determining that the Payment Application is a proper Payment Application. A Payment Application is "proper" only if it is submitted on the form approved by the District, with all of the information completely and accurately provided and such completed Payment Application is accompanied by: (i) the form of Verification of Certified Payroll Records Submittal to Labor Commissioner, executed under penalty of perjury by the Contractor's Superintendent and/or the Contractor PM; which verifies that all Certified Payroll Records for the Contractor and all Subcontractors for the period of time covered by the Application for Progress Payment have been completed and submitted in strict conformity with Labor §1771.4; (ii) a breakdown identifying each Subcontractor/Material Supplier to be disbursed a portion of the requested Progress Payment and the amount of the Progress Payment to be disbursed to each Subcontractor/Material Supplier so identified; (iii) duly completed and executed forms of Conditional Waiver and Release of Rights Upon Progress Payment in accordance with California Civil Code §8132 of the Contractor, all Subcontractors and Material Suppliers covering the Progress Payment requested: (iv) duly completed and executed forms of Unconditional Waiver and Release of Rights upon Progress Payment in accordance with California Civil Code §8134 of the Contractor, Subcontractors and Material Suppliers covering the Progress Payment received by the Contractor under the prior Payment Application; and (v) a certification by the Contractor that it has continuously maintained the Record Drawings. Submittal of all of the foregoing is an express condition precedent to the District's obligation to disburse any Progress Payment. If a Payment Application is determined by the District not to be a "proper" Payment Application, the Payment Application will be returned by the District to the Contractor (along with a written document setting forth the reason(s) why the Payment Application is not proper) as soon as is practicable after receipt of the same from the Contractor, but in no event not more than seven (7) days after the District's receipt thereof.
- 8.2.3. <u>Review of Payment Applications</u>. Upon receipt of Payment Application, the Architect, Construction Manager and Project Inspector shall inspect and verify the Work to determine

whether it has been performed in accordance with the terms of the Contract Documents and to determine the portion of the Payment Application which is properly due to the Contractor under the terms of the Contract Documents.

8.3. <u>District's Disbursement of Progress Payments</u>.

- 8.3.1. <u>Timely Disbursement of Progress Payments</u>. In accordance with Public Contract Code §20104.50, within thirty (30) days after the District's receipt of a proper Payment Application, the District will pay the Contractor ninety five percent (95%) of the value of the Work indicated in the Payment Application which is actually in place as of the date of the Payment Application and as verified and approved by the Project Inspector, Construction Manager and Architect, along with the pro rata portion of the Contractor's overhead, supervision and general conditions costs and profit for that month; provided, however, that the District's obligation to disburse any Progress Payment shall be subject to the Contractor's submission of a "proper" Payment Application as defined hereinabove. If a Payment Application is not "proper" due to the failure or refusal of the Contractor to comply with conditions precedent to the District's obligation to disburse a Progress Payment, or incompleteness or inaccuracies in any such documents submitted, the thirty (30) day period for the District's timely disbursement of a Progress Payment shall commence on the date that the District is actually in receipt of documents not submitted with the Payment Application, or corrections to documents with the Payment Application so as to render them complete and accurate.
- 8.3.2. <u>Untimely Disbursement of Progress Payments</u>. Pursuant to Public Contract Code §20104.50, if the District fails to make any Progress Payment within thirty (30) days after receipt of an undisputed and proper Payment Application, the District shall pay the Contractor interest on the undisputed amount of such Payment Application equal to the legal rate of interest set forth in California Code of Civil Procedure §685.010(a).
- 8.3.3. <u>District's Right to Disburse Progress Payments by Joint Checks</u>. The District may in its sole discretion issue joint checks to the Contractor and Subcontractors or Material Suppliers in satisfaction of its obligation to make Progress Payments or the Final Payment due hereunder. The Contractor shall cooperate with the District and subcontractors/Material Suppliers in the issuance or processing of joint checks.
- 8.3.4. <u>No Waiver of Defective or Non-Conforming Work</u>. The approval of any Payment Application or the disbursement of any Progress Payment to the Contractor shall not be deemed nor constitute acceptance of Defective or Non-Conforming Work.
- 8.3.5. <u>Progress Payments for Changed Work</u>. The Contractor's Payment Applications may include requests for payment for Changes which have been authorized and approved by the District, Construction Manager, Project Inspector, Architect and all other governmental agencies with jurisdiction over such Change. Except as provided for herein, no other payment shall be made by the District for Changes.
- 8.3.6. <u>Materials or Equipment Not Incorporated Into the Work</u>. No Progress Payments will be made for materials or equipment not incorporated into the Work at the time a Payment Application is submitted.
- 8.3.7. <u>Title to Work</u>. The Contractor warrants that title to all Work covered by a Payment Application will pass to the District no later than the time of payment.
- 8.4. <u>Substitute Security for Retention</u>. Eligible and equivalent securities may be substituted for Retention at the request and expense of the Contractor pursuant to California Public Contract Code §22300. The foregoing and the provisions of California Public Contract Code §22300 notwithstanding, failure of the Contractor to request substitution of eligible and equivalent securities for Retention prior to the Contractor's submission of the first Payment Application is the Contractor's waiver of rights under Public Contract Code §22300.

8.5. Final Payment.

- 8.5.1. Application for Final Payment. When the Contractor has achieved Final Completion of the Work and has otherwise fully performed its obligations under the Contract Documents, the Contractor shall submit an Application for Final Payment on such form as approved by the District. Thereupon, the Architect, Construction Manager and Project Inspector will promptly make a final inspection of the Work and when the Architect, Construction Manager and Project Inspector find the Work acceptable under the Contract Documents and that the Contractor has completed all other obligations of the Contractor, the Architect, Construction Manager and Project Inspector will approve the Application for Final Payment, stating that to the best their knowledge, information and belief, the Work has been completed in accordance with the Contract Documents and that the Contractor is entitled to receipt of Final Payment. The Final Payment shall include the remaining balance of the Contract Price and Retention previously withheld by the District, less offsets and deductions thereto.
- 8.5.2. Conditions Precedent to Disbursement of Final Payment. Submittal of the following are express conditions precedent to the District's obligation to disburse the Final Payment: (i) duly completed and executed forms of Conditional or Unconditional Waivers and Releases of rights upon Final Payment of the Contractor, Subcontractors of any tier and Material Suppliers in accordance with California Civil Code §§8136 or 8138, with each of the same stating that there are, or will be, no claims for additional compensation after disbursement of the Final Payment; (ii) Operations and Maintenance manuals and separate warranties provided by any manufacturer or distributor of any materials or equipment incorporated into the Work; (iii) the Record Drawings; (iv) the form of Guarantee included in the Contract Documents duly executed by an authorized representative of the Contractor; (v) all other items or documents required by the Contract Documents to be delivered to the District upon completion of the Work; and (vi) written evidence of the Contractor's filing of the DSA Final Verified Report.
- 8.5.3. <u>Disbursement of Final Payment</u>. Provided that the District is then in receipt of all materials set forth in Article 8.5.2 above as conditions precedent to the District's obligation to disburse Final Payment, not later than sixty (60) days following Final Acceptance, the District shall disburse the Final Payment to the Contractor. Pursuant to California Public Contract Code §7107, if there is any dispute between the District and the Contractor at the time that disbursement of the Final Payment is due, the District may withhold from disbursement of the Final Payment an amount not to exceed one hundred fifty percent (150%) of the amount in dispute. If the Contractor complies with all of the conditions precedent to the District's disbursement of the Final Payment, except for written evidence of the Contractor's filing of the DSA Final Verified Report, the District may withhold and retain ten percent (10%) of the Final Payment in accordance with Article 4.22.2 of these General Conditions. In such event, provided that the Contractor has fully complied with and satisfied all other conditions precedent set forth in Article 8.5.2, the District will disburse the remaining balance of the Final Payment to the Contractor; such disbursement shall constitute the District's full and complete performance of payment obligations to the Contractor hereunder.
- 8.5.4. <u>Waiver of Claims</u>. The Contractor's acceptance of the Final Payment is a waiver and release by the Contractor of any and all claims against the District for compensation or otherwise in connection with the Contractor's performance of the Contract.
- 8.5.5. <u>Claims Asserted After Final Payment</u>. Any stop payment notice or other claim filed or asserted after the Contractor's acceptance of the Final Payment by any Subcontractor, Material Supplier or others in connection with or for Work is the sole and exclusive responsibility of the Contractor who shall indemnify, defend and hold harmless the Indemnified Parties from and against any claims, demands or judgments arising or associated therewith, including without limitation attorneys' fees.
- 8.6. Withholding of Payments. The District may withhold and retain the Contract Price, in whole or

in part, on account of: (i) uncorrected Defective or Non-Conforming Work; (ii) failure of the Contractor to make payments when due laborers, Subcontractors or Material Suppliers; (iii) claims filed or reasonable evidence of the probable filing of claims by Subcontractors, laborers, Material Suppliers, or others performing any portion of the Work under the Contract Documents for which the District may be liable or responsible including, without limitation, Stop Notice Claims: (iv) reasonable doubt that the Contract can be completed for the then unpaid balance of the Contract Price; (v) tax demands filed in accordance with California Government Code §12419.4; (vi) other claims, penalties and/or forfeitures for which the District is required or authorized to retain funds otherwise due the Contractor, including any amounts due from the Contractor to the District under the Contract Documents; or (vii) the Contractor's failure to perform any of its obligations under the Contract Documents, its default under the Contract Documents or its failure to maintain adequate progress of the Work. In addition to the foregoing, the District shall not be obligated to process any Application for Progress Payment or Final Payment, nor shall Contractor be entitled to any Progress Payment or Final Payment so long as any lawful or proper direction concerning the Work or the performance thereof or any portion thereof, given by the District, the Construction Manager, Project Inspector, Architect or any public authority having jurisdiction over the Work, or any portion thereof, shall not be fully and completely complied with by the Contractor. When the District is reasonably satisfied that the Contractor has remedied any such deficiency, payment shall be made of the amount withheld. The foregoing notwithstanding, if the District withholds: (i) ten percent (10%) of the Final Payment pursuant to Articles 4.22.2 and 8.5.3 of these General Conditions; or (ii) any amount incurred to complete an obligation of the Contractor hereunder, the Contractor shall not be entitled to receipt or payment of any portion of such withholdings.

8.7. <u>Payments to Subcontractors</u>. The Contractor shall pay all Subcontractors on account of Work performed by Subcontractors in accordance with the terms of their respective subcontracts and pursuant to Business & Professions Code §7108.5 and Public Contract Code §7201.

9. Changes

- 9.1. Changes to the Work. The District, at any time, by written order, may make Changes within the general scope of the Work or issue additional instructions, require additional Work or direct deletion of Work. The Contractor shall not proceed with any Change without prior written authorization from the District. The Contractor shall promptly commence and diligently complete any District authorized Change; the Contractor shall not be relieved or excused from its prompt commencement and diligent completion of any Change authorized by the District due to the inability of the Contractor and the District to agree upon the adjustment to the Contract Time or the Contract Price on account of such Change. The issuance of a Change Order in connection with any Change authorized by the District is not a condition precedent to Contractor's obligation to promptly commence and diligently complete any Change authorized by the District hereunder. The District's right to make Changes shall not invalidate the Contract nor relieve the Contractor of its obligations under the Contract Documents. Any requirement of notice of Changes to the Surety shall be the responsibility of the Contractor. Changes shall be subject to DSA approval.
- 9.2. Oral Order of Change in the Work. Any oral order, direction, instruction, interpretation, or determination (collectively "Instruction Order") from the District, Construction Manager, Project Inspector or Architect which Contractor believes is a change to the Work, or requires an adjustment to the Contract Price or the Contract Time, shall be treated as a Change only if the Contractor gives the Architect, Construction Manager and Project Inspector written notice within ten (10) days of the Instruction Order and prior to acting in accordance therewith. Time is of the essence in Contractor's written notice pursuant to the preceding sentence and the

Contractor acknowledges that its failure to give written notice within ten (10) days of the date of an Instruction Order is deemed Contractor's waiver of any right to adjustment of the Contract Time or the Contract Price on account of such Instruction Order. The written notice shall state the date, circumstances, extent of adjustment to the Contract Price or the Contract Time, if any, requested, and the source of the Instruction Order that the Contractor regards as a Change. Unless the Contractor acts in strict accordance with this procedure, no Instruction Order shall not be treated as a Change and the Contractor waives any adjustment to the Contract Price or the Contract Time on account thereof.

- 9.3. Contractor Submittal of Data. Within thirty (30) days after receipt of a written order directing a Change or furnishing the written notice regarding any Instruction Order, the Contractor shall submit to the Architect, Project Inspector, Construction Manager and District a detailed written statement setting forth the general nature of the Change, the amount of any adjustment to the Contract Price on account thereof, properly itemized and supported by sufficient substantiating data to permit evaluation of the same, and the extent of adjustment of the Contract Time, if any, required by such Change. No claim or adjustment to the Contract Price or the Contract Time shall be allowed if not asserted by the Contractor in strict conformity herewith or if asserted after Final Payment is made.
- 9.4. Adjustment to Contract Price on Account of Changes to the Work. Adjustments to the Contract Price due to Changes in the Work shall be determined by application of one of the following methods, in the following order of priority:
 - 9.4.1. <u>Mutual Agreement</u>. By negotiation and mutual agreement, on a lump sum basis, between the District and the Contractor on the basis of the estimate of the actual and direct increase or decrease in costs on account of the Change. Upon request of the District or the Architect, the Contractor shall provide a detailed estimate of increase or decrease in costs directly associated with performance of the Change along with cost breakdowns of the components of the Change and supporting data and documentation.
 - 9.4.2. Determination by the District. By the District, whether or not negotiations are initiated pursuant to Article 9.4.1 above, based upon actual and necessary costs incurred by the Contractor as determined by the District. If the procedure set forth in this Article 9.4.2 is utilized to determine the extent of adjustment to the Contract Price on account of Changes to the Work, promptly upon determining the extent of adjustment to the Contract Price, the District shall notify the Contractor in writing of the same; the Contractor shall be deemed to have accepted the District's determination of the amount of adjustment to the Contract Price on account of a Change to the Work unless Contractor shall notify the District, Architect and Construction Manager, in writing, not more than fifteen (15) days from the date of the District's written notice, of any objection to the District's determination. Failure of the Contractor to timely notify the District, Architect and Construction Manager of Contractor's objections to the District's determination of the Contract Price adjustment is deemed Contractor's acceptance of the District's determination and a waiver of any right of the Contractor to thereafter protest or otherwise object to the District's determination. Notwithstanding any objection of the Contractor to the District's determination of the adjustment to the Contract Price pursuant to this Article 9.4.2, Contractor shall promptly commence and diligently complete any such Change.
 - 9.4.3. <u>Basis for Adjustment of Contract Price</u>. If Changes in the Work require an adjustment of the Contract Price pursuant to Articles 9.4.1or 9.4.2 above, the basis for adjustment of the Contract Price shall be as follows:
 - 9.4.3.1. <u>Labor</u>. The Contractor shall be compensated for the costs of field labor actually and directly utilized in the performance of the Change. Labor costs shall be limited to field labor for labor classification(s) necessary to perform the Change. Use of a labor classification which increases labor costs associated with any Change shall

- not be permitted. Labor costs shall exclude costs incurred by the Contractor in preparing estimate(s) of the costs of the Change, in the maintenance of records relating to the costs of the Change, coordination and assembly of materials and information relating to the Change or performance thereof, or the supervision and other overhead and general conditions costs associated with the Change or performance thereof.
- 9.4.3.2. <u>Materials and Equipment</u>. Contractor shall be compensated for the costs of materials and equipment necessarily and actually used or consumed in connection with the performance of Changes. Costs shall be the then lowest wholesale price at which identical or similar materials/equipment are available in the quantities required to perform the Change. The District may furnish materials and/or equipment for Changes, in which event the Contractor shall not be compensated for any mark-up thereon.
- 9.4.3.3. Construction Equipment. The Contractor shall be compensated for the actual cost of the necessary and direct use of Construction Equipment in the performance of Changes in increments of fifteen (15) minutes. No costs or compensation shall be allowed for time while Construction Equipment is inoperative, idle or on standby, for any reason. The Contractor shall not be entitled to compensation for Construction Equipment or tools used for Changes with a replacement value of \$500.00 or less. Construction Equipment costs shall not exceed rental rates established by construction equipment rental agencies in the locality of the Site. The allowable rate for Construction Equipment includes compensation for rental costs, fuel, power, oil, lubrication, supplies, necessary attachments, repairs or maintenance of any kind, depreciation, storage, insurance, labor (exclusive of labor costs of the Construction Equipment operator), and any all other costs incidental to the use of such Construction Equipment.
- 9.4.4. Mark-up on Costs of Changes to the Work. The allowance for mark-ups on the costs of the Change for all overhead (including home office, supervision and field overhead costs, including personnel costs; labor burdens on personnel costs; insurance premiums), general conditions costs and profit associated with the Change shall not exceed the percentage set forth in the Special Conditions, regardless of the number of Subcontractors performing any portion of any Change. If a Change reduces the Contract Price, no profit, general conditions or overhead costs shall be paid by the District to the Contractor for the reduced or deleted Work; the Contract Price shall be reduced by the actual cost for the reduced or deleted Work multiplied by the percentage set forth in the Special Conditions for mark-ups on the cost of a Change adding to the scope of the Work.
- 9.4.5. Contractor Maintenance of Records. If the Contractor is directed to perform any Change pursuant to Article 9.1 or 9.2, the Contractor shall maintain detailed separate records on a daily basis for each separate Change. Such records shall include without limitation hourly records for labor and Construction Equipment and itemized records of materials and equipment used that day in connection with any Change to the Work. Subcontractors shall maintain records in accordance with this Article. Each daily record maintained hereunder shall be signed by Contractor's Superintendent/Subcontractor's Superintendent and shall incorporate a statement that all information contained therein is true, accurate, complete and relates only to the Change referenced therein. All records maintained hereunder shall be subject to inspection, review and/or reproduction by the District, Architect, Construction Manager or Project Inspector upon request. If the Contractor fails or refuses, for any reason, to maintain or make available for inspection, review and/or reproduction such records and the adjustment to the Contract Price on account of any Change to the Work is determined by the District, the District's reasonable good faith determination of the adjustment to the Contract Price on account of such Change shall be final, conclusive and binding upon the Contractor. The Contractor's obligation to

- maintain records hereunder is in addition to, and not in lieu of, other Contractor obligations relating to Changes to the Work.
- 9.5. Adjustment to Contract Time. If any Change(s) are authorized by the District, the Contract Time shall be extended or reduced by Change Order for a period of time commensurate with the time reasonably necessary to perform such Change
- 9.6. Addition or Deletion of Alternate Bid Item(s). If the Bid for the Work includes proposal(s) for Alternate Bid Item(s), during performance of the Work, the District may elect, to add any such Alternate Bid Item(s) if the same did not form a basis for award of the Contract or delete any such Alternate Bid Item(s) if they formed a basis for award of the Contract. If the District elects to add or delete any such Alternate Bid Item(s) pursuant to the foregoing, the cost or credit for such Alternate Bid Item(s) shall be as set forth in the Contractor's Bid. If any Alternate Bid Item is added or deleted pursuant to the foregoing, the Contract Time shall be adjusted by the number of days allocated for the added or deleted Alternate Bid Item in the Contract Documents; if days are not allocated for any Alternate Bid Item added or deleted pursuant to the foregoing, the Contract Time shall be equitably adjusted.
- Change Orders. If the District approves of a Change, a written Change Order prepared by the 9.7. Architect on behalf of the District shall be forwarded to the Contractor describing the Change and setting forth the adjustment to the Contract Time and the Contract Price, if any, on account of such Change. All Change Orders shall: (i) be deemed full payment and final settlement of all claims for direct, indirect and consequential costs, including without limitation, costs of delays or impacts related to, or arising out of, items covered and affected by the Change Order; (ii) incorporate adjustments to the Contract Time; and (iii) constitute the Contractor's waiver of rights of rights under Civil Code §1542. Any claim or item relating to any Change incorporated into a Change Order not presented by the Contractor for inclusion in the Change Order shall be deemed waived. The Contractor shall execute the Change Order prepared pursuant to the foregoing; once the Change Order has been prepared and forwarded to the Contractor for execution. The Contractor shall not modify or amend the form or content of such Change Order, or any portion thereof; attempted or purported modifications or amendments are not binding upon the District and are null, void and unenforceable. Change Orders shall be binding upon the District only upon action of the District's Board of Trustees approving and ratifying such Change Order.
- 9.8. Unilateral Change Order. A Unilateral Change Order is a written Change Order issued by or on behalf of the District before the Contractor and District have agreed on the extent of adjustment of the Contract Time or the Contract Price relating to the Change reflected in a Unilateral Change Order. A Unilateral Change Order shall describe the scope and nature of the Change and set forth the adjustment to the Contract Time and Contract Price, if any. The District shall forward to the Contractor a copy of the Unilateral Change Order (for information only) at least five (5) days prior to the Board of Trustees' review and consideration of the Unilateral Change Order. Any Unilateral Change Order issued hereunder shall be binding upon the District and Contractor upon action of the District's Board of Trustees to ratify or approve such Unilateral Change Order. The objections, if any, of the Contractor to the extent of adjustment of the Contract Time or the Contract Price on account of the Change(s) incorporated into a Unilateral Change Order shall be submitted in writing by the Contractor to the District, Construction Manager and Architect not more than fifteen (15) days after the date of the District's Board of Trustees action to approve or ratify a Unilateral Change Order. The absence of the Contractor's written objections to a Unilateral Change Order within the time set forth above shall be deemed the Contractor's acceptance of the Contract Time and/or Contract

Price adjustment set forth in a Unilateral Change Order for the Changes described therein and the Contractor shall be deemed to have knowingly waived any right to seek additional adjustments of the Contract Time or the Contract Price on account of Change(s) incorporated into such a Unilateral Change Order.

- 9.9. Construction Change Directive. A Construction Change Directive is a written instrument issued by or on behalf of the District directing a Change to the Work prior to the Contractor and District reaching full agreement on an adjustment of the Contract Time and/or Contract Price on account of such Change. The Contractor shall promptly commence and diligently complete any Change to the Work subject to a Construction Change Directive issued hereunder. The issuance of a Change Order in connection with any Construction Change Directive is not a condition precedent to Contractor's obligation to promptly commence and diligently complete a Construction Change Directive. Upon completion of a Construction Change Directive, if the Contractor and District have not agreed on the adjustment of Contract Time and/or Contract Price, the District shall issue a Unilateral Change Order for such Construction Change Directive.
- 9.10. Contractor Notice of Changes. If the Contractor claims that any instruction, request, the Drawings, the Specifications, action, condition, omission, default, or other situation obligates the District to increase the Contract Price or to extend the Contract Time ("Potential Changes"), the Contractor shall notify the Project Inspector, Construction Manager and Architect, in writing, of such claim within ten (10) days from the date of its actual or constructive notice of the factual basis supporting the Potential Changes. The District shall consider any such claim of the Contractor only if sufficient supporting documentation is submitted with the Contractor's notice to the Construction Manager, Project Inspector and Architect. Time is of the essence in Contractor's written notice pursuant to the preceding so that the District can promptly investigate and consider alternative measures to the address such Potential Changes. Accordingly, Contractor acknowledges that its failure, for any reason, to give written notice (with sufficient supporting documentation to permit the District's review and evaluation) within ten (10) days of its actual or constructive knowledge of any Potential Changes shall be deemed Contractor's waiver, release, discharge and relinquishment of any right to assert or claim any entitlement to an adjustment of the Contract Time or the Contract Price on account of any such Potential Changes.
- 9.11. <u>Disputed Changes</u>. If any dispute or disagreement between the Contractor and the District or the Architect regarding the characterization of any item as a Change or as to the appropriate adjustment of the Contract Price or the Contract Time on account thereof, the Contractor shall promptly proceed with the performance, subject to a subsequent resolution of such dispute or disagreement in accordance with the terms of the Contract Documents.
- 9.12. Minor Changes in the Work. The Architect may order minor Changes in the Work not involving an adjustment in the Contract Price or the Contract Time and not inconsistent with the intent of the Contract Documents. Such Changes shall be effected by written order and shall be binding on the District and the Contractor.
- 9.13. <u>Unauthorized Changes</u>. Any Work beyond the lines and grades shown on the Contract Documents, or any extra Work performed or provided by the Contractor without notice in strict conformity with the Contract Documents shall be considered unauthorized and at the sole expense of the Contractor. Work so done will not be measured or paid for, no extension to the Contract Time will be granted on account thereof and any such Work may be ordered removed at the Contractor's sole cost and expense.

10. Separate Contractors

- 10.1. <u>District's Right to Award Separate Contracts</u>. The District reserves the right to perform construction or operations related to the Work with the District's own forces or to award separate contracts in connection with other portions of the Project or other construction or operations at or about the Site. If the Contractor claims that delay or additional cost is involved because of such action by the District, the Contractor shall seek an adjustment to the Contract Price or the Contract Time as provided for in the Contract Documents. Failure of the Contractor to request such an adjustment in strict conformity with the Contract Documents shall be deemed a waiver of the same.
- 10.2. <u>District's Coordination of Separate Contractors</u>. The District shall coordinate the activities of the District's own forces and separate contractor(s) with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the District in reviewing their respective Construction Schedules when directed to do so. The Contractor shall make any revisions to the Accepted Construction Schedule deemed necessary after a joint review and mutual agreement. The Construction Schedules shall then constitute the Construction Schedules to be used by the Contractor, separate contractors and the District until subsequently revised.
- 10.3. <u>Mutual Responsibility</u>. The Contractor shall afford the District and separate contractors of the District with a reasonable opportunity for storage of their materials and equipment and performance of their activities at the Site.
- 10.4. <u>Discrepancies or Defects</u>. If any part of the Work depends for proper execution or results upon construction or operations by the District or a separate contractor to the District, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect, Construction Manager and Project Inspector any discrepancies or defects in such other construction that renders it unsuitable for such proper execution and results.

11. Tests; Inspections; Observations

- 11.1. Contractor's Notice. If the Contract Documents, Laws or any public authority with jurisdiction over the Work require the Work, or any portion thereof, to be specially tested, inspected or approved, the Contractor shall give the Architect, Construction Manager and Project Inspector written notice of the readiness of such Work for observation, testing or inspection at least two (2) working days prior to the time for the conducting of such test, inspection or observation. If any portion of the Work subject to tests, inspection or approval is covered up by Contractor prior to completion and satisfaction of the requirements of such tests, inspection or approval, Contractor shall be responsible for the uncovering of such portion of the Work as is necessary for performing such tests, inspection or approval without adjustment of the Contract Price or the Contract Time.
- 11.2. Cost of Tests and Inspections. The District will pay for fees, costs and expenses for the initial tests/inspections of materials/equipment which are conducted at the Site or locations within a one hundred (100) mile radius of the Site. All fees, costs or expenses for subsequent tests/inspections or for tests/inspections conducted at a location more than a one hundred (100) mile radius from the Site (including without limitation, travel and travel-related expenses) shall be borne solely and exclusively by the Contractor.
- 11.3. <u>Testing/Inspection Laboratory</u>. The District shall select duly qualified person(s) or testing laboratory(ies) to conduct the tests and inspections to be paid for by the District and required

by the Contract Documents or the Laws. Tests and inspections required of the Work shall be as set forth in the Contract Documents and as required by the Laws, including without limitation, Title 24 of the California Code of Regulations. Test/inspection standards shall be as set forth in the Contract Documents or established by the Laws. Where inspection or testing is to be conducted by an independent laboratory or testing agency, materials or samples thereof shall be selected by the laboratory, testing agency, the Project Inspector, Construction Manager or Architect and not by the Contractor.

- 11.4. Additional Tests, Inspections and Approvals. If the Architect, Construction Manager, Project Inspector or public authorities having jurisdiction over any portion of the Work require additional testing, inspection or approval, the Architect, Project Inspector or Construction Manager will instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the District, and the Contractor shall give timely notice to the Architect, Construction Manager and Project Inspector of when and where tests and inspections are to be made so the Construction Manager, Project Inspector and Architect may observe such procedures. The District shall bear the costs of such additional tests, inspections or approvals, except to the extent that such additional tests, inspections or approvals reveal any failure of the Work to comply with the requirements of the Contract Documents, in which case the Contractor shall bear all costs made necessary by such failures, including without limitation, the costs of corrections, repeat tests, inspections or approvals and the costs of the services, the Architect or its consultants, the Construction Manager and Project Inspector in connection therewith.
- 11.5. <u>Delivery of Certificates</u>. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect, Project Inspector and Construction Manager.
- 11.6. <u>Timeliness of Tests, Inspections and Approvals</u>. Tests or inspections required and conducted pursuant to the Contract Documents shall be made or arranged by Contractor to avoid delay in the progress of the Work. The Contractor shall be liable for delays to completion of the Work if the Contractor fails coordinate and timely schedule required tests, inspections or observations of the Work.

12. Uncovering and Correction of Work

- 12.1. <u>Uncovering of Work</u>. If any portion of the Work is covered contrary to the request of the Architect, Construction Manager, Project Inspector or the requirements of the Contract Documents, it must, if required by the Architect, Construction Manager or Project Inspector, be uncovered for observation by the Architect, Project Inspector and/or the Construction Manager and be replaced at the Contractor's expense without adjustment of the Contract Time or the Contract Price.
- 12.2. <u>Rejection of Work</u>. Defective or Non-Conforming Work may be rejected by the District, Construction Manager, Architect or Project Inspector. The Contractor shall correct such rejected Work without adjustment to the Contract Price or the Contract Time, even if the Work, materials or equipment have been previously inspected by the Architect or the Project Inspector or even if they failed to observe the Defective or Non-conforming Work.
- 12.3. <u>Correction of Work</u>. The Contractor shall promptly correct any portion of the Work rejected by the District, Construction Manager, Architect or Project Inspector as Defective or Non-Conforming Work, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such

- rejected Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary thereby. The Contractor shall bear all costs of correcting destroyed or damaged Work, whether completed or partially completed.
- 12.4. Removal of Non-Conforming or Defective Work. The Contractor shall, at its sole cost and expense, remove from the Site all portions of the Work which are defective or are not in accordance with the requirements of the Contract Documents which are neither corrected by the Contractor nor accepted by the District.
- 12.5. <u>Failure of Contractor to Correct Work</u>. If the Contractor fails to commence to correct Defective or Non-Conforming Work within three (3) days of notice of such condition and promptly thereafter complete the same within a reasonable time, the District may correct it in accordance with the Contract Documents and at the expense of the Contractor.
- 12.6. <u>Acceptance of Defective or Non-Conforming Work</u>. The District may, in its sole and exclusive discretion, elect to accept Defective or Non-Conforming Work instead of requiring its removal and correction, in which case the Contract Price shall be equitably reduced.

13. Warranties

- 13.1. Workmanship and Materials. The Contractor warrants to the District that: (i) all materials and equipment furnished under the Contract Documents are new, of good quality and of the most suitable grade and quality for the purpose intended, unless otherwise specified in the Contract Documents; and (ii) all Work and workmanship is of good quality, free from faults and defects and in conformity with the requirements of the Contract Documents. If required by the Architect or the District, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment incorporated into the Work. Any Work, or portion thereof not conforming to these requirements, including substitutions or alternatives not properly approved in accordance with the Contract Documents may be deemed Defective or Non-Conforming Work and subject to repair, replacement or other remedial action by the Contractor to render such work in accordance the Contract Documents. The Contractor expressly warrants the merchantability, the fitness for use, and quality of all Work; such warranty of the Contractor in addition, and not in lieu of, any warranty given by the manufacturer or supplier of such item.
- 13.2. Warranty Work. If, within one (1) year after the date of Final Acceptance, or such other time frame set forth elsewhere in the Contract Documents, any Work is Defective, Non-Conforming, not in accordance with the requirements of the Contract Documents, or otherwise contrary to the warranties contained in the Contract Documents, the Contractor shall commence all necessary corrective action within seven (7) days after receipt of a written notice from the District to do so, and to thereafter diligently complete the same. If the Contractor fails or refuses to commence correction of any such item within said seven (7) day period or to diligently prosecute such corrective actions to completion, the District may, without further notice to Contractor, the District may, in the sole discretion of the District: (i) cause such corrective Work to be performed and completed; or (ii) upon notice and demand to the Performance Bond Surety, require the Surety to complete corrective work. If the District elects to complete corrective work under (i) above, the Contractor and the Performance Bond Surety shall be responsible for all costs in connection with such corrective Work, including without limitation, general administrative overhead costs of the District in securing and overseeing such corrective Work. The obligations of the Contractor hereunder are in addition to, and not in lieu of, any other obligations imposed by any special guarantee or warranty required by the Contract Documents, guarantees or warranties provided by any manufacturer of any item incorporated into the Work, or otherwise recognized, prescribed or imposed by the Laws.

Neither the District's Final Acceptance, the making of Final Payment, nor the use or occupancy of the Work, in whole or in part, by District shall nor relieve the Contractor or the Contractor's Performance Bond Surety from liability with respect to any warranties or responsibility for faulty or defective Work or materials, equipment and workmanship incorporated therein.

- 13.3. <u>Guarantee</u>. Upon completion of the Work, Contractor shall execute and deliver to the District the form of Guarantee included within the Contract Documents. The Contractor's execution and delivery of the form of Guarantee is an express condition precedent to any obligation of the District to disburse the Final Payment to the Contractor.
- 13.4. <u>Survival of Warranties</u>. The Contractor' warranty and guaranty obligations hereunder shall survive the Contractor's completion of Work under the Contract Documents, the District's Final Acceptance or the termination of the Contract.

14. Suspension of Work

- 14.1. <u>District's Right to Suspend Work</u>. The District may, without cause, and without invalidating or terminating the Contract, order the Contractor, in writing, to suspend, delay or interrupt the Work in whole or in part for such period of time as the District may determine. The Contractor shall resume and complete the Work suspended by the District in accordance with the District's directive, whether issued at the time of the directive suspending the Work or subsequent thereto.
- 14.2. Adjustments to Contract Price and Contract Time. If the District directs suspension of the Work, an adjustment shall be made to the Contract Price for increases in the direct cost of performance of the Work of the Contract Documents, actually caused by suspension, delay or interruption ordered by the District; provided however that no adjustment of the Contract Price shall be made to the extent: (i) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or (ii) that an equitable adjustment is made or denied under another provision of the Contract Documents. The foregoing notwithstanding, any such adjustment of the Contract Price shall not include any adjustment to increase the Contractor's overhead, general administrative costs or profit, all of which will remain as reflected in the Cost Breakdown submitted by the Contractor pursuant to the Contract Documents. If the District directs suspension of the Work, the Contract Time shall be equitably adjusted to reflect the duration of the District's suspension of the Work.

15. Termination

15.1. Termination for Cause.

15.1.1. <u>District's Right to Terminate</u>. The District may terminate the Contract upon the occurrence of any one or more of the following events of the Contractor's default: (i) the Contractor refuses or fails to prosecute the Work with diligence to achieve Substantial Completion of the Work within the Contract Time; (ii) the Contractor fails to achieve Substantial Completion of the Work within the Contract Time; (iii) the Contractor becomes bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the Contractor or a third party files a petition to reorganize or for protection under any bankruptcy or similar laws; (iv) the Contractor repeatedly fails to supply sufficient skilled workmen or sufficient quantities of suitable materials or equipment; (v) the Contractor repeatedly fails to make payments to any Subcontractor, Material Suppliers or others for labor, materials or equipment furnished in connection with the Work; (vi) the Contractor disregards the Laws or other requirements of any public entity having jurisdiction over the Work; (vii) the Contractor disregards proper directives of the Architect, Construction Manager, Project Inspector or District; (viii) the Contractor performs Work which deviates from requirements of the Contract Documents and fails

refuses to correct such Work; or (ix) the Contractor otherwise violates in any material way any provisions or requirements of the Contract Documents. Once the District determines that sufficient cause exists to justify the action, the District may terminate the Contract without prejudice to any other right or remedy the District may have, after giving the Contractor and the Surety at least seven (7) days advance written notice of the effective date of termination. The District shall have the sole discretion to permit the Contractor to remedy the cause for the termination without waiving the District's right to terminate the Contract, or otherwise waiving, restricting or limiting any other right or remedy of the District under the Contract Documents or the Laws.

- 15.1.2. <u>District's Rights Upon Termination</u>. If the Contract is terminated pursuant to this Article 15.1, the District may take over the Work and prosecute it to completion, by contract or otherwise, and may exclude the Contractor from the Site. The District may take possession of the Work and of all of the Contractor's tools, appliances, Construction Equipment, machinery, materials, and other items at or about the Site, and use the same to the full extent they could be used by the Contractor without liability to the Contractor. The District shall have the sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work; the District shall not be required to obtain the lowest price for completion of the Work. If the District takes bids for completion of the Work, the Contractor is not eligible for award of such contract(s).
- 15.1.3. Completion by the Surety. If the Contract is terminated pursuant to this Article 15.1, the District may demand that the Surety take over and complete the Work, in which case the rights and obligations of the District and the Surety shall be as set forth in the Performance Bond. Upon the failure or refusal of the Surety to take over and begin completion of the Work within twenty (20) days after demand therefor, the District may take over the Work and prosecute it to completion as provided for above, provided that such action of the District shall not operate to modify, diminish or otherwise affect the liability of the Surety or Contractor to the District under the Contract Documents, Performance Bond or the Laws.
- 15.1.4. <u>Assignment and Assumption of Subcontracts</u>. Upon termination pursuant to the foregoing, the District shall, in its sole and exclusive discretion, have the option of requiring any Subcontractor or Material Supplier to perform in accordance with its Subcontract or Purchase Order with the Contractor and/or assign the Subcontract or Purchase Order to the District or such other person or entity designated by the District.
- 15.1.5. Costs of Completion. In the event of termination under this Article 15.1, the Contractor shall not receive any further payment of the Contract Price until the Work is completed. If the unpaid balance of the Contract Price as of the date of termination exceeds the District's direct and indirect costs and expenses for completing the Work, including without limitation, attorneys' fees and compensation for additional professional and consultant services, such excess shall be used to pay the Contractor for the cost of the Work performed prior to the effective date of termination with a reasonable allowance for overhead and profit. If the District's costs and expenses to complete the Work exceed the unpaid Contract Price, the Contractor and the Surety shall be jointly and severally liable for payment of the difference to the District.
- 15.1.6. <u>Conversion to Termination for Convenience</u>. If the Contract is terminated under this Article 15.1, and it is determined, for any reason, that the Contractor was not in default under the provisions hereof, the termination shall be deemed a Termination for Convenience of the District and thereupon, the rights and obligations of the District and the Contractor shall be determined in accordance with Article 15.2 hereof.
- 15.1.7. <u>District's Rights Cumulative</u>. If the Contract is terminated pursuant to this Article 15.1, the termination shall not affect or limit any rights or remedies of the District against the Contractor or the Surety. The rights and remedies of the District under this Article 15.1 are in addition to, and not in lieu of, any other rights and remedies provided by the Laws or under the Contract Documents.

15.2. Termination for Convenience of the District. The District may at any time, in its sole and exclusive discretion, by written notice to the Contractor, terminate the Contract in whole or in part when it is in the interest of, or for the convenience of, the District. In such case, the Contractor shall be entitled to payment for: (i) Work actually performed and in place as of the effective date of such termination for convenience of the District, with a reasonable allowance for profit and overhead on such Work, and (ii) reasonable termination expenses for reasonable protection of Work in place and suitable storage and protection of materials and equipment delivered to the Site but not yet incorporated into the Work, provided that such payments exclusive of termination expenses shall not exceed the total Contract Price as reduced by payments previously made to the Contractor and as further reduced by the value of the Work as not yet completed. The Contractor shall not be entitled to profit and overhead on Work which was not performed as of the effective date of the termination for convenience of the District. The District may, in its sole discretion, elect to have subcontracts assigned pursuant to Article 15.1.4 above after exercising the right hereunder to terminate for the District's convenience.

16. Miscellaneous

- 16.1. Governing Law; Interpretation. This Contract shall be governed by and interpreted pursuant to the laws of the State of California. The titles used in the Contract Documents are for convenience of reference only shall have no effect upon the interpretation of the Contract Documents. The Contract Documents shall be construed as a whole in accordance with their fair meaning and not strictly for or against the District or the Contractor. The neuter gender shall include the feminine and masculine, the masculine gender shall include the feminine and neuter, the singular number shall include the plural and the plural number shall include the singular. Except as otherwise expressly provided, capitalized terms used in the Contract Documents shall have the meaning and definition for such term as set forth in the Contract Documents.
- 16.2. <u>Successors and Assigns</u>. Unless otherwise expressly provided in the Contract Documents, all terms, conditions and covenants of the Contract Documents shall be binding upon, and shall inure to the benefit of the District and the Contractor and their respective heirs, representatives, successors-in-interest and assigns.
- 16.3. <u>Cumulative Rights and Remedies; No Waiver</u>. Duties and obligations imposed by the Contract Documents and rights or remedies available thereunder shall be in addition to and not in lieu of or otherwise a limitation or restriction of duties, obligations, rights and remedies otherwise imposed or available by the Laws. No action or failure to act by the District shall constitute a waiver of a right or remedy afforded it under the Contract Documents or the Laws nor shall such an action or failure to act constitute approval of or acquiescence in a breach hereunder.
- 16.4. <u>Severability</u>. If any provision of the Contract Documents is deemed illegal, invalid, unenforceable and/or void, by a court or any other governmental agency of competent jurisdiction, such provision shall be deemed to be severed and deleted from the Contract Documents, but all remaining provisions hereof, shall in all other respects, continue in full force and effect.
- 16.5. <u>No Assignment by Contractor</u>. The Contractor shall not assign the Contract or any obligation of the Contractor thereunder, in whole or in part, without the express prior written consent and approval of the District, which may be granted, conditioned or withheld in the sole and exclusive discretion of the District.

- 16.6. <u>Time of Essence</u>. Time is of the essence in the Contractor's performance of its obligations under the Contract Documents.
- 16.7. <u>Independent Contractor Status</u>. The Contractor is an independent contractor to the District and not an agent or employee of the District.
- 16.8. Notices. Except as otherwise expressly provided for in the Contract Documents, all notices which the District or the Contractor may be required, or may desire, to serve on the other, shall be effective only if delivered by: (i) personal delivery; or by (ii) postage prepaid, First Class Certified Return Receipt Requested United States Mail, addressed to the District or the Contractor at their respective address set forth in the Contract Documents, or such other address(es) as either the District or the Contractor may designate from time to time by written notice to the other in conformity with the provisions hereof. For personal delivery, such notices shall be deemed effective upon delivery, provided that such personal delivery requires a signed receipt by the recipient acknowledging delivery of the same. For mailed notices, such notice shall be deemed effective on the third (3rd) working day after deposit in the mail.
- 16.9. <u>Disputes; Continuation of Work.</u> Notwithstanding any claim, dispute or other disagreement between the District and the Contractor regarding performance under the Contract Documents, the scope of Work thereunder, or any other matter arising out of or related to, in any manner, the Contract Documents or the Work, the Contractor shall proceed diligently with performance of the Work in accordance with the District's written direction, pending any final determination or decision regarding any such claim, dispute or disagreement.

16.10. Dispute Resolution; Arbitration.

- 16.10.1. Claims Under \$375,000.00. Claims between the District and the Contractor of \$375,000.00 or less shall be resolved pursuant to Public Contract Code, §\$20104 et seq.; provided however that California Public Contract Code §20104.2(a) shall not supersede the requirements of the Contract Documents for the Contractor's notification to the District of such claim or extend the time for the giving of such notice. The term "claims" used herein shall be as defined in Public Contract Code §20104(b)(2).
- 16.10.2. <u>JAMS Arbitration</u>. Except as provided in Article 16.10.1, any other claims, disputes, disagreements or other matters in controversy between the District and the Contractor arising out of, or related, in any manner, to the Work, the Contract Documents, or the interpretation, clarification or enforcement thereof shall be resolved by binding arbitration conducted by a JAMS arbitrator with expertise in public works construction matters and in accordance with the Comprehensive Arbitration Rules and Procedures of JAMS in effect as of the date that a Demand for Arbitration is filed, except as modified herein. The locale for any arbitration shall be the regional office of JAMS closest to the Site.
- 16.10.3. <u>Demand for Arbitration</u>. A Demand for Arbitration shall be filed and served within a reasonable time after the occurrence of the claim, dispute or other disagreement giving rise to the Demand for Arbitration, but in no event after the date when institution of legal or equitable proceedings based upon such claim, dispute or other disagreement would be barred by the applicable statute of limitations. If either the District or the Contractor assert that the other filed a Demand for Arbitration after expiration of the applicable statute of limitations, no arbitration proceeding shall be commenced until there is a judicial adjudication of whether or not matters raised in the Demand for Arbitration are barred by the applicable statute of limitations and a judgment or an order is entered by a Superior Court of the State of California with competent jurisdiction.
- 16.10.4. <u>Discovery</u>. In connection with any arbitration proceeding commenced hereunder, the

discovery rights and procedures under California Code of Civil Procedure §1283.05 shall be applicable, and the same are incorporated herein by this reference.

- 16.10.5. <u>Arbitrator's Award</u>. Notwithstanding Rule 24 of JAMS Comprehensive Arbitration Rules and Procedures, in accordance with California Code of Civil Procedure §1296, in any arbitration commenced hereunder, the arbitrator's award shall be supported by law and substantial evidence; the District and Contractor hereby expressly agree that a court shall, subject to California Code of Civil Procedure §1286.4, vacate the arbitrator's award if after review it determines either that the arbitrator's award is not supported by substantial evidence or that it is based on an error of law. Any arbitration award that does not include written findings of fact and conclusions of law in conformity with California Code of Civil Procedure §1296 shall be invalid and unenforceable. Subject to the foregoing provisions, the arbitrator's award shall be final, binding and conclusive upon the District and the Contractor.
- 16.10.6. <u>Costs</u>. Expenses and fees of the arbitration and the arbitrator shall be divided equally among the parties to the arbitration. Each party to an arbitration commenced hereunder shall bear its own attorneys' fees, witness fees and other costs and expenses in connection with such arbitration. The foregoing notwithstanding, the arbitrator may award arbitration costs, consisting of arbitration expenses and the arbitrator's fees but excluding attorneys' fees, to the prevailing party.
- 16.10.7. <u>Confirmation of Arbitration Award</u>. The confirmation, enforcement, vacation or correction of an arbitration award shall be by the Superior Court of the County in which the Site is located. The substantive and procedural rules for such post-award proceedings shall be as set forth in California Code of Civil Procedure §1285 et seq.
- 16.10.8. <u>Inapplicability to Bid Bond</u>. This Article 16.11 is not applicable to disputes, disagreements or enforcement of the Bid Bond; all claims, disputes and actions to enforce rights or obligations under the Bid Bond shall be adjudicated exclusively by judicial proceedings commenced in a court of competent jurisdiction.
- 16.10.9. Government Code Claims. All claims, demands, disputes, disagreements or other matters in controversy asserted by the Contractor against the District in a demand for arbitration filed pursuant to Article 16.10.2 or asserted by the Contractor against the District in any arbitration proceeding commenced pursuant to Article 16.10.2 above, shall be deemed a "suit for money or damages" under Government Code §900 et seq. An express condition precedent to the Contractor's commencement of arbitration proceedings under Article 16.10.2, is the Contractor's strict compliance with and exhaustion of remedies and procedures under Government Code §900 et seq, including without limitation, §§945.4, 945.6 and 946. Notwithstanding the dispute resolution provisions set forth herein, all claims demands, disputes, disagreements or other matters in controversy asserted by the Contractor against the District seeking money or damages shall first be presented to the District's Board of Trustees and acted upon or deemed rejected by the Board of Trustees pursuant to Government Code §900 et seq.
- 16.11. <u>Attorneys' Fees</u>. Except as expressly provided for in the Contract Documents, or authorized by the Laws, neither the District nor the Contractor shall recover from the other any attorneys' fees or other costs associated with or arising out of any legal, administrative or other proceedings filed or instituted in connection with or arising out of the Contract Documents or the performance of either the District or the Contractor thereunder.
- 16.12. Provisions Required by the Laws Deemed Inserted. Each and every provision of the Laws and clause required by the Laws to be inserted in the Contract Documents is deemed to be inserted herein and the Contract Documents shall be read and enforced as though such provision or clause are included herein, and if through mistake, or otherwise, any such provision or clause is not inserted or if not correctly inserted, then upon application of either party, the Contract Documents shall forthwith be physically amended to make such insertion or correction.

- 16.13. <u>Days</u>. Unless otherwise expressly stated, references to "days" in the Contract Documents are calendar days.
- 16.14. Entire Agreement. The Contract Documents contain the entire agreement and understanding between the District and the Contractor concerning the subject matter hereof, and supersedes and replaces all prior negotiations, proposed agreements or amendments, whether written or oral. No amendment or modification to any provision of the Contract Documents shall be effective or enforceable except by an agreement in writing executed by the District and the Contractor.

[END OF SECTION]

SPECIAL CONDITIONS

- 1. <u>Application of Special Conditions</u>. These Special Conditions form a part of the Contract Documents for the Work generally described as: **UG Electrical Pathway**.
- 2. <u>Liquidated Damages</u>. The per diem rate of Liquidated Damages for delayed Substantial Completion, delayed submission of Submittals and delayed completion of Punchlist shall be as set forth herein.
 - 2.1. <u>Delayed Substantial Completion</u>. If Substantial Completion is not achieved on or before expiration of the Contract Time, the Contractor shall be liable to the District for Liquidated Damages from the date of expiration of the Contract Time to the date that the Contractor achieves Substantial Completion of the Work at the per diem rate of fifteen hundred Dollars (\$1,500.00).
 - 2.2. <u>Delayed Submission of Submittals</u>. If the Contractor fails to submit a Submittal in accordance with the Submittal Schedule, the Contractor shall be liable to the District for Liquidated Damages for each delayed Submittal at the per diem rate of five hundred Dollars (\$ 500.00) from the date that such Submittal was due to be submitted pursuant to the Submittal Schedule and the date that the Contractor actually submits the Submittal to the Architect.
 - 2.3. <u>Delayed Punchlist Completion</u>. If the Contractor fails to complete Punchlist within the time established pursuant to the Contract Documents, the Contractor shall be liable to the District for Liquidated Damages from the date established for completion of Punchlist until the date that all Punchlist is actually completed at the per diem rate of five hundred Dollars (\$500.00)
 - 2.4. <u>Surety Liability</u>. Subject only to limitations established by the penal sum of the Performance Bond, the Surety issuing the Performance Bond shall be liable to the District for Liquidated Damages due from the Contractor.
- 3. Construction Manager. The Construction Manager is PCM3, Inc.
- 4. <u>District Furnished Drawings and Specifications</u>. Pursuant to Article 2.1.3 of the General Conditions, the District will furnish to the Contractor for use solely and exclusively in connection with performance of the Work Choose an item. (Choose an item.) copies of the Drawings and Specifications. Additional copies of the Drawings and Specifications may be reproduced by the Contractor at its cost and expense or may be obtained by the Contractor from the District at the cost of the District's cost of reproduction plus ten percent (10%).
- 5. Hours and Days of Work at the Site.
 - 5.1. Work Hours/Days. Subject to limitations set forth elsewhere in the Contract Documents and below, the hours/days of Work at the Site are: 7am 7pm Mondays through Fridays, except for holiday days.
 - 5.2. <u>Limitations on Work Hours/Days</u>. Work activities at the Site will be limited or prohibited on days: (i) devoted to student testing or when testing of students may be adversely affected by Work activities at the Site; or (ii) when other special events or functions are scheduled. The Contractor shall familiarize itself with District activities at the Site to avoid Work activity interferences or disturbances to such District activities. The Contractor's Construction Schedule shall take into account the District activities which limit or preclude Work activities at the Site.
- 6. <u>Contractor Personnel Parking</u>. Personnel of the Contractor, Subcontractors and others performing Work at the Site will be allowed to park, with a valid District parking permit, in the parking spaces at a location designated by the District. Parking permit charges, if any, shall be borne and paid by the Contractor without adjustment of the Contract Price. The foregoing notwithstanding, the extent

or location of parking for such personnel may be limited, restricted, eliminated or modified by the District as reasonably necessary to facilitate and accommodate necessary parking for the District's students, staff and visitors engaged in activities and functions in and about the Site. Neither the Contract Price nor the Contract Time shall be adjusted as a result of any such District modifications to the extent or location of parking.

- 7. <u>Site Perimeter Fencing</u>. The Contractor shall install a chain link fence with fabric privacy screen around the entire perimeter of the Site to prevent dust and debris being blown from the Site to adjacent areas, including without limitation, adjacent streets and residential areas. Without adjustment of the Contract Time or the Contract Price the Contractor shall maintain all fencing in good condition and clear of any graffiti or damage. The Contractor shall remove or relocate such fencing as directed by the District or the Construction Manager.
- 8. <u>Facilities/Services for Project Inspector</u>. Pursuant to Article 4.14 of the General Conditions, during the Work, the Contractor shall provide/furnish the following facilities/services or other items for use by the Project Inspector: Andy Martin, Priest Construction Services.
- 9. <u>District Provided Temporary Utilities</u>. Pursuant to Article 4.3.4 of the General Conditions, during the Contractor's performance of the Work, the District will provide the Contractor with utility services and a point of connection for Choose an item.. If the District provides any utility services for use by the Contractor: (i) the District may discontinue, limit or condition use of such services by a Contractor if the District reasonably determines that the Contractor has wasted such utilities, and (ii) the District shall not be liable to the Contractor, nor shall the Contract Time or the Contract Price be increased if any District provided temporary utility service is discontinued or disrupted for any reason other than the District's non-payment of undisputed utility charges. If provided by the District, the Contractor may use the temporary electrical power and domestic potable water service in connection with the Work provided that: (i) the District may discontinue, limit or condition use of such services by a Contractor if the District reasonably determines that the Contractor has wasted such utilities, and (ii) the District shall not be liable to the Contractor, nor shall the Contract Time or the Contract Price be increased if any District provided temporary utility service is discontinued or disrupted for any reason other than the District's non-payment of undisputed utility charges. Notwithstanding any provision of the Contract Documents to the contrary, the Contractor shall not use District provided water supply in connection with any earthwork or grading operations; water supply for earthwork or grading operations shall be obtained by the Contractor, without adjustment of the Contract Time or the Contract Price, from an offsite source or mobile water delivery service. Further, notwithstanding the District providing a point of connection for the Contractor's telephone/data service at the Site, the Contractor is solely responsible for the payment of utility service charges therefor.
- 10. Mark-Ups on Changes to the Work. In the event of Changes to the Work, pursuant to Article 9 of the General Conditions, the mark-up for all overhead (including home and field office overhead), general conditions costs and profit, shall not exceed the percentage of allowable direct actual costs for performance of the Change as set forth below.
 - 10.1. <u>Subcontractor Performed Changes</u>. For the portion of any Change performed by Subcontractors of any tier, the percentage mark-up on allowable actual direct labor and materials costs incurred by all Subcontractors of any tier shall be. In addition, for the portion of any Change performed by a Subcontractor of any tier, the Contractor may add an amount equal to of the allowable actual direct labor and materials costs of Subcontractors performing the Change; the foregoing mark-up shall not be applied to the Subcontractor mark-up.

- 10.2. <u>Contractor Performed Changes</u>. For the portion of any Change performed by the Contractor's own forces, the mark-up on the allowable actual direct labor and materials costs of such portion of a Change shall be .
- 10.3. <u>Bond Premium Costs</u>. In addition to the foregoing mark-ups on the direct costs of labor and materials, a bond premium expense in an amount equal to the lesser of the Contractor's actual bond premium rate of of the total actual direct costs of labor and materials (before Subcontractor and Contractor mark-ups) will be allowed.
- 10.4. <u>Exclusions From Mark-Up of Actual Costs</u>. Mark-ups on the actual cost of materials/equipment incorporated into a Change or for purchase/rental of Construction Equipment shall not be applied to any portion of such costs which are for sales, use or other taxes arising out of the purchase of materials/equipment and/or for purchase/rental of Construction Equipment.
- 11. <u>Rain Days</u>. The Contractor's Construction Schedules prepared pursuant to Article 7 of the General Conditions shall incorporate the Rain Days set forth below; there shall be no adjustment to the Contract Time on account of unusually severe weather conditions resulting from rainfall until the actual number of Rain Days exceeds the number of Rain Days set forth below. The Contractor's Construction Schedule shall incorporate the following number of Rain Days for each Calendar Month of the Contract Time:

Month	Rain Days
January	four (4)
February	four (4)
March	three (3)
April	two (2)
May	two (2)
June	none
July	none
August	none
September	none
October	two (2)
November	three (3)
December	four (4)

12. <u>Deferred Approval Items</u>. The following Deferred Approval Items are incorporated into and made a part of the Work: N/A. The Contractor is responsible for preparing all materials necessary for DSA review and approval of Deferred Approval Items without adjustment of the Contract Time or the Contract Price.

[CONTINUED ON NEXT PAGE]

13. <u>Insurance Coverages</u>

13.1. <u>Contractor Insurance</u>. Pursuant to Article 6 of the General Conditions, the Contractor shall obtain and maintain the following insurance coverages with minimum coverage amounts as set forth below:

Policy of Insurance	Minimum Coverage Amount
Commercial General Liability Insurance	Per Occurrence: One Million Dollars (\$1,000,000)
	Aggregate: Two Million Dollars (\$2,000,000)
Workers Compensation	In accordance with the Laws
Employers Liability	One Million Dollars (\$1,000,000)
Builders Risk	Full insurable value of the Work; Seismic coverage: Not Required

13.2. <u>Subcontractor Insurance</u>. Pursuant to Article 6 of the General Conditions, each Subcontractor shall obtain and maintain the following insurance coverages with minimum coverage amounts as set forth below

Policy of Insurance	Minimum Coverage Amount
Commercial General Liability Insurance	Per Occurrence: One Million Dollars (\$1,000,000)
	Aggregate: Two Million Dollars (\$2,000,000)
Workers Compensation	In accordance with the Laws
Employers Liability	One Million Dollars (\$1,000,000)

[END OF SECTION]

CAMPUS PUBLIC SAFETY BUILDING – UG ELECTRICAL PATHWAY

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END OF SECTION

COMPTON COMMUNITY COLLEGE DISTRICT CAMPUS PUBLIC SAFETY BUILDING – UG ELECTRICAL PATHWAY

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Public Safety Building Underground Electrical Pathway

SCOPE OF WORK Bid #CCC-041:

Public Safety Building Underground Electrical Pathway

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. Work Covered by Contract Documents
- B. Contract Scope
- C. Contractor Use of Premises

1.2 WORK COVERED BY CONTRACT DOCUMENTS:

- A. Work Included: The work to be performed by prime contractor shall conform to the requirements of all of Division 00 and Division 01 as well as the General Conditions, Special Conditions, and all related Specifications that pertain to this Bid Package scope of work, all sheets in Drawings and other related documents, and includes the furnishing of all supervision, labor, materials, tools, equipment, transportation, plan and services necessary therefore and incidental thereto to complete the project. The work shall consist of, but not be limited to, the following:
 - 1. This Prime Contractor is to provide and accurately locate all Underground Electrical Conduits, Red colored slurry, Electrical Pull Boxes, Temporary Fencing, Security, Excavation, Mandrel Testing, Pull Strings, Excavation, Core Drilling, and Electrical scope of work for the entire project including but not necessarily limited to the following work: All lay out of project, including all grade staking, all protection of existing to remain in place, all concrete and asphalt cutting and demo, all over cutting and compaction, all removal, all base material, all earth work, site clearing. scarification, grading, earth moving, compaction, finish grading, field engineering and preparations for the complete project, irrigation protection and repairs, capping and preparation, soil amendments, all paving, all construction signs, all disposal of excess materials, all final clean up and demobilization, and all other required materials, equipment and labor not identified, but necessary to complete this Prime Contractors scope of work.
 - A. Provide a certified survey by a California Licensed Certified Surveyor for all As-built and layout prior to actual Layout of the project per plans and specifications.

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- B. This contractor understands and has included within the base bid provided that all work will be completed during the Christmas Holiday for the District. This time period is from December 15th to January 3rd. This contractor will include within their base bid all overtime required to make this schedule.
- C. This contractor will keep the main entrance to the campus free from debris and displaced soil to keep the traffic lane open for all vehicles. This contractor may use the Bike Lane for displaced soil but must be delineated from traffic at all times and cleaned daily for night patrol.
- D. Provide all Site Clearing and Selective Demolition and all work pertaining to plans and specifications to include the removal of all trees, shrubs and vegetation from the site.
- E. Provide all Earthwork and other related work pertaining to plans and specifications.
- F. This contractor understands and has included within its base bid the requirement of core drilling into the north existing Man Hole from the east side so as not to disrupt the asphalt and concrete curb. This will include all patching and water proofing of the Man Hole after installation of the conduits.
- G. Provide all Concrete Pavement and all scope of work pertaining to plans and specifications. This will include the replacement of an ADA ramp in its entirety where the trenching for the conduit is required.
- H. Provide all Cast-In-Place Concrete scope of work and all related work pertaining to plans and specifications.
- I. Provide accurate Vertical and Horizontal Controls.
- J. This contractor understands that there is an existing catch basin along the required trench for the electrical conduits. This contractor will ensure that the electrical conduits run underneath the storm catch basin without disrupting the storm catch basin.
- K. Insure that all Irrigated areas to remain are tested to provide proper coverage. This contractor will have the sole responsibility to ensure that the areas are reestablished and properly irrigated utilizing the existing

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controls and timers. This contractor will be responsible for ensuring that all irrigation systems are properly protected in place. Any damage to these irrigation systems will be the sole responsibility of this contractor to reestablish in proper working order. All repairs to the irrigation lines will be with schedule 40 pipe and schedule 80 couplers.

- L. This contractor will provide all underground utilities to include but not limited to: Electrical Underground Boxes, Pull Boxes, Electrical Service, Trenching, conduits, 6" Red Slurry Mix, Water and Water connections, and not limited to Irrigation Capping, Realign Irrigation, and irrigation controls. All displaced soils will be coordinated with the Construction Manager for remaining on site and stockpiled in the proper location.
- M. This contractor will have sole responsibility of removing all vegetation from the work area to an offsite location. All clean soil left over from this scope of work will be placed on site at the direction of the construction manager for the District.
- N. This contractor will have the sole responsibility of removing 4" of soil from the east side of the road curb to the east fence line after completion of installing the electrical conduits. This 4" of soil will be measured from the top of existing curb with a "not to exceed" 2% slope up to the east. This area will be compacted to a minimum of 90%. This contractor will then spray weed killer on the soil. This contractor will then lay down a weed fabric barrier prior to installing 4" of Decomposed Granite, DG, (California Gold or equal) and compact this area to 90 % and kept smooth and protecting all existing irrigation.
- 2 This prime contractor is to add an allowance of \$30,000.00 in their base bid. The allowance shall be listed as a line item in the schedule of values. The allowance is to be utilized at the discretion of the District through the Construction Manager. The Construction Manager shall be informed of any additional work for validation and for authorization from the District to use the allowance or portion of the allowance for the work. The Construction manager will document the proposed work, (via

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the AUR form) which will be performed on a time and material basis, not to exceed if such claim is valid. If this allowance is not exhausted by end of this prime contractor's contract, a deductive change order will be prepared for any portion of the allowance not used. The allowance shall be listed as a line item on the contractor's schedule of values.

- 3. **ADD ALTERNATE:** There are no add alternates to this project.
- 4. SPECIAL REQUIRED INSPECTIONS: This contractor will have several special inspections during construction that are above the standard required inspections. Each inspection must be timely and well planned in advance of its normal requirements. 1.) A mandrel test of the electrical conduits after installation in the open trench. 2.) A mandrel test after installation of the slurry on the conduits within the open trench. 3.) A mandrel test after all the backfill and grading is complete.
- 5. Temporary Facilities: This Contractor will have sole responsibility of ensuring that all required temporary services of toilets, water, safety, construction access, and temporary fencing for this contract. These temporary facilities include but are not limited to self-contained toilet units / sanitary facilities, temporary roads and paved areas, maintaining fire lane access at all times during construction, facilities for dewatering (from any source of water) and drains, project identification and temporary construction signage, trash disposal facilities, environmental protection, storm water control, tree and plant protection, pest control, barricades, traffic control flagman/flagmen with phone/radio, (daily at all points of delivery and/or exiting of materials, waste etc. as required), security, warning signs and lights, temporary enclosures, temporary partitions, temporary fire protection and fire extinguishers).
- 6. The following is additional information, instructions and detailed requirements for this Prime Contractors scope of work as identified. Not all specification sections are listed below, only further detail into specific sections along with additional instructions for the project that pertain to this Prime Contractors scope of work.
 - a. Provide all shop drawings and submittals to not cause any delays to any portion of the construction schedule for

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this Prime Contractor or any other Prime Contractor included in this project.

This Contractor is to adhere to the following submittal schedule.

Executed contract.	Five (5) Days from the District's issuance of a Notice of Award.
Submittal and shop drawing schedule.	Five (5) Days from the District's issuance of a Notice of Award.
Procurement schedule with all copies of purchase orders and subcontractor agreements.	Five (5) Days from the District's issuance of a Notice of Award.
Manufacturing schedule with all long lead and special inspection requirements.	Five (5) Days from the District's issuance of a Notice of Award.
5. Delivery schedule.	Five (5) Days from the District's issuance of a Notice of Award.
6. Detailed construction schedule.	Five (5) Days from the District's issuance of a Notice of Award.
7. Commissioning, Warranty, Closeout and punch list schedule.	Fourteen (14) Days from the District's issuance of a Notice to Proceed.

b. This Prime Contractor is responsible for all barricades, or other types of protection necessary to prevent damage to existing improvements indicated to remain. This prime Contractor is to ensure that the site is secured at all times by usage of barricades, fencing & gates w/locks, and any other means required daily to prevent entrance by unauthorized personnel. This Prime Contractor is also responsible for providing, daily cleanup, street cleaning, and dust control surrounding the area of work affected by the proposed construction for this prime contractor. Maintain and/or rework fencing, barricades, and paths of travel daily and/or as described in Division 01, Section 01 50 00, Temporary Facilities and Controls or as directed by the Construction Manager.

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- c. This Contractor will immediately, after award of contract, set up a meeting with the Districts Building Services to review the entire irrigation layout around the scope of work for this contract. Insure protection of existing site concrete flatwork, curb and gutter, sidewalks, benches, railings, pathways, landscaping, irrigation, planting areas, trees, breaking or skinning of roots, skinning and bruising of bark, smothering of trees, shrubs, and ground cover. No stockpiling of construction materials or excavated materials within planters and landscaped areas. No excess foot or vehicular traffic, or parking of vehicles within planters and landscaped areas during the demolition and construction stage of this project through to project acceptance by the owner. Any damage to the above is to be corrected / repaired by this Contractor at no additional cost to the District. Any repairs will be like for like.
- d. Provide all demolition, removal and haul off of Foliage and other obstructions where necessary for this Prime Contractor's scope of work, to include, but not to be limited to, old fencing, shrubs, plants, trees, etc.
- e. This Contractor is to inspect all materials delivered to the site for damage. Store materials on site in enclosures or under protective covering out of direct sunlight. Do not store materials directly on ground. Keep inside of pipes and fittings free of dirt and debris.
- Storm drains shall be staked by a Land Surveyor licensed to practice in the state of California.
- g. Provide adequate cribbing, sheathing, and shoring as necessary to safely retain the earth sides of excavations and trenches from caving and other damage resulting from excavating, together with suitable forms of protection against property damage and bodily injury to personnel employed on the work and the general public. Contractor to be responsible for the design, installation, and maintenance of required cribbing and shoring, and shall meet the approval of the Cal/OSHA and local governing agency requirements.
- h. Drain lines, including trenches, shall be protected from damage during the entire construction period. This

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Contractor is responsible to replace or rework damaged portion of the work at no cost to the Owner.

- Provide all dust, wind erosion control and street cleaning through out the entire duration of this project and for this Prime Contractors scope of work.
- Provide all labor, material, equipment for the installation, per the plans and specification sections or Construction Managers direction.
- k. All costs for repairs due to this Prime Contractor's negligence shall be borne by this Prime Contractor without impact to the approved construction schedule and without additional cost to the District.
- Continuous site cleanup, which includes street cleaning of parking lot and sidewalks, sweeping, litter removal, and housekeeping and daily cleanup of site is mandatory. This Prime Contractor shall put debris in its own debris boxes and/or remove debris from site at this prime contractor's own expense prior to the end of the work day or as directed by the Construction Manager. All debris boxes and containers shall be kept free of graffiti at all times. If this Prime Contractor fails to perform daily clean up, the Construction Manager upon written notice to the Prime Contractor shall order that clean up done at this Prime Contractor's expense and adjust Prime Contractors contract accordingly.
- m. This Prime Contractor is to provide all white glove clean up scope of work for the surrounding site for the entire project, including but not necessarily limited to removal of all residual trash created during this prime contractor's scope of work. Cleaning up must have the Districts final approval through the Construction Manager.
- n. This Prime Contractor shall coordinate his work with that of other prime contractors, subcontractors and work by the District as necessary. All potential space conflicts are to be identified during the bidding and field investigation process. If a field space conflict is encountered, it shall be reworked or rerouted at no additional cost, and only a scope change by the Architect will be considered for contract price adjustment.

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- o. Revisions/Updating Contract Documents This Prime Contractor is responsible to immediately update all field and office sets of contract documents upon receipt of any revised instructions. This includes addenda, revised drawings, "RFI" responses, bulletins, etc. This Prime Contractor shall insert, "cut and paste", revise with red ink or other suitable methods denoting the most current construction documents. Payments to the contractor shall be withheld until drawings are updated.
- p. Record Drawings This Prime Contractor shall maintain and update all changes in the work on the Construction Manager's record drawing set in the field office. All entries must be made and reviewed by the Construction Manager. Monthly progress payments will not be paid until this requirement is complied with. If applicable, this Prime Contractor shall use the contract specifications as a minimum guideline standard. This Prime Contractor shall pay the cost for the final issue of reproducible record drawings, three (3) each that are required by this scope of work.
- q. Deviation From Design This Prime Contractor shall NOT deviate from the design required by the contract documents unless the design violates code requirements or the design is unfeasible. If a design condition warrants a change, then this Prime Contractor shall issue a "Request for Information" pursuant to the terms of the Request for Information article in this exhibit; prior to the work being performed so as to not delay work.
- r. Prime Contractor Personnel The District has complete authority to review and approve selection of this Prime Contractor's field and office personnel for this project. The District has authority to request replacement of any Prime Contractor personnel for reasons determined by the District. This Prime Contractor shall maintain the same approved personnel throughout the entire duration of the project at the District's discretion. This Prime Contractor will, at the time of award of work, furnish a list of persons assigned to the Project showing their titles and telephone numbers. Emergency telephone numbers shall also be provided for the after-hour use by the District.

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- s. This Prime Contractor agrees to provide a minimum of one competent English speaking skilled foreman or superintendent who shall be present at all times during execution of this Prime Contractor's work. Failure to provide adequate Project Management or Superintending result in an assessment of Construction Management costs levied to have the Construction Manager coordinate and manage prime contractors / subcontractor's work. In no event shall Construction Manager be liable for any costs associated with this Prime Contractors lack of supervision. This Prime Contractor agrees to use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work.
- t. Timely requests for clarifications and other information to allow reasonable response time and avoid delay to the construction schedule.
- u. Provide all hoisting necessary for this Prime Contractors entire scope of work.
- v. Schedule shall be in accordance with District approved construction milestone schedule and all subsequent revisions.
- w. This prime contractor is to address punch list, final clean up, and closeout, per the contract construction schedule and or the District's desire for occupancy. This prime contractor agrees that delays to completion of punch list and closeout would constitute a delay in project completion and therefore this Prime contractor shall be subject to the assessment of liquidated damages per the Contract Documents.
- x. Existing Site Conditions: This Prime Contractor shall make a thorough examination of the site to determine all existing conditions affecting the work prior to beginning any work under this Prime Contractor. All conflicts within the contract documents and existing conditions are to be brought to the attention of the Construction Manager during the bidding process by way of the pre-bid clarification form issued at the job walk. Any claims for changes in scope or claims for additional compensation

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will not be considered for this contractor's failure to notify the Construction Manager of such a conflict/discrepancy.

y. Location of Site:

Compton Community College District 1111 E. Artesia Blvd. Compton, CA. 90221

1.3 CONTRACT METHOD:

A. Construct the Work under a single Lump Sum Contract with a Schedule of Values.

1.4 CONTRACTOR USE OF PREMISES:

- A. Contractor shall have use of the premises for the execution of the work.
- B. Work Week and Job Hours Work hours are subject to standard construction hours per the Ordinance set by the City of Compton, Ca. Contractor is expected to work weekends and holidays, as necessary, to complete the work within the specified time of completion without any additional cost to the District. If the contractor plans to work off hours and or weekends at times during the course of the project, this prime contractor needs to notify the Construction Manager (PCM3) forty-eight (48) in advance. All weekends, holidays, or irregular hours worked must be supervised by the Construction Manager and be in compliance with local ordinances. Coordinate use of the premises under the direction of the Construction Manager.
- C. This Prime Contractor shall enforce that all persons working on the site use only non-permanent markers, tapes and tags to indicate construction techniques and instructions, on construction in progress, and on existing construction. This includes markings on exterior and interior of building and on walks, curbs, walls and other site surfaces. Where work is damaged or defaced by use of permanent marking devices, such work will be subject to cleaning, repair or replacement, as the Architect may require.
- D. Move any stored products under This Prime Contractor's control that interferes with the operations of the Owner and/or any other Contractor that is on a separate contract.

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- E. Obtain and pay for the use of additional storage or work areas needed for operations.
- F. This Prime Contractor shall assume all responsibility for parking his own and his subcontractor's vehicles at the direction of the Construction Manager, Contractor shall direct all material deliveries to the construction gate.
- G. Theft: If any person working on the contract should engage in theft of money, property, supplies, equipment, food, or any other item, whether from the District's personnel, students, facilities, employees, visitors, or from another of the Contractor's personnel or subcontractors, will be immediately and permanently dismissed from the site.
- H. All District property is smoke free, drug free, alcohol free, weapons free and graffiti free. This Prime Contractor shall enforce these rules to his crew, subcontractors and suppliers.
- I. All prime contractors must comply with the District's policies regarding worker conduct and security, including fingerprinting and badging requirements as per the "Agreement for Compliance with education Code 45125.1"
 - All costs for the requirements in this section shall be included in the contract unit or lump sum prices for such work appurtenant thereto, and no additional allowance will be made therefore. One half of the cost of the erosion control work will be withheld until after all erosion control features are removed and all affected areas are cleaned and restored.
- J. **SWPPP/Erosion Control**: This Contractor shall install and comply with the Erosion Control Measures/Storm Water Pollution Prevention Plan in accordance with all local and state agency standards and as identified in the contract documents regarding erosion control. The Contractor shall be responsible for installing all erosion control features and maintaining in a good condition for the duration of the project, as deemed reasonable by local and state agency standards until the project is completed. This Contractor shall provide and maintain at all times during construction all necessary pumping and other devices with which to promptly remove and properly dispose of all water from rainfall run-off entering the excavations or other parts of the work. Erosion control devices shall not be removed or modified without the written approval of the Engineer. After a rainstorm, trenching, directional boring etc., all silt and debris shall be removed from check berms and desilting basins. Any erosion protection measures

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damaged during a rainstorm shall be immediately repaired. Any drainage ditch or earthen walled storm drain channels that are adjacent to a pipeline trench or within the limits of the work if damaged or altered shall be reshaped to the satisfaction of the Owner. If erosion control problems occur, this Contractor shall correct the condition immediately and prior to receiving a correction notice from the Owner. If a notice is issued and the erosion problem is not corrected, the Owner will proceed to have the defects repaired, and all costs incurred will be deducted from the Contractor's progress payments

END OF SECTION

ALLOWANCES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Allowances which the Contractor shall provide for designated construction activities in the Work and in this bid.
- B. The provisions in this Section only apply if the Owner includes Allowances in the Contract.

1.2 RELATED DOCUMENTS

A. The Conditions of the Contract and other section of Division 01 apply to this section as fully as if repeated herein, including Section 10 10 00 – Scope of Work.

1.3 DESCRIPTION OF REQUIREMENTS

- A. Definitions and Explanations: Certain requirements of the construction related to each allowance are indicated and specified. The Allowance has been established by the Owner and represents selection by the Owner of selected Sub-Contractors for designated portions of the work specified and shown.
- B. Types of allowance scheduled herein for the Work include lump sum cash allowances. Include all allowances in Contract sum, and identify all allowances in Schedule of Values as separate line items.
- C. Selection and Purchase: At earliest feasible date after award of contract, advise the Architect/Engineer of scheduled date when final selection and purchase of each product or system described by each allowance must be accomplished in order to avoid delays in performance of the Work.
 - Establish date by which Prime Contractor must enter into contract and coordinate with sub-contractor responsible for work defined by allowance.
 - 2. Establish date by which final list of products must be established for purchase of products and systems as specifically selected by the District.

1.4 DEFINITIONS AND DESCRIPTION OF REQUIREMENTS

- A. Cash Allowance Criteria
 - 1. The Allowance is used only as directed by the Owner.
 - 2. The Allowance is used exclusively for the Owner's purposes and for scope(s) of work as directed by Owner.
 - 3. The sub-contractor will prepare detailed breakdown of all costs associated with the work defined for the Allowance. These amounts will be charged against the Allowance by Change Order, based on final detailed payment receipts and back-up as required by Architect/Engineer, and will include all costs of work performed under the defined work scope.
 - a. If required by Owner, Contractor shall obtain quotes for equipment from three separate vendors and present to District for consideration and selection.
 - 4. Contractor shall include in the base bid contract amount all cost of coordination, supervision, bond costs, overhead and profit, supervision, installation and all indirect project costs associated with performing the work of each Allowance. Contractor shall be permitted to charge only its direct costs to perform the work, as indicated through documentation approved by the District.
 - a. At project closeout, any unused Cash Allowance amounts shall be credited to the Owner by Change Order. Contractor shall not deduct costs such as bond costs, overhead and profit or other indirect costs when returning any unused Cash Allowance amounts.
 - Changes that exceed the scope of work or amount of each Allowance covered by each allowance will be processed as a Change Order per Contract Documents.

PART 2 – PRODUCTS - (Not Applicable)

PART 3 – EXECUTION

3.1 SCHEDULE OF CASH ALLOWANCES

1.	. The Bid Package Contractor will provide a \$30,000.00 Allowance to be used for unforeseen conditions and at the District's discretion. This allowance is to be included in the base bid.						

ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for Alternates.
- B. Definition: An Alternate or Alternate Bid is an amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to or deducted from Base Bid amount if the School District decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.
- C. Coordination: Coordinate related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted Alternate is complete and fully integrated into the project.
- D. Notification: Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each Alternate. Indicate whether Alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to Alternates.
- E. A "Schedule of Alternates" is included as an attachment at the end of this section.
 - 1. Include as part of each Alternate, miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.
- B. Bid Form

PART 2 - PRODUCTS - (Not Applicable)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

1. There are no alternates on this bid.

END OF SECTION

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for making modifications to the contract including:
 - 1. Change Orders
 - 2. Construction Change Documents (see General Conditions)
 - Contract Credits
 - 4. Contract Additions
 - 5. Construction Change Directives
 - 6. Immediate Change Directives (see General Conditions)
 - 7. Instructions

B. Modifications:

- 1. Provide full written data required to evaluate contract modifications, including breakdown of labor, material, equipment and description of work with unit costs for each category.
- 2. Maintain detailed records of work done on a time-and-material basis.
- 3. Provide full documentation for all proposed Change Orders to the Architect for his review.
- C. Designate in writing the member of Contractor's organization:
 - 1. Who is authorized to accept changes in the Work.
 - 2. Who is responsible for informing others in the Contractor's employ of the authorization of changes in the Work.

1.2 RELATED SECTIONS

- A. Addenda: All issued Addendums
- B. Agreement: The amounts of unit prices if any as established in the Contract.
- C. General Conditions Article 7, Changes in the Work.
- D. Section 01330 Submittals
- E. Section 01630 Product Substitution Procedures

1.3 REFERENCES

- A. Change Order Requirements per Title 24 Part 1 CCR.
 - 1. Changes in the plans and specifications are to be made by addenda or Change Orders or construction change documents approved by the Division of the State Architect, Title 24 Part 1 Section 4-338.
 - 2. Change Orders: Changes or alterations of the approved plans or specifications after a contract for the work has been awarded are to be made by means of Change Orders. State the reason for the change and provide supplementary drawings where necessary. Change Orders must be manually signed by the Architect or Engineer in general responsible charge of observation of the work or by the Architect or Engineer delegated responsibility for observation of the portion of the work affected by the Change Order.
 - 3. Change Orders are required to bear the approval of the School Board or their authorized representative upon delegated authority.
 - 4. One original signed copy by all parties of each Change Order is required for the files of the Division of the State Architect.

1.4 PRELIMINARY PROCEDURES

A. The Architect or School District may initiate changes by submitting a Request For Proposal. The request will include:

- 1. Detailed description of the Change, Products, and location of the change in the Project. Changes may include additions and deletions from the Contract.
- 2. Supplementary or revised Drawings and Specifications.
- 3. The projected time span for making the change and a specific statement as to whether overtime work is, or is not, authorized.
- 4. A specific period of time during which the requested price will be considered valid.
- 5. Such request is for information only, and is not an instruction to execute the changes, nor to stop Work in progress.
- B. Contractor may initiate changes by submitting a written Change Order Request to the Architect or School District containing:
 - 1. Description of the proposed change.
 - 2. Statement of the reason for making the changes.
 - 3. Statement of the effect on the Contract Sum/ Contract Price and the Contract Time.
 - 4. Statement of the effect on the Work of separate contractors with breakdown of costs for labor, materials and equipment.
 - 5. Documentation supporting any change in Contract Sum/ Contract Price or Contract Time, as appropriate.

1.5 CONSTRUCTION CHANGE DIRECTIVES

- A. In lieu of Proposal Request, the School District through the Construction Manager may issue, a Construction Change Directive (also referred to as an Immediate Change Directive in the General Conditions) for Contractor to proceed with a change which shall state a basis for adjustment, if any, in the Contract Sum/ Contract Price or Contract Time, or both.
- B. Authorization will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change, and will designate the method of determining any change in the Contract Sum/ Contract Price and any change in Contract Time.

- C. The School District and Architect will sign and date the Construction Change Directive as authorization for the Contractor to proceed with the changes.
- D. Contractor may sign and date the Construction Change Directive to indicate agreement with the terms therein.

1.6 DOCUMENTATION OF PROPOSALS AND CLAIMS

- A. Support each quotation for a lump-sum proposal, and for each unit price which has not previously been established, with sufficient substantiating data to allow the Engineer and School District to evaluate the quotation.
- B. On request provide additional data to support time and cost computations:
 - 1. Labor required in hours with unit costs.
 - 2. Equipment required.
 - 3. Products required in units.
 - a. Recommended source of purchase and unit cost.
 - b. Quantities required.
 - 4. Taxes, insurance and bonds.
 - 5. Credit for Work deleted from Contract, similarly documented.
 - 6. Overhead and profit.
 - 7. Justification for any change in Contract Time.
- C. Support each claim for additional costs, and for work done on a time and material basis, with documentation as required for a lumpsum proposal, plus additional information:
 - 1. Name of the School District's authorized agent who ordered the work, and date of the order.
 - 2. Dates and times work was performed, and by whom.

- 3. Time record, summary of hours worked, and hourly rates paid.
- 4. Receipts and invoices for:
 - a. Equipment used, listing dates and times of use.
 - b. Products used, listing of quantities.
 - c. Subcontracts.
- D. Document requests for Substitution of Products as specified in Section 01630.

1.7 CONSTRUCTION CREDITS

- A. Work deleted and no work has been completed by the Contractor: Work deleted from the contract is to be credited back to the District and subtracted from the contract amount. Credits are to be included in Change Orders.
 - Contractor shall credit back to the District total value for the work deleted from the contract. Cost of credits shall be determined by the amount stated in the Contractor's Schedule of Values.
 - 2. Where the value of credits cannot be determined from the Contractor's Schedule of values, total value of the credit is to be determined by the cost of materials, labor, overhead and profit, insurance, bonds, etc. All General Contractor, Subcontractor and Material Supplier levels of the Contract are to be included in the total value of credits back.
 - No amount at any level of the contract shall be withheld from credits for overhead and profit, insurance, bonds, time delays, construction schedule changes and administrative expenses.
- B. Work deleted and a portion of the work has been completed by the Contractor: Work deleted from the contract is to be credited back to the District and subtracted from the contract amount. Credits are to be included in Change Orders.
 - Contractor shall credit back to the District the total value of the work deleted from the contract less any work already completed on the credit item. Cost of credits shall be

determined by the amount stated in the Contractor's Schedule of Values less any work already completed. Completed work may include cost of shop drawings, submittals, site preparation, partially completed work on the credit item or other expenses related to the item.

- 2. Where the value of credits cannot be determined from the Contractor's Schedule of values, total value of the credit is to be determined by the cost of materials, labor, overhead and profit, insurance, bonds, etc. All General Contractor, Subcontractor and Material Supplier levels of the Contract are to be included in the total value of credits back.
- 3. An amount equal to the percentage of work already completed on the deleted item may be withheld from credits back for overhead and profit, insurance, bonds, construction schedule adjustments and administrative expenses, as indicated in the General Conditions (Section 00700).

1.8 PREPARATION OF CHANGE ORDERS

- A. The Architect will prepare each Change Order.
- B. Change Order will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.
- C. Change Order will provide an accounting of the adjustment in the Contract Sum/ Contract Price and in the Contract Time.

1.9 LUMP-SUM/FIXED PRICE CHANGE ORDER

- A. Content of Change Orders will be based on either:
 - 1. The School District's Proposal Request and Contractor's responsive Proposal as mutually agreed with the School District.
 - 2. Contractor's Proposal for a change, as recommended by the School District or their authorized agent.
- B. The School District, Division of the State Architect and Architect or Engineer in responsible charge will sign and date the Change Order as an authorization for the Contractor to proceed with the changes.

C. The Contractor will sign and date the Change Order to indicate agreement with the terms therein.

1.10 UNIT PRICE CHANGE ORDER

- A. Content of Change Orders will be based on either:
 - 1. The School District's definition of the scope of the required changes.
 - 2. Contractor's Proposal for a change, as recommended by the School District or Authorized Agent.
 - 3. Survey of completed work.
- B. The amounts of the unit prices to be:
 - 1. Those stated in the Agreement.
 - 2. Those mutually agreed upon between School District and Contractor.
- C. When quantities of each of the items affected by the Change Order can be determined prior to start of the work:
 - 1. The School District and Architect or Engineer in responsible charge will sign and date the Change Order as authorization for Contractor to proceed with the changes.
 - 2. Contractor is to sign and date the Change Order to indicate agreement with the terms therein.
- D. When quantities of the items cannot be determined prior to start of the work:
 - 1. The School District through the Architect will issue a Construction Change Directive directing the Contractor to proceed with the change on the basis of unit prices, and will cite the applicable unit prices.
 - 2. At completion of the change, the School District or its authorized agent will determine the cost of such work based on the unit prices and quantities used.

- 3. The Contractor shall submit documentation to establish the number of units of each item and any claims for a change in Contract Time.
- 4. The School District, Division of the State Architect and Architect or Engineer in responsible charge will sign and date the Change Order as authorization for the Contractor to proceed with the Changes.
- 5. The Contractor will sign and date the Change Order to indicate agreement with the terms therein.

1.11 TIME AND MATERIALS CHANGE ORDER/CONSTRUCTION CHANGE DIRECTIVE:

- A. The School District through the Architect will issue a Construction Change Directive directing Contractor to proceed with the changes
- B. At completion of the change, Contractor shall submit itemized accounting and supporting data as provided in the Article 1.6, "Documentation of Proposals and Claims," of this Section.
- C. The School District or its authorized representative will determine the allowable cost of such work, as provided in General Conditions and Supplementary Conditions.
- D. The School District, Division of the State Architect and Architect or Engineer in general responsible charge will sign and date the Change Order to authorize the change in Contract Sum/ Contract Price and in Contract Time.
- E. The Contractor will sign and date the Change Order to indicate agreement with the terms therewith.

1.12 INSTRUCTIONS

- A. Architect's Supplemental Instructions:
 - Minor changes in the work shall be carried out in accordance with supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum/ Contract Price or Contract Time.
 - 2. The Architect will issue, sign, and date Supplemental Instructions.

3. The Contractor will sign and date Supplemental Instructions to indicate acceptance of minor changes consistent with the Contract Documents and return signed copy to Architect.

1.13 CORRELATION WITH CONTRACTOR'S SUBMITTALS

- A. Periodically revise Schedule of Values and Request for Payment forms to record each change as a separate item of Work and to record the adjusted contract amounts.
- B. Periodically revise the Construction Schedule to reflect each change in Contract Time.
- C. Revise sub-schedules to show changes for other items of work affected by the changes.
- D. Upon completion of work under a Change Order, enter pertinent changes in Record Documents.

1.14 FORMS

- A. Submit Proposal Request typed on AIA Document G709. A Copy of this form may be obtained from the local American Institute of Architects, Chapter Office
- B. Submit Change Orders typed on the Change Order Form included in this Project Manual. Form is included in General Conditions and at the end of this Section.
- C. Submit Construction Change Directive on the Construction Change Directive Form included in this Project Manual. Form is included in General Conditions and at the end of this Section
- D. Submit Supplemental Instructions typed on the form included in this Project Manual at the end of Document 00935, Requests For Interpretation (RFI's).
- E. Immediate Change Directive Form is included in the Supplementary General Conditions.

PART 2 – PRODUCTS - (Not Applicable)

PART 3 – EXECUTION - (Not Applicable)

END OF SECTION

PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.
- B. Submit applications for payment to Construction Manager in accordance with the schedule established by the conditions of the Contract and Agreement between Owner and Contractor.
- C. The Contractor's Construction Schedule and Submittal Schedule are included in Section "Submittals".
- D. The Contractor agrees to provide an updated certified "As-Built" with every pay application both "Hard Copy" and electronic copy that is approved by the Architect/ Engineer, Inspector of Record, and the Construction Manager.

1.2 SCHEDULE OF VALUES

- A. Coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule.
 - 1. Submit the Schedule of Values to the Construction Manager at the earliest feasible date, but in no case later than 10 days before the date scheduled for submittal of the initial Application for Payment.
- B. Format and Content: Use the Project Manual Table of Contents as a guide to establish the format for the Schedule of Values.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of the Architect/ Engineer.
 - c. Project number.
 - d. Contractor's name and address.

- e. Date of submittal.
- 2. Arrange the Schedule of Values in a tabular form with separate columns to indicate the following for each item listed:
 - a. Generic name.
 - b. Related Specification Section.
 - c. Name of subcontractor.
 - d. Dollar value.
 - e. Percentage of Contract Sum/ Contract Price to the nearest one-hundredth percent, adjusted to total 100 percent.
- Provide a breakdown of the Contract Sum/ Contract Price in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principal subcontract amounts down into specific line items.
- 4. Round amounts off to the nearest whole dollar; the total shall equal the Contract Sum/ Contract Price.
- 5. For each part of the Work where an Application for Payment may include materials or equipment, purchased or fabricated and stored, but not yet installed, provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 6. Schedule Updating: Update and resubmit the Schedule of Values when Change Orders or Construction Change Directives result in a change in the Contract Sum/ Contract Price.

1.3 APPLICATIONS FOR PAYMENT:

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect/ Engineer and paid for by the School District.
- B. Payment Application Times: Each progress payment date is as indicated in the Agreement. The period of construction Work

- covered by each Application or Payment is the period indicated in the Agreement.
- C. Payment Application Forms: Use AIA Document G702 and Continuation Sheets G 703 as the form for Application for Payment.
- D. Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the School District. Incomplete applications will be returned without action.
 - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
 - 3. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Engineer and Construction Manager.
 - 4. When the Architect/ Engineer finds the application completed and correct will transmit a certificate for payment to Owner with a copy to the Contractor.
- E. Lien Releases: With each Application for Payment submit Lien Releases from subcontractors or sub- subcontractors and suppliers for the construction period covered by the previous application.
 - 1. Submit partial Lien Releases on each item for the amount requested, prior to deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full Lien Releases.
 - a. Submit final Application for Payment with or preceded by final Releases from every entity involved with performance of Work covered by the application that could lawfully be entitled to a lien.
 - 3. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to the School District.

- F. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include, without limitation, the following (see also General Conditions):
 - 1. List of subcontractors.
 - Schedule of Values.
 - 3. Contractor's Construction Schedule (preliminary if not final).
 - 4. Copies of authorizations and licenses from governing authorities for performance of the Work.
 - 5. Certificates of insurance and insurance policies.
 - 6. Performance and payment bonds (if required).
- G. Application for Payment at Substantial Completion: Upon Substantial Completion, submit an Application for Payment.
 - 1. Administrative actions and submittals that shall proceed or coincide with this application include, without limitation, the following (see also General Conditions):
 - a. Project inspector's status of completion report.
 - b. Warranties (guarantees) and maintenance agreements.
 - c. Test/adjust/balance records.
 - d. Maintenance instructions.
 - e. Meter readings.
 - f. Start-up performance reports.
 - g. Change-over information related to Owner's occupancy, use, operation and maintenance.
 - h. Final cleaning.
 - i. List of incomplete Work, recognized as exceptions to the Certificate of Substantial Completion.

- H. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final payment Application for Payment include, without limitation, the following (see also General Conditions):
 - 1. Completion of Project closeout requirements.
 - 2. Completion of items specified for completion after Substantial Completion.
 - 3. Assurance that unsettled claims will be settled.
 - 4. Assurance that Work not complete and accepted will be completed without undue delay.
 - 5. Transmittal of required Project construction records to Owner.
 - 6. Removal of temporary facilities and services.
 - 7. Removal of surplus materials, rubbish and similar elements.
 - 8. Submit the final complete "As-builts" both hard copy and electronic copies with proper electronic titles for each page.

PART 2 - PRODUCTS - (Not Applicable)

PART 3 – EXECUTION - (Not Applicable)

END OF SECTION



COMPTON COMMUNITY COLLEGE DISTRICT 1111 E. Artesia Blvd Compton, California 92553 (310) 900-1600

Campus Public Safety Building – UG Electrical Pathway

POST BID INTERVIEW

1.1 **SUMMARY**

This Section requires each apparent low bidder to attend and participate in a POST BID INTERVIEW with the CONSTRUCTION MANAGER, prior to award of any contract by the DISTRICT. The POST BID INTERVIEW will be scheduled by the CONSTRUCTION MANAGER within three (3) calendar days after the date of bid. The Conditions of the Contract and all other Sections of the Contract apply to this Section as fully as if repeated herein.

1.2 REQUIRED ATTENDANCE

- A. A duly authorized representative of the apparent low bidder is required to attend the POST BID INTERVIEW, in person.
- B. The apparent low bidder's authorized representative must have signatory authority on behalf of the apparent low bidder.
- C. Failure to attend the POST BID INTERVIEW will be considered just cause for the District to reject the Bid.

Initials:				
	Contractor	Construction Manager		

1.3 POST BID INTERVIEW PROCEDURE

- A. The CONSTRUCTION MANAGER will review the Bidder's Proposal with the attendees.
- B. The CONSTRUCTION MANAGER will review the Contract Documents with the attendees, including but not limited to:
 - Insurance
 - 2. Bonding
 - Addenda
 - 4. Pre-Bid Clarifications
 - 5. Scope of Work (Section 01010)
 - 6. Bid Alternates and Voluntary Alternates
 - 7. Value Engineering
 - 8. The Contract Plans
 - 9. The Contract Specifications
 - 10. The Master Schedule
 - 11. Critical Materials
 - 12. General Contract Schedule Requirements
 - 13. Prevailing Wage Requirements
 - 14. Critical Dates Requirement for Other Bid Packages
 - 15. Liquidated Damages
 - 16. Required Documentation for Contract Administration
 - 17. Contract Coordination Requirements
 - 18. DVBE Requirements
 - 19. Owner Controlled Insurance Program

1.4 POST BID INTERVIEW DOCUMENTATION

The CONSTRUCTION MANAGER will document the POST BID INTERVIEW on the form attached to this Section. Both the Apparent Low Bidder and the CONSTRUCTION MANAGER are required to sign the POST BID INTERVIEW Documentation.

Initials:				
	Contractor	Construction Manager		

Signatures will be witnessed at the time of signing. POST BID INTERVIEWS will be conducted at the CONSTRUCTION MANAGER jobsite trailer.

POST BID INTERVIEW FORM

CONSTRUPCM3, Inc 1111 E. Ar Compton, (tesia Blvd.	ER FIRM			
Phone Nur	nber: (310) 900-	1600			
BIDDER:					
DATE:		TIME:	PHONE #		_
. INT	RODUCTIONS: (SIGN IN BELOW)			
A.	Present	CONTRACTOR	CONTE	RACTOR	
		CONSTRUCTION MANAGER	ONSTRUCT	ION MAN	AGER
I. PRO	POSED CONTR	ACT:			
II. PUF	RPOSE OF INTER	RVIEW IS TO ASSURE:			
A.	Contractor ackr	nowledgment of a comple	ete and accurate bid.	Yes	No
В.	B. Contractor submission of a fair and equitable bid.			Yes	No
C.	Fair comparison	ns of bid.		Yes	No
		Initials: Contractor	Construction	Manager	

CONTRACTUAL REQUIREMENTS: IV.

	A.	Do y	ou understand you are a prime contractor?	Yes	No
	B.	Can	you meet all specified insurance requirements?	Yes	No
	C.		are required to obtain a Performance, and a Labor and erial Bond for 100% of the Contract price	Yes	No
		1.	Is this acceptable?	Yes	No
		2.	Will you provide bonds as stipulated?	Yes	No
		3.	Cost for bond:%	Yes	No
		4.	Is the cost of the bond in your base bid?	Yes	No
		5.	Is your insurance company California licensed?	Yes	No
	D.	Ackr	nowledged Receipt of Addenda123_	4	5
	E.	Ackr	nowledged Receipt of Pre-Bid Clarification Questions	Yes	No
	F.		any costs for addenda items included in your proposal oplicable)?	Yes	No
V.	sco	PE O	F WORK:		
	A.		have a complete understanding of your Scope of Work er the proposed Agreement	Yes	No
	B.	Scop	have re-reviewed the documents and understand the pe of the Work. Are there any items that need to be tified or require clarification?	Yes	No
		If ye	s, please identify item.		
		1.			
		2.			
		3.			
		4.			
		5.			
			re) the cost(s), as applicable, included in your proposal	Yes	No
	C.		iew bid alternates (if applicable) NONE	Yes	No
	D.	Are	you offering any unsolicited alternates? NONE	Yes	No
			Initials: Contractor Construction	Manager	

	-			
	2.			
	3.			
E.		the plans and specifications clear and understandable to r satisfaction?	Yes	No
VAL	UE E	NGINEERING: (describe for District Consideration)		
1		Add / De	educt _	
2.				
_		Add / De	duct	
3				
-		Add / De	educt _	
4. <u>-</u>		A 11 / D	. 1	
-		Add / De		
		AFFECTED TOTAL	L	
SCH	IEDU	LE:		
A.		you acknowledge and agree to the stipulated completion es and milestones in the Contract?	Yes	No
Α.		Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3)		No
A.	date	will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700)	Yes	No
Α.	date 1. 2.	Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700) Can you expedite the schedule without impact to others?		
Α.	date	Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700) Can you expedite the schedule without impact to others? It is understood the Project schedule is critical. Can you accelerate any and all schedule activities if the requirement occurs?	Yes	N ₀
Α.	date 1. 2.	Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700) Can you expedite the schedule without impact to others? It is understood the Project schedule is critical. Can you accelerate any and all schedule activities if the	Yes Yes	N N
Α.	date 1. 2.	Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700) Can you expedite the schedule without impact to others? It is understood the Project schedule is critical. Can you accelerate any and all schedule activities if the requirement occurs?	Yes Yes	N N
Α.	date 1. 2.	Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700) Can you expedite the schedule without impact to others? It is understood the Project schedule is critical. Can you accelerate any and all schedule activities if the requirement occurs?	Yes Yes	N
Α.	date 1. 2.	Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700) Can you expedite the schedule without impact to others? It is understood the Project schedule is critical. Can you accelerate any and all schedule activities if the requirement occurs?	Yes Yes	Ne Ne
Α.	date 1. 2.	Will you provide a detailed construction schedule to CONSTRUCTION MANAGER within the required three (3) days, per the Contract? (Section 00700) Can you expedite the schedule without impact to others? It is understood the Project schedule is critical. Can you accelerate any and all schedule activities if the requirement occurs?	Yes Yes Yes	N

B.	Identify critical materials, deliveries and dependencies, including Owner Furnished items that could affect the completion of your work.			No			
	1						
	2						
	3						
C.							
DDO IECT (CRITICAL DATES						
PROJECT	Milestone Dates						
Notice of Av	vard	10/25/17					
All Submitta	lls received by Construction Manager	5 Days After Notic	e of Awa	ard			
Provide Dist	trict Approved Schedule	5 Days After Notic	e of Awa	ard			
Mobilize		12/15/17					
Construction	n Completed by	01/03/18					
Final Clean	up, Punchlist, and Closeout	14 Days After Not	ce to Pr	oceed			
	hat failure to meet the date is just cause for Damages in accordance with the Contract Do		s and re	etain			
VIII. CON	TRACTOR COMMENTS / SUGGESTIONS:						
1.							
				_			
2				-			
3				_			
4				_			
5				_			
	Initials:Contractor	Construction M	 anager				

IX. CONTRACTOR The foregoing information is true and accurate, and I am authorized to sign as an office of the company I am representing. Company Name _____ Signature: Title: X. **CONSTRUCTION MANAGER** Signature:_____ Title: _____ XI. Witness: Signature: Date: **END OF SECTION** Initials: **Construction Manager** Contractor

CONSTRUCTION PROCEDURE MANUAL

COMPTON COMMUNITY COLLEGE DISTRICT

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I. INTRODUCTION

This Construction Procedures Manual has been developed for the Compton Community College District.

The purpose of this Manual is to provide the <u>Owner</u>, the <u>Architect, Engineer</u>, <u>Inspector</u> and <u>Contractors</u> detailed information concerning the specific project requirements and procedures.

This manual delineates lines of authority and responsibility of the team members associated with this Project.

Questions or suggested changes to this manual may be addressed to the Construction Manager, at 1111 E. Artesia Blvd., Compton, CA 90221

SHOULD INCONSISTENCIES OR DISCREPANCIES EXIST BETWEEN THIS MANUAL AND THE CONTRACT DOCUMENTS (INCLUDING THE GENERAL CONDITIONS); THE CONTRACT DOCUMENTS (INCLUDING THE GENERAL CONDITIONS) WILL TAKE PRECEDENCE.

II. PROJECT PROCEDURES

A. COMMUNICATIONS

- 1. In carrying out the terms of the Contract, the Owner and the Architects/Engineer will interact with the Contractors through the Construction Manager.
- 2. All correspondence, shop drawings, submittals, RFIs etc. are to be processed and submitted through the Construction Manager.
- 3. All correspondence, shop drawings, submittals, RFIs etc. shall reference the Project by name and Contract number.
- 4. The Construction Manager is the point of contact for all Project communications.

B. MEETINGS

1. **Pre-Construction Meeting** - (Section 013100)*

After award of the Contract, the Construction Manager will schedule a "Pre-Construction Meeting" to be held at a time and location designated by the Construction Manager. <u>An authorized representative of Contractor MUST attend the "Pre-Construction" meeting</u>. Minutes of the meeting will be prepared and distributed by the Construction Manager

- 2. Weekly Project Meeting (Section 01 31 00)*
 - a. The Construction Manager will conduct a weekly Project meeting in the on site office.
 - b. Contractor with crews on site and upcoming work must attend weekly meetings.
 - c. Persons required to attend the weekly Project meetings include Contractor's supervisory personnel, subcontractor personnel, (as appropriate), the Construction Manager, A/E, and others as requested by the Construction Manager. The Owner or User personnel may attend at any time.

- d. The Contractor(s) shall bring any documentation as may be required in order to accomplish a joint review and status of the Project activities.
- e. Contractor(s) shall prepare a two week "look ahead" schedule for review at each meeting. The schedule shall be prepared in accordance with the scheduling section of this manual and will be reviewed with the contract schedule at each weekly meeting.

3. Special Project Meetings

The Construction Manager may call a Special Project Meeting at any time during the course of the Project. Special Project Meetings, if deemed necessary, shall include representatives of the Contractor(s) and subcontractors as requested in order to provide an adequate line of communication to discuss problems and/or solutions that are common to the Project.

C. SITE RULES

- 1. All Compton Community College District's Campuses are Non-Smoking and Drug Free.
- 2. All Compton Community College District's Campuses are alcohol free.
- 3. All personnel are required to wear appropriate protective clothing, work shoes, and safety equipment at all times.
- 4. All personnel shall restrict their behavior, their language and their demeanor so as to avoid harassment to students and faculty.
- 5. Violations of Site Rules may result in permanent banning from the Project.
- **D. PROJECT DOCUMENTS** All Construction Manager Document Control will be administered utilizing Prolog 9.1 (or later) software.
 - 1. **SUBMITTALS** (Specification Section 01 30 00)*

^{*}References are to Specification Sections; refer to section for more detailed requirements.

- a. Contractor shall submit all shop drawings, samples and product data through the Construction Manager within the time requirements set forth in the General Conditions.
- b. Every Submittal shall be made to the Construction Manager at the Project site, using the enclosed submittal form. A separate form must be filled out for each submittal. At a minimum, every submittal shall contain the following information and any other information required by the General Conditions:
 - 1. Project Name
 - 2. Contractors Name & Address
 - 3. DSA Application Number and File Number for each school.
 - 4. Submittal Number according to the Submittal Registry.
 - Submittal Date
 - 6. Specification and/or Drawing Reference.
 - Contractor Name and Address
 - Index of Items Submitted
 - 9. Number of Copies.

Each submittal must be complete in all forms to allow review without further contact with the Contractor.

- c. CONTRACTOR WILL STAMP AND SIGN SUBMITTALS, SHOP DRAWINGS, ETC. THAT HE HAS REVIEWED THE ITEMS SUBMITTED, AND CERTIFIES THE ITEMS ARE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND THAT EACH HAS BEEN CHECKED FOR DIMENSIONS AND RELATIONSHIPS WITH WORK OF ALL OTHER CONTRACTORS AND TRADES INVOLVED.
- d. Upon receipt, the Construction Manager will log each submittal. The Construction Manager may reject any submittal if it is, in his or her judgment, incomplete or

inadequate. In such case, one copy of the rejected submittal will be retained by the Construction Manager with remaining copies returned to the Contractor with the reason for rejection cited.

e. All Submittals shall be numbered by the Contractor as follows:

Start with Contract number for your Submittal, followed by the complete specification section number of the item submitted. For example, assuming Reinforcing Steel is required by Specification Section 03300.3.2. The Submittal number for this example is: 0002-03300-2-B. In the event there is a revision required to a submittal, the re-submittal uses the same number as the original, appended with "Rev. 1". The Submittal example then would read: 0002-03300-2-B - Rev. 1.

f. Upon completion of the preliminary review, the Construction Manager will transmit acceptable submittals to the A/E for review and comment.

E. A/E REVIEW COMMENTS

- The A/E will review all submittals and, where appropriate, make written commentary. The A/E's comments will be similar to the following:
 - a. "NO EXCEPTIONS TAKEN" the Contractor may proceed with work covered by the submittal.
 - b. "MAKE CORRECTIONS NOTED" The Contractor may proceed with the work, provided the Contractor proceeds in accordance with the notes and comments on the submittal.
 - c. "REVISE and RESUBMIT" the Contractor shall NOT begin any work covered by the submittal until a revision or correction to the submittal has been re-submitted, reviewed and returned to the Contractor.
 - d. "REJECTED" the Contractor shall not begin any work covered by the submittal until a new submittal has been prepared, submitted and reviewed.

F. SUBMITTAL & SHOP DRAWING QUANTITIES

1. Submittals, Shop Drawings and Product Data shall be submitted in the following minimum quantities:

a. SAMPLES: Three or more samples.

b. SHOP DRAWINGS: One (1) reproducible and seven

(7) copies.

c. PRODUCT DATA: Seven (7) copies.

G. DISTRIBUTION OF REVIEWED SUBMITTALS

SHOP DRAWINGS - Seven Sets

One (1) reproducible and One (1) copy to Contractor

One (1) copy retained by Architect

One (1) copy retained by the Consultant/Engineer

One (1) copy retained by the DSA Inspector

Two (2) copies to the Construction Manager

One (1) copy to the District

2. PRODUCT DATA - Seven Sets

Three (3) sets to Contractor

One (1) copy retained by Architect

One (1) copy retained by the Consultant/Engineer

One (1) copy retained by the DSA Inspector

One (1) copy to the Construction Manager

If Contractor requires additional reviewed copies of shop drawings or product data, he shall print copies from the reproducible at Contractor's expense.

Fabrication or other work performed in advance of receipt of reviewed drawings, samples or test certifications will be entirely at the Contractor's risk.

H. REQUEST FOR INFORMATION (RFI)

Should the Contractor(s) require clarification or additional information of the plans or specifications, he will direct the request to the Construction Manager on the RFI form as provided by the Construction Manager. Sample forms are in the appendix.

Each RFI will be numbered sequentially by each Contract Number, Contractor, beginning with Contract Number for RFI, and then a sequential number. For example: Contract Number 05 Contractor's RFI would be numbered "05-0001". Contractor shall be responsible for maintaining his own "log". The Construction Manager will maintain the Construction Manager's RFI log, and each week, the Construction Manager RFI Log will be distributed & discussed at the weekly meeting.

The RFI shall describe thoroughly, the problem or clarification being requested and a suggested solution. The description provided should be adequate and complete to permit a written response without additional communication with the Contractor. The Contractor shall attach related sketches, information or correspondence which may have been received from subcontractors or vendors on the subject. Each attachment to the RFI shall have the RFI # marked plainly on the attachment pages are to be numbered "Page of ." In instances where the Contractor believes there may be a conflict between elements of the plans and specifications, he should identify the conflict and indicate the manner in which he interpreted the sections in preparing his bid.

No RFI will be accepted without proper reference to Plan Drawings. Shop Drawings and / or Specification Sections, and all areas completely filled out.

The contractor shall list potential solutions to expedite resolution by the Architect and Owner and the contractor shall insure that all line items in the RFI Form are completely filled out before submitting to the Construction Manager.

The Construction Manager will review the RFI and will either:

- 1. Return the RFI to the Contractor for additional information or response.
- 2. Forward the RFI to the Architect of Record for response, copying the Project Inspector in accordance with the below timelines.
- 3. Provide the response within twenty-four (24) hours and return to the Contractor, with copies to the Architect of Record and Project Inspector. RFI's answered by the CM are logged as official RFI's and subject to all of the below conditions.

The timeline scenario for a routine RFI shall be as follows:

- CM will verify all RFI's for format and content prior to any disposition and may return to sender for edit, clarification and completeness.
- When a Contractor submits an RFI to the CM it must be reviewed within twenty-four (24) hours. If the RFI is deemed legitimate by the CM and In the event that the CM is not able to adequately answer the RFI in the twenty-four (24) hour period it must be immediately transmitted to the Architect of Record.
- 3. Once the Architect receives the RFI from the CM, he must respond or pass the RFI on to the proper consultant within three (3) days. (In a Modernization project, the Architect must answer or pass the RFI on to a Consultant with in twenty-four (24) hours.)
- 4. Consultants are given a maximum of seven (7) days to respond or show cause for delay. (For a Modernization Project this period is shortened to three (3) days.)
- 5. The appropriate recipient of the RFI will endeavor to provide the response as soon as possible within the above time constraints.
- 6. When the Construction Manager receives a response back from the Architect, the answer should be reviewed and transmitted to the Contractor as soon as possible and within twenty-four (24) hours. A sixty (60) minute turnaround is preferred.
- 7. All RFI's properly executed, answered and reviewed must be posted on plans within twenty-four (24) hours of receipt by the CM.
- 8. In the event an RFI goes unanswered for a period of thirty (30) days or longer it shall be subject to weekly habeas corpus hearings, in which the CM, Architect, Project Inspector, and appropriate Consultant shall attend.

RFI's requiring critical response timing shall be duly annotated as to the urgency of the response date.

If the RFI review indicates a change or revision is necessary to the Contract Documents, the A/E will prepare appropriate drawings and/or specifications required to define the change or revision.

If the Contractor believes the clarification or direction provided by the response to the RFI will impact the cost or schedule of the Project, he shall provide prompt notification thereof to the Construction Manager in

accordance with the General Conditions. Upon notification thereof to the Construction Manager, the Contractor shall prepare a Proposed Change Order, if approved by the District thru the Construction Manager, which shall be processed as outlined in the Change Order Procedure of this manual. In the event the Contractor fails to notify the Construction Manager, no consideration will be given to the Contractor for additional costs as outlined in the Change Order Procedure.

See also Project Coordination Section (01310, 1.06 Requests for Information) regarding frivolous Requests for Information.

I. SCHEDULES

The Contractor shall furnish to the Construction Manager any required schedules that addresses the work in his Contract(s) in accordance with the General Conditions. The schedules shall be in a format as approved by the Construction Manager, and as a minimum, shall include, without limitation, the following (see also General Conditions):

- Detail of activities required for their mobilization and start of construction.
- 2. Activities of other Contractors which must be completed prior to starting various components of other work.
- 3. A plan for completion of work in sufficient detail to allow observation and monitoring by the Construction Manager. Any activity longer than five (5) working days shall be broken down into phases of five (5) working days or less in length.
- 4. List activities which must be complete for succeeding contractors to start their work.
- 5. Show submittals and shop drawing preparation and review time.
- 6. Long lead procurement requirements.
- 7. Include all necessary and required DSA Inspections in Schedule.

The Contractor shall prepare schedules in a Critical Path Method (CPM) format as required by the General Conditions. Contractor will review the logic and duration of activities affecting his work. The Construction Manager will conduct a meeting with Contractor(s) to incorporate revisions and issue the approved construction schedule.

The schedule will become the basis for determining completion of the Project and will be reviewed at each weekly meeting.

Contractor will prepare and submit at each weekly meeting a Short Interval Schedule (SIS). The SIS shall be a two (2) week Projection of activities currently in progress or to be started within the following two (2) week period (use form within this manual).

The SIS will be reviewed against the base Contract Schedule each week to evaluate the progress of the work. Contractor shall submit a recovery schedule in the event his work falls behind the approved construction schedule.

J. INSPECTION & TESTING

Contractor shall be responsible for maintaining the necessary licenses required for the completion of the work.

The Owner will pay for State assessed plan check fees and inspection fees, unless otherwise indicated.

Contractor and Subcontractor will be responsible for obtaining and paying for any required City Business licenses.

The on-site DSA Inspector will make normal building and code compliance inspections. Contractor will be responsible for compliance with all requirements of applicable codes per the Contract Documents. Contractor shall inform the Construction Manager at least 2 working days prior to scheduling required inspections. Use Inspection Request Form supplied in the appendix of this manual and also complete and submit the required DSA Form 156.

Inspection, testing, and sampling will be performed as specified in the General Conditions and the specific divisions of the Contract Documents. The Owner, through the Construction Manager, will contract for performance of soil, concrete, steel, grout and mortar testing. Review the Contract Documents for Contractor testing and sampling requirements. In all cases where testing is being performed of samples being taken, the Construction Manager will be given notification pursuant to Contract Document requirements. Contractor shall also timely request special inspections as required by DSA and complete and submit the required DSA verified report forms.

If inspection or testing discloses errors, omissions, inconsistencies, or deficiencies during construction activities, the Contractor will be

immediately notified using the "Notice of Non-Conforming Work" form. If corrective action is not apparent, the Construction Manager may request the Contractor to propose a corrective action plan.

Where utilities (electric, water, drainage, sewer, gas, etc.) must be disrupted by construction activity, each Contractor shall notify the Construction Manager in writing at least fourteen (14) calendar days prior to the disruption, to be reflected on the 2 Week Look Ahead Schedule.

All **INSPECTION REQUESTS** will be channeled through the Construction Manager to the DSA Inspector (IOR). The Construction Manager shall log and monitor time, date and subject of all Inspection Requests utilizing an Inspection Log, and maintaining a binder additionally containing copies of above completed form, as well as copies of Inspection Request Response form executed by the IOR. Photographs of area or items to be inspected will be taken and kept as part of the permanent daily record of the project. Inspection log must indicate the title/number of the photos and their permanent file location.

K. VERIFIED REPORTS are required.

Each Contractor shall submit the required DSA Verified Reports to the Construction Manager at the end of construction or as otherwise required by DSA.

Three (3) copies of the report with <u>Blue ink wet signatures</u> shall be submitted. Retention may not be paid if Verified Reports are not received. The Construction Manager will transmit the completed Verified Reports to the Inspector for transmittal to DSA and the Architect. Use DSA-6 form supplied in appendix or any updated form from DSA at the completion of the project. The Contractor is also required to submit any other required DSA Verified Reports during construction of the project as required by DSA.

L. SAFETY

Contractor shall have sole and complete responsibility for initiating, maintaining and supervising all safety precautions and programs in connection with this Project. In no case shall the Owner, the Construction Manager, the Architect, the Inspector or their agents, employees or representatives, have either direct or indirect responsibility for the means, methods, techniques, sequences or procedures utilized by the Contractor, or for safety precautions and programs in connection with the work.

Contractor will provide the Construction Manager a copy of his updated safety program prior to commencing the work.

Contractor must submit a Safety Plan to the District via the Construction Manager within thirty five (35) calendar days of the issuance of the Notice to Proceed per the General Conditions (Specification 00700). Contractor will conform to all OCIP Regulations where applicable.

M. CHANGE ORDER PROCEDURE (Specification Section 00700 Article 7)

The Owner, through the Construction Manager, may from time to time direct the Contractor to make changes in the work within the general scope of the Contract. All changes to the Contract will be implemented through written orders or directives prepared by the A/E and issued by the Construction Manager.

When the Construction Manager believes a change order to the construction documents is required that may involve a change in time or cost, he will request the A/E prepare a Bulletin and issue it to the Construction Manager. The A/E will sequentially number and date each Bulletin. The Construction Manager will attach a Potential Change Order (PCO) form to the Bulletin requesting the Contractor to submit a proposal. The Proposal will fully describe the proposed change(s) to the Contract Documents, including sketches, new drawings, or revised specifications as required. The Construction Manager will maintain a log of all PCOs issued. The Construction Manager shall number each PCO. Sample PCO forms and work sheet are in the appendix.

Should the Contractor believe that conditions have changed or he has been directed to do additional work requiring a change in time or cost, he may request the Construction Manager to prepare a PCO delineating the changed condition along with the cost and/or time impact. If the Contractor intends to make claim for a change in the contract time or cost, he must give the Construction Manager written notice per contract documents after the occurrence of the event giving rise to the claim, or lose his rights to the cost recovery of the extra work arising from the claim.

Upon return of the PCO the Construction Manager will evaluate the Contractor's quotation for the work, using an estimate of time and cost impact prepared by the A/E or the Construction Manager. If the quotation is acceptable to the Construction Manager, the proposal will be forwarded to the Owner and the A/E. If the quotation is judged by the Construction Manager to be not acceptable, he will begin negotiations with the Contractor to come to an agreement as to the time and cost impact.

The Construction Manager reserves the sole right to notify the Contractor when there will be no further negotiations, and when an impasse exists between the Contractor and the Construction Manager and the work is declared to be in dispute.

The Owner and the Architect may issue through the Construction Manager a PCO which directs the Contractor to proceed with a change which will be included on a subsequent Change Order. The routing procedure will be the same as a change order. If the PCO directs work to proceed prior to agreement on a lump sum quotation, the Contractor shall prepare an Extra Work Report <u>each day</u> for signature by the Construction Manager and/or the Inspector. <u>Extra Work tickets not signed daily will not be paid for.</u>

The DSA and Architect must approve all Change Orders. The Construction Manager will review each Proposed Change Order with the A/E to determine the appropriate DSA approval process and whether the Change Order is a Category A (DSA Form 140) or Category B (DSA Form 141) Construction Change Document. The Contractor must comply with all DSA requirements for Change Orders and Construction Change Documents.

N. APPLICATION FOR PAYMENT

Application for Payment shall be made by the Contractor on a **monthly** basis for work completed on or before the **25th of each month**.

All Applications for Payment shall contain the approved detailed Schedule of Values submitted by the Contractor at the time of award. Applications shall be submitted on forms provided in the appendix. **No other form will be accepted**.

No later than the 25th of each month, Contractor shall submit a "Preliminary Pay Request" (pencil copy) to the Construction Manager for review. Only the Schedule of Values need be submitted. The "Preliminary Pay Request" shall include a detailed Schedule of Values showing percentages of work complete or scheduled to be complete through the end of the month. The Construction Manager, the A/E and Inspector will review and evaluate the "Preliminary Pay Request". Upon agreement of the amounts due the Contractor, the Contractor will prepare the Application for Payment, and submit seven (7) original copies (wet signature) of the Application to the Construction Manager, last working day of the month, for signatures by the Architect and the Inspector. After signatures are obtained, the Construction Manager will submit the

Applications to the District for payment. The District will process the Application.

Payment for materials delivered to the Project site but not yet incorporated in the work may be made, <u>at the discretion of the Owner</u>. Such materials must be stored at the Project site, properly stacked, crated, boxed, and, if necessary, covered and protected from weather. Documentation of cost shall be provided with the payment request for materials. No payment will be considered without the required documentation. See additional requirements in the General Conditions.

Change Orders, if applicable, shall not be billed until approval of school board is received.

<u>EVERY</u> pay application must be accompanied by a CONDITIONAL Lien Release for the current application, and an UNCONDITIONAL Lien Release for the prior application. All Applications and Releases are to be <u>NOTARIZED</u>, and signatures are to be in <u>BLUE</u> ink.

O. PAY ESTIMATE CHECK OFF PROCEDURE (INTERNAL)

- 1. Verify all Schedule of Values shown on second page agrees with Schedule of Values submitted by Contractor at start of Project.
- 2. Check all upper details, both pages, are correctly filled in, i.e. Contractor Name and Address, complete Project Name, Architect Name, pay period dates, and that contract date is shown. (Date of Contract Agreement.)
- Verify all previous information is correctly transferred from last prior estimate. Verify all math calculations are correct on page two and the correct numbers are transferred to page one. Verify all math on estimate page #1.
- 4. Verify all approved Change Orders have been included in the estimate.
- 5. Verify Contractor signatures and notary signatures and stamp are on page #1.
- 6. Verify there is a Conditional Lien Release for the current payment request. If there has been a previous pay request, then verify there is also an Unconditional Lien Release for the previous estimate.

These releases must be filled out and signed by the Contractor. The District will not pay if the releases are not in order.

- 7. Verify Preliminary Notice information against amounts billed and Request Lien Releases as necessary.
- 8. Once all of the above is correct, then transfer the complete original to the Construction Manager for signatures by the Architect and the IOR. The Architect should be available for signatures, within a reasonable time.
- 9. After all signatures are obtained, CM signs as approved for payment, then copy for PCM3 file, attach a Letter of Transmittal and have Construction Manager take to district with spread sheet showing all estimates to date for signature by District and distribution to Accounting Department.

P. POSTING OF PROJECT DOCUMENTS (PLANS AND SPECIFICATIONS)

- 1. All Construction Managers will maintain an up-to-the-day posted set of plans and Specifications for each project at all times. This is essential to the continuity of the project during construction and for archiving purposes. This "Posted Set" shall not leave the Construction Trailer for any reason, and must be kept in a secure location and scrupulously maintained and preserved at all times.
- 2. Posting must be done <u>within (24) twenty-four hours</u> of the receipt of a completed, signed, change to the Contract Documents.
- 3. Items that must be posted:
 - a. All addendums to the bid set
 - b. All Requests for Information (RFI)
 - c. All Instructional Bulletins (IB)
- 4. For consistency the following color scheme for posting shall be followed throughout the District:
 - a. All pre-bid addendums to the bid set shall be posted on YELLOW paper.

- b. All RFI's will be posted using 50% reduction and PINK paper.
- c. All Instructional Bulletins will be posted using 50% reduction and GREEN paper.
- 5. All postings should be sufficiently clear and concise enough to indicate a definitive change to the bid documents. Postings that implement changes on more than one plan sheet or specification page must be posted in the multiple locations or a reference to that posting must be made, sufficient to guide a user to a substantial and correct conclusion.

Note: Use of 50% reduction is a vehicle for saving space. All postings should be located on the plan sheet or in the Specification Section referred to in the posted document. If frequency of posting is such that more room is needed it is permissible to insert blank sheets into the plans or blank pages into the Specifications. Posting on the reverse of the preceding plan sheet is not advised due to the possibility of replacement sheets.

Q. ITEM OF CHANGE (IOC) LOG TO BE KEPT AND MAINTAINED BY CONSTRUCTION MANAGER.

- 1. All changes to the Contract Documents are to be logged under separate cover in an Items of Change (IOC) Log and maintained on a continual updated basis.
- 2. Items in the IOC Log must correspond to items included in the Schedule of Values and be valuated based on given costs or good faith estimates.
- The IOC Log matrix should include, but be not limited to: Item Number; Date; Description; Budget Revision; checklist for necessary Approvals; and indication of Inclusion in a Change Order.

END OF SECTION

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COMPTON COMMUNITY COLLEGE DISTRICT Daily Construction Job Report

,	School Site:						-
	CONTRACTOR		_		DATE		
	WEATHER		-		Time W	ork Started	
c							
3	SUPT./FOREMAN		-		rime v	Work Ended	
	WORK FORCE		N	Number o	f Hours		
	WORKERS NAME	Foreman	Journeyman	Apprentice	Laborer	Operator	Other
1.							
2.							
3. 4.						-	
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.						TOTAL	HOURS
14.						_	
15.						-	
	WORK DONE and MA	TERIALS DE	LIVERED				

SUBMITTAL FORM

CM #_____(For CM Use Only)

CCCD PCM3 Construction Trailer 1111 E. Artesia Blvd.	PF	ROJECT: Campus Public Safety Blo Electrical Pathway	lg. – UG
Compton, CA 90221	PR	ROJECT NO: CCC-041	
	SUBMIT	TAL	
	BP# SUB	BMITTAL #	
DATE: <i></i>	TTLE/Description:		
SPECIFICATION SECTION or Di	RWG.#:	NO. COPIES SUBMITTED: _	
		NO. COPIES RETURNED:	
TO: Little			
DSA FILE NO:	CONTRACTOR:		
	ADDRESS:		
DSA APP. NO:	PHONE:		
	ATTN.:		
submittal, dimensions, adjacent	work, and coordination	attached submittal verifying produces on of information is in accordance prove this submittal (Reference Secti	e with the
BY:Contractor's Repres	entative	DATE://	
FOR USE BY ENGINEER:		ENGINEER'S STAMF) :
NO	EXCEPTIONS TAKEN	I	
M <i>i</i>	AKE CORRECTIONS N	OTED	
RE	EVISE & RESUBMIT		
R	EJECTED		
REMARKS:			

SUBSTITUTION REQUEST FORM (AFTER BID)

Construction Manager #_____(For CM Use Only)

DATE:		BID PACKAGE:_			
TO:					
PROJECT: Ca SPECIFIED ITI		Building – UG Electrical F	athway		
Section Pa	ge Paragraph	Description			
The undersi	gned requests cor	sideration of the followi	ng:		
PROPOSEI	SUBSTITUTION	:			
		tion, specifications, drawings, ortions of the data are clearly		and test data adequate for	
Attached data al proper installation		on of changes to the Contract	Documents which the propo	osed substitution will require for	or its
	I certifies that the follow by attachments, are co		itional requirements in the G	eneral Conditions Article 3.10),
 The unders caused by The propose 	igned will pay for chan the requested substitut ed substitution will hav		cluding engineering design,	detailing, and construction co	sts
	ce and service parts wil	ll be locally available for the p nitted within seven (7) calenda		Notice of Intent to Award.	
The undersigned the specified iter		function, appearance, and qu	uality of the proposed substit	tution are equivalent or superi	or to
Submitted by			(For Use By T	The Design Consultant)	_ <u>_</u>
Signature			Accepted	Accepted as note	ed
Firm			Not Accepted	Received too late	
Address			Reviewed By		- !
Remarks			I		1
Date			<u>i</u> ———		- I
Telephone			I I		_ į
Fax:			Date:		I
			<u> </u>		

INSPECTION REQUEST

DATE:	CONTRACTOR:
OUR CONTRACTOR/TRADE	
SUB-CONTRACTOR/ TRADE: (if any)	
DECODINE OF DECLURED IN	DECTION
DESCRIPTION OF REQUIRED INS	PECTION:
_	
INSPECTION LOCATION:	DATE REQUIRED:
	TIME REQUIRED:
PHONE:	
REQUESTED BY:	DATE:
TITLE:	SPECIAL INSTRUCTIONS:
SIGNATURE:	BATCH PLANT INSP. REQ'D: YES NO
INSPECTORS COMMENTS:	
INOI ECTORO COMMENTO.	
2.75	
DATE:	SIGNATURE:
SUBMIT TO (CM), 2 WORKING DA	AYS PRIOR TO DATE & TIME REQUIRED.
DATE & TIME RECEIVED BY CM :	
CM. PROJECT MANAGER:	

cc: CM File

COMPTON COMMUNITY COLLEGE DISTRICT REQUEST FOR INFORMATION

PCM3 #_____(For PCM3 Use Only)

(ALL LINE ITEMS MUST BE COMPLETED PRIOR TO SUBMITTAL)

						RFI No.	Т
	Construction						
TO:	Manager	Ref No.:			Bid Pkg.	RFI No.	
FROM:_	<u> </u>			DWG. REF.:			
EMAIL_	_						
SCHOOL							
				Spec. Ref:	<u></u>		
Bid Pack:	<u>Trade</u> not BP			Date:			
	Trade not BP	No.					
Description of Prob	olem / Clarificatio	n / Informatio	on Required:				
							_
							_
Drawings attached	-						_
Proposed Solution	:						
Question By:_				Date:_			_
Response:							
_							
							_
Response By:				Date:			
Reviewed By: _	_			Date:	_		

REQUEST FOR QUOTATION FORM

Project :	
	RFQ NO.:
	DATE/
TO:	BID PACKAGE NO.:
Please submit price quotation for	the following work:
(Support Quotation with det	ailed cost breakdown and back-up materials.)
Reference Document, if any:	
Price Quotation needed by:	
Request submitted by: Construction	DATE: /on Manager.
	ation in this Request for Quotation is for review purposes only. t for, nor an authorization of additional work or an extension of

POTENTIAL CHANGE ORDER CM #_____

CM PROJECT: Campus Public Safety Building – UG Electrical Pathway

	PROPO	SED	CHANGE	ORI	DER —	BP #_		PCO#_		
TO:							DATE	ISSUED:		
	DM:						PRICI	NG DUE E	BY:	
	JECT No.:						PROJ	ECT NAM	E:	
Please	e submit an itemized quo act Documents as descri	tation f	or change in the	e contra	act sum and					
	nge Item:					•		· · · · · · · · · · · · · · · · · ·		
	IS NOT A CHANGE (E WORK DES	CRIBED	HEREIN.
	RENCE RFQ#								0	
REG	QUESTED BY:	A. [] Architect	B. [] DSA In	spector	C. [] Contracto	or D.[] Owner
COS	ST IMPACT:	A. [] NONE	B. [] DEDU	CT: \$		C.[]AD	D: \$	
	E IMPACT: nit justification for tir									_DAYS
APP PRO	ROVAL OF THE FICEED AND PCO	-co	BY ALL PA BE FOLLO	RTIE DWEI	S LISTEI D BY A F	O BELC ORMAI	OW SEF L CHAN	RVES AS A NGE ORDE	NOTIC R.	E TO
CC:	Contractor:		В	Y: _						
	District:		В	Y: _						
	Architect/Engine	eer	В	Y:						
	Inspector of Re	cord	В	Y:						
	Construction Ma	anag	er B	Y:						

ALLOWANCE USAGE REQUEST CM #____

CM PROJECT: Campus Public Safety Building – UG Electrical Pathway

	ALLOWANCE USAGE	REQU	QUEST — BP#AUR#
TO:			DATE ISSUED:
	:		
PROJE	ECT No.:		PROJECT NAME:
Please sub	bmit an itemized quotation for change in	the contra	tract sum and time incidental to the proposed modifications to the format shall be as specified including all back up documentation.
Change	e Item:		, c
THIS IS N		IRECTIO	ION TO PROCEED WITH THE WORK DESCRIBED HEREIN.
REQUE	ESTED BY: A. [] Archited	ct B.[[] DSA Inspector C. [] Contractor D. [] Owner
COST	IMPACT: A. [] NONE	В. [[] DEDUCT: \$ C. [] ADD: \$
TIME II	MPACT: A. [] NONE ustification for time impact per A	B. [article 16	[] DEDUCTDAYS C. [] ADD:DAYS 6.2.2 d in the General Conditions 00700
APPRO PROCE		PARTIES	ES LISTED BELOW SERVES AS A NOTICE TO
cc: Co	ontractor:	BY: _	
Di	istrict:	BY: _	
Ar	rchitect/Engineer	BY:	
In	spector of Record	BY:	
Co	onstruction Manager	BY:	

CHANGES AND EXTRAS FORM

The following format shall be used, as applicable by the District and the Contractor to communicate proposed additions and deductions to the Contract. A copy of a proposed Allowance Usage Request form is provided at the end of this Article.

		<u>EXTRA</u>	CREDIT
(a)	Material (attach itemized quantity and unit cost plus sales tax)		
(b)	Labor (attach itemized hours and rates)		
(c)	Equipment (attach invoices)		
(d)	Subtotal		
(e)	If Subcontractor performed Work, add Subcontractor's overhead and profit to portions performed by Sub-contractor, not to exceed fifteen percent (15%) of item (d).		
(f)	Subtotal		
(g)	General Contractor's Overhead and Profit: Not to exceed fifteen percent (15%) of Item (d) if Contractor performed the work. No more than five percent (5%) of Item (f) if Subcontractor performed the work. If work was performed by Contractor and Subcontractors, portions performed by Contractor shall not exceed fifteen percent (15%) if Item (d), and portions performed by Subcontractor shall not exceed five percent (5%) of Item (f)		

		<u>EXTRA</u>	CREDIT
(h)	Subtotal		
(i)	Bond not to exceed one percent (1%) of Item (d)		
(j)	TOTAL		
(k)	Date / Time		

The undersigned Contractor approves the foregoing Allowance Usage Request as to the changes, if any, and the contract price specified for each item and as to the extension of time allowed, if any, for completion of the entire work on account of said Allowance Usage Request, and agrees to furnish all labor, materials and service and perform all work necessary to complete any additional work specified therein, for the consideration stated herein. It is understood that said Allowance Usage Request shall be effective when approved by the Governing Board of the District.

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. Any costs, expenses, damages or time extensions not included are deemed waived.

The Contractor expressly acknowledges and agrees that any change in the Work performed shall not be deemed to constitute a delay or other basis for claiming additional compensation based on theories including, but not limited to, acceleration, suspension or disruption to the Project.

INSTRUCTION SHEET

A. GENERAL INFORMATION:

The Payment Application and the Schedule of Values Sheet are designed to be used on a project where a Contractor has a direct Agreement with the Owner. **No Pay Applications will be accepted without updated approved "As-Builts".**

B. COMPLETING THE PAYMENT APPLICATION:

After the Contractor has completed the Schedule of Values Sheet, summary information should be transferred to the Payment Application.

The Contractor should sign the form have it notarized and submit it, together with the Schedule of Values, to the Architect. Seven signed, notarized originals should be submitted.

The Architect should review it and, if it is acceptable, complete the Architect's Certificate for Payment on this form. The completed form should be forwarded to the Owner.

C. COMPLETING THE SCHEDULE OF VALUES SHEET:

Heading: Complete the information here consistent with similar information on the Payment Application.

Columns A, B & C: These columns should be completed by identifying the various portions of the project and their scheduled value consistent with the schedule of values submitted to the Architect at the commencement of the Project or as subsequently adjusted. The breakdown may be by sections of the Work or by Subcontractors and should remain consistent throughout the Project. Multiple pages should be used when required.

Column C: This column should be subtotaled at the bottom when more than one page is used and totaled on the last page. Initially, this total should equal the original Contract Sum. The total of Column C may be adjusted by Change Orders during the Project.

Column D: Enter in this column the amount of completed Work covered by the previous application. This is the sum of columns D and E from the previous application. Values from column F (Materials Presently Stored) from prior payments should not be entered in this column.

Column E: Enter here the value of Work completed until the time of this Application, including the value of materials incorporated in the project, which were listed on the previous Application and Certificate for Payment under Materials Presently Stored (column F).

Column F: Enter here the value of Materials Presently Stored for which payment is sought. The total of the column *must* be recalculated at the end of each pay period. This value covers both materials newly stored for which payment is sought and materials previously stored which are not yet incorporated into the Project. Mere payments by the Owner for stored materials does not result in a deduction from this column. Only as materials are incorporated into the Project is their value deducted from this column and incorporated into column E (Work Completed—This Period).

Column G: Enter here the total of columns D, E and F. Calculate the percentage completed by dividing column G by column C.

Column H: Enter here the difference between column C (Scheduled Value) and column G (Total Completed and Stored to Date).

Column I: This column is normally used only for contracts where variable retainage is permitted on a line-item basis. It need not be completed on projects where a constant retainage is withheld from the overall contract amount.

Change Orders: Although Change Orders could be incorporated by changing the schedule of values each time a Change Order is added to the Project, this is not normally done. Usually, Change Orders are listed separately, either on their own form or at the end of the basic schedule. The amount of the original contract adjusted by Change Orders is to be entered in the appropriate location of the Payment Application.

D. MAKING PAYMENT

The Owner should make payment directly to the Contractor based on the amount certified by the Architect on the Payment Application. The completed form contains the name and address of the Contractor. Payment should not be made to any other party unless specifically indicated on this form.

APPLIC	ATION AND CERTI	FICATE FOR	PAYMENT - A	AIA DOCUMENT	G702/CMa (I	nstructions on next page)	Page One ofPage	ges
TO:	Compton C PCM3 Site	Community Colle	ge District	Campus Public Sa	afety Bldg U	G Electrical Pathway	APPLICAT	TON NO.
	1111 E. Art	tesia Blvd.					Distribution	n to:
	Compton ,	CA 90221		PERIOD TO	D:			OWNER
								ARCHITECT
FROM	-		_					CONTRACTOR
ADDRESS			_				Ш	CONSTRUCTION MANAGER
							PROJECT NO:	CCC-041
CONTRAC	T FOR:		_	BID PACKAGE:			CONTRACT DATE:	
CONTRA	ACTOR'S APPLICA	TION FOR PA	YMENT			Application is made for Contract. Schedule of		ow, in connection with the
CHANGE (ORDER SUMMARY			1		1. ORIGINAL CONTR	RACT SUM	
Change Or	ders approved in	ADDITIONS	DEDUCTIONS	1		2. NET CHANGE OR	DERS	<u> </u>
	onths by Owner					3. CONTRACT SUM	TO DATE	
	TOTAL					4. TOTAL COMPLETE	D & STORED TO DATE	
Approved the	nis Month			= -		(Column G on SCHI	EDULE)	
Number	Date Approved					-	ed Work	
				•		(Column D + E on SC		
	TOTALS					(Column F on Schedule		
Net change	by Change Orders	-				Retainage (Line 5a + 5b Column 1 of Schedule of	or Total in	
belief the We	gned Contractor certifies to ork covered by this Applica as been completed in acc	ation for cordance with the	Contract Docume	-	d	7. LESS PREVIOUS C	el) ERTIFICATES FOR	
	ave been paid by the Cor rtificates of Payment were			on Owner and that		PAYMENT (Line 6 from	prior Certificate)	·····
•	nent shown herein is now		ints received from ti	ie Owiler, and mat			ENT DUE BH, INCLUDING RETAIN	
CONTRAC	TOR.					(Line 3 less Line 6)		
BY:			Date:		State of:	County of:		
						nd sworn to before me		, 20
ARCHITEC	CT'S CERTIFICATE FO	R PAYMENT			Notary Public	::		
					My Commiss	ion expires:		
By: INSPECTOR By:	₹:	DATE:DATE:		_	In accordance application, the and belief the	with the Contract Docume e Architect certifies to the O Work has progressed as in	ents, based on-site observ Owner that to the best of the dicated, the quality of the	ations and the data comprising this he Architect's knowledge, information Work is in accordance with the the AMOUNT CERTIFIED.
					AMOUNT CE		• •	Date:
BY:						nation if amount certifie	ed differs from the amou	-
CONSTRUC	CTION MANAGER: PCM3	3, Inc.			Little			
					Ву:		Date:	

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CONSTRUCTION MANUAL

APPLICATION FOR PAYMENT

SCHEDULE OF VALUES

Schedule of Values Sheet Page 2 of 2

Α	В	С	D		E		F		G		Н		l	
			Work C	omp	oleted									
Item #	Description of Work	Scheduled Value	From Previous Application (D + E)	Т	his Period		Materials Stored ot in D or E)	c	Total Completed & Stored To Date	% (G/C)	Balance Finish G)	To (C-	Retaiı (Of Var Rat	riable
1			` ,	ሰ		· Φ		Φ	(D +E+F)	#DI\//OI	Φ		Φ.	
			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
2			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
3			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
4			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
5			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
6			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
7			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
8			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
9			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
10			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
11			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
12			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
13			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
14			-	\$	-	\$	-	\$	-	#DIV/0!	\$	-	\$	-
Change	Orders (Approved)													
	, , , ,													
				_				_		"D" //c:			_	
Totals		\$ -	\$ -	\$	-			\$	-	#DIV/0!	\$	-	\$	-

CONDITIONAL WAIVER AND RELEASE UPON PROGRESS PAYMENT [Civil Code §8132)]

Upon receipt by the under	signed of a check from			
Upon receipt by the undersigned of a check from				
(Amα	r ayable ι ount of Check)	(Pavee or Pavees of Check)		
and when the check has b	peen properly endorsed and ha	as been paid by the bank upon which it is		
		any mechanic's lien, stop notice or bond		
		•		
•		Community College District located at		
		to the following extent.		
This release cover	s a progress payment for labo	r, services, equipment or materials		
	(Your Customer)	through (Date)		
the release date. Rights be order which has been fully release unless specifical mechanic's lien, stop notion rights between parties to contract, or the right to the equipment, or material compared material was not compens	ased upon work performed or executed by the parties prior ly reserved by the claimant ce, or bond right shall not other the contract based upon a reserved by this release if that ated by the progress payment of this document relies on it	received; extras or items furnished after items furnished under a written changer to the release date are covered by this in this release. This release of any erwise affect the contract rights, including scission, abandonment, or breach of the inpensation for furnished labor, services, furnished labor, services, equipment, or said party should verify evidence of		
Dated:	Company Name: _			
	By:			
	,	(Title)		

NOTE: This form complies with the requirements of Civil Code Section 8132. It is to be used by a party who applies for a progress payment when the progress check has not yet cleared the bank. This release only becomes effective when the check, properly endorsed, has cleared the bank.

USE REVERSE SIDE AS RELEASE FOR INDIVIDUALS PERFORMING LABOR FOR WAGES

§ 484(b) OF THE CALIFORNIA PENAL CODE PROVIDES IN PART AS FOLLOWS:

"Any person who receives money for the purpose of obtaining paying for services, labor, materials or equipment and willfully fails to apply such money for such purpose by wither willfully failing to complete the improvements for which funds were provided or willfully failing to pay for services, labor, materials or equipment provided incident to such construction, and wrongfully diverts the funds to a use other that for which the funds were received, shall be guilty of a public offense and punishable by a fine not exceeding ten thousand dollars (\$10,000), or by imprisonment in the state prison, or in the county jail not exceeding one year, or by both such fine and such imprisonment. If the amount diverted is in excess of one thousand dollars (\$1,000). If the amount diverted is less than one thousand dollars (\$1,000), the person shall be guilty of a misdemeanor."

§484(c) OF THE CALIFORNIA PENAL CODE PROVIDES AS FOLLOWS:

"Any person who submits a false voucher to obtain construction loan funds and does not use the funds for the purpose for which the claim was submitted is guilty of embezzlement."

§206.5 OF THE CALIFORNIA LABOR CODE PROVIDES:

"No employer shall require the execution of any release of any claim or right on account of wages due, or become due, or made as an advance on wages top be earned, unless payment of such wages has been made. Any release required or executed in violation of the provisions of this section shall be null and void as between the employer and the employee and the violation of the provisions of this section shall be a misdemeanor."

§532(e) OF THE CALIFORNIA PENAL CODE PROVIDES AS FOLLOWS:

"Any person who receives money for the purpose of obtaining or paying for services, labor, materials or equipment incident to constructing improvements on real property and willfully rebates any part of the money to or on behalf of anyone contracting with such person for provision of the services, labor, materials or equipment for which the money was given, shall be guilty of a misdemeanor, provided, however, that normal trade discount for prompt payment shall not be considered a violation of this section."

UNCONDITIONAL WAIVER AND RELEASE UPON PROGRESS PAYMENT

Civil Code Section 8134

The und	ersigned has been paid in and has r	eceived a progress pay	ment in the sum of
\$	for		
labor, so	ervices, equipment, or material function the job of CCCD		Community College Project and
undersig covers a	reby release pro tanto any mechar ned has on the above referenced a progress payment for labor, se n Community College District thro	job to the following rvices, equipment, or	extent. This release material furnish to
and doe release or received performe executed specification, stop rights be breach of furnished	s not cover any retention retained date; extras furnished before the re; extras or items furnished after the dor items furnished under a wild by the parties prior to the released by the parties prior to the released by the claimant in this ponotice, or bond right shall not one tween parties to the contract base of the contract, of the right of the dilabor, services equipment, or material was revices, equipment, or material was recommendated.	before of (Date/End ease date for which pane release date. Right itten change order we date are covered by release. This release herwise affect the conted upon a rescission undersigned to recoverial covered by this release of compensated by the	of Month) after the ayment has not been ts based upon work thich has been fully this release unless of any mechanic's ntact rights including a bandonment, or ter compensation for ease if that furnished
Ву: _	(Signature)		
	(Print Name)		(Title)
NOTICE:	THIS DOCUMENT WAIVES RIGHT YOU HAVE BEEN PAID FOR GIVIN ENFORCEABLE AGAINST YOU IF BEEN PAID. IF YOU HAVE NOT E FORM.	G UP THOSE RIGHTS. YOU SIGN IT, EVEN	THIS DOCUMENT IS
NOTE:	This form of release complies wi 8134. It is to be used to release chas actually been received by the	aims to the extent that	

CONDITIONAL WAIVER AND RELEASE UPON FINAL PAYMENT (Civil Code Section 8136)

Upon receipt by the undersigned of a check fr	om
	(Maker of Check)
in the sum of \$	
(Amount of Che	ck)
payable to	
(Payee or Payee	es of Check)
and when the check has been properly endo	rsed and has been paid by the bank upon which it
is drawn, this document shall become effecti	ive to release pro tanto any mechanic's lien, stop
notice or bond right the undersigned has or	n the job of Compton Community College District
located at 1111 E. Artesia Blvd., Compton, CA	A 90221 to the following extent:
This release covers the final payment to the	undersigned for all labor, services, equipment, or
materials furnished on the	, except for disputed claims
for extra work in the amount of \$	
DATED:	
	(Company Name)
Ву: _	
-	(Title)

NOTE: This form complies with the requirements of Civil Code Section 8136. It is to be used by the party who applies for a final payment when the final payment check has not yet cleared the bank. This release only becomes effective when the check, properly endorsed, has cleared the bank.

2-WEEK-LOOK-AHEAD

- 1. Insert information, including dates
- 2. Include Contractor Company Name & Bid Package Number below
- 3. Include Signature below

Items to Schedule:			
	Date:	Signature:	
COMPTON COMMUNITY COLLEGE DISTRICT	(Contractor:	2 WEEK LOOK ALIEAT
CAMPUS PUBLIC SAFETY BLDG. – UG ELECTRICAL PATHWA	AY		SECTION 01 30 50-36

SECTION 01 30 50-36

TIME AND MATERIAL	WORK	TEM TI	CKET	
PROJECT:		PCO#	BP#	<u> </u>
PROJECT: CONTRACTOR:		SHEET#	BP# # of	
Reference Document:	Submitte	d for work	on:	
Original Work Date for this Item:	ls Work	Completed	I today?	
Date of Last Work Activity:	Date Sub	omitted to	CM	_
WORK COMPLETED TODAY:				
Location: EMPLOYEE NAME CLASSI	IFICATION	Hours Noted	REMARK	(S
1				
2			-	
3			-	
5.				
<u> </u>	OTV /	Hours		
ITEM DESCRIPTION	QTY / UNITS	Noted	REMARK	(S
1				
_2				
3				
4 5.	<u> </u>			
5				
	MAKE &	Hours		Rented /
EQUIPMENT	MODEL	Noted	REMARKS	Owned
1 2.		i		
5				
CONTRACTOR CERTIFICATION: Signature by contractor to certify that all information on this sheet is true and accurate. Contractor also certifies that only the listed labor, material, and equipment listed were used for this item and that no other items are part of this work.		SIGNATU	RES	
CM: Verifies hours worked as identified on this sheet only, not acceptance of any cost or schedule impact on behalf of the Owner.				
IOR: Verifies hours worked as identified on this sheet only, cost or schedule impact on behalf of the Owner.	not acceptanc	e of any		



COMPTON COMMUNITY COLLEGE DISTRICT 1111 E. Artesia Blvd Compton, California 90221

GUARANTEE

Guarantee for		. We hereb	y guarante	е
that the		_, which	we have	е
installed in		, has b	een done i	n
accordance with the Contract Docum	ents, including without limit	tation, the d	rawings and	d
specifications, and that the work as i	installed will fulfill the requi	irements inc	luded in the	е
bid documents. The undersigned an	d its surety agrees to repa	air or replac	e any or a	ıII
such work, together with any oth	er adjacent work, which	may be o	displaced in	n
connection with such replacement, t	hat may prove to be defed	ctive in worl	kmanship c	r
material within a period of() year(s) from the date of the	he Notice of	f Completion	n
of the above-mentioned structure by	the Compton Community C	College Dist	rict, ordinar	У
wear and tear and unusual abuse or i	neglect excepted.			

In the event the undersigned or its Surety fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by the District, but not later than ten (10) days after being notified in writing by the District or within two (2) business days in the case of an emergency or urgent matter, the undersigned and its surety authorizes the District to proceed to have said defects repaired and made good at the expense of the undersigned and its surety, who will pay the costs and charges therefore upon demand. The undersigned and its surety shall be jointly and severally liable for any costs arising from the District's enforcement of this Guarantee.

GUARANTEE (continued)

Contractor's Company Name
Signature of Contractor
Print Name
Title
Subcontractor's Company Name (If work performed by subcontractor)
(ii work performed by subcontractor)
Signature of Subcontractor
Signature of Subcontractor
Print Name

Title
Representatives to be contacted for service
Name:
Address:
Telephone Number:

END OF SECTION



6-C

CONTRACTOR VERIFIED REPORT

This form shall be completed by each contractor having a contract with the owner, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-343 or 4-220.

School District/Owner:			DSA File #: -		
Project Name/School:		DSA App. #: -			
Date	of Report: Number of Attached Pages: (If none, enter zero.)				DSA 152 Card #(s):
the co	onstruction documents,	duly approved b	by the DSA, that	o below, are those portions of contain information related to sibility portions of the project.	List all inspection card numbers for which this verified report applies.
				REQUIRED DOCUMENTATIO	N
1. CO	Name of Contractor	•			
\vdash_{\sqcap}		· · ·	·	·	
片				work shown in the DSA approv	
	(Describe scope of w	vork in the con	ntract.)	work shown in the <i>DSA approve</i>	ed construction documents.
2. RE	ASON FOR FILING T				
⊢씀	-			52 Inspection Card Section #(s):	
	Final Verified Report complete.	: Construction c	of all work shown	in the DSA approved construction	on documents that is part of my contract is
		•	completion of all	work in the contract (Provide la	ast date of work):
	DSA Request Dated	<u>:</u>			
3. DE	FERRED SUBMITTAL	L S (Check app	olicable box)		
ᆜᆜ				ithin the scope of my contract.	
닏닏				ract are approved by DSA.	
	The following deferred submittals, within the scope of my contract, are not approved by DSA (<i>Provide list. Attach additional pages if necessary.</i>):				
4. DE	VIATIONS AS OF TH				
	All deviation notices pertinent to my contract related to work shown in the DSA approved construction documents are resolved.				
	There are unresolved deviation notices pertinent to my contract and related to work shown in the DSA approved construction documents. (Attach copies)				
There is work pertinent to my contract that is not completed in compliance with the DSA approved construction documents. (Briefly describe. Attach additional pages if necessary.)					
I attest that based on my own personal knowledge (as defined in California Code of Regulations, Title 24, Part 1, Sections 4-336 and 4-214) that, except as marked in Sections 3 and 4, as of the date of this report, the work has been performed and materials have been used and installed, in every material respect, in compliance with the <i>DSA approved</i> construction documents. I declare under penalty of perjury that I prepared this report and that all statements are true.					
Signatu	ure:			Date:	
Print Name:Contractor's License No.:					
Subm	ait completed form to	the DSA Rea	nional Office wif	th construction oversight aut	hority for the project
Submit completed form to the DSA Regional Office with construction oversight authority for the project.□ DSA OAKLAND□ DSA SACRAMENTO1515 Clay Street, Suite 12011102 Q Street, Suite 5200Oakland, CA 946121102 Q Street, Suite 5200Sacramento, CA 95811Los Angeles, CA 90012 To the project. DSA SAN DIEGO 10920 Via Frontera Rd., Suite 300 San Diego, CA 92127					

V. PROJECT / CONTRACT COMPLETION

A. The contracts of certain other Contractors may be complete prior to the overall completion of the project, as determined by the Construction Manager. The entire project is not finally complete until Contractors have completed their work and all equipment and furnishings have been installed, systems tested, and accepted and all notices of completion recorded. The District may occupy all or any part of the project prior to completion, in accordance with the Contract Documents. See General Conditions Article 9.9 for further details regarding project completion and requirements.

END OF SECTION

UNCONDITIONAL WAIVER AND RELEASE UPON FINAL PAYMENT

{Civil Code Section 8138}

The undersigned has been paid in full f	for all labor, services, equipment or materials
furnished to	
and does hereby release pro tanto any r	mechanic's lien, stop notice or bond right, except
for disputed claims for extra work in th	ne amount of \$
DATED:	
DATED:	Company Name
	By:
	Signature
	Title

NOTICE:

THIS DOCUMENT WAIVES RIGHTS <u>UNCONDITIONALLY</u> AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL RELEASE UPON FINAL PAYMENT FORM.

NOTE:

This form of release complies with the requirements of Civil Code Section 8138. It is to be used to release claims to the extent that a final payment has actually been received by the releasing party.

VI. CONTRACT CLOSE-OUT

- A. Contract close-out involves review of the Contract Documents, drawings, specifications, schedules, and inspection reports to ensure the Contractors have satisfactorily completed the requirements of the Contract Documents (General Conditions Article 9.9). Before release of the retainage, the Contractor must deliver to the Construction Manager the following close-out submittals and documentation: Including, but not limited to, the following (see also General Conditions Article 9.11):
 - 1. Certificates of Inspection as applicable to each bid package
 - 2. Project record documents, including as-built documents (Hard and Electronic per the District Requirements)
 - 3. Operation and Maintenance Manuals (per Contract Documents)
 - 4. Warranties and Bonds two wet signed notarized originals that MUST be signed with blue ink
 - 5. Keys and keying schedule
 - 6. Spare parts and materials
 - 7. Statement of completion of all punch list items
 - 8. Affidavit that all payrolls, bills, and indebtedness connected with the work have been paid or satisfied sworn statement
 - Final waiver of liens
 - 10. Consent of Surety to final payment
 - 11. Final Verified Reports
 - 12. Other data as required by the Construction Manager for assurance of satisfaction of the requirements of the contract documents.
 - In-Service Schedule
 - 14. Commissioning

The A/E will make distribution of the close-out submittals to the Owner with copies to the appropriate project team members.

- B. The A/E will draft the Notice of Completion for Board presentation. The District normally files these with the County within ten (10) days of the Board's action.
- C. Upon completion and submittal of all contract close-out times, the Contractor shall submit written notice to the Construction Manager that the project is ready for final inspection. Concurrent with the request for final inspection, the Contractor shall prepare and submit a final application for payment, the Construction Manager, in conjunction with the A/E, will issue a final certificate for payment to the Owner recommending final payment. The Owner will make final payment, less outstanding Stop Notices.

END OF SECTION

V. APPENDIX

A. GENERAL FORMS:

- 1. Daily Construction Job Report
- 2. Submittal Form
- 3. Substitution Request Form
- 4. Inspection Request
- 5. Request For Information
- 6. Request For Quotation Form
- 7. Potential Change Order
- 8. Change and Extras Form
- 9. Instruction Sheet for Pay Applications
- 10. Application and Certification for Payment
- 11. Schedule of Values Sheet
- 12. Conditional Waiver And Release Upon Progress Payment
- 13. Unconditional Waiver And Release Upon Progress Payment
- 14. Conditional Waiver And Release Upon Final Payment
- 15. 2-Week-Look-Ahead
- 16. Time and Material Work Item Ticket
- 17. Guarantee Form
- 18. DSA-6 Form

PROJECT COORDINATION

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED:

- A. Each Prime CONTRACTOR shall coordinate his Work and Work of his subcontractors for the Project.
- B. Each Prime Contractor shall:
 - 1. Coordinate work of his own employees and suppliers.
 - 2. Expedite his work to assure compliance with schedules.
 - 3. Coordinate his work with that of other Prime Contractors, subcontractors, and work by DISTRICT.
- C. Each Prime Contractor shall coordinate his work and the work of his subcontractors with other Prime Contractors on Project.
- D. This Prime Contractor understands and will coordinate with Bid Packs 01to ensure proper coordination, scheduling and ensure that the required Fire Watch/Security is well informed and coordinated with the Construction Manager and reviewed at each construction meeting.

1.2 RELATED REQUIREMENTS:

A. The General Conditions of the Contract: Authority and responsibilities of the Contractor and subcontractor.

1.3 CONSTRUCTION ORGANIZATION AND START-UP:

- A. The Prime Contractor shall establish on-site lines of authority and communications, and each Contractor shall:
 - 1. Attend pre-construction meeting and mandatory weekly progress meetings.
 - 2. Establish procedures for inter-project communications:
 - a. Submittals
 - b. Reports and records
 - c. Recommendations

- d. Coordination drawings
- e. Schedules (Critical path method, submitted to CONSTRUCTION MANAGER in accordance with the General Conditions)
- f. Resolution of conflicts
- 3. Interpret Contract Documents:
 - a. Consult with CONSTRUCTION MANAGER to obtain interpretation from the ARCHITECT.
 - b. Assist in resolution of questions or conflicts which may arise.
 - c. Transmit written interpretations to subcontractors and to other concerned parties.
- 4. Assist in obtaining permits and approvals:
 - a. Building permits and special permits required for all Work or for temporary facilities.
 - b. Verify that subcontractors have obtained inspections for all Work through the D.S.A. approved INSPECTOR.
- 5. Control the use of site:
 - a. Supervise field engineering and site layout.
 - b. Allocate space for each subcontractor's use for field offices, sheds, and work and storage areas as approved by the CONSTRUCTION MANAGER.
 - c. Establish access, traffic and parking allocations and regulations.
 - d. Monitor use of site during construction.

1.4 GENERAL DUTIES:

A. Construction Schedules - Each Prime Contractor shall:

- 1. Prepare a detailed schedule of basic operations for all subcontractors.
 - a. Each subcontractor shall prepare sub-schedules to comply with critical phases.
- 2. Monitor schedules as work progresses:
 - a. Identify potential variances between scheduled and probable completion dates for each phase.
 - b. Recommend to CONSTRUCTION MANAGER adjustments in schedule to meet required completion dates.
 - c. Adjust schedules of subcontractors as required.
 - d. Document changes in schedule, submit to DISTRICT and ARCHITECT/ENGINEER through the CONSTRUCTION MANAGER and to involved subcontractors.
 - e. Upon written notice by CONSTRUCTION MANAGER, PRIME CONTRACTOR shall, within three (3) calendar days, provide a complete recovery schedule, including manpower loading, resource loading, detailing how the PRIME CONTRACTOR and his subcontractors will recover PRIME CONTRACTOR'S original scheduled milestone dates. Recovery schedule shall show overtime, weekends, or multiple shifts as necessary to meet each milestone of the original schedule.
- 3. Observe Work of each subcontractor to monitor compliance with schedule.
 - a. Verify that labor and equipment are adequate for the Work and the schedule.
 - b. Confirm that product procurement schedules are adequate.
 - c. Confirm that product deliveries are adequate to maintain schedule.

- d. Report noncompliance to District D.S.A. approved INSPECTOR, with recommendation for changes.
- B. Process Shop Drawings, product data and samples Each Prime Contractor shall:
 - 1. Prior to submittal to ARCHITECT/ENGINEER, review for compliance with Contract Documents:
 - a. Field dimensions and clearance dimensions.
 - b. Relation to available space.
 - c. Relation to other contracts and to other trades.
 - d. Effect of any changes on the Work of any other contracts or other trades.
 - e. Provide written approval that submittals have been approved by Prime Contractor.
- C. Review coordination drawings prepared by mechanical and electrical Contractors Each Prime Contractor shall:
 - 1. Prior to submittal to ARCHITECT/ENGINEER, through the CONSTRUCTION MANAGER, review for compliance with Contract Documents.
 - 2. Resolve conflicts and assure coordination of the Work of, or affected by, mechanical and electrical trades, or by special equipment requirements.
- D. Inspection and testing Each Prime Contractor shall:
 - 1. Inspect Work to assure performance in accordance with requirements of Contract Documents.
 - 2. Bring to ARCHITECT'S/ENGINEER'S attention, through the CONSTRUCTION MANAGER, the need of any special testing and inspections of suspect Work.
 - 3. Reject Work which does not comply with requirements of Contract Documents.
 - 4. Coordinate Testing Laboratory services:

- a. Verify that required laboratory personnel are present.
- b. Verify that tests are made in accordance with specified standards.
- c. Review test reports for compliance with specified criteria.
- d. Recommend and administer any required retesting.
- E. Monitor the use of temporary utilities Each Prime Contractor shall verify that adequate services are provided and maintained.
- F. Monitor the PRIME CONTRACTOR'S periodic cleaning Each Prime Contractor shall:
 - 1. Enforce compliance with Specifications.
 - 2. Resolve any conflicts.
- G. Arrange for delivery of DISTRICT furnished products Each Prime Contractor shall:
 - 1. Inspect for condition at delivery.
 - 2. Turn over to appropriate subcontractor, obtain receipt.
- H. Changes and substitutions Each Prime Contractor shall:
 - 1. Recommend necessary or desirable changes to DISTRICT and to ARCHITECT/ENGINEER, through the CONSTRUCTION MANAGER.
 - Review subcontractor's requests for changes and substitutions. Submit recommendations to DISTRICT and to ARCHITECT/ENGINEER through the CONSTRUCTION MANAGER.
 - 3. Assist ARCHITECT/ENGINEER, through the CONSTRUCTION MANAGER, in negotiating Change Orders.
 - 4. Promptly notify all subcontractors of pending changes or substitutions.

1.5 CLOSE-OUT DUTIES:

- A. Mechanical and electrical equipment start-up:
 - 1. Coordinate check-out of utilities, operations systems, and equipment.
 - 2. Assist in initial start-up and testing.
 - 3. Record dates of start of operation of systems and equipment.
 - 4. Submit to DISTRICT written notice of beginning of warranty period for equipment put into service.
- B. At completion of Work of each Prime Contract, conduct an inspection to assure that:
 - 1. Specified cleaning has been accomplished.
 - 2. Temporary facilities have been removed from site.
- C. Substantial Completion:
 - 1. Conduct an inspection to confirm or supplement Prime Contractor's list of work to be completed or corrected.
 - 2. Assist ARCHITECT/ENGINEER, through the CONSTRUCTION MANAGER, in preparation of correction list.
 - 3. Supervise correction and completion of Work as established in Certificate of Substantial Completion.
- D. When DISTRICT occupies a portion of Project prior to final completion, coordinate established responsibilities of PRIME CONTRACTOR and DISTRICT.
- E. Final Completion:
 - 1. When each Prime Contractor determines that Work is finally complete, conduct an inspection to verify completion of Work, prior to Punchlist.

- 2. Assist ARCHITECT/ENGINEER, through the CONSTRUCTION MANAGER, in verification of final completion.
- F. Administration of Contract Close-out: Each Prime Contractor shall:
 - 1. Review final submittals and as-builts prior to transmittal.
 - 2. Transmit to ARCHITECT/ENGINEER, through the CONSTRUCTION MANAGER, with recommendations for action.

1.6 REQUEST FOR INFORMATION

- A. Each Prime Contractor shall plan, schedule, coordinate and sequence Work so Requests for Information (RFI), if necessary, may be submitted to the Architect/Engineer in a timely manner so as not to delay progress of Work. Submission of and responses to RFI(s) with copies to Owner, shall be transmitted via facsimile (FAX) equipment or via email to designated email addresses.
- B. Telephone conversations requesting information shall be confirmed in writing for prompt reply of all RFI(s). Prime Contractor shall coordinate the timing of facsimile (FAX), email and telephone conversations to be made with the Architect's/Engineer's office between the hours of 8:00 a.m. and noon, Monday through Friday.
- C. RFI will be unanswered until Contractor submits a "Construction Schedule". "Construction Schedule" shall be based on Specification Section arrangement and establish starting and ending dates for Work in each section. "Construction Schedule" shall be updated monthly and delivered to Architect and Owner at "Request for Payment".
 - If "Construction Schedule" is not received by Architect/Engineer and Owner by that date, Architect's/Engineer's response to pending RFI(s) will be delayed by the same number of days as the days the "Construction Schedule" is late.
- D. Architect/Engineer shall have the same time period to respond to RFI(s) as "shop drawing review period". When Architect/Engineer responds to an RFI within 5 working days after receipt of RFI but when the response already is contained or included within contract documents, or is based on referenced standards, or is based on established and common construction practices, Contractor shall reimburse the Architect at the following hourly rates:

Principal	\$150
Associate Architect/Project Manager	100
Project Architect/Engineer	85
Job Captain	70
Draftsperson	65
Support Staff	45

- If RFI requires Architect's/Engineer's Consultant(s) acknowledgement, Prime Contractor shall reimburse consultant(s), at the same hourly rate for consultant's staff; Prime Contractor shall also pay to the Architect, a percentage for overhead and profit to the consultant's fee, equal to the markup the Prime Contractor adds to "Change Orders".
- E. Prime Contractor shall be billed at "Request for Payment" meeting, and payment is due on the 10th day of the following month. If payment is not received by Architect/Engineer by that date, Architect's/Engineer's response to pending RFIs will be delayed by the same number of days as the days the payment check for RFI services is late.
- F. No damages for delay due to RFI response beyond allotted time will be allowed, unless Contractor can show that RFI was not foreseeable with proper planning, scheduling, coordination, and sequencing, and the Architect's/Engineer's late response delayed timely purchase or delivery of equipment or material, or limited construction personnel from proceeding with their task(s), within previously listed "Construction Schedule" activity period(s).

1.7 QUALITY ASSURANCE

- A. Familiarity with Contract Documents:
 - 1. Prime Contractor and all Subcontractors shall conduct a study necessary to become completely familiar with all requirements. Applicable requirements indicated or described in the Contract Documents, and the publications referred to, are a part of the Work required as though repeated in each such Section.
 - 2. In the event discrepancies or conflicts are encountered, notify the Architect/Engineer immediately. Where there is discrepancy between different parts of the contract documents, including referenced codes and standards, the documents requiring the higher quality, the greater quantity,

- or the more difficult work shall govern, unless determined otherwise by the Architect.
- 3. Promptly distribute required information to entities concerned and ensure the needed actions are taken.
- B. Reporting: Unless otherwise noted by the Prime Contractor in his transmittals, all of the Prime Contractor's data transmittals to the Architect/Engineer for the Architect's/Engineer's review will be construed as stipulating that the Prime Contractor has thoroughly and completely reviewed and coordinated the data prior to transmittal.
- C. Interfacing: It shall be solely the responsibility of each Prime Contractor to make sure that the assigned work completes in a timely manner and that all interfaces are prepared, connected, and function as required.

PART 2 – PRODUCTS – All products will be submitted and approved by the Architect/Engineer prior to purchase and then placement.

PART 3 - EXECUTION

3.1 PLANNING THE WORK

- A. By thorough advance planning of activities, coordinate the following in addition to other coordination activities required:
 - 1. Materials, services, and equipment purchasing.
 - 2. Shipping.
 - 3. Receipt and storage at the site.
 - 4. Installation, including interface with related items.
 - 5. Inspection and testing, to the extent required under the Contract.
 - 6. Assistance in initial start-up and operational tests.
 - 7. Completion of the Work, including removal and disposal of Contractor's surplus material and equipment, and final cleaning of structures and sites.

3.2 COORDINATION

- A. Coordinate construction activities included under various Sections of these Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation connection and operation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work.

3.3 GENERAL INSTALLATION PROVISIONS

- A. Coordination methods used by the Prime Contractor are at the Prime Contractor's option, except that the Architect/Engineer may disapprove Work completed by the Prime Contractor or data submitted by the Prime Contractor when, in the Architect's/Engineer's judgment, coordination has been inadequate to ensure the specified quality.
- B. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect for final decision.

END OF SECTION

ACCELERATION OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for the acceleration of the work by the Contractor.
 - 1. Where work is falling behind the construction schedule and the total project may not be completed by the date for contract completion as adjusted by change orders.
 - 2. Where the District requires the entire project or a portion thereof be completed at a date earlier than the contract completion date as adjusted by change orders.

B. Related Sections

- 1. Section 01250 Contract Modifications Procedures
- 2. Section 01290 Payment Procedures
- Section 01330 Submittals.
- C. Construction Completion date as stated in the Agreement shall be the completion dated as revised by all time extensions granted at the time acceleration of the work begins.

1.2 NOTICE TO ACCELERATE WORK

- A. If in the judgment of the Architect and School District it becomes necessary at any time to accelerate the work or a portion thereof to increase rate of progress, Contractor when directed in writing, shall increase his construction forces, equipment, hours of work, number of shifts, delivery of materials and provide means to insure timely completion of the project.
 - 1. Any increase in cost to Contractor to accelerate the work progress to meet construction schedules or contract completion dates are the responsibility of the Contractor.
 - 2. Contractor shall not be entitled to additional compensation for additional effort he applies to the work to meet construction schedules or contract completion dates.

- Overtime hours by Contractor or its Subcontractors are the responsibility of the Contractor and are not grounds for additional compensation.
- B. If in the judgment of the Architect/Engineer and School District it become necessary at any time to accelerate the work or a portion thereof be completed at a date earlier than the contract completion date, Contractor when directed in writing, shall increase his construction forces, equipment, hours of work, number of shifts, delivery of materials and provide means to insure an earlier completion date.
 - 1. Architect/Engineer and District shall determine new accelerated completion date.
 - 2. Any increase in the cost to Contractor in compliance which such accelerated completion date shall be adjusted by Change Order.
- C. All directives or orders to accelerate the work will be in writing. Any directive or order terminating acceleration of the work will be in writing.
- D. Phased Construction: Where the project includes phased construction and portions of the project are to be completed at earlier times than other portions of the contract, the above stated acceleration provisions shall apply to each phase of the construction contract.

1.3 CONTRACTOR RESPONSIBILITIES

- A. Contractor shall when so directed by the Architect/Engineer or School District to accelerate the work or portion thereof, deploy Subcontractors, accelerate material deliveries, increase work forces, increase hours of work, provide additional shifts or provide other methods to accelerate progress of the work.
- B. Contractor shall within ten (10) calendar days after receiving written notice to accelerate the work, provide in writing to the Architect/Engineer and District specific measures being taken or planned to increase rate of progress along with a revised Construction Schedule. Architect/Engineer may require the Contractor to make adjustments in the plan of action to insure acceleration of the work.

C. Contractor shall continue acceleration of the work until scheduled progress is regained for timely completion of the project. Timely completion shall be understood as the contract completion date, as revised by all time extensions granted at the time acceleration begins.

1.4 REVISED CONSTRUCTION SCHEDULE

A. Critical-Path Acceleration of Work Schedule: Prepare a new revised fully developed, Critical Path Method type Contractor's construction schedule showing an Acceleration of Work Schedule and new completion dates where an earlier completion date is directed. Revised schedule shall show acceleration of work scheduled to increase progress of the work to provide for timely completion of the project.

PART 2 – PRODUCTS - (Not Applicable)

PART 3 - EXECUTION - (Not Applicable)

END OF SECTION

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: General requirements for the submittal of Shop Drawings, product literature, samples, RFIs, and other data.
 - To ensure that specified products are furnished and installed in accordance with the design intent, procedures have been established for advance submittal of relevant data, and for review and acceptance or rejection of that data by the Architect.
 - 2 Procedures have been established to ensure that Contractor requests for information and clarification are processed efficiently and promptly.
- B. Referenced Documents and Sections:
 - 1. Document 00700 General Conditions.
 - Section 01450 Quality Control.
 - 3. Section 01630 Product Substitution Procedures.
- C. Substitutions: Requests for substitutions shall be made in accordance with the provisions of, and in a form described in, Section 01630.

1.2 **DEFINITIONS**

- A. Request For Information (RFI): A document submitted by the Contractor requesting clarification of a portion of the Contract Documents, hereinafter referred to as RFI.
 - 1. Proper RFI: An RFI that includes a detailed written statement indicating the specific Drawings or Specification section in need of clarification and the nature of the clarification requested.
- B. Improper RFIs: RFIs that are not properly prepared.

- Improperly prepared RFIs will be processed by the Architect/Engineer at the Architect's/Engineer's standard hourly rate. The Architect will charge the Owner, and such costs will be deducted from monies still due the Contractor.
 - a. The Contractor will be notified by the Architect/Engineer prior to the processing of Improper RFIs
- C. Frivolous RFIs: RFIs that request information that is clearly shown on the Contract Documents.
 - 1. Frivolous RFIs may be returned unprocessed. If processed, the Architect may charge the Owner at the Architect's/Engineer's standard hourly rate, and such costs will be deducted from monies due the Contractor.
 - a. The Contractor will be notified by the Architect/Engineer prior to the processing of Frivolous RFIs.

1.3 SCHEDULE OF SUBMITTALS

- A. Schedules: Furnish required schedules in accordance with the General Conditions listing all items that will be submitted for acceptance-review by the Construction Manager and Architect/Engineer.
 - 1. Include Shop Drawings, manufacturer's literature, test procedures, test results, certificates of compliance, material samples, and special guaranties.
 - 2. Indicate scheduled dates for submitting the above items, projected needs for responses, and procurement dates.
 - 3. Revise and update submittal schedule as required to keep current. Make revised schedules available to the Architect/Engineer for review.
- B. For drawings larger than 11 inches by 17 inches, submit two copies of blueline prints, and one reproducible sepia or vellum of each Shop Drawing submittal, or as determined by mutual agreement. One reproducible copy will be returned to Contractor for reproduction and distribution as required.

- 1. Alternately, provide two sets of plain bond paper copies 11 inches by 17 inches in size.
- C. Make submittals in accordance with the General Conditions to allow adequate time for securing necessary acceptances, for revision and resubmittal, for placing orders and securing delivery, and to accommodate the rate of construction progress required under the Contract.
- D. Do not begin work requiring submittals until the submittals have been returned with the other professional consultant's stamp indicating review and acceptance.
 - Provide acknowledgement stamp by Contractor signifying review and acceptance of submittal as defined in Article 1.5 -Coordination of Submittals.

E. Submittals with Bid:

1. Elevators: Provide copies of Preventive Maintenance Contract in accordance with Section 14200.

1.4 IDENTIFICATION OF SUBMITTALS

- A. On submittal forms acceptable to the Architect/Engineer, identify each submittal and resubmittal by including the following information:
 - 1. Name and address of submitter, including name and telephone number of the individual to be contacted for further information.
 - 2 Complete name of Project.
 - 3. Drawing number and Specification Section number to which the submittal applies.
 - 4. Whether submittal is an original or a resubmittal.
 - 5. Date submittal was prepared or revised.

1.5 COORDINATION OF SUBMITTALS

A. General: Fully coordinate materials prior to submittal for review. Include a transmittal form with a signed statement that submittal satisfies the following procedures:

- 1. Determine and verify field dimensions and other field conditions.
- Coordinate with work of related trades.
- 3. Coordinate with the requirements of public agencies having jurisdiction.
- 4. Secure required approvals from public agencies and signify by stamp, or other legitimate means, that they have been secured.
- 5. Indicate necessary deviations from the Contract Documents in a clear manner.
- B. Grouping of Submittals: Make submittals in groups containing associated items. The Architect reserves the right to reject partial submittals as not complying with provisions of the Contract Documents.

PART 2 - PRODUCTS

2.1 PRODUCT DATA

- A. When required by Part 1 General of the respective Sections, submit manufacturer's printed product data and instructions for products used on the Project. Include catalog cuts, diagrams, and other descriptive material published by the manufacturer, as well as evidence of compliance with safety and performance standards to demonstrate conformance to the specified requirements. Catalog numbers alone will not be acceptable.
 - 1. Include complete lists of materials, illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information proposed for use, giving manufacturer's name, catalog number, and catalog cut for each item, where applicable.
 - 2. When materials, equipment, or fixtures are identified by numeric, alphabetical, or alphanumerical designations, identify materials, equipment, and fixtures proposed for use with identical designations.

2.2 SHOP DRAWINGS

- A. When required by Part 1 General of the respective Sections for the various portions of the construction, provide special detailed drawings, diagrams, schedules, and other data in amplification of the Contract Documents before proceeding with the work.
 - 1. Refer to Document 00700 General Conditions for obligations under the Contract regarding Shop Drawings, product data, and samples.
- B. Submit Shop Drawings prepared by qualified detailers. Identify details by reference to Contract Drawing sheet and detail numbers and by specification section and article numbers. Provide a blank area approximately 4 inches by 4 inches for Architect's review stamp.
 - 1. Do not use reproductions of Contract Drawings for fabrication or erection drawings.
- C. Shop Drawings submitted shall include not less than the following:
 - 1. Dimensioned plans, elevations, and sections locating assembly components in relationship to each other and in relationship to contiguous building structure.
 - 2. Typical and special fabrication and installation details, including details of anchorage to supporting structure.
 - 3. Materials and finishes.
- D. Indicate desired deviations from Contract Drawings on Shop Drawings by placing a heavy line around features on which acceptance is requested. Append a note to each deviation specifically requesting acceptance.
 - 1. Contractor is advised that the identification of "desired deviations" will not be construed as a means of requesting substitutions. Make requests for substitutions in accordance with the provisions of Section 01630.
- E. Refer to Part 3 Execution, for additional review documentation procedures.

2.3 SAMPLES

- A. When required by Part 1 General of the respective Sections of the Specifications, submit physical examples of each item which illustrate materials, equipment, or workmanship, and establish standards by which the work will be judged.
- B. All products requiring color selection shall be submitted prior to any selection of colors by the Architect/Engineer. Allow sufficient time for color selection of all items so as not to delay construction progress.

2.4 QUALITY CONTROL SUBMITTALS

- A. Test Reports: When and as directed by the Architect/Engineer, submit certified laboratory test reports confirming physical characteristics of materials used in the performance of the work. Refer to Section 01450 for general requirements for inspections and tests.
- B. Manufacturer's Instructions: Submit manufacturer's current recommended methods of installation, including relevant limitations, safety and environmental cautions, and application rates.

2.5 EQUIPMENT ROOM LAYOUT DRAWINGS

- A. Prepare and submit equipment room layout drawings where required by the Contract Drawings and additionally for areas where equipment proposed for use could present interface or space difficulties.
 - 1. Submit room layout drawings within 10 calendar days after receipt of Notice to Proceed in conformance with the requirements specified for Shop Drawings.
 - Include elevations of wall mounted items.

2.6 CERTIFICATES OF COMPLIANCE

A. When required by Part 1 - General of the respective Sections of the Specifications, furnish certificates to demonstrate compliance of materials with specification requirements, including statements of application and extended guaranties, executed in duplicate. Furnish certificates to the Architect at least 10 days prior to delivery of product. Review certificates before submittals are made to ensure compliance with the specification requirements, and to ensure that the affidavit is properly executed.

- 1. Furnish certificates relative to flame-resistance for all decorative materials.
- B. Furnish certificates signed by an official authorized to act on behalf of the manufacturing company, material supplier, or other thirdparty entity, as required. Furnish certificates that contain the name and address of the Contractor, the Project name and location, and the quantity and dates of shipment or delivery to which the certificates apply. In the case of copies of laboratory test reports submitted with certificates, furnish test reports which contain the name and address of the testing laboratory and the dates of the tests to which the report applies.
- C. Certification will not be construed as relieving the Contractor from furnishing satisfactory material if, after tests are performed on selected samples, the material is found not to meet the specific requirements.

2.7 CONSTRUCTION COST BREAKDOWN

Within 10 calendar days after issuance of Notice to Proceed, A. submit a Construction Cost Breakdown (Schedule of Values) based on final Contract Sum and scope of work for use in evaluating construction progress and certificates of payment.

PART 3 - EXECUTION

3.1 **CONTRACTOR'S REVIEW**

- Α. Check subcontractor-submitted drawings and data, verify field stamp, and submit to the measurements. apply review Architect/Engineer promptly.
 - 1. Indicate on review stamp that Contractor has reviewed subcontractor's submittal for conformance to the specified product and submittal procedures.
 - 2. Disapprove and return to the material supplier, submittals not meeting the requirements of the Contract Documents.

3.2 **ARCHITECT'S REVIEW**

The Architect/Engineer will review, and either accept or reject with Α. reasonable promptness and as outlined in the accepted submittal schedule, data and drawings submitted by the Contractor. The

Architect/Engineer will review submittals for conformance with the intent of the design, and for compliance with specific and relevant requirements of the Contract Documents.

- 1. The Architect/Engineer will reject and return to the Contractor, Shop Drawings and product literature submitted without the Contractor's review stamp.
- 2. The Architect/Engineer will reject and return to the Contractor, Shop Drawings not thoroughly reviewed by Contractor prior to submittal.
- B. The Architect/Engineer is not responsible for delays caused by rejection of Shop Drawings submitted by the Contractor.

C. **Review Procedures:**

- 1. Review will not relieve the Contractor from responsibility for errors.
 - Acceptance of submittals shall not be construed as a. authorizing changes in the Contract Sum or Contract Time, nor shall it be construed as relieving the Contractor of his responsibility for coordination of work with other trades, or interpreted as approving quantities and dimensions.

2. Notations:

- a. REVIEWED: Fabrication, manufacture, or construction may proceed.
- MAKE CORRECTIONS NOTED: h. Fabrication. manufacture, or construction may proceed providing submittal complies with comments and notations. If, for any reason, Contractor cannot comply with the comments and notations. Contractor shall bring reasons to the attention of the Architect/Engineer promptly. If Contractor cannot comply with the comments and notations, the MAKE CORRECTIONS NOTED becomes REJECTED. The Contractor shall return the revised version of the submittal to the Architect/Engineer when requested to do so.
- REJECTED: Submittal does not comply with the C. Contract Documents and fabrication, manufacture,

and construction shall not proceed. Submittals stamped REJECTED are not permitted on the job site. Review and re-submit submittal.

3.3 DISTRIBUTION OF SUBMITTALS BY CONTRACTOR

- A. After Architect's/Engineer's review, distribute copies of Shop Drawings and product data which carry the Architect's/Engineer's stamp as determined at the pre-construction meeting. If not otherwise determined, distribute one copy to each of the following:
 - 1. Contractor's Project site file.
 - 2. Project record documents file.
 - 3. Subcontractor, supplier, or fabricator.
 - 4. Other prime Contractors, if applicable.
 - 5. Owner's Representative (at Owner's option).
- B. Distribute samples as directed.
- C. Maintain an up-to-date submittal log.

3.4 CONTRACTOR'S RESPONSIBILITY

- A. The Architect's/Engineer's review of submittals or data shall not relieve the Contractor from responsibility for deviations from Contract Drawings or Specifications unless the Contractor has called the Architect's/Engineer's and Owner's attention to such deviations and secured written acceptance, nor shall it relieve him of responsibility for errors in Shop Drawings or other data.
- B. In the event the Architect/Engineer rejects a submittal twice for valid reasons, including improper procedures, the Contractor shall accept the responsibility to pay for professional services to cover further processing of the submittal. A flat hourly rate, as agreed upon, shall be paid by the Contractor.

END OF SECTION

ALTERATION PROJECT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for Alteration or Modernization Projects for acceptance of existing site conditions, selective demolition, cutting and patching of existing buildings and site improvements, removal and reinstallation of existing materials, wiring and equipment and interface with existing construction.
- B. Refer to other Sections for specific requirements and limitations applicable to Alteration or Modernization projects
- C. Requirements of this Section apply to Sections in Divisions 2 through 16.

1.2 RELATED SECTIONS

- A. Section 01010 Summary of work.
- B. Section 01045 Cutting and Patching
- C. Section 01890 Existing Facility Reconstruction

1.3 ALTERATION PROJECTS GENERAL PROCEDURES

- A. Alteration/Modernization projects require that the contractor may need to demolish, cut, alter, expose, modify, repair, replace, reconstruct, patch, reroute, or other construction procedures to interface new construction into existing construction.
- B. The Drawings and specifications are not intended to show in detail all Alteration Project Procedures for interface of new construction into existing construction. It is the responsibility of the Contractor to include in the Contract Price Allowances for such Alteration Procedures.

1.4 QUALITY ASSURANCE

A. Matching existing Construction: On Alteration\Modernization projects new materials are to match existing materials for patching and extending work.

B. Determine type and quality of existing materials by inspection and testing. Existing construction shall be used as a standard of quality for new construction unless noted or specified otherwise.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Use materials that are identical to existing materials. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials whose installed performance will equal or surpass that of existing materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that selective demolition is complete and areas are ready for installation of new work.

3.2 PREPARATION

- A. Cut, move, or remove items as necessary for access to alteration and renovation work. Replace and restore prior to completion.
- B. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated construction. Replace materials as specified for the affected finish material.
- C. Remove debris and abandoned items from area and from concealed spaces.
- D. Remove surface finishes to provide for proper installation of new work.
- E. Temporarily close openings in exterior surfaces to protect existing improvement from weather, temperature and humidity during construction of new work.

3.3 INSTALLATION

- A. Coordinate work of Alteration/Modernization to expedite completion and to accommodate School occupancy of the facility.
- B. Remove, cut and patch in a manner to minimize damage to existing facilities and to provide a means of restoring materials and finishes to original conditions.
- C. Refinish visible existing surfaces to remain in Alteration/Modernization areas to specified condition for each material, with a neat transition to adjacent finishes.
- D. In addition to the specified new equipment, fixtures, wiring, conduit, materials, etc. bring existing systems to full operational conditions before Alteration/Modernization work is completed.
- E. Patch, repair and refinish work that was damaged during mechanical, electrical and other modernization work.

3.4 TRANSITIONS

- A. Where the removal or addition of walls, ceilings and finishes abuts existing construction, construct a smooth and even transition. Patch new work to existing to match adjacent work in texture and appearance.
- B. When existing surfaces are cut so that a smooth transition with new construction is not possible, terminate existing surface along a straight line at a natural line of division, such as a corner change in finish or a joint. Replace existing finish as required for a smooth transition.
- C. Trim bottom of existing doors as required to clear new floor finish.

3.5 CONSTRUCTION INTERFERENCE

- A. Where existing construction interferes with new construction, such as pipes, conduit, junction boxes, and other existing construction that may be in a location that is not compatible with new construction, contractor is to relocate, move, provide replacement or otherwise remove the construction interference.
- B. Contractor is to field verify existing conditions and is not to reply on Existing Record Drawings provided by the School District. Contractor is not to rely on any verbal instructions or verbal locations given by School District Personnel unless given or stated

in writing. Existing Record drawings if provided are for information only and may not indicate the exact existing construction.

3.6 REPAIR OF DAMAGED SURFACES

- A. Where removal of partitions, ceilings, walls or finishes results in adjacent spaces becoming damaged, rework floors, walls and ceilings to provide for a smooth plane without break, steps, or bulkheads.
- B. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections. Repair substrate prior to patching finish.

3.7 FINISHES

- A. Finish surfaces as specified in individual Product sections.
- B. Finish patches to produce uniform finish and texture over the entire area. When finish cannot be matched, refinish entire surface to nearest joint corner or intersection.

END OF SECTION

REFERENCES

PART 1 - GENERAL

1.1 **SECTION INCLUDES**

- Requirements for reference materials applicable to contract Α. documents
- B. Definitions of abbreviations, terms, and symbols.
- Establishes edition dates for reference standards found elsewhere C. in the specifications.

1.2 **DEFINITIONS**

- General: Basic Contract definitions are included in the General Α. Conditions.
- B. Indicated: The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, other paragraphs schedules in the Specifications, and similar requirements in the Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used, it is to help the reader locate the reference; no limitation on location is intended. Except as specifically noted.
- C. Directed: Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean "directed by the Architect/Engineer," "requested by the Architect/Engineer," and similar phrases. However, no such implied meaning will be interpreted to extend Architect/Engineer responsibility into Contractor's area of construction supervision.
- Approve: The term "approved," where used in conjunction with the D. Architect's/Engineer's action on the Contractor's submittals. applications, and requests, is limited to the Architect's/Engineer's duties and responsibilities as stated in General and Supplementary Conditions. In no case will "approval" by the Architect/Engineer be interpreted as a release of the contractor from responsibilities to fulfill requirements of contract documents.
- Ε. Regulation: The term "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction.

- as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. Furnish: The term "furnish" is used to mean "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."
- G. Install: The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations."
- H. Provide: The term "provide" means "to furnish and install, complete and ready for the intended use."
- I. Installer: An "Installer" is the Contractor or an entity engaged by the Contractor, either as an employee, subcontractor, or subsubcontractor, for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.
 - 1. The term "experienced" when used with the term "Installer" means having a minimum of 5 previous Projects similar in size and scope to this Project, being familiar with the precautions required, and having complied with requirements of the authority having jurisdiction.
- J. Project Site is the space available to the Contractor for performance of construction activities, either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land upon which the Project is to be built.
- K. Testing Laboratories: A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

1.3 REFERENCE STANDARDS

A. Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or

- copied directly into the Contract Documents. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Where the date of issue of a referenced standard is not specified, comply with the standard in effect as of bid date or date of Contract Execution, for projects that are not competitively bid.
- C. Upon request, the Contractor is required to make available at the job site within a reasonable time a copy of all referenced standards referred to in the Specifications. Standards are to be maintained in the Project Job Site Office Library for use by the Architect/Engineer, School District and School District's inspector for the purpose of establishing requirements applicable to equipment, materials, quality and workmanship.
- D. Conflicting Requirements: Where compliance with two or more standards is specified, and the standards establish different or conflicting requirements for minimum quantities or quality levels, refer requirements that are different, but apparently equal, and uncertainties to the Architect for a decision before proceeding.
 - Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. In complying with these requirements, indicated numeric values are minimum or maximum, as appropriate for the context of the requirements. Refer uncertainties to the Architect for a decision before proceeding.

1.4 ABBREVIATIONS

- A. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision.
- B. Refer to the "Encyclopedia of Associations," published by Gale Research Co., available in most libraries or the Construction

Specifications Institute (CSI) Technical Document TD-2-5 November 1989, entitled "Sources of Construction Information".

PART 2 - PRODUCTS - (Not Applicable)

PART 3 - EXECUTION - (Not Applicable)

END OF SECTION



COMPTON COMMUNITY COLLEGE DISTRICT 1111 E. Artesia Blvd Compton, California 90221 (310) 900-1600

Campus Public Safety Building – UG Electrical Pathway

Work Plan and Milestone Schedule

Task Name	Finish Date
Pre-bid Conference:	10/12/17
Bid Opening:	10/24/17
Notice of Intent to Award:	10/25/17
Start Construction Phase:	12/15/17
Construction Completion:	01/03/18
Punchlist/Closeout completion:	01/26/18

QUALITY CONTROL

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for quality control services.
- B. Quality control services include inspections and tests and related actions including reports, performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Architect/Engineer.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
 - 1. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
 - 2. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.
 - Requirements for the Contractor to provide quality control services required by the Architect/Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.2 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Inspections and testing required by laws, ordinances, rules, regulations or orders of public authorities: General Conditions.

- B. Certification of Products: Respective specification sections.
- C. Test, Adjust and Balance of Equipment: Respective specification sections.

1.3 RESPONSIBILITIES

A. The Owner will engage and pay for the services of an independent agency to perform inspections and tests specified as the Owner's responsibilities. Testing agency and project inspector shall have approval of the Division of the State Architect.

1.4 DEFICIENCIES

- A. Tests or inspections due to the following will be reimbursed to the Owner by deductive change order.
 - 1. Retesting because of failure of initial samples.
 - 2 Additional costs due to overtime work or extra shifts work because of improper scheduling of work or of delivery of materials by Contractor.
 - 3. Failure to properly notify laboratory.
 - 4. Changes in sources, lots or suppliers of materials after original tests.
 - 5. Changes in methods or materials of construction requested by Contractor that require testing, inspection, or other related services in excess of that required by original design.
 - 6. Concrete mix designs in excess of first successful design for each concrete type.
 - 7. Overtime or extra shift work requiring overtime work by Owner's Inspector.
 - This contractor will have the sole responsibility of coordinating the Schedule with the Construction Manager for Owner/General Contractor, Bid Package 01, provided Fire Watch.

1.5 TESTS

- A. Selection of the material required to be tested shall be the responsibility of the laboratory or the Owner's representative and not selected by the Contractor.
- B. The Contractor shall notify the Owner's representative a sufficient time in advance of the manufacture of material to be supplied by him under the Contract Documents, which must be tested, in order that the Owner may arrange for the testing of material at the source of supply.
- C. Any material shipped by the Contractor from the source of supply prior to satisfactory testing and inspection or prior to the receipt of notice from said representative that testing and inspection will not be required shall not be incorporated in the work.
- D. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Architect/Engineer and Contractor in performance of its duties, and is to provide qualified personnel to perform required inspections and tests.
 - 1. Notify the Architect/Engineer and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. The agency is not authorized to release, revoke, alter or enlarge requirements of the Contract Documents, or approve or accept any portion of the Work.
 - 3. The agency shall not perform any duties of the Contractor.
- E. Perform specified instructions, sampling and testing of materials and methods of construction:
 - 1. Comply with specified standards; ASTM, other recognized authorities, and as specified.
 - 2. Ascertain compliance with requirements of Contract Documents.
 - 3. Comply with requirements of Title 24, Part I, Sec. 4-333.

F. Coordination: The Contractor and each agency engaged to perform inspections, tests, Fire Watch and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

1.6 SUBMITTALS

- A. Promptly submit copies of reports of inspections and tests mill analysis, concrete mix designs and certifications per applicable sections of the specifications.
 - 1. Comply with requirements of Division of State Architect testing and inspection requirements.
 - One copy of all test reports shall be forwarded to the Division of the State Architect by the testing agency. Such reports shall include all tests made, regardless of whether such tests indicated that the material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of Title 24, CCR and with the approved specifications. Test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with requirements.
 - 3. Verification of Test Reports: Each testing agency shall submit to the Office of the State Architect a verified report in duplicate covering all of the tests which are required to be made by the agency during the progress of the project. Such report shall be furnished each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project, covering all tests.
 - 4. Submit one copy of all test reports to:
 - a. Owner
 - b. Architect/Engineer
 - c. Structural Engineer
 - d. Contractor

- e. Inspector
- f. Division of the State Architect (DSA)
- g. Submit verification of test reports to DSA per Title 24, Part 1, CCR, Sec. 4-336.

1.7 QUALITY ASSURANCE

- A. All tests and inspection required by the Division of the State Architect are to be conducted in strict accordance with requirements of Title 24, CCR.
- B. Contractor shall comply with all Project Inspection Card requirements (DSA Form 152), DSA PR 13-01 and 13-02, and all related DSA required inspection and testing requirements.

1.8 INSPECTION BY THE SCHOOL DISTRICT

- A. The School District and its representative shall at all times have access for the purpose of inspection to all parts of the work and to the shops wherein the work is in preparation, and the Contractor shall at all times maintain proper facilities and provide safe access for such inspection.
- B. The School District shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the School District. If the Contractor does not correct such rejected work within a reasonable time, fixed by written notice, the School District may correct same and charge the expense to the Contractor.
- C. Should it be considered necessary or advisable by the School District at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out the same, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of the Contractor or his subcontractor, he shall defray all expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and materials necessarily involved in the examination and replacement shall be allowed the Contractor.

D. District to provide an Inspector employed by the District in accordance with the requirements of the California Code of Regulations, Title 24, to be assigned to the work. His duties are specifically defined in Title 24, Part I, Sec. 4-342. The work of construction in all stages of progress shall be subject to the personal continuous observation of the Inspector. He shall have free access to any or all parts of the work at any time. The contractor shall furnish the Inspector reasonable facilities for obtaining such information as may be necessary to keep him fully informed respecting the progress and manner of the work and the character of the materials. Inspection of the work shall not relieve Contractor from any obligation to fulfill this Contract.

1.9 WORK BY DISTRICT'S INSPECTORS

- A. General inspection of construction.
- B. Concrete slump tests.
- C. Concrete cylinder samples.
- D. Cement samples and tests.
- E. Reinforcing Steel sample and test, (#5 and larger).
- F. Continuous inspection of Structural Concrete placement.
- G. Structural Steel sample and test.
- H. Continuous inspection of welds, (shop and field).

1.10 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel, provide access to work, to manufacturer's operations.
- B. Provide to laboratory, selected preliminary representative samples of materials to be tested, in required quantities.
- C. Furnish casual labor and facilities:
 - 1. To provide access to work to be tested.
 - 2 To obtain and handle samples at the site.

- 3. To facilitate inspections and tests.
- 4. For laboratory's exclusive use for storage and curing of test samples.
- D. Notify laboratory sufficiently in advance of operations to allow for his assignment of personnel and scheduling of tests. Per Specification Section 1305, the contractor will provide an updated 2 Week Look Ahead to ensure proper and timely scheduling.

PART 2 - PRODUCTS - (Not Applicable)

PART 3 - EXECUTION

3.1 MISCELLANEOUS TESTS AND INSPECTIONS

- A. Soil and Compaction Testing and Inspection: Performed by soils engineer employed and paid by the School District.
- B. Roofing Inspection: As specified in Section "Built-Up Roofing".
- C. Moisture and Bond Tests for resilient flooring and non-breathing floor surface materials. Performed by Independent Testing Agency and paid for by the School District.
- D. Special Tests: Special tests requested by School District, Architect or Division of the State Architect will be paid for by the School District, except that if such tests fail, the costs for failed tests and additional retesting shall be deducted from the Contract Price by Change Order.

3.2 SCHEDULE OF TESTS, INSPECTIONS AND METHODS

- A. Foundations (Chapter 18A):
 - 1. Earth Fill Compaction: 1802A
- B. Concrete (Chapter 19A):
 - Materials:
 - a. Portland Cement Tests: 1929A.1
 - b. Concrete Aggregates: 1903A.3

- c. Reinforcing Bars: 1903A.5, 1929A.2
- d. Batch Plant Inspection and Tests: 1929A.4
- 2. Concrete Quality:
 - a. Proportions of Concrete: 1905A.2.3, 1905A.3.1.1, 1905A.3.3.2, 1905A.4
 - b. Strength Tests of Concrete: 1905A.6
 - c. Splitting of Tensile Test 1905A.1.5
- 3. Concrete Inspection:
 - a. Job Site Inspection: 1905A.7
 - b. Batch Plant or Weighmaster Inspection: 1929A.4
- C. Structural Steel (Chapter 22A):
 - Materials:
 - a. Structural Steel, Cold-Formed Steel: 2203A.3
 - b. Structural Steel Construction: 2203A.2
 - 2. Inspection and tests of Structural Steel:
 - a. Tests of Structural and Cold Formed Steel: 2231A.1
 - b. Tests of End-Welded studs (Nelson Studs): 2231A.3
 - c. Welding Inspection: 2231A.5
 - d. High Strength Bolts: 2231A.2
- D. Wood (Chapter 23A):
 - 1. Materials:
 - a. Lumber and Plywood Grading: 2303A.1.2303A.2
 - b. Glue-Laminated Member testing: 2337A.1

Note: Chapters and Articles refer to 1997 UBC and 1998 Title 24 Part 2, California Building Code (CBC), 1998

3.3 REPAIR AND PROTECTION

- A. General: upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes. Comply with Contract Document requirements for "Cutting and Patching".
- B. Protect construction exposed by or for quality control service activities, and protect repaired construction.
- C. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar service.

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security and protection.
- B. Temporary utilities required include but are not limited to:
 - 1. Water service and distribution.
 - 2. Temporary electric power and light.
 - 3. Telephone service with separate Fax line.
 - 4. Storm and sanitary sewer.
- C. Temporary construction and support facilities required include but are not limited to:
 - 1. Temporary heat.
 - 2. Field offices and storage sheds.
 - 3. Sanitary facilities, including drinking water.
 - 4. Temporary enclosures.
 - 5. Temporary Project identification sign.
 - 6. Waste disposal services.
- D. Security and protection facilities required include but are not limited to:
 - 1. Temporary fire protection. Coordination of Fire Watch.
 - 2. Barricades, warning signs.
 - 3. Environmental protection.

4. Temporary security fencing when required and in compliance with the Phase temporary fencing provided by Bid Package xx.

1.2 SUBMITTALS

A. Temporary Utilities: Submit reports of tests, inspections, meter readings and similar procedures performed on temporary utilities.

1.3 RELATED WORK

- A. All equipment furnished by subcontractors shall comply with all requirements of pertinent safety regulations. The ladders, planks, hoists, and similar items normally furnished by the individual trades in execution of their own portions of the work are not part of this section.
- B. Permanent installation and hook-up of the various lines are described in the other pertinent sections.

1.4 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
 - 1. Building Code requirements.
 - 2. Health and safety regulations.
 - 3. Utility company regulations.
 - 4. Police, Fire Department and Rescue Squad rules.
 - 5. Environmental protection regulations.
- B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities."
 - Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", prepared jointly by AGC and ASC, for industry recommendations.

- 2. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service in compliance with National Electric Code (NFPA 70).
- C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.5 PROJECT CONDITIONS

A. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Provide new materials; if acceptable to the Architect/Engineer, undamaged previously used materials in serviceable condition may be used. Provide materials suitable for the use intended.
- B. Water: Provide potable water approved by local health authorities.

2.2 FIELD OFFICE

- A. Provided by this Bid Package; Provide on-site, adequate field space for use by construction forces, the District Inspector, and the Architect during the time construction is in progress. The offices shall be conveniently located and shall be watertight and waterproof, clean, insulated, heated, cooled, lockable, provided with windows to give adequate light and ventilation, have electrical service outlets, and have a floor. Minimum size of temporary site construction is 360 square feet.
 - 1. The Contractor shall provide and pay for separate telephone service for phone and fax machine. Telephone and fax machines are to be on separate telephone line.

- 2. Equip with a minimum of one desk and a layout table. Equip with additional folding chairs for field meetings.
- 3. The offices, equipment, and furniture shall remain the property of the Contractor and shall be removed by contractor upon completion of work.
- 4. A complete set of approved plans and specifications shall be kept in the office at all times.
- B. Inspectors Field Office: Contractor is required to provide for the use of the School District's Inspector a temporary office space to be located as directed by the Inspector and to be maintained until removal is authorized by the School District. Space is to have a lockable separate room area with a table for plans and a desk with two chairs. At least one entrance to Inspector office space is to be from the outside and not through the Contractors field office space. Provide and pay for a separate private phone service and telephone with a loud exterior bell, and separate Fax telephone line and Fax machine. Maintain for Inspector until completion of the Contract.

2.3 TOILET FACILITIES

A. Provided by Each Bid Package for their personnel; Provide, install and maintain, for during of the work, temporary outside toilet facilities for use of construction personnel. Toilet facilities shall be constructed, maintained and supplied as required for the numbers of construction personnel required, and according to local regulations.

2.4 FIRST AID

A. Maintain such first aid supplies as may be required for minor accidents. Make arrangements with local emergency center and nearest hospital to receive cases requiring medical attention, including emergencies. Such information shall be conspicuously displayed at the construction office.

2.5 WATCHMAN SERVICES

A. Provided by this Bid Package; The Contractor shall provide such watchman services as he may deem necessary to properly safeguard materials, tools, appliances, and work during all hours that operations under the Contract are not actively proceeding. The District will not assume any responsibility for the loss of or damage

to materials, tools, appliances or work arising from acts of theft, vandalism, malicious mischief, or other causes.

2.6 FIRE PROTECTION

- A. Provide fire extinguisher on the premises during the course of construction of the type and sizes recommended by the NBFU to control fires resulting from the particular work being performed. Instruct employees in their use. Place extinguisher in the immediate vicinity of the work being performed, ready to be used.
- B. During the use of hazardous equipment such as acetylene torches, welding equipment, bitumen kettles, salamanders and similar devices, no work shall be commenced or equipment used unless fire extinguisher of an approved type and capacity are placed in the working area and available for use by the workmen using such hazardous equipment.
- C. Provide fire extinguisher conforming to the requirements, as minimums, of NFPA 10 and 241.

2.7 SAFETY AND PROTECTION

- A. Provided by this Bid Package the Contractor shall furnish and erect temporary or permanent fences around the areas, as indicated on the drawings, and elsewhere where required for protection of the work, and to prevent unauthorized persons from entering the construction area. Temporary fences shall be at least eight feet (6'-0") above grade, of chain link or other substantial construction. Necessary gates for access to the site shall be placed where directed by the School District.
- B. Furnish or construct barricades, lights and other guards about the work area that may be required by local ordinance or for public safety and necessity. Protect all work from vandalism.

2.8 TEMPORARY UTILITY SERVICES

- A. Provided by this Bid Package; Power and Lighting: Furnish, install and maintain temporary wiring, poles, meter board, service entrance switch, lamps and equipment necessary to provide temporary lighting and power for the construction site.
 - 1. Temporary power is available from location as directed by the Power Company.

- 2. Any temporary transmission lines required shall be installed by Contractor.
- 3. Provide power sources within eighty feet of any working position to allow the use of one hundred foot extension cords.
- B. Water: Install required temporary connections to existing water. Locate temporary pipelines so that they do not interfere with traffic or drainage. Design and construct such pipelines so that they do not leak or cause damage or nuisance.
 - 1. Upon completion of work, remove all temporary piping.

2.9 HEAT AND VENTILATION

- A. Provide temporary heat and ventilation as required to maintain adequate environmental conditions to facilitate the progress of the work, to meet specified minimum conditions for the installation of materials, and to protect materials and finishes from damage due to temperature and humidity.
 - 1. Pay costs of installation, maintenance, operation and removal, and fuel consumed.

2.10 CONSTRUCTION AIDS

- A. Provide construction aids and equipment required by personnel and to facilitate the execution of the work; scaffolds, staging, ladders, stairs, ramps, runways, platforms, railings, hoists, cranes, chutes and other such facilities and equipment.
- B. Provide all necessary facilities and means of access to all parts of the structure so that Governmental Agency Inspectors, Special Inspectors and the Architect and Structural Engineer may inspect any portion of the structure.
 - 1. Means of access includes, but is not limited to, ladders, and/or scaffolds.

2.11 ACCESS ROADS AND PARKING AREAS

A. Prior to starting work, the Contractor, District and the Architect or his representative shall make a thorough survey of the site and approaches thereto. The Contractor will maintain temporary access roads required to perform the work and locate construction

offices at locations approved by the Architect/Engineer and the District. The Contractor shall verify all grade elevations indicated on the Drawings at the site and immediately notify the Architect/Engineer if any deviations are found. The Contractor shall assume all responsibility if any work proceeds without such notification.

- B. Maintain specific vehicular access as required for the orderly progress of the work. Fill, compact and grade areas as necessary to provide suitable support during all weather conditions for anticipated loads including municipal fire apparatus. Provide adequate surface drainage and do not interrupt natural flow of existing drainage.
- C. Provide designated parking areas for use by construction personnel.
- D. Restore temporary vehicular access and parking areas to original or to specified conditions at completion of work.

2.12 TEMPORARY CONTROLS

- A. Provide and maintain methods, equipment, and temporary construction, as necessary to provide controls over environmental conditions at the construction site and related areas under Contractor's control; remove physical evidence of temporary facilities at completion of work.
- B. Dust Control: Provide positive methods and apply dust control materials and methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into the atmosphere.
- C. Water Control: Provide methods to control surface water to prevent damage to the Project, the site, or adjoining properties.
 - 1. Control fill, grading and ditching to direct surface drainage away from excavations, pits, tunnels, and other construction areas; and to direct drainage to proper runoff.
 - 2. Provide, operate and maintain hydraulic equipment of adequate capacity to control surface water.
 - 3. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the site or to adjoining areas.

D. Pollution Control:

- 1. Provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
- 2. Provide equipment and personnel; perform emergency measures required to contain any spillages, and to remove contaminated soils or liquids.
- E. Excavate and dispose of any contaminated earth off-site, and replace with suitable compacted fill and topsoil.
 - 1. Take special measures to prevent harmful substances from entering public waters and atmosphere.
 - a. Prevent disposal of wastes, effluent, chemicals, or other such substances in sanitary or storm sewers.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed, or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment; comply with the company's recommendations.
 - 1. Arrange with the company and existing users for a time when service can be interrupted, where necessary, to make connections for temporary services.

- Provide adequate capacity at each stage of construction.
 Prior to temporary utility availability, provide trucked-in services.
- 3. Obtain easements to bring temporary utilities to the site, where the Owner's easements cannot be used for that purpose.
- 4. Use Charges: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect, and will not be accepted as a basis of claims for a Change Order.
- B. Water Service: Install water service and distribution piping of sizes and pressures adequate for construction until permanent water service is in use. Water may be taken from existing site water supply.
 - 1. Sterilization: Sterilize temporary water piping prior to use.
- C. Temporary Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload protected disconnects, automatic ground-fault interrupters and main distribution switch gear.

3.3 PROJECT IDENTIFICATION AND SIGNS

- A. Project Identification and Temporary Signs: Prepare project identification and other signs of the size indicated; install signs where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative treated wood or steel. Do not permit installation of unauthorized signs.
- B. Provide temporary on-site informational signs.
 - 1. As required by codes, laws and regulatory agencies.
 - 2. To identify key elements of the construction facilities.
 - To direct traffic.
- C. Project Identification Sign: Size, design and information lettered as specified and as shown on drawing located at the end of this

section. Finish with 3 coats of paint. Locate sign as indicated or directed by the Architect and School District.

3.4 OWNERSHIP OF TEMPORARY FACILITIES AND CONTROLS

A. Items provided by the Contractor under this section shall remain the property of the Contractor and shall be removed from the job site immediately upon completion of the work.

3.5 COLLECTION AND DISPOSAL OF WASTE

A. Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F (27 deg C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.

3.6 OPERATION, TERMINATION AND REMOVAL

- A. Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of the Contractor. The School District reserves the right to take possession of Project identification signs.

PRODUCT OPTIONS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. This Section establishes procedures for specified product options.
- B. The intent of this section is to insure that specified product options exceed or equal the quality of the specified products and are furnished and installed in accordance with the design intent.
- C. This Section does not apply to any substitution requests that should have been made at time of bid in accordance with the Instructions to Bidders and the bid documents. The District can reject any requests for substitution in its sole discretion if the Contractor did not submitted a request at the time of bid in accordance with the Instructions to Bidders and the bid documents.

1.2 RELATED SECTIONS

- A. Information for Bidders
- B. Instructions to Bidders
- C. General and Supplementary Conditions
- D. Section 01 25 00- Contract Modification Procedures
- E. Section 01 33 00 Submittal Procedures
- F. Section 01 63 00 Product Substitution Procedures

1.3 PRODUCT OPTIONS

- A. Where product options are included in the specifications sections and are specified by naming more than one, or several acceptable products or manufacturers, select any product or manufacturer listed.
 - Where more than one manufacturer or product is listed in the specifications and only one manufacturer or product is specified in detail with model numbers and features, the one specified in detail shall be considered the standard of quality required for all manufacturers or products listed.

- B. Where product options are included in the specifications and they are followed by an "or equal " or "approved equal" or equal meeting a specified standard, review and approval by the Architect/Engineer and School District is required for Contractor-proposed equal items. Procedures specified in Section 01630 are to be followed.
- C. For items specified only by Reference Standards, select any item meeting standards.
- D. Performance Specifications: For items specified by performance requirements, select any item meeting the performance standards specified.
- E. Descriptive Specifications: When specifications describe a product or assembly, listing exact components and characteristics, without the use of a brand or trade name, provide a product or assembly that contains the components and characteristics specified.
- F. Compliance with Standards Specifications: When specifications only require compliance with a Code, Regulation or Voluntary Standard, Provide products that comply with the specified Codes, Regulations or Standards.
- G. Submit request, as required for substitution, for any item or manufacturer not specifically named in the specifications on the Substitution Request Form enclosed with the Bidding Documents.
 - 1. Architect/Engineer and School District will determine acceptability of proposed substitutions.
 - 2 The Compton Community College District has a Resolution: No. 2009-10-21 and 2015-16-50 for the Designation of Specific Material, Product, or Service for numerous District Standard product and systems. (see attached resolutions for details).

PART 2 – PRODUCTS - (Not Applicable)

PART 3 – EXECUTION - (Not Applicable)

PRODUCT SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. This Section establishes procedures for Contractor submittal of substitutions. This Section does not apply to any substitution requests that should have been made at time of bid in accordance with the Instructions to Bidders and the bid documents. The District can reject any requests for substitution in its sole discretion if the Contractor did not submitted a request at the time of bid in accordance with the Instructions to Bidders and the bid documents.
- B. This Section provides procedures for review and compliance with Public Contract Code section 3400 for the "or equal" clause allowing bidders to furnish any equal material, product, thing or service. Or equal items proposed by bidders are considered substitutions and are subject to approval of the Architect and School District. Burden of proof for "Or Equals" is the responsibility of the Contractor.
- C. The intent of this section is to insure that proposed substitutions exceed or equal the quality of the specified products and are furnished and installed in accordance with the Contract Documents.
- D. The Compton Community College District has adopted Resolution No. 2009-10-21 and Resolution No. 2015-16-50 for Designation of Specific Material, Product, or Services.

1.2 RELATED SECTIONS

- A. Information for Bidders
- B. General and Supplementary Conditions
- C. Section 01 62 00 Product Options
- D. Section 01 25 00- Contract Modification Procedures

1.3 SUBSTITUTIONS

A. Substitution requests are to be submitted by Generals Contractors Only. Requests submitted by Subcontractors, Material Suppliers,

Manufacturers and other interested parties, other than General Contractors, will not be considered. Submit requests on the attached SUBSTITUTION REQUEST FORM (AFTER BID) in section 1305. Substitution requests will only be considered for an "or equal" product specifically listed in the technical specifications for this project. No other substitutions will be considered. (ie if Carrier AC units are used on plans and specifications say "Carrier, Trane or York" – Trane or York would be considered as a substitution.)

- B. Comply with provisions of Articles for Substitutions in the Information for Bidders, General Conditions and any modifications to these documents provided in the Supplementary Conditions.
- C. Tabulate products by specification section number and title.
- D. Submit separate request for each substitution. Support each request with the information and documents below and any other requirements in the General Conditions Article 3.10.:
 - 1. Complete data substantiating compliance of proposed substitution with requirements stated in Contract Documents:
 - a Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature; identify:
 - i. Product description.
 - ii. Reference standards.
 - iii. Performance and test data.
 - iv. Fire resistance and fire ratings.
 - c. Samples, as applicable.
 - d. Name and address of similar projects on which product has been used, and date of each installation.
 - 2. Itemized comparison of the proposed substitution with product specified; list significant variations.

- 3. Any effect the substitution may have on other trade contracts.
- 4. List of changes required in other work or products.
- 5. Accurate cost data comparing proposed substitution with product specified.
 - a Amount of any change in cost.
- 6. Designation of required license fees or royalties.
- 7. Designation of availability of maintenance services, sources of replacement materials.
- 8. Comparison of physical size and weight with product specified.
- 9. Comparison of physical shape and available finishes.
- E. Substitutions will not be considered for acceptance when:
 - 1. They are indicated or implied on shop drawings or product data submittals and where not approved in compliance with the General Conditions and this section.
 - 2. Substitution request procedures included in this Section, the Information for Bidders, and in the General and Supplementary Conditions are not complied with by the Contractor.
 - 3. The School District has determined that compatibility, standardization, technological sophistication, service and uniformity are necessary with regard to technological and certain safety items across the Schools in the District.
 - 4. The request for substitution, as determined by the District, should have been submitted at the time of bid in accordance with the Instructions to Bidders and the bid documents.
- F. Substitute products shall not be installed in the construction without written acceptance of the Architect and School District.
- G. Architect and School District will determine acceptability of proposed substitutions prior to awarding of the Contract.

Substitutions may be approved after award of the Contract only where the following conditions exist and only at the School District's sole discretion:

- 1. Specified item has been discontinued or is not unavailable to meet project schedule.
- 2. The School District requested the Substitution.
- 3. Substitution will reduce the Contract Amount and Contract Time (Credit Back to the District) without reducing quality.

1.4 CONTRACTOR'S SUBSTITUTION CERTIFICATION

- A. In making formal request for substitution contractor certifies that:
 - 1. He has investigated proposed product and has determined that it is equal to or superior in all respects to that specified.
 - 2. He will provide same warranties or bonds for substitution as for product specified.
 - 3. He will coordinate installation of accepted substitution into the work, and will make such changes as may be required for the work to be complete in all respects including modification of the work of other trades.
 - 4. He waives claims for additional costs caused by substitution which may subsequently become apparent.
 - 5. Substituted material is similar in physical appearance, size and weight and will install with the same opening and attachments.
 - Substituted material has the same or better fire rating and fire resistive qualities, including flame spread, smoke developed, UL tested and listing.
 - 7. Meets all requirement set forth in the General Conditions Article 3.10.

1.5 ARCHITECT'S/ENGINEER'S DUTIES

A. Review contractor's request for substitutions with reasonable promptness.

B. Consult with District and provide notification to contractor, in writing, of decision to accept or reject requested substitution.

1.6 AVAILABILITY OF SPECIFIED ITEMS

- A. Verify prior to bidding that all specified and substituted items will be available in time for installation during orderly and timely progress of the work.
- B. In the event specified items will not be available, notify the Architect prior to receipt of bids.
- C. Cost of delays because of non-availability of specified items, when such delays could have been avoided by the Contractor, will be back-charged as necessary and shall not be borne by the Architect or School District.

1.7 SUBSTITUTION WARRANTY REQUIREMENTS

- A. Submit with the substitution request an executed Substitution Warranty. The Form is provided at the end of this Section. This form shall apply to substitutions submitted for acceptance prior to bid, prior to award of contract and for substitutions required after contract has been executed.
- B. The Contractor is to warrant, in writing on company letterhead, that the substituted items are to perform as specified, and assume complete responsibility for the same. This includes responsibility and costs required for modifications to building, other materials, or equipment, and any additional coordination with work of other trades. The Contractor if required or requested by the Architect or School District shall pay for testing, of Substitution proposed.

PART 2 – PRODUCTS - (Not Applicable)

PART 3 - EXECUTION - (Not Applicable)

CLEANING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes: Cleaning throughout the construction period and final project cleaning prior to the acceptance tour.
- B. Related Work Described Elsewhere: In addition to standards specified herein, comply with requirements for cleaning as described in other sections of these Specifications.

1.2 QUALITY ASSURANCE

- A. Inspection: Conduct daily inspection, and more often if necessary, to verify that requirements of cleanliness are being met.
- B. Codes and Standards: In addition to the requirements specified herein, comply with pertinent requirements of authorities having jurisdiction.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS AND EQUIPMENT

A. Provide required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

2.2 COMPATIBILITY

A. Use cleaning materials and equipment that are compatible with the surfaces being cleaned, as recommended by the manufacturer of the material to be cleaned.

PART 3 - EXECUTION

3.1 PROGRESS CLEANING

A. General:

- 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of materials.
- 2. Do not allow the accumulation of scrap, debris, waste materials, and other items not required for construction of this work. Debris

shall be removed from the site and disposed of in a lawful manner. Disposal receipts of dump tickets shall be furnished to Architect/Engineer upon request.

- 3. At least twice each month, and more often if necessary, remove scrap, debris, and waste material from the job site.
- 4. Provide adequate storage for items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.

B. Site:

- Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove items to the place designated for their storage. Combustible waste shall be removed from the site. Flammable waste shall be kept in sealed metal containers until removed from the site.
- 2. Weekly, and more often if necessary, inspect arrangements of materials stored on the site; restack, tidy, or otherwise service arrangements to meet the requirements specified above.
- 3. Maintain the site in a neat and orderly condition.

C. Structures:

- 1. Daily, and more often if necessary, inspect the structures and pick up scrap, debris, and waste material. Remove items to the place designated for their storage.
- 2. Daily, and more often if necessary, sweep interior spaces clean.
 - a. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from dust and other materials capable of being removed by use of reasonable effort and a handheld broom, i.e., "broom-clean".
- As required preparatory to installation of succeeding materials, clean the structures of pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using equipment and materials required to achieve the required cleanliness.
- 4. Following the installation of finish floor materials, clean the finish floor daily, and more often if necessary, and while work is being performed in the space in which finish materials have been installed.

a. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from foreign material that, in the opinion of the Architect, may be injurious to the finish floor material, i.e., "vacuum- clean".

3.2 FINAL CLEANING

- A. Definition: Except as otherwise specifically provided, "clean", for the purpose of the Article, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials, i.e., "scrub and polish clean".
- B. General: Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste and conduct final progress cleaning as described above.
- C. Site: Unless otherwise specifically directed by the Architect, water and broom clean paved areas on the site and public paved areas directly adjacent to the site. Remove resultant debris.

D. Structures:

- Exterior: In areas affected by the work under this contract, visually inspect exterior surfaces and remove traces of soil, waste material, smudges, and other foreign matter. Remove traces of splashed material from adjacent surfaces. If necessary to achieve a uniform degree of exterior cleanliness, hose down the exterior of the structure.
 - In the event of stubborn stains not removable with water, the Architect may require light sandblasting or other cleaning at no additional cost to the Owner.
- Interior: In areas affected by the work under this contract, visually inspect interior surfaces and remove traces of soil, waste material, smudges, and other foreign matter. Remove traces of splashed materials from adjacent surfaces. Remove paint drippings, spots, stains, and dirt from finished surfaces. Use only the cleaning materials and equipment instructed by the manufacturer of the surface material.
- Glass: Clean glass inside and outside.
- 4. Polished surfaces: On surfaces requiring the routine application or buffed polish, apply the polish recommended by the manufacturer of the material being polished. Glossy surfaces shall be cleaned and shined as intended by the manufacturer.

E. Timing: Schedule final cleaning as accepted by the Architect to enable the Owner to accept a completely clean project.

3.3 CLEANING DURING OWNER'S OCCUPANCY

A. Should the Owner occupy the work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning of the occupied spaces shall be determined by the Architect in accordance with the General Conditions of the Contract.

FIELD ENGINEERING

PART 1 - GENERAL

1.1 SUMMARY

- A. General: This Section specifies administrative and procedural requirements for field engineering services, including, but not necessarily limited to, the following:
 - 1. Land survey Work.
 - 2. Civil engineering services.
 - 3. Structural engineering services.

1.2 RELATED SECTIONS

- A. Section 01330 Submittals
- B. Section 02300 Earthwork

1.3 SUBMITTALS

- A. Certificates: Submit a certificate signed by the Land Surveyor or Professional Engineer certifying that the location and elevation of improvements comply with the Contract Documents. These Surveys and updated "As-Builts" will be submitted with every pay application for review and acceptance by the Engineer and Inspector of Record.
- B. Submittal Copies of final as built property survey.
- C. Project Record Documents: Submit a record of Work performed and record survey data as required under provisions of Sections "Submittals", "Project Closeout", and Specification Number 01782 "Project Record Documents".

1.4 QUALITY ASSURANCE

A. Surveyor: Engage a Registered Land Surveyor registered in the State where the project is located, to perform land surveying services required.

B. Engineer: Engage a Professional Engineer of the discipline required, registered in the state of California, in which the Project is located, to perform required engineering services.

PART 2 – PRODUCTS - (Not Applicable)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. The District will identify existing control points and property line corner stakes.
- B. Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks before preceding to layout the Work. Locate and protect existing benchmarks and control points. Preserve permanent reference points (if any) during construction.
 - Do not change or relocate benchmarks or control points without prior written approval. Promptly report lost or destroyed reference points, or requirements to relocate reference points because of necessary changes in grades or locations.
 - 2 Promptly replace lost or destroyed project control points. Base replacements on the original survey control points.
- C. Establish and maintain a minimum of two permanent benchmarks on the site, referenced to data established by survey control points.
 - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
- D. Existing utilities and equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction. Contact underground service alert at 1(800) 422-4133 before start of construction.
 - 1. Prior to construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer and water service piping.

3.2 PERFORMANCE

- A. Working from lines and levels established by the survey, establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to properly locate each element of the Project. Calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.
 - 1. Advise entities engaged in construction activities, of marked lines and levels provided for their use.
 - 2. As construction proceeds, check every major element for line, level and plumb.
- B. Surveyor's Log: Maintain a surveyor's log of control and other survey Work. Make this log available for reference.
 - Record deviations from required lines and levels, and advise the Architect when deviations that exceed indicated or recognized tolerances are detected. On Project Record Drawings, record deviations that are accepted and not corrected.
 - 2 On completion of foundation walls, major site improvements, and other Work requiring field engineering services, prepare a certified survey showing dimensions, locations, angles and elevations of construction and site work.
- C. Site Improvements: Locate and lay out site improvements, including pavements, stakes for grading, fill and topsoil placement, utility slopes and invert elevations by instrumentation and similar appropriate means.
- D. Building Lines and Levels: Locate and lay out batter boards for structures, building foundations, column grids and locations, floor levels and control lines and levels required for mechanical and electrical Work.
- E. Existing Utilities: Furnish information necessary to adjust, move or relocate existing structures, utility poles, lines, services or other appurtenances located in, or affected by construction. Coordinate with local authorities having jurisdiction.

F. Final Property Survey: Before Substantial Completion, prepare a final property survey showing significant features (real property) for the Project. Include on the survey a certification, signed by the Surveyor, to the effect that principal metes, bounds, lines and levels of the Project are accurately positioned as shown on the survey.

CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for cutting and patching, and interface of new work into existing construction and with work being performed under other contracts provided by the School District.
- B. Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the work.
 - 1. Requirements of this Section apply to Sections in Divisions 2 through 16.

1.2 RELATED SECTIONS

- A. Section 01010 Summary of work (Scope of Work).
- B. Section 03300 Cast-in-place Concrete
- C. Division 16 Sections

1.3 SUBMITTALS

- A. Cutting and Patching Proposal: Approval of procedures for cutting and patching is required before proceeding, submit a proposal describing procedures well in advance of the time cutting and patching will be performed and request approval to proceed. Include the following information, as applicable, in the proposal:
 - 1. Describe the extent of cutting and patching required and how it is to be performed.
 - 2. Indicate dates when cutting and patching is to be performed.
 - List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily outof-service. Indicate how long service will be disrupted.
 - 4. Refer to Structural Drawing for locations where cutting and patching involves addition of reinforcement to structural

elements. Do not damage or weaken existing structural elements.

5. Approval by the Architect/Engineer to proceed with cutting and patching does not waive the Architect's right to later require complete removal and replacement of a part of the work found to be unsatisfactory.

1.4 QUALITY ASSURANCE

A. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Architect's/Engineer's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace work cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Use materials that are identical to existing materials. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials whose installed performance will equal or surpass that of existing materials.

PART 3 - EXECUTION

3.1 INSPECTION

A. Before cutting existing surfaces, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse

- weather conditions for portions of the Project that might be exposed during cutting and patching operations.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Take all precautions necessary to avoid cutting existing pipe, electrical wire and conduit or ductwork serving the building.

3.3 **PERFORMANCE**

- A. General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.
 - 2 Where patching occurs in a smooth painted surface, extend final paint coat over entire surface containing the patch, after the patched area has received primer and second coat.
 - 3. Cut, patch, point-up and repair plaster to accommodate other construction and to repair cracks, dents and imperfections.
 - 4. Cut, patch, restore and repair all gypsum board wall and ceiling surfaces where new pipes, equipment, clocks, switches, conduit, ducts and any new construction items that would damage or cut existing surfaces.
 - 5. Cut patch and repair existing concrete and asphalt paving where new utility lines are installed across existing paving and under existing concrete floor slabs. Site verify extent of cutting and patching required. All existing site improvements may not be indicated on the site plan and floor plans.
 - 6. Cut existing walls, floors, ceilings and roofs or other parts of building structure to accommodate new ducts, conduits and piping, patch and repair existing.
 - 7. Patch existing floors, walls, roofs and ceilings where existing ducts, conduit, equipment, water, gas, sewer, windows, doors etc. that are not used or removed and are not to be

replaced. This is considered part of required general patching and is part of the contract and will not be shown in detail on the Contract drawings. Field verify with existing site and building construction for patching required.

3.4 CLEANING

A. Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged areas to their original condition.

WARRANTIES, GUARANTIES AND BONDS

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. This Section specifies general requirements for written warranties, guaranties and bonds required by the Contract Documents.
- B. Submittal to, and approval by, the District of the warranties, guaranties and bonds are prerequisites to final payment under the Contract.

1.2 RELATED WORK

- A. Related work specified elsewhere:
 - 1. Section 01 70 00 Contract Close-out

1.3 TIME PERIOD

A. Deliver manufacturers' warranties, guaranties and bonds required by Contract Documents, with District named as beneficiary. For equipment and machinery, or components thereof, bearing a manufacturer's warranty or guaranty that extends for a longer time period than the Contractor's warranty and guaranty, deliver manufacturer's warranties or guaranties in same manner.

1.4 FORM

A. Written warranties and guaranties, excepting manufacturer's standard printed warranties and guaranties shall be submitted on the Contractor's, Subcontractors, material suppliers', or manufacturers' own letterhead, addressed to District. Warranties and guaranties shall be submitted in duplicate, and in the form shown on the following page, signed by all pertinent parties and by Contractor in every case, with modifications as approved by District to suit the conditions pertaining to the warranty or guaranty.

1.5 SUBMITTAL

- A. The Contractor shall collect and assemble written warranties and guaranties from all subs, material suppliers and manufacturers into a bound booklet form, and deliver the bound books to Architect/Engineer for delivery to the District's attorney for final review and approval.
- B. Submit required warranty/guaranty on letterhead of Contractor responsible for each type of Work in accordance with attached sample form.
- C. The contractor will ensure that the Manufacturers will be scheduled in a timely manner to ensure that the start of the warranty period is well documented.

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the work.
- B. Related Requirements in Other Parts of the Project Manual:
 - 1. Fiscal provisions, legal submittals and additional administrative requirements: Conditions of the Contract.
- C. Comply with requirements set forth in General Conditions Article 9.

1.2 SUBSTANTIAL COMPLETION

- A. When Contractor considers the work is substantially complete as defined in the General Conditions, he shall submit to Architect/Engineer:
 - 1. A written notice that the work, or designated portion thereof, is substantially complete.
 - 2. A list of items to be completed or corrected.
 - 3. Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
- B. When Architect/Engineer concurs that the work is substantially complete, he will:
 - 1. Prepare a letter of Substantial Completion accompanied by Contractor's list of items to be completed or corrected, as verified and amended by the Architect.
 - 2. Submit the Certificate to Owner and Contractor for their written acceptance of the responsibilities assigned to them.

1.3 FINAL INSPECTION

- When Contractor considers the work is complete, he shall submit Α. written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents.
 - Equipment and systems have been tested in the presence of 4. the Owner's representative and are operational.
 - 5. Work is completed and ready for final inspection.
 - 6. The Architect's/Engineer's final inspection list of items to be completed or corrected, has been completed or otherwise resolved for acceptance, and the list has been endorsed and dated by the Architect/Engineer.
 - 7. Submit consent of surety to final payment.
 - 8. Submit a final liquidated damages settlement statement.
 - 9. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Architect/Engineer will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- C. When the Architect/Engineer finds that the work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

1.4 **RECORD DOCUMENT SUBMITTALS**

- Α. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect's reference during normal working hours.
- B. Record Drawings: Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings.

Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.

- Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
- 2. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.
- 3. Note related Change Order numbers where applicable.
- 4. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set per Specification 01782 Project Record Documents.
- C. Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data.

1.5 CLOSEOUT SUBMITTALS

- A. Submit the following, where applicable, in accordance with the General Conditions and Specifications:
 - 1. Project record documents.
 - 2. Operation and maintenance data.
 - 3. Warranties, guarantees and bonds.
 - 4. Keys and keying schedule.

- 5. Spare parts and extra stock.
- 6. Other items as required by the Specifications.
- B. Deliver Certificate of Compliance and Test Report as follows:
 - 1. Sterilization of water systems.
 - 2. Testing of sewer systems.
 - 3. Testing of hot and cold water systems.
 - 4. Testing of gas system.
 - 5. Testing of lighting, power and alarm systems.
 - 6. Testing of HVAC equipment and exhaust fans.

1.6 FINAL APPLICATION FOR PAYMENT

A. Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

PART 2 – PRODUCTS - (Not Applicable)

PART 3 - EXECUTION

3.1 CLOSEOUT PROCEDURES

- A. Operating and Maintenance Instructions: Arrange for each installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include a detailed review of the following items:
 - 1. Maintenance manuals.
 - Record documents.
 - 3. Spare parts and materials.
 - 4. Tools.

- 5. Identification systems.
- 6. Control sequences.
- 7. Hazards.
- 8. Cleaning.
- 9. Warranties and bonds.
- 10. Maintenance similar continuing agreements and commitments.
- B. As part of instruction for operating equipment, demonstrate the following procedures:
 - 1. Start-up.
 - 2. Shutdown.
 - 3. Emergency operations.
 - 4. Noise and vibration adjustments.
 - 5. Safety procedures.
 - 6. Economy and efficiency adjustments.
 - 7. Effective energy utilization.

3.2 **FINAL CLEANING**

- A. General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
 - 1. Complete the following cleaning operations before requesting inspection for Final Completion.
 - Remove labels that are not permanent labels. a.

- b. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compound and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
- c. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.
- d. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
- e. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth eventextured surface.
- C. Pest Control: Engage an experienced exterminator to make a final inspection, and rid the Project of rodents, insects and other pests.
- D. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.
- E. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.
 - 1. Where extra materials of value remaining after completion of associated Work have become the Owner's property, arrange for disposition of these materials as directed.

END OF SECTION

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Maintain at the site for the School District, one record copy of:
 - 1. Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other Modifications to the Contract
 - 5. Architect/Engineer written instructions
 - 6. Approved Shop Drawings, Product Data and Samples.
 - 7. Field Test Records
 - 8. Construction Photographs.

1.2 RELATED SECTIONS

- A. General Conditions 00700
- B. Section 01310 Project Coordination
- C. Section 01330 Submittals
- D. Section 01305-31 Contract Closeout
- E. Section 01722 Field Engineering

1.3 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in Contractor's field office apart from documents used for construction.
 - 1. Provide files and racks for storage of documents.
 - 2. Provide locked cabinet or secure storage space for storage of samples.

- B. File documents and samples in accordance with CSI/CSC Master Format.
- C. Maintain documents in a clean, dry legible condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by School District.

1.4 MARKING DEVICES

A. Provide felt-tip marking pens for recording information in the color code designated by Owner.

1.5 RECORDING

- A. Label each document "PROJECT RECORD" in neat, large printed letters.
- B. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- C. Drawings: Legibly mark to record actual construction:
 - 1. Depth of various elements of foundation in relation to finish first floor datum.
 - 2. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Addenda, Supplemental Instruction Construction Change Directive or by Change Order.
 - 6. Details not on original contract drawings.
 - 7. Revisions to electrical circuitry and locations of electrical Devices and equipment

- 8. Identify each record drawing with the written designation of "RECORD DRAWING" in a prominent location.
- D. Specifications and Contract Document Modifications: Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
 - 2. Supplier and Installer's name and contact information.
 - 3. Changes made by Addenda, Supplemental Instructions, and Construction Change Directive or by Change Order.
- E. Record Digital Data Files: Immediately before inspection for Substantial Completion, review marked-up record prints with Architect/Engineer, Construction Manager and Project Inspector. When authorized, prepare a full set of corrected digital data files of the Contract Drawings as follows:
 - 1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
 - 2. Format: Annotated PDF electronic file with comment function enabled.
 - 3. Incorporate changes and additional information previously marked on record prints. Delete, redraw and add new details and notations where applicable.
 - 4. Refer instances of uncertainty to Architect/Engineer (through Construction Manager) for resolution.
 - 5. Architect/Engineer will furnish Contractor one set of digital files of the Contract Drawings, complete on same set, with all Addenda, clarifying Request for Information, Instruction Bulletins, Construction Change Documents, or any other changes, for use in recording information. Digital files shall be in AutoCAD (latest version) and PDF format.
 - Refer to section 01330 "Submittal Procedures" for requirements related to use of architect's/engineer's digital data files.
 - b. Architect/Engineer will provide data file layer information. Record mark-ups in separate layers.

- F. Record Drawings Labeling: Provide Hard copy and Digital copy (in PDF format) as follows:
 - Provide a Flash Drive for all Digital Record Drawing submittals with a letter of transmittal describing all contents and date of contents on the Flash Drive.
 - Provide a folder in the Digital submittal labeled in capital letters naming the project i.e. CAMPUS PUBLIC SAFETY BUILDING – UG ELECTRICAL PATHWAY.
 - Provide sub-folders labeled in capital letters with the category and date of the as-builts i.e. UG ELECTRICAL PATHWAY – AS-BUILTS (CONTRACTORS NAME).
 - 4. Provide separate files in sub-folders labeled with drawing number and description i.e. FA0.0 Title.
 - 5. Submit documents to Architect/Engineer (through the Construction Manager) with claim for final Application for Payment.
 - 6. Final 5% retention will be held until as-builts are complete.

1.6 SUBMITTALS

- A. At the completion of the Project, deliver Record Documents to the Compton Community College District (through the Construction Manager). Architect/Engineer shall review documents for compliance with requirements as described above.
- B. Accompany submittal with transmittal letter in duplicate, containing:
 - 1. Date
 - 2. Project title and number
 - 3. Contractor's name and address
 - 4. Title and number of each Record Document
 - 5. Signature of Contractor or his authorized representative
- C. Prior to the date of Substantial Completion the Contractor is to meet with the architect/engineer to determine which Samples

maintained during construction are to be transferred to the School District. Dispose of all samples not be saved.

PART 2 - PRODUCTS - (Not Applicable)

PART 3 - EXECUTION - (Not Applicable)

END OF SECTION

OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for operating and maintenance manuals including the following:
 - 1. Preparation and submittal of operating and maintenance manuals for building operating systems and/or equipment.
 - 2. Instruction of the School District's operating personnel in operation and maintenance of building systems and equipment.
- B. Special operating and maintenance data requirements for specific pieces of equipment or building operating systems are included in the appropriate Sections of Divisions 2 through 16.

1. 2 QUALITY ASSURANCE

- A. Maintenance Manual Preparation: In preparation of Maintenance Manuals, use personnel thoroughly trained and experienced in operation and maintenance of the equipment or system involved.
 - 1. Where written instructions are required, use personnel skilled in technical writing to the extent necessary for communication of essential data.
 - 2. Where Drawings or diagrams are required, use draftsmen capable of preparing Drawings clearly in an understandable format.
- B. Instructions for the School District's Personnel: For instruction of the School District's operating and maintenance personnel, use experienced instructors thoroughly trained and experienced in the operation and maintenance of the building equipment or system involved.

1.3 SUBMITTALS

A. Submittal Schedule: Comply with the following schedule for submittal of operating and maintenance manuals.

- 1. Before Substantial Completion, when each installation that requires submittal of operating and maintenance manuals is nominally complete, submit two draft copies of each manual to the Architect/Engineer for review. Include a complete index or table of contents of each manual.
- B. Form of Submittal: Prepare operating and maintenance manuals in the form of an instructional manual for use by the Owner's operating personnel. Organize into suitable sets of manageable size. Where possible, assemble instructions for similar equipment into a single binder.
 - 1. Binders: For each manual, provide heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, in thickness necessary to accommodate contents, sized to receive 8-1/2" by 11" paper. Provide a clear plastic sleeve on the spine, to hold labels describing the contents. Provide pockets in the covers to receive folded sheets.
 - a Where two or more binders are necessary to accommodate data, correlate data in each binder into related groupings in accordance with the Project Manual table of contents. Cross-reference other binders where necessary to provide essential information for proper operation or maintenance of the piece of equipment or system.
 - b. Identify each binder on the front and spine, with the typed or printed title "OPERATION AND MAINTENANCE MANUAL", Project title or name, and subject matter covered. Indicate the volume number for multiple volume sets of manuals.
 - Protective Plastic Jackets: Provide protective transparent plastic jackets designed to enclose diagnostic software for computerized electronic equipment.
 - 3. Text Material: Where written material is required as part of the manual use the manufacturer's standard printed material, or if it is not available, specially prepared data, neatly typewritten, on 8-1/2" by 11", 20 pound white bond paper.
 - 4. Drawings: Where drawings or diagrams are required as part of the manual, provide reinforced punched binder tabs on the drawings and bind in with the text.

- a. Where oversize drawings are necessary, fold the drawings to the same size as the text pages and use as a fold-out.
- b. If drawings are too large to be used practically as a fold- out, place the drawing, neatly folded, in the front or rear pocket of the binder. Insert a typewritten page indicating the drawing title, description of contents and drawing location at the appropriate location in the manual.

1.4 MANUAL CONTENT

- A. In each manual include information specified in the individual Specification Section, and the following information for each major component of building equipment and its controls:
 - 1. General system or equipment description.
 - 2. Design factors and assumptions.
 - 3. Copies of applicable Shop Drawings and Product Data.
 - 4. System or equipment identification, including:
 - a. Name of manufacturer.
 - b. Model number.
 - c. Serial number of each component.
 - 5. Operating instructions.
 - 6. Emergency instructions.
 - 7. Wiring diagrams.
 - 8. Inspection and test procedures.
 - 9. Maintenance procedures and schedules.
 - 10. Precautions against improper use and maintenance.
 - 11. Copies of warranties.
 - 12. Repair instructions including spare parts listing.

- 13. Sources of required maintenance materials and related services.
- 14. Manual Index.
- B. Organize each manual into separate Sections for each piece of related equipment. As a minimum each manual shall contain a title page, a table of contents, copies of Product Data, supplemented by drawings and written text, and copies of each warranty, bond and service Contract issued.
 - 1. Title Page: Provide a title page in a transparent plastic envelope as the first sheet of each manual. Provide the following information:
 - a. Subject matter covered by the manual.
 - b. Name and address of the Project.
 - c. Date of submittal.
 - d. Name, address, and telephone number of the Contractor.
 - e. Name and address of the Architect;
 - f. Cross reference to related systems in other operating and maintenance manuals.
 - 2. Table of Contents: After the Title Page, include a typewritten table of contents for each volume.
 - 3. General information: Provide a general information Section immediately following the Table of Contents, listing each product included in the manual, identified by product name. Under each product, list the name, address, and telephone number of the Subcontractor or installer, and the maintenance contractor. Clearly delineate the extent of responsibility of each of these entities. In addition, list a local source for replacement parts and equipment.
 - 4. Product Data: Where manufacturer's standard printed data is included in the manuals, include only sheets that are pertinent to the part or product installed. Mark each sheet to identify each part or product included in the installation.

- 5. Written Text: Where manufacturer's standard printed data is not available, and information is necessary for proper operation and maintenance of equipment or systems, or it is necessary to provide additional information to supplement data included in the manual, prepare written text to provide necessary information. Organize the text in a consistent format under separate headings for different procedures. Where necessary, provide a logical sequence of instruction for each operating or maintenance procedure.
- 6. Drawings: Provide specially prepared drawings where necessary to supplement manufacturer's printed data to illustrate the relationship of component parts of equipment or systems, or to provide control or flow diagrams. Coordinate these drawings with information contained in Project Record Drawings to assure correct illustration of the completed installation.
- 7. Warranties, Bonds and Service Contracts: Provide a copy of each warranty, bond or service contract in the appropriate manual for the information of the Owner's operating personnel. Provide written data outlining procedures to be followed in the event of product failure. List circumstances and conditions that would affect validity of the warranty or bond.

1.5 MATERIAL AND FINISHES MAINTENANCE MANUAL

- A. Architectural Products: Provide manufacturer's data and instructions on care and maintenance of architectural products, including applied materials and finishes.
 - Care and Maintenance Instructions: Provide information on care and maintenance, including manufacturer's recommendations for types of cleaning agents to be used and methods of cleaning. Provide information regarding cleaning agents and methods that could prove detrimental to the product. Include manufacturer's recommended schedule for cleaning and maintenance.
- B. Moisture-Protection and Weather-Exposed Products: Provide complete manufacturer's data with instructions on inspection, maintenance and repair of products exposed to the weather or designed for moisture-protection purposes.

1.6 EQUIPMENT AND SYSTEMS MAINTENANCE MANUAL

- A. Manufacturer's Information: For each manufacturer of a component part or piece of equipment provide the following:
 - 1. Printed operating and maintenance instructions.
 - 2. Assembly drawings and diagrams required for maintenance.
 - 3. List of items recommended to be stocked as spare parts.
- B. Maintenance Procedures: Provide information detailing essential maintenance procedures, including the following:
 - 1. Routine operations.
 - 2. Trouble-shooting guide.
 - 3. Disassembly, repair and reassembly
 - 4. Alignment, adjusting and checking.
- C. Operating Procedures: Provide information on equipment and system operating procedures, including the following:
 - 1. Start-up procedures.
 - 2. Equipment or system break-in.
 - 3. Routine and normal operating instructions.
 - 4. Regulation and control procedures.
 - 5. Instructions on stopping.
 - 6. Shut-down and emergency instructions.
 - 7. Summer and winter operating instructions.
 - 8. Required sequences for electric or electronic systems.
 - 9. Special operating Instructions.
- D. Servicing Schedule: Provide a schedule of routine servicing and lubrication requirements, including a list of required lubricants for equipment with moving parts.

- E. Controls: Provide a description of the sequence of operation and as-installed control diagrams by the control manufacturer for systems requiring controls.
- F. Coordination Drawings: Provide each Contractor's Coordination Drawings.
 - 1. Provide as-installed color-coded piping diagrams, where required for identification.
- G. Valve Tags: Provide charts of valve tag numbers, with the location and function of each valve.
- H. Circuit Directories: For electric and electronic systems, provide complete circuit directories of panel boards, including the following:
 - 1. Electric service.
 - Controls.
 - Communication.

1.7 INSTRUCTIONS TO SCHOOL DISTRICT PERSONNEL

- A. Prior to final inspection, instruct School District personnel in operation, adjustment, and maintenance of products, equipment and systems. Provide instruction at mutually agreed upon times.
 - 1. For equipment that requires seasonal operation, provide similar instruction during other seasons.
 - Use operation and maintenance manuals for each piece of equipment or system as the basis of instruction. Review contents in detail to explain all aspects of operation and maintenance.

PART 2 – PRODUCTS - (Not Applicable)

PART 3 – EXECUTION - (Not Applicable)

END OF SECTION

COMMISSIONING

PART 1 - GENERAL

1.1 SUMMARY

- A. Commissioning is a process for validating and documenting that the facility and its systems are constructed and perform in conformity with the Contract Documents.
- B. The objective of the commissioning process is to verify that the performance of the facility and its systems meet or exceed the design intent.
- C. Commissioning includes special facility start-up processes used to bring the facility to a fully operational state, free of deficiencies in an efficient and timely manner
- D. Training on related systems and equipment operation and maintenance shall be scheduled to commence only after start-up is complete and systems are verified to be 100% complete and functional.

1.2 DESCRIPTION

- A. The following applies to all Contract Documents
 - Contractor Startup: Sub-phase of Contractor's work ending with Acceptance of Work, during which Contractor performs a pre-planned program of activities including starting, testing, inspecting, adjusting balancing, correcting deficiencies and other similar activities.
 - a. The Construction Manager, Architect/Engineer, Consultants and the DSA Inspector of Record (IOR) shall be present to observe, inspect and identify deficiencies in Building Systems Operations.
 - 2. The completion of startup means the entire Construction Project including startup and fine tuning has been performed to the requirements of the Contract Documents and is verified in writing by the Construction Manager, Architect/Engineer and the Consultants.

- Fine Tuning: Fine tuning is the responsibility of Contractors after District occupancy and ending one year after District occupancy. During this time the Contractor is responsible for optimizing systems and correcting deficiencies arising under normal operating conditions.
 - Includes a period after occupancy where systems are optimized under "live" operating conditions and any outstanding construction deficiencies are corrected.
 - b. Fine Tuning shall extend from date of District occupancy to one year after occupancy.

1.3 RELATED SECTIONS – (Not Applicable)

1.4 DEFINITION OF TERMS

- A. Contractor's Pre-Commissioning Checklists: Includes installation and start-up items as specified to be completed by the appropriate contractors prior to operational verification through the functional testing process.
- B. Installation Verification Process: Includes the on-site inspection and review of related system components for conformance to Contract Documents. The Contractor shall verify systems readiness for functional testing procedures prior to the start of functional testing. Deficiencies will be documented by the Inspector for future resolution.
- C. Functional Performance Testing Process: Includes the documented testing of system parameters, under actual or simulated operating conditions. Final performance commissioning of systems will begin only after the appropriate Contractor certifies that systems are 100% complete and ready for functional testing. The contractors will be required to schedule, coordinate and perform device tests, calibration and functional performance test procedures.
- D. Deficiencies and Resolutions List: Includes a list of noted deficiencies discovered as a result of the commissioning process. This list also includes the current disposition of issues, and the date of final resolution as confirmed by the Construction Manager and Inspector. Deficiencies are defined as those issues where products execution or performance does not satisfy the Project Contract Documents and/or the design intent.

1.5 COMMISSIONING SCHEDULE

- A. Provide schedules for Contractor Start-Up work.
- B. Incorporate in overall construction schedule.
- C. Contractor's activities, which will be performed as specified under Fine Tuning, shall be completed within one year from date of occupancy by the District.

1.6 SUBMITTALS

- A. Submit Draft and Final Contractor Start-up Forms as described in this Section. Submit Draft Report for Construction Manager and Architect's review and comment prior to Final Submission.
- B. Prepare and submit one copy of report form to be used in preparation of system reports for:
 - 1. Each mechanical system as required
 - 2. Each Electrical & low voltage system as required.
- C. Each System Report shall be submitted including the following:
 - 1. Project Name
 - 2. Name of System
 - 3. Manufacturer's equipment start-up reports.
 - 4. Systems' testing, balancing, and adjusting reports.
 - 5. Equipment Report Forms shall include the following: Project name, name of equipment, starting and testing procedures to be performed and observations and test results to be recorded.

1.7 COMMISSIONING DUTIES AND RESPONSIBILITIES

- A. Contractors Duties and Responsibilities:
 - 1. Assure the participation and cooperation of Subcontractors and Suppliers under their jurisdictions as required to complete the commissioning process.

- 2. Complete Commissioning Report Forms. Reports are to be completed in a neat easily readable condition.
- 3. Complete the respective start-up and check out procedures and insure readiness of equipment and systems prior to the start of the functional performance testing.
 - Written confirmation of system readiness for performance testing is required.
- 4. Provide qualified representatives for the functional performance commissioning process.
- Assure that all subcontractors, suppliers, test and balance, controls, etc. include in there respective contracts cost necessary to participate in and complete the commissioning process.
- B. Duties and responsibilities of others for Commissioning:
 - 1. The commissioning process requires the active participation of the Construction Manager, School District, Mechanical Engineer, Electrical Engineer, and any other related Consultants on the project.

1.8 SYSTEM FAILURES

A. After a second failure of a system to successfully meet the criteria as set for in the functional performance testing process, the contractor shall reimburse the School District for cost associated with any additional retesting required due to uncorrected deficiencies. Costs shall include salary, benefits, overhead, travel costs and per diem lodging costs if applicable.

PART 2 - PRODUCTS - (Not Applicable)

PART 3 – EXECUTION - (Not Applicable)

END OF SECTION

SECTION 26 05 00

COMMON WORK RESULTS FOR ELECTRICAL

1. GENERAL

1.1. DESCRIPTION

- **1.1.1.** Principal Work Items are: Provide all labor, material and equipment necessary to complete and test the electrical work as shown on the drawings and as specified herein. Work will include, but not limited to the following:
 - 1.1.1.1. Underground duct banks and pre-cast concrete pull-boxes/manholes, including furnishing hardware and accessories (pulling eyes, drainage, necking, traffic cover, ladder, cable racks, perimeter grounding bus and ground rods) in each pull-box/manhole of the Power and Low Voltage Communication system (for telephone data copper, fiber-optic, low voltage control and Fire Alarm network systems).
 - 1.1.1.2. A complete electrical grounding system for the building, including electrical service grounding (Ground Rods in ground well, concrete encased electrode underground (Ufer) and cold water pipe) and Low Voltage Communication system reference ground with a single point of ground connection at the Main Ground Bus.
 - **1.1.1.3.** Supports, duct spacers, clamps, hangers, fastening devices, sleeves, slots, concrete bases, physical protection, caulking, weatherproofing, sealing, closing, etc.
 - **1.1.1.4.** Relocation of utility services (power, fire alarm, fiber optic, tel/data, PV connections and etc.) for the portable buildings and incoming Cox Fiber Optic service which are in the foot-print of the new building in this scope of work. The utility relocation works shall be done prior to grading works starting date.
 - 1.1.1.5. Complete installation and supply of 480/277-Volt and 208/120-Volt, 3-Phase, 4-Wire Switchboard, Distribution Switchboards, feeders, pull-boxes, distribution transformers, control transformers, motor starters, disconnect switches, panel boards, branch circuit conduit and wiring and all other electrical devices.
 - **1.1.1.6.** A complete grounding system for the 480/277-Volt and 208/120-Volt derived systems and all of the electrical equipment.
 - **1.1.1.7.** Luminaires (lighting fixtures), including LED driver, electronic ballasts, lamps, emergency battery pack and occupancy sensor control, day light control, classroom lighting control system, corridor & lobby & exterior lighting control system and other control complete. Including the daylight dimming control system for the specified Tubular DaylightSystem.
 - **1.1.1.8.** Exterior lighting fixtures including concrete bases for poles / low level area lights, walkway/bollard, step lights and planter lights.
 - **1.1.1.9.** Electrical work for the mechanical system, except as specified to be furnished or installed as part of other Sections in the Specifications.

- **1.1.1.10.** Distribution materials and connection of the following listed equipment by the specific equipment furnished so that a complete and operable system results:
 - **1.1.1.10.1.** Building power, communication and fire alarm system connections to Campus systems.
 - **1.1.1.10.2.** Electrical operated roll down doors, gates and other type of door operator.
 - **1.1.1.10.3.** Electrical operated shades system asapplicable.
 - **1.1.1.10.4.** Irrigation power connections.
 - **1.1.1.10.5.** Audio/Video equipment for classroom.
 - **1.1.1.10.6.** Hearing Assistance system.
- 1.1.1.1. Complete installation of the emergency generator set (self-contained an outdoor in NEMA 3R enclosure, diesel generator set with sub-base double wall fuel tank), Automatic Transfer Switch with the 480/277-Volt and 208/120-Volt distribution system for the Emergency Egress Lighting system and IT equipment and selected emergency outlets designated by the College.
- **1.1.1.12.** Furnish and install all hangers, anchors, sleeves, chases, access panels and supports required for electrical works.
- **1.1.1.13.** Electrical conduit system rough-in.
- **1.1.1.14.** Complete Fire Detection and Alarm system including all control equipment, devices, terminal cabinets, backboards, boxes, conduits, wiring and connections.
- **1.1.1.15.** Complete system of empty conduit, outlets, back-boxes, cabinets and/or terminal backboards for the security distribution system or other low voltage /signal systems.
- **1.1.1.16.** Complete system of conduit with voice/data cables, outlets with devices, back-boxes, cabinets and/or terminal backboards with terminating blocks or patch panels for voice/data distribution system.
- **1.1.1.17.** Excavation, backfill and concrete works required to complete items of this section.
- **1.1.1.18.** Closing of all openings resulting from coring, sleeving, removal of conduit and/or equipment.
- **1.1.1.19.** Cleaning, patching, fire stopping/proofing seal, repairing and painting.
- **1.1.1.20.** Permits and Code Inspection fees.
- **1.1.1.21.** Prime coat painting of all electrical equipment exposed to view in public area where required and deemed necessary by Architect.
- **1.1.1.22.** Identified and instruction plates, tags, labels, magnetic yellow tapes, underground warning tapes etc.

- **1.1.1.23.** Shop drawings and technical data; operating instruction and maintenance manual.
- **1.1.1.24.** Test of all equipment and systeminstalled.
- **1.1.1.25.** "As-built" drawings, including but not limited to record of actual routing of duct banks, location of Power Pull-boxes/Manholes and Communication Pull-boxes, lighting and power/communication plan as-built condition.
- **1.1.1.26.** Incidental items not indicated on the drawings nor mentioned in the specifications that belong to the work described, or are required to provide complete systems, as though called out here in every detail.
- **1.1.2.** Work in Cooperation with Other Trades:
 - 1.1.2.1. Examine the Drawings and Specifications and determine the work to be performed by the electrical, and other trades. Provide the type and amount of electrical materials and equipment necessary to place this work in proper operation, completely wired, tested, and ready for use. This shall include all conduits, conductor, and all other devices for the required operation and control sequences of all electrical, and other existing systems or equipment.

1.2. QUALITY ASSURANCE

1.2.1. Standards:

- **1.2.1.1.** Comply with standards listed in thefollowing:
 - **1.2.1.1.1.** Underwriters' Laboratories Inc. (UL).
 - **1.2.1.1.2.** The 2013 California Electrical Code, National Electric Code (NEC) 2011 edition, with California Amendments.
 - **1.2.1.1.3.** The USA National Fire Code (NFPA).
 - **1.2.1.1.4.** The National Electrical Manufacturers' Association (NEMA).
 - **1.2.1.1.5.** Institute of Electrical and Electronic Engineers (IEEE).
 - **1.2.1.1.6.** American National Standards Institute(ANSI).
 - **1.2.1.1.7.** 2013 California Code of regulations, Title 24, Part 1, 2 and 3.
- **1.2.1.2.** Off-Site Work: Conform to Governing Agencies requirements.
- **1.2.1.3.** Earthquake Provisions: Electrical components shall be anchored and braced to meet the force and displacement requirements prescribed in the 2013 CBC, Sections 1613 and ASCE 7-05 Chapter 6 and 13.
- 1.2.1.4. In case of conflict among the reference standards, the more stringent provisions shall govern and shall be resolved before installation at Contractor's expense. Prepare and secure approval for any clarifying details required by inspection authorities.
- **1.2.1.5.** Nothing in the Contract Documents shall be construed as authority to permit work not conforming to codes, ordinances, standards or regulations.

1.2.2. Qualification of Installers:

- 1.2.2.1. Throughout the progress of installation of the work of each Section, provide where required as indicated in respective Sections, at least one manufacturer's authorized representative who shall be thoroughly familiar with the specified requirements, completely trained and experienced in the necessary skills, who shall be present at the job site and shall direct all work performed under that particular Section.
- **1.2.2.2.** Cutting and patching finish work shall be performed by workmen of the proper trade.

1.2.3. Qualification of Manufacturers:

- **1.2.3.1.** Manufacturers of the products supplied for this project shall have been in the business of manufacturing the particular product for at least five years and be able to prove a history of successful production acceptable to the Architect. As a condition for approval and when directed by the Architect, submit a list of past projects showing a minimum of five projects of similar scope to the Architect for approval.
- **1.2.3.2.** Provide together with the Shop Drawing submittal, where called for in these Specifications, a list of five projects which shall have been in satisfactory operation for the past five years.

1.3. GUARANTEE

1.3.1. Manufacturers Guaranties: Submit guarantees for all applicable equipment and devices.

2. PRODUCTS

2.1. MATERIALS

- **2.1.1.** General: See General Conditions, Article titled "Materials".
 - **2.1.1.1.** Architect shall be the sole judge of material conformance to Contract Documents. Equal products shall be as selected by the Architect.
 - **2.1.1.2.** Materials and products shall be new and in perfect condition, and of the manufacturer's latest type and model. Unless otherwise noted, each material or product type shall be from one manufacturer only.
 - **2.1.1.3.** Exterior mounted electrical boxes, devices and miscellaneous items shall be tamper-proof assemblies. Where not a standard feature, shop modify assembly to meet this requirement.
 - 2.1.1.4. Where any devices or equipment is referred to or indicated in these documents or on the Drawings in the singular number, such reference shall be deemed to apply to as many such devices as are required to complete the intended installation as specified and/or as shown on the Drawings.
 - **2.1.1.5.** In case of conflicts among Drawings and Specifications, the more stringent requirement, larger quantities, better qualities and/or more proper application and installation for the particular situation shall govern.

- **2.1.1.6.** Wherever "finishes" are indicated to be selected by the Architect, such "finishes" shall include all standard as well as optional finishes offered bythe Manufacturers.
- **2.1.1.7.** Materials shall be UL listed where applicable.
- **2.1.2.** Manufacturer and Catalog Numbers:
 - **2.1.2.1.** Where manufacturer and catalog numbers are indicated, the published data on the product by the manufacturer are deemed to be part of this specification.
 - **2.1.2.2.** Numbers used indicate basic minimum design and appearance required, and must be modified to meet all specific requirements of Contract Documents.
 - 2.1.2.3. Before submitting bid, verify availability of such modification. Where manufacturers cannot meet these modifications, notify Architect 10 days prior to bid date and deem these products removed from approved list of equipment.
 - **2.1.2.4.** Act of submitting bid is certification that all equipment specified, with required modifications, is available from at least one manufacturer listed.

2.2. CONDUIT

- **2.2.1.** General: Provide only new conduit with UL listing or label and deliver to the site in standard lengths.
- **2.2.2.** Types:
 - 2.2.2.1. Rigid Steel Conduit and Couplings: Hot-dipped galvanized or sherardized inside and out, with galvanized threads. Electro-galvanizing is not acceptable. Provide insulated throat metallicbushings.
 - 2.2.2.2. Electric Metallic Steel Tubing: Hot-dipped galvanized or sherardized inside and out, with galvanized threads. Electro-galvanizing is not acceptable. Provide insulated and bushed tap-on type connectors and couplings as made by Tomic or T&B, or wrench-tightened compression type couplings. Set-screw type couplings or connectors are not acceptable.
 - **2.2.2.3.** Flexible Conduit: Manufacture from single strip steel, hot-dip galvanized on all four sides prior to conduit fabrication. Provide insulated die-cast connectors with ridges that thread into the inside of the conduit to ensure a force fit as made by T&B or approved equal. Binding-screw type connectors are not acceptable.
 - **2.2.2.4.** Liquid-Tight Flexible Conduit: Identical to flexible steel conduit but with overall polyvinyl chloride plastic jacket. Provide insulating connectors, Appleton STN series, or approved equal.
 - 2.2.2.5. Rigid Plastic Conduit: Extrude from virgin polyvinyl chloride compound, Schedule 40 heavy wall, in 10-foot lengths with couplings. Where threaded connection is required or for allowed exposed application where subject to physical damage provide Schedule 80 conduit.

2.3. GROUND WELL AND GROUNDELECTRODE

2.3.1. Ground Well

- **2.3.1.1.** Ground well shall be of the pre-cast concrete type with armored body and cast iron lid. Inside dimensions shall be 10-inch diameter by 12-inch deep.
- **2.3.1.2.** Provide permanent marking on top of lid identifying as "GROUNDWELL".

2.3.2. Ground Electrode:

- **2.3.2.1.** Install a grounding electrode constructed of ¾-inch diameter by 10-feet long copper-weld rod driven vertically full length into the ground through the ground well.
- **2.3.2.2.** Fill the inside of the ground well with a layer of fine sand and layer of crushed rock on top with the ground rod protruding approximately 3-inch above the two layers.
- **2.3.3.** Acceptable Manufacturers: Provide Brooks Product No. 3RT or approved equal by Quick set for the Ground Well and J.A. Weaver W-3410 for the grounding electrode

2.4. WORKMANSHIP

2.4.1. General:

- 2.4.1.1. Materials and equipment shall be installed in accordance with approved recommendations of the manufacturer and conforming to the Contract Documents. All devices and equipment are laid out per requirements of one manufacturer. Modify work and arrangements to suit actual equipment installed and pay for additional costs incurred, if any. The installation shall conform to the applicable codes, rules, and regulations. The Drawings indicate, in diagrammatic form, the work to be done rather than exact routing, location and arrangement of equipment, conduit, and wiring. Make use of data in Contract Documents, verify against developed field conditions, install work in an orderly arrangement in a manner to overcome structural and other interference.
- 2.4.1.2. Study all Drawings and properly locate the outlets and equipment so that they are readily accessible. Locate equipment and outlets to avoid interference with mechanical or structural features. Do not support any electrical material, equipment or device from sheet metal roof decks or ductworks. If any conflicts occur necessitating departures from the Drawings, details of such departures and reasons therefore shall be submitted as soon as practicable for written approval.
- **2.4.1.3.** Where developed conditions make revisions necessary to indicated locations and arrangements, Contractor shall make changes, at no additional cost, provided:
 - **2.4.1.3.1.** Change is ordered prior to time conduit is installed.
 - **2.4.1.3.2.** Length of conduit run is not changed more than 10-percent.
- 2.4.1.4. Architectural and structural drawings take precedence over electrical drawings in representation of general construction work, and drawings of various trades take precedence in representation of work of these trades. Refer to all Contract Documents and coordinate electrical work with other work.

- **2.4.1.5.** Where discrepancies arise among the various Contract Documents, stop work in affected areas. Promptly notify Inspector of conditions.
- **2.4.1.6.** Galvanic and chemical corrosion shall be prevented by isolating dissimilar metals and preventing contact of aluminum with concrete, plaster, mortar or earth.
- 2.4.1.7. All equipment shall be braced and/or anchored to meet the force and displacement requirements prescribed in the 2013 CBC, Sections 1615A.1.12 through 1615A.1.22 and ASCE 7-05 Chapter 6 and 13.
- 2.4.1.8. The bracing and attachments to the structure shall be detailed on the approved drawings or they shall comply with one of the OSHPD pre-approvals (OPA #) as modified to satisfy anchorage requirements of ACI 318, Appendix D.
- **2.4.1.9.** The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and braceloads

END OF SECTION

SECTION 26 05 45

UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL AND COMMUNICATION SYSTEMS

1. GENERAL

1.1. DESCRIPTION

1.1.1. Work Included: Provide all labor, material, equipment, necessary testing, and complete the power and service distribution system as shown on the Drawings and as specified herein.

2. PRODUCTS

2.1. CONCRETE PULL BOXES/MANHOLE

2.1.1. General:

- **2.1.1.1.** Provide pre-cast concrete pull boxes where pull boxes are indicated complete with cover, drain hole, removable steel ladder, four pull irons, ground bus and ground rods. Pull box/manhole size shall be as indicated.
- **2.1.1.2.** Pre-cast concrete manholes shall conform to the requirements of ASTM C478 Standard Specification for Pre-cast Reinforced Concrete Manhole
- **2.1.1.3.** Pull box/manhole shall meet all legal requirements as to size for conduits terminating therein.
- **2.1.1.4.** Reinforced concrete shall be Class A, 3,000-psig type. Minimum design loading shall be 300-lb/ft².

2.1.2. Covers:

- **2.1.2.1.** Covers shall be concrete with a cast-iron lid and frame. Minimum clear opening through the frame shall be 36-inch in diameter.
- **2.1.2.2.** Cast-iron lid shall have lid lettering designation; "ELECTRIC", "HIGH-VOLTAGE", for Power Manhole/Pull box and "SIGNALS" for Communication pull boxes. Submit to the Architect for review.
- **2.1.2.3.** Provide traffic-type construction with traffic covers in areas involving vehicular traffic suitable for AASHTO HS-20 wheelloads.

2.1.3. Accessories:

- **2.1.3.1.** Provide hooked manhole ladder that complies with OSHA 29 CFR 1910.27 and ANSI A14.36 Safety Code for Fixed Ladders. Ladder shall be coated with non-corrosive finish.
- **2.1.3.2.** Provide heavy duty cable racks and arms by Hubbell Power Systems/Chance Group for each manhole.

2.1.4. Acceptable Manufacturers: Pre-cast concrete pull boxes shall be Quikset EPB-2100 Series or equal by Oldcastle Pre-cast or Brooks Jensen Pre-cast.

2.2. UNDERGROUND CONDUIT SYSTEM

- **2.2.1.** Underground Conduit System: Provide as shown on the Drawings and as specified.
- **2.2.2.** Excavation: Provide excavation for underground conduit system and manholes as shown on the Drawings and as specifiedhereinbefore.
- **2.2.3.** Conduit for the underground conduit system shall be as shown on the Drawings, and as specified in Section 26 05 00 and in Part Three of this Section.
- **2.2.4.** The conduit length for each size shall be the length that is standard with the manufacturer with a permissible tolerance of ¼-inch in a 10-foot length.
- **2.2.5.** Conduit fittings shall be UL approved and shall conform to applicable standards, except that where NEMA Standards for conduit fittings do not exist, fittings shall be as recommended by the conduit manufacturer.
- **2.2.6.** Conduit fittings shall be of a type especially made for use with the conduit for electrical service. Plastic conduit and fittings shall be capable of being joined, by means of a solvent welding cement, so as to provide a watertight root-proof joint.

END OF SECTION

SECTION 31 00 00

EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. The work of this section shall include excavation, unclassified cut, unclassified fill, removing existing unsatisfactory material, preparing areas to be filled, spreading and compacting of fill in the areas to be filled, and all other work necessary to complete the grading of the site. It shall be the Contractor's responsibility to place, spread, moisten or dry, and compact the fill in strict accordance with these specifications to the lines and grades indicated on project plans or as directed in writing by the Geotechnical Engineer. Included with this Work are the following:
 - 1. General exterior grading, cutting and filling, including grading for building area, paving, planting areas, banks and hillsides.
 - 2. Excavating, filling, backfilling, and compacting for pavement, planting areas, buildings, and other structures.
 - 3. Base course for walks and pavements.
 - 4. Excavating and backfilling trenches within buildings lines.
 - 5. Excavating and backfilling for underground mechanical and electrical utilities and appurtenances.
 - 6. Shoring plan guidelines.
- B. Related Sections: The following Sections contain requirements that relate to this Section.
 - 1. Section 01 71 23 Field Engineering.
 - Section 32 12 16 Asphaltic Concrete Paving.
 - 3. Section 32 13 13 Site Concrete Work.
 - Owner provided Geotechnical Report.

1.2 DEFINITIONS

- A. Excavation consists of the removal of material encountered to subgrade elevations and the reuse or disposal of materials removed.
- B. Subgrade: The uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, or topsoilmaterials.
- C. Borrow: Soil material obtained off site when sufficient approved soil material is not available from excavations.
- D. Base Course: The layer placed between the subgrade and surface pavement in a paving system.
- E. Drainage Fill: Course of washed granular material supporting slab on grade placed to cut off upward capillary flow of pore water.
- F. Permeable Backfill: Provide permeable backfill material behind retaining structures consisting of gravel, crushed gravel, crushed rock, natural sands, manufactured sand, or combinations.

- G. Unauthorized excavation consists of removing materials beyond indicated subgrade elevations or dimensions without direction by the Architect. Unauthorized excavation, as well as remedial work directed by the Architect, shall be at the Contractor's expense.
- H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man made stationary features constructed above or below ground surface.
- I. Utilities include underground pipes, conduits, ducts, and cables, as well as underground services within building lines.

1.3 SUBMITTALS TO CONSTRUCTION MANAGER

- A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for the following:
 - 1. Each type of plastic warningtape.
 - Filter fabric.
- C. Samples of the following:
 - 12 by 12 inch sample of filter fabric.
- D. Test Reports: In addition to test reports required under field quality control, submit the following:
 - 1. One optimum moisture-maximum density curve for each soil sample.
 - Laboratory analysis of each soil material proposed for fill or backfill from borrow sources.
- E. Excavation support & protection (shoring) shop drawings for informational purposes: Prepared by or under the supervision of a qualified professional engineer for excavation support and protection systems.

1.4 QUALITY ASSURANCE

- A. Codes and Standards:
 - 1. 2013 California Building Code, Title 24, Part 2, Volume 2 of 2, Appendix J, Grading.
 - 2. ASTM D422 Method for Particle Size Analysis of Soils
 - 3. ASTM D1556 Test Method for Density of Soil in Place by the Sand-Cone Method.
 - 4. ASTM D1557 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.54 kg) and 18-inch (457-mm) Drop.
 - 5. ASTM D2216 Method for Laboratory Determination of Water (Moisture) Content of Soil, Rock, and Soil Aggregate Mixtures.
 - 6. ASTM D2922 Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depths).
 - 7. ASTM D3017 Test Method for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depths).
 - 8. ASTM D4318 Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.

- AASHTO T217 Determination of Moisture in Soils by Means of a Calcium Carbide Gas Pressure Meter.
- 10. ASTM D4829 Expansion Index Test.
- B. For off-site work, conform to all requirements of City of Long Beach and any other agencies having jurisdiction. Coordinate and obtain all required permits and inspections.
- C. The work provided herein shall conform to and be in accordance with the Contract Plans, General Conditions/Specifications and Special Provisions, as well as the <u>Standard Specifications for Public Works Construction</u> ("GREENBOOK"), Latest Edition, adopted by the Southern California Chapter, American Public Works Association; herein referred to as the "Standard Specifications".
- D. Comply with all requirements of permit for export of soil from site. Permit is to be obtained and paid for by Contractor. Furnish copies of all permits and licenses required by the City of Long Beach to the Owner's representative.
- E. Professional Observation: A soils engineer will be retained by the Owner for purposes of inspection, testing and approval of all work under this section. Perform work of this Section under inspection and approval of the soils engineer. Give soils engineer not less than 48 hours advance notice of readiness for inspection.
- F. The soils engineer will have the authority over all filling, grading, and compaction operations, including interruption of work if deemed necessary due to improper work
- G. Pre-Grading Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings."
 - Before commencing earthwork operations, meet with representatives of the governing authorities, Owner, Architect, consultants, Geotechnical Engineer, independent testing agency, and other concerned entities. Review earthwork procedures and responsibilities including testing and inspection procedures and requirements. Notify participants at least 3 working days prior to convening conference. Record discussions and agreements and furnish a copy to each participant.

1.5 CONSTRUCTION MONITORING

- A. All earthwork and foundation construction should be monitored by a qualified engineer/technician under the supervision of a Geotechnical Engineer, including;
 - 1. Observation of all site preparations;
 - Observation of shoring installation, if needed:
 - Observation of all site excavations;
 - 4. Test and approval of all import soil;
 - 5. Observation of placement of all compacted fills and backfills;
 - 6. Observation of all surface and subsurface drainage systems;
 - 7. Observation of all foundation and pile excavations;
 - 8. Observation of subgrade preparation for paved and building areas.
- B. The Geotechnical Engineer of Record should be notified at least three (3) days in advance of the start of construction. A joint meeting between the Contractor and Geotechnical Engineer is recommended prior to the start of construction to discuss specific procedures and scheduling. The Geotechnical Engineer should be present to observe the soil conditions

encountered during construction, to evaluate the applicability of the recommendations presented in the Soils Report to the soil conditions encountered, and to recommend appropriate changes in design or construction if conditions differ from those described herein. The Geotechnical Engineer of Record should inspect and approval all imported backfill material prior to its placement as backfill, approve the subgrade beneath all fills, fill placement and bottom of all foundation excavations before concrete or steel is placed.

C. The Geotechnical Engineer shall submit compaction reports to the Construction Manager and the Civil Engineer at the completion of the work, including test results and plot plans indicating the locations from which the tested samples of fill were taken. The Geotechnical Engineer shall keep the Construction Manager informed on the progress of the grading work.

1.6 IMPORT AND EXPORT OF EARTH MATERIALS

- A. Fees: Pay as required by government authority having jurisdiction over the area.
- B. Bonds: Post as required by government authority having jurisdiction over the area.
- C. Hauling Routes and Restrictions: Comply with requirements of authorities having jurisdiction over the area.

1.7 TRUCK HAUL ROUTE

- A. A proposed truck haul route is to be submitted to the City of Long Beach Public Works Department for review and approval. Upon approval, an approved copy shall be returned to the Contractor. The Contractor shall post an approved copy on the job site. All trucks working that project shall also carry a copy. If a truck(s) is found not to be carrying an approved copy, the Contractor shall be subject to a Notice of Noncompliance (stop work order)
- B. All trucks must cover their dirt with an acceptable tarp during transport for dust containment. Provisions for street sweeping and watering will also be required unless an active wheel washing facility proves that they are un-necessary to the satisfaction of the Engineer.
- C. All truck haul routes, as approved, are good only for the project time period, and trucks shall have to comply with the approved route only. If during the progress of the project an alternate route is needed, the Contractor shall submit a new plan. The haul route application shall contain the following information:
 - 1. Map showing the proposed route
 - Project name
 - 3. Grading Contractor's name, address and phone number
 - 4. Type of material being hauled
 - 5. Encroachment or construction permit number

1.8 DIG ALERT NOTIFICATION

- A. <u>Before any excavation in or near the public right-of-way</u>, the Contractor must contact the Underground Service Alert of Southern California (Dig Alert) at **811** for information on buried utilities and pipelines.
- B. Delineation of the proposed excavation site is mandatory. Mark the area to be excavated with water soluble or chalk based white paint on paved surfaces or with other suitable markings such as flags or stakes on unpaved areas.
- C. Call at least Two (2) full working days prior to digging.

- D. If the members (utility companies) have facilities within the work area, they will mark them prior to the start of your excavation and if not, they will let you know there is no conflict. A different color is used for each utility type (electricity is marked in red, gas in yellow, water in blue, sewer in green, telephone and cable TV inorange).
- E. The Law requires you to hand expose to the point of no conflict 24" (inches) on either side of the underground facility, so you know its exact location before using power equipment.
- F. If caught digging without a Dig Alert ticket you can be fined as much as \$50,000 per California government code 4216.

1.9 SUBSURFACE CONDITIONS

- A. Where investigations of subsurface conditions have been made by the Owner with respect to subsurface conditions, utilities, foundation, or other structural designs, and that information is shown in the Plans, it represents only a statement by the Owner as to the character of materials which have actually been encountered by the Owner's investigation. This information is only included for the convenience of Bidders.
- B. Investigations of subsurface conditions are made for the purpose of design only. The Owner assumes no responsibility with respect to the sufficiency or accuracy of borings or of the log of test borings or other preliminary investigations or of the interpretation thereof. There is no guaranty, either expressed or implied, that the conditions indicated are representative of those existing throughout the Work, or any part of it, or that unanticipated conditions may not occur. When a log of test borings is included in the Plans, it is expressly understood and agreed that said log of test borings does not constitute a part of the Contract. The log of test borings represents only an opinion of the Owner as to the character of the materials to be encountered, and is included in the Plans only for the convenience of the Bidders. Making information available to Bidders is not to be construed in any way as a waiver of the provisions of the first paragraph of this Section, and Bidders must satisfy themselves through their own investigations as to conditions to be encountered.

1.10 GRADING

- A. If the Contractor encounters any suspected cultural resource, or unique archaeological or paleontological resource, during the course of construction, the Contractor shall halt or divert work and notify the District Representative immediately. The District will evaluate the situation and if warranted, will consult with a qualified archeologist or paleontologist to determine further actions.
- B. If human remains are encountered unexpectedly during construction excavation and grading activities, the State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98, and the Contractor will notify the District Representative immediately. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

1.11 PROJECT CONDITIONS

- A. Data: Maps, boring logs, geotechnical and foundation investigation reports, and like reference data, not included in Contract Documents but made available to Contractor by Architect or Owner are for information only, and the Architect and Owner assume no responsibility for any conclusions Contractor may draw from such information. Should questions or issues arise, contact Architect or Owner for clarification.
- B. Contractor shall determine existing conditions under which the Contractor will operate in performing the Work.
- C. A geotechnical investigation report, by GeoTek, Inc (Project No. 1529-CR), dated October 24, 2016, was prepared for this project. Prior to bidding or performing the work of this project, contractor shall obtain a copy of these reports, and shall thoroughly familiarize

himself/herself with their contents. Any information obtained from such reports, or any information given on any drawings as to subsurface soil conditions or to elevations of existing elevations or elevations of underlying rock, is approximate only, is not guaranteed, and does not form a part of the contract, unless specifically referenced in the Contract Documents. The Contractor is required to make a visual inspection of the Project Premises and must (and is permitted to) make whatever tests the Contractor deems appropriate to determine and assess the underground condition of the soil. No claims for allowances or damages because of the Contractor's negligence or failure in acquainting itself with the conditions of the Project Premises as described herein will be recognized by the District.

- D. Up to 15 feet of undocumented fill was encountered in the test boring in the southeast quadrant of the property. Five feet of undocumented fill was encountered in the northeast portion and northwest of the central part of the site. The property is relatively planar and flat with a total relief of approximately one foot. The topography of the area generally slopes downward to the southwest at a gradient of less than five percent.
- E. Groundwater: During field exploration, groundwater was encountered 50.5 feet below existing ground surface.
- F. Information on Drawings does not constitute a guarantee of accuracy or uniformity of soil conditions over the Project site.
- G. Existing utilities: Locate existing underground utilities in all areas of work prior to excavation or commencement of work. If utilities are to remain in place provide adequate means of protection during earthwork operations.
 - Should uncharted, or incorrectly charted piping or other utilities be encountered during excavation, consult Utility Owner immediately for direction. Cooperate with Owner and Utility companies in keeping respective services and facilities in operation. Repair damaged utilities to the satisfaction of Utility Company.
 - Do not interrupt existing utilities serving facilities occupied or used by Owner, or others, except when permitted in writing by Owner's Representative, and then only after acceptable temporary services have been provided.
 - Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut off of services if lines are active.
- H. Noise and Dust Abatement: Exercise all reasonable and necessary means to abate dust, dirt rising and undue noise. Perform necessary sprinkling and wetting of construction site to allay dust as required by applicable codes and ordinances.
- I. Water for Grading: Contractor shall obtain and pay for all water required for his grading operation. This may include, but is not limited to, payment of deposits to utility for construction meter, and payment of all monthly service and water charges. Construction meter shall be in place throughout construction period unless alternative arrangements are made with the Water Department to provide construction water for all purposes. Contractor shall be aware of water moratoriums and restrictions, and shall immediately advise Owner of effects on construction schedules.
- J. Existing Conditions: Prior to commencing work at site, verify agreement of existing conditions with indicated conditions. Notify Owner's Representative in writing of discrepancies found. Start of work without notification constitutes acceptance of conditions, without cause for extra compensation.
- K. Field obstructions, grade differences or differences in dimensions may exist that might not have been considered or observed during design of this project. Contractor shall promptly notify the Engineer and the Agency having jurisdiction by telephone and in writing upon discovery of and before disturbing, any physical conditions differing from those represented

by approved plans and specifications. In the event this notification is not performed, the Contractor shall assume full responsibility for necessary revisions.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: All soils materials to be used throughout the site shall be approved for use by the Geotechnical testing engineer. Provide approved borrow soil materials from off site when sufficient approved soil materials are not available from excavations.
- B. No earthwork analysis has been completed with respect to the volumes of soils to be excavated, placed, or imported in order to provide the finished grades shown on the plans.

 The Contractor is solely responsible for verifying the earthwork quantities necessary to complete the project.
- C. For earthwork volume estimating purposes, an average shrinkage volume of 10 to 15 percent and subsidence of 0.1 to 0.2 foot may be assumed for the surficial soils. These values are estimates only and exclude losses due to removal of vegetation and debris. Actual shrinkage and subsidence will depend on the types of earthmoving equipment used and should be determined during rough grading.
- D. Satisfactory Soil Materials: Existing site soils at their present state and composition, unless indicated otherwise, are considered suitable for re-use as fill during site grading at designated areas within the footprint of the building and pavement, non-structural or landscape areas, and backfilling of utility trenches, provided they are 1) free of debris, particles greater than 4 inches in maximum dimension, organic matter or other deleterious materials, 2) are not environmentally contaminated, and 3) adequately moisture conditioned to permit achieving the required compaction. No nesting of large particles (2 to 4-inch size) should be permitted during backfilling operations.
- E. Borrow / Imported Fill Material: Soil excavated from site or imported conforming to requirements for fill material.
 - Any soil re-used or imported as fill for the completion of subgrade preparation should consist of predominantly "Very Low" to "Low" expansive, granular material exhibiting an EI not greater than 35, and should be exhibiting a relatively uniform gradation, free of debris, particles greater than 4 inches in maximum dimension, organic matter or other deleterious materials.
 - All blended material and potential import material must be approved by the Geotechnical Consultant or his representative, prior to its use and arrival on site, and should be subjected to continuing verification testing during site grading.
- F. Base Course Material For Use Under Asphalt Pavement: Crushed aggregate base material shall consist of materials that meet the provisions listed below.
 - 1. Crushed Aggregate Base (CAB) per Section 200-2.2, 3/4" maximum of the Standard Specifications for Public Works Construction (Green Book).
 - 2. Crushed Miscellaneous Base (CMB) per Section 200-2.4, fine sieve, of the Standard Specifications for Public Works Construction (Green Book).
- G. Engineered Fill: Satisfactory Soil Materials, as described above, placed in lifts no greater than 8 inches thick (loose measurements), moisture conditioned to slightly above the laboratory optimum moisture content, and compacted to a minimum of 90% relative compaction per ASTM D1557.
- H. Bedding Material for Trenches:

- 1. Bedding sand shall be as defined by Standard Specifications, Section 200-1.5, and shall be free of expansive material and organic matter. Bedding material for utility lines outside the property lines shall be as required by the agency having jurisdiction. Onsite soils are not considered suitable for bedding or shading of utilities.
- Sand providing a sand equivalent of at least 35. All of the sand bedding shall be compacted to a minimum 90 percent of maximum density as indicated in the Contract Documents by mechanical means. Flooding and jetting shall not be permitted without prior written approval from the Geotechnical Engineer. Where sheeting or shoring is used densification of the bedding shall be accomplished after the sheeting or shoring has been removed from the bedding zone, unless the sheeting or shoring is to be cut off or left in place. Pipe bedding material shall be placed in horizontal layers not exceeding (8) eight inches.

I. Backfill Material for Trenches:

1. The on-site soils have been determined to be suitable for being used for backfilling purposes in trenches. Utility trenches should be backfilled with granular materials (EI less then 35) and mechanically compacted to at least 90% of the maximum dry density of the soils.

2.2 ACCESSORIES

- A. Detectable Warning Tape: Acid and alkali-resistant polyethylene film metallic warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick minimum, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep.
 - 1. Tape Colors: Provide tape colors to utilities as follows:
 - a. Red: Electric.
 - b. Yellow: Gas, oil, steam, and dangerous materials.
 - c. Orange: Telephone and other communications.
 - d. Blue: Water systems, with "Caution: Water Line Below."
 - e. Green: Sewer systems, with "Caution: Sewer Line Below."
 - f. Green: Storm systems, with "Caution; Storm Drain Line Below."

2.3 EXCAVATION SUPPORT & PROTECTION – SHORING PLAN

- A. The CONTRACTOR shall have at the Worksite, copies or suitable extracts of: Construction Safety Orders, Tunnel Safety Orders and General Industry Safety Orders issued by the State Division of Industrial Safety. The CONTRACTOR shall comply with provisions of these and all other applicable laws, ordinances, and regulations.
- B. Before excavating any trench 5 feet or more in depth, the CONTRACTOR shall submit a detailed plan to the Owner showing the design of shoring, bracing, sloping, or other revisions to be made for the Workers' protection from the hazard of caving ground during the excavation of such trench. If the plan varies from the shoring system standards, the plan shall be prepared by a registered Civil Engineer. No excavation shall start until the DISTRICT has accepted the plan and the CONTRACTOR has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to the DISTRICT.
- C. The INSPECTOR will provide a competent person trench/excavation certification form to the CONTRACTOR. It shall be completely filled out before any worker has access to trench or

excavation and returned to the INSPECTOR before the end of the first working day. The CONTRACTOR shall certify by this form the name of the competent person administering the Work, the soil classification, and the type of excavation protective system provided and/or installed.

- D. The CONTRACTOR shall completely fence all excavations to provided protection against anyone falling into the excavation and to the satisfaction of the INSPECTOR. The fencing shall be in place at all times except when workers are present and actual construction operations are in progress.
- E. The fencing material shall be chain link fabric or welded wire fabric (6x6-W9xW9 minimum) and 6 feet high, constructed according to one of the following:
 - Tensioned fencing material and have top and bottom tension wires securely fastened to driven steel posts or other equally rigid elements at a maximum spacing of 12 feet; or
 - 2. Untensioned fencing materials securely fastened to extended trench shoring elements at a maximum spacing of 8 feet and fastened to continuous top and bottom rails constructed of nominal 2 in x 4 in lumber or equally rigid material. Framed panels with suitable supporting elements fastened together to form a continuous fence may also be used.
- F. Payment for performing all work necessary to provide safety measures shall be included in the prices bid for other items of work except where separate bid items for excavation safety are provided, or required by law.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect adjacent property and existing improvements and structures as necessary to prevent undermining, caving of cuts, and miscellaneous damage.
- B. Provide cribbing, sheeting, and shoring necessary to safely retain the earth banks and protect excavations and adjoining grades from caving and other damage resulting from excavating together with suitable forms of protection against bodily injury to personnel employed on the work and the general public. Be responsible for the design, installation, and maintenance of required cribbing and shoring and shall meet the approval of the State Division of Industrial Safety and local governing agencies requirements.
- C. Utility lines and structures shown shall be protected and treated as indicated. Where work not shown is encountered, report it to the Architect before proceeding with excavation. Encase active lines in sleeves where they pass through concrete; remove inactive lines as directed, and plug the remaining ends. Bear the costs for repairs to damaged or broken utilities and any damages related thereto.
- D. Protect existing improvements and adjacent properties from storm damage and flood hazard originating on this project until final acceptance by the Owner. Prevent silt run-off from the limits of work in accordance with governmental requirements.
- E. An 6 foot high, temporary chain link fence with visual screen and gates, (pair 26' wide, minimum) shall be erected prior to any grading operations at the construction limits perimeter. Coordinate the exact location with Architect and District.

3.2 DEWATERING

A. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area. Any water entering an excavation shall be immediately pumped out and the exposed excavation allowed to ry.

B. Protect subgrades and foundation soils from softening and damage by rain or water accumulation.

3.3 GRADE STAKES

- A. The Contractor's Surveyor will set grade stakes. The Surveyor shall be a California registered land surveyor or licensed Civil Engineer. The Surveyor shall be hired and paid by the Contractor, and shall be subject to the approval of the District. Contractor shall notify the District at least 48 hours before staking is to be started. The District will determine if work is ready for staking.
- B. All work shall conform to the lines, elevations, and grades shown on the Construction Plans. Three consecutive points set on the same slope shall be used together so that any variation from a straight grade can be detected. Any such variation shall be reported to the Engineer. In the absence of such report, the Contractor shall be responsible for any error in the grade of the finished work.
- C. Protect and maintain stakes in place until their removal is approved by the District. Grade or location stakes lost or disturbed by Contractor, shall be reset by the Surveyor at the expense of Contractor.
- D. Grades for underground conduits will be set at the surface of the ground. The Contractor shall transfer them to the bottom of the trench.

3.4 TEMPORARY EXCAVATION

A. Refer to section 5.2.10 Temporary Excavations in the project geotechnical report.

3.5 HAZARDOUS MATERIALS

- A. All import fill material shall be characterized, handled, and documented in accordance with applicable US EPA and State of California hazardous waste and hazardous materials regulations.
- B. "Contaminated" shall mean any soil or geotechnical material at a concentration, which would require disposal at a regulated facility (i.e., California hazardous or RCRA hazardous).
- C. Owner's Authorized Representative (OAR) must be notified at least 72 hours prior to the disposal of any hazardous waste or hazardous material. No material disposal or reuse can take place without prior written approval of the OAR.
- D. Replacement of earth material, that has been removed due to hazardous waste reasons, shall be placed back to meet the requirements of Section 2.01G Engineered Fill.

3.6 EXCAVATION FOR BUILDING FOOTINGS

- A. Refer to section 5.2.2 of the project geotechnical report.
- B. Shoring may be required in some areas along the property line so that all the undocumented fill can be safely removed and replaced as engineered fill.

3.7 EXCAVATION FOR CEMENT CONCRETE PAVEMENT & HOT-MIX ASPHALT PAVING

- A. Refer to Site Concrete Work Specification 32 13 13 section 3.01 requirements.
- B. Refer to Asphaltic Concrete Paving Specification 32 12 16 section 3.2 requirements.
- C. The compacted surface shall be firm, hard and unyielding. The term "firm, hard and unyielding" as used in the Standard Specifications Section 301-1.3 shall mean that when the heaviest construction and hauling equipment used on the project drives over the subgrade, no permanent deformation shall occur either before or during pavement construction. On areas where the underlying material appears to be wet or soft, or where it deflects under

- wheel loads, the Contractor shall employ excavation and work techniques which do not worsen the subgrade condition.
- D. The above subgrade preparation recommendations are based on the assumption that soils encountered during field exploration are representative of soils throughout the site. However, there can be unforeseen and unanticipated variations in soils between points of subsurface exploration. For this reason, the actual scarification depths will have to be determined on the basis of in-grading observations and testing performed by representatives of the Owner's geotechnical consultant.
- E. Whenever batch trucks or other paving equipment cause rutting of the subgrade or subbase in asphalt or concrete placement areas, inspectors shall immediately stop construction. Construction shall not be allowed to resume until distorted subgrade or subbase is repaired. Contractors and inspectors should locate by proof rolling, any questionable unstable areas in advance to avoid distortion under equipment. Wet, unstable areas must be dried out or replaced before starting placement of asphalt. Locating wet or soft areas in advance can be accomplished by testing finished subgrade or subbase with a loaded truck. Construction of asphalt or concrete pavement should not proceed unless testing gives a reasonable indication that distortions will not occur during construction of overlying pavement. When repair, aeration, and recompaction are required to correct damage from Contractor's operation, all necessary repair will be done at Contractor's expense. However, if the Engineer determines that additional depth of aeration and recompaction are needed, that should be paid by change order.
- F. A California Licensed Surveyor (LS) must provide grade stakes and elevations for the Geotechnical Engineer to verify that the over-excavation depths, shown on the construction drawings for asphalt concrete pavement structural sections, have been achieved prior to recompaction.
- G. Subgrade tolerances: Subgrade for pavement shall not vary more than 0.02' from the specified grade and cross section established by the Engineer. Subgrade for base material shall not vary more than 0.04' from the specified grade and cross section. Variations within the above specified tolerances shall be compensating so that the average grade and cross section specified are met.

3.8 TRENCH EXCAVATION, BACKFILL & COMPACTION FOR UTILITIES

- A. Field conditions may require deviations from information indicated on Drawings. Such changes in work shall be covered by a Change Order, indicating an increase or decrease in the Contract sum.
- B. Before excavation, Contractor shall contact the "Underground Service Alert of Southern California" (USASC) for information on buried utilities and pipelines.
- C. When connections are to be made to any existing pipe, conduit, or other appurtenances, the actual elevation or position of which cannot be determined without excavation, the Contractor shall excavate for, and expose, the existing improvement before laying any pipe or conduit. The Engineer shall be given the opportunity to inspect the existing pipe or conduit before connection is made. Any adjustments in line or grade which may be necessary to accomplish the intent of the plans will be made, and the Contractor will be paid for any additional work resulting from such change in line orgrade.
- D. Trenches, ditches, pits, sumps, and similar items which are outside the barricaded working area shall be barricaded to conform to Cal OSHA standards.
- E. Trenches over 5'-0" in depth shall conform to the Construction Safety Orders of the California Division of Industrial Safety, see Section 2.3 EXCAVATION SUPPORT & PROTECTION SHORING PLAN.
- F. Safe and suitable ladders which project 2 feet above the top of the trench shall be provided for all trenches over 4 feet in depth. One ladder shall be provided for each 50 feet of open

- trench, or fraction thereof, and be so located that workers in the trench need not move more than 25 feet to a ladder.
- G. Where indicated and/or required to excavate in lawn areas, protect adjoining lawn areas outside of the Work area. Replace or install removed sod upon completion of backfill by installing sod level with adjacent lawns. If installation of removed sod fails, furnish sod and install to match existing lawns.
- H. All trenches should be backfilled with approved fill material compacted to relative compaction of not less than 90 percent of maximum density determined in accordance with ASTM D 1557. Backfill shall be placed in layers not exceeding 8" (inches) inthickness.
- I. Backfill over excavations to the required elevations with earth, gravel, sand, or concrete and compact as required. Provide excavations free from standing water by pumping, draining, or providing protection against water intrusion. Slope adjacent grades away from excavations to minimize entry of water.
- J. Do not excavate trenches parallel to footings closer than 18" from the face of the footing or below a plane having a downward slope of 2 horizontal to one vertical, from a line 9" above bottom of footings.
- K. If soft, spongy, unstable, or other unsuitable material is encountered upon which the bedding material or pipe is to be placed, this material shall be removed to a depth ordered by the Engineer and replaced with bedding material suitably densified. Additional bedding so ordered, over the amount required by the Plans or Specifications, will be paid for as provided in the Bid. If the necessity for such additional bedding material has been caused by an act of failure on the part of the Contractor or is required for control of groundwater, the Contractor shall bear the expense of the additional excavation and bedding.
- L. Unless indicated otherwise on the plans are within this specification, excavate trenches to the required depths for utilities, such as pipes, conduit and tanks, with minimum allowances of 6 inches at the bottom and 6 inches at the sides for bedding of unprotected piping or as required for concrete encasement of conduits as indicated on Drawings. Maximum allowances at the sides for trenching shall be 12 inches. Grade bottom of trenches to a uniform smooth surface. Remove loose soil from the excavation before installing sand bedding or concrete encasement.
- M. Where portions of existing structures, walks, paving, etc. must be removed or cut for pipe or conduit installation, replace the material with equal quality, finished to match adjacent work.
- N. Provide a minimum clear dimension of 6 inches from sides of wall excavation to outer surfaces of buried pipes or conduits installed in the same trench or outside surfaces of containers and/or tanks.
- O. **DO NOT** place backfill until the bedding and pipe work installed has been inspected, tested and approved by the Inspector. Remove excavated rocky material unsuitable for backfill from the site prior to final backfilling.
- P. Bedding material immediately around a utility line and to a point 12 inches above the top of pipe should consist of sand to support the line and protectit.
- Q. Bedding zone shall be defined as the area containing the material specified that is supporting, surrounding, and extending to 12" (inches) above the top of pipe. Compaction requirements in this area must meet 90%.
- R. Bedding material shall first be placed on a firm and unyielding subgrade so that the pipe is supported for the full length of the barrel. There shall be 6" (inch) minimum of bedding below the pipe barrel and 1" (inch) clearance below a projecting bell for sewer, storm drain and water pipe. The material in the bedding zone shall be placed and densified by mechanical compaction only.

- S. Mechanically compacted backfill shall comply with section 306-1.3.2 of the Standard Specifications for Public Works Construction.
- T. Concrete backfill trenches that carry below or pass under footings and that are excavated within 18 inches of footings. Place concrete to level of bottom of footings.
- U. Fill voids with approved backfill materials as shoring bracing and sheeting is removed.

3.9 INSPECTION & TESTING AT TRENCHES

- A. Pipe will be inspected in the field before and after laying. If any cause for rejection is discovered in a pipe after it has been laid, it shall be subject to rejection. Any corrective work shall be approved by the Engineer and shall be at NO cost to the Owner.
- B. The Inspector or Geotechnical Engineer will inspect all subgrades and excavations prior to placing bedding & backfill materials.
- C. **DO NOT** place backfill until the bedding and pipe work installed has been inspected, tested and approved by the Inspector. Remove excavated rocky material unsuitable for backfill from the site prior to final backfilling.
- Utility backfill compaction test shall be performed in accordance with ASTM D1557, method "C".
- E. Utility backfill in place density test per ASTM D 1556 (sand cone) or other test method as considered appropriate by the Geotechnical Engineer.
- F. Hydrostatic pressure tests shall be done only after backfill has been placed and final compaction has been achieved.

3.10 APPROVAL OF SUBGRADE

- A. Notify Geotechnical Engineer when excavations have reached required over-excavation subgrade.
- B. When Geotechnical Engineer determines that unforeseen unsatisfactory soil is present, continue work only after receiving direction from the Contracting Officer.
- Reconstruct subgrades damaged by rain, accumulated water or construction activities as directed by the Soils Engineer.

3.11 UNAUTHORIZED EXCAVATION

- A. Fill of unauthorized excavation below bottoms of foundations or wall footings will be engineered fill.
- B. Fill unauthorized excavations under other construction as directed by the Soils Engineer.
- C. Where indicated widths of utility trenches are exceeded, provide stronger pipe, or special installation procedures, as required by the Geotechnical Engineer.

3.12 STORAGE OF SOIL MATERIALS

- A. After the site has been stripped of all debris, vegetation and organic materials, excavated on site soils may be reused as engineered fill provided they meet the satisfactory soils material conditions in Section 2.01, part D. High in-site moisture contents will require aeration prior to placement as engineered fill.
- B. Stockpile excavated materials acceptable for backfill and fill soil materials, including acceptable borrow materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Stockpile soil materials away from edge of

excavations. Do not store within drip line of remaining trees. <u>Cover to prevent wind-blown</u> dust.

3.13 PLACEMENT OF ENGINEERED FILL

- A. Preparation of the bottom of the excavation:
 - 1. Soils exposed at excavation bottoms to a depth of 8-inches should be scarified, reworked and re-compacted to exhibit a minimum 90 percent relative compaction.
- B. Spreading and Compacting Fill Material:
 - On-site soils and import materials approved for use as fill should be placed in horizontal lifts not exceeding 8 inches in loose thickness, moisture conditioned to a minimum of two (2) percentage points above optimum moisture content for "Low" expansive import or blended material, as well as for untreated site silty/clayey soils, and to a minimum of one (1) percentage point above optimum moisture content for "Very Low" expansive import material, and compacted to a minimum 90 percent relative compaction, per ASTM D1557-12 Test Method, unless otherwise stated.
 - 2. After each layer has been placed, mixed, and spread evenly, it shall be thoroughly compacted by the Contractor to the specified density. Compaction shall be accomplished by sheepsfoot rollers; vibratory rollers; multiple-wheel, pneumatic-tired rollers; or other types of acceptable compacting equipment. Equipment shall be of such design that it will be able to compact the fill to the specified density. Compaction shall be continuous over the entire area, and the equipment shall make sufficient passes to obtain the desired density uniformly. Jetting, puddling and hydroconcolitation techniques shall not be used.
 - 3. When backfilling and compacting behind retaining walls and flexible retaining structures, the Contractor shall use lightweight compaction equipment such as hand-operated equipment, shoring, or other means to avoid over-stressing structural walls. When using lightweight compaction equipment, the fill materials shall be spread in horizontal layers not greater than 6 inches thick, measured before compaction.

C. Compaction Testing:

- The Geotechnical Engineer's representative shall observe the excavation, filling, and compacting operations and shall make density tests in the fill material so that he can state his opinion as to whether or not the fill was constructed in accordance with the specifications. If the surface is disturbed, the density tests shall be made in the compacted materials below the disturbed zone. When these tests indicate that the density or moisture content of any layer of fill or portion thereof does not meet the specified density or moisture content, the particular layer or portions shall be reworked until the specified density and moisture content have been obtained.
- Sampling and testing of materials for determination of compliance with the specified compaction requirements will be conducted by the Geotechnical Engineer's representative at any location and time as the Owner may determine.
- 3. The Contractor shall be responsible for excavation of the test pits and for providing and installing any shoring, ladders, or other equipment necessary to protect the testing personnel. The Contractor shall also suspend operations as necessary and at no cost to the owner for the purpose of conducting such testing.
- 4. Test pits shall be excavated in the backfill by the Contractor as directed by the Engineer for the purpose of testing the backfill compaction. At the option of Engineer, density tests may be taken on a lift of compacted backfill immediately before placing the next lift.

- 5. Any settlement noted in backfill, fill, or in structures built over the backfill or fill within the one-year warranty period will be considered to be caused by improper compaction methods and shall be corrected at the Contractor's expense. Structures damaged by settlement shall be restored to their original condition by the Contractor at the Contractor's expense.
- 6. When initial compaction testing performed by the Engineer indicates the required density has not been obtained, the Contractor shall re-compact or replace the backfill as necessary to meet the specified minimum density.
- 7. The Contractor shall be responsible for rescheduling compaction testing with the Engineer and shall bear all costs for subsequent retesting in the areas of noncompliance. Costs associated with retesting and scheduling delays shall be the sole responsibility of the Contractor. The Engineer will deduct the costs for testing of materials and work found to be unacceptable, as determined by the tests performed by the Owner and the costs for testing of material sources identified by the Contractor which are not used for the work, from moneys due or to become due to the Contractor. The amount deducted will be determined by the Engineer.

3.14 BACKFILL - GENERAL

- A. Backfill excavations promptly, but not before completing the following:
 - 1. Acceptance of construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for record documents.
 - 3. Testing, inspecting, and approval of underground utilities.
 - 4. Concrete formwork removal.
 - Removal of trash and debris from excavation.
 - 6. Removal of temporary shoring and bracing, and sheeting.
 - 7. Installing permanent or temporary horizontal bracing on horizontally supported walls.

3.15 GRADING

- A. Rough & Fine Grading: Rough grade area sufficiently high to require cutting by fine grading.
- B. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between existing adjacent grades and new grades.
 - Cut out soft spots, fill low spots, and trim high spots to conform to required surface tolerances.
 - 3. Grade area for paving to a depth below finish grades indicated, equal to base and pavement thickness to be constructed.
 - 4. Cut banks neatly to required finish grades as cut progresses, or leave cuts full and finish grading by mechanical equipment, which will produce finish grades indicated on Drawings.
 - 5. Grade filled banks full and compact beyond grade of finish bank so that when trimmed to finish grades, soil is compacted to density specified for final slope face.
 - 6. Bring areas to be graded to approximate finish grades and then scarify, moisten and roll to obtain required density. Scarify, moisten and roll resulting high and low areas to obtain required finish grades by cutting and filling.
 - 7. Grade future planting areas so that, upon cultivation and fertilization, they will conform to finish grades indicated for planting areas.

- 8. Protect all utilities.
- C. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
 - 1. Building pad tolerance plus or minus ½ inch (0.05-foot).
 - 2. Lawn or Unpaved Areas: Plus or minus (0.10-foot).
 - 3. Walks: Plus or minus (0.04-foot).
 - 4. Pavements: Plus or minus (0.04-foot).
- D. Grading Inside Building Lines: Finish subgrade to a tolerance of ½ inch when tested with a 10-foot straightedge.

3.16 FIELD QUALITY CONTROL

- A. The CONTRACTOR shall provide an independent approved California Department of Health Services certified testing laboratory, to perform sampling and testing of import/export fill materials in accordance with the terms as specified in Section 01 45 24 Environmental Import/Export Materials Testing.
- B. Backfill and compaction of trenches in traffic areas must be in the presence of the project inspector or geotechnical engineer.
- C. A Geotechnical Engineer, designated by the Owner, will be engaged to perform continuous inspection of the placing and compacting of all fills and backfills within the limits of grading of this project. All work shall be done in accordance with the approved plans and these specifications and as recommended and approved by the Geotechnical Engineer. Revised recommendations relating to conditions differing from the approved soils engineering and engineering geology reports shall be submitted to the owner, inspector, architect and the civil engineer. Costs for all such inspections and tests shall be paid by the Owner. The Contractor shall be responsible for notifying the Geotechnical Engineer in advance so that he may be present to perform his services as needed.
- D. The Geotechnical Engineer shall submit compaction reports to the Construction Manager and the Architect at the completion of the work, including test results and plot plans indicating the locations from which the tested samples of fill were taken. The Geotechnical Engineer shall keep the Construction Manager informed on the progress of the grading work.
- E. Testing Agency Services: Allow testing agency to inspect and test each subgrade and each fill or backfill layer. Do not proceed until test results for previously completed work verify compliance with requirements.
 - 1. Perform field in-place density tests according to ASTM D 1556 (sand cone method) or other test method as considered appropriate by Geotechnical Engineer.
 - a. Field in place density tests may also be performed by the nuclear method according to ASTM D 2922, provided that calibration curves are periodically checked and adjusted to correlate to tests performed using ASTM D 1556. With each density calibration check, check the calibration curves furnished with the moisture gages according to ASTM D3017.
 - b. When field in place density tests are performed using nuclear methods, make calibration checks of both density and moisture gages at beginning of work, on each different type of material encountered, and at intervals as directed by the Architect.
 - 2. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, perform at least one field in-place density test for every 2,000 sq. ft. or less of paved area or building slab, but in no case fewer than three tests.

- 3. Foundation Wall Backfill: In each compacted backfill layer, perform at least one field in place density test for each 100 feet or less of wall length, but no fewer than two tests along a wall face.
- Trench Backfill: In each compacted initial and final backfill layer, perform at least one field in place density test for each 150 feet or less of trench, but no fewer than two tests
- F. When testing agency reports that subgrades, fills, or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depth required, recompact and retest until required density is obtained.
- G. Owner's inspector will inspect foundation excavations when completed and ready for forms, after forms are in place, and before first placement of concrete.

3.17 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and re establish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace material to depth directed by the Architect; reshape and recompact at optimum moisture content to the required density.
- C. Settling: Where settling occurs during the Project correction period, remove finished surfacing, backfill with additional approved material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

3.18 MAINTENANCE

- A. Install and maintain all erosion control devices, including sandbag and gravel bag dikes, silt fences, de-silting basins, inlet barricades, vehicle wash traps, and other features called for on the Storm Water Pollution Prevention Plan (SWPPP) required per Section 01 74 16. Maintain a copy of the approved SWPPP on jobsite, and make it available for inspection by authorized individuals at all times
- B. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape to required tolerances, and compact to required density prior to further construction.

3.19 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off the Owner's property.

END OF SECTION

SECTION 32 13 13

SITE CONCRETE WORK

PART 1 - GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall furnish all materials for concrete in accordance with the provisions of this Section and shall form, mix, place, cure, repair, finish, and do all other work as required to produce finished concrete, in accordance with the requirements of the Contract Documents.
- B. The following types of concrete shall be covered in this Section:
 - Portland cement concrete pavement, cement walks, flatwork, curbs, gutters, retaining curbs, swales, trash pick-up areas, ramps, fence post footings, sliding gate concrete, catch basins, pipe bedding and encasements, transition structures, flagpoles and light standard bases and footings, and equipment pads.
 - 2. Portland cement concrete paving shall be stable, firm and slip resistant and shall comply with CBC sections 11B-302 and 11B-403.

1.2 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- Comply with the reference specifications of the GENERAL REQUIREMENTS.
- B. The work provided herein shall conform to and be in accordance with the Contract Plans, General Conditions/Specifications and Special Provisions, as well as the Standard Specifications for Public Works Construction ("GREENBOOK"), 2015 Edition, adopted by the Southern California Chapter, American Public Works Association; herein referred to as the "Standard Specifications".
- C. Comply with the current provisions of the following Codes and Standards.
 - Federal Specifications:

in the Field.

a. UU-B-790A (Int.Amd. 1) Building Paper, Vegetable Fiber (Kraft, Waterproofed, Water Repellant and Fire Resistant).

Standards:

a.	ACI 214	Recommended	Practice	for	Evaluation	of	Strength	Test
	Results of Concrete.							

b.	ACI 301	Specifications for Structural Concrete for Buildings.
C.	ACI 315	Details and Detailing of Concrete Reinforcement.
d.	ACI 318	Building Code Requirements for Reinforced Concrete.
e.	ACI 347	Recommended Practice for Concrete Formwork.
f.	ACI 350	Recommended Practice for SanitaryStructure.
g.	ASTM C 31	Practices for Making and Curing Concrete Test Specimens

h. ASTM C 33 Specification for Concrete Aggregates.

- i. ASTM C 39 Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- ASTM C 40 Test Method for Organic Impurities in Fine Aggregates for Concrete.
- k. ASTM C 42 Methods of Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
- I. ASTM C 78 Specification for Flexural Strength.
- m. ASTM C 88 Test Method for Soundness of Aggregates by use of Sodium Sulfate or Magnesium Sulfate.
- n. ASTM C 94 Specification for Ready-Mixed Concrete.
- ASTM C 114 Method for Chemical Analysis of Hydraulic Cement.
- p. ASTM C 131 Test Method for Resistance to Degradation of Small-Sized Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- q. ASTM C 136 Method for Sieve Analysis of Fine and Coarse Aggregate.
- r. ASTM C 143 Test Method for Slump of Portland Cement Concrete.
- s. ASTM C 150 Specification for Portland Cement.
- t. ASTM C 156 Test Method for Water Retention by Concrete Curing Materials.
- u. ASTM C 157 Test Method for Length Change of Hardened Hydraulic Cement Mortar and Concrete.
- v. ASTM C 172 Specification for Sampling Fresh Concrete.
- w. ASTM C 192 Method of Making and Curing Concrete Test Specimens in the Laboratory.
- x. ASTM C 260 Specification for Air-Entraining Admixtures for Concrete.
- y. ASTM C 289 Test Method for Potential Reactivity of Aggregates (Chemical Method).
- z. ASTM C 311 Method for Sampling and Testing Fly Ash or Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete.
- aa. ASTM C 494 Specification for Chemical Admixtures for Concrete.
- bb. ASTM C 618 Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete.
- cc. ASTM D 1751 Specification for Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).
- dd. ASTM E 119 Method for Fire Tests of Building Construction and Materials.

1.3 CONTRACTOR SUBMITTALS

A. Submittals shall be made in accordance with GENERAL REQUIREMENTS.

- B. The following submittals and specific information shall be provided.
 - Mix Designs: Prior to beginning the WORK, the CONTRACTOR shall submit to the ENGINEER, for review, and approval, preliminary concrete mix designs for each class and type of concrete specified herein. The mix designs shall be designed by an independent testing laboratory acceptable to the ENGINEER. All costs related to such mix design shall be borne by the CONTRACTOR.
 - a. Each concrete mix submittal shall contain the following information:
 - 1) Slump on which the design is based.
 - 2) Total gallons of water per cubic yard.
 - 3) Brand, type, composition and quantity of cement.
 - 4) Brand type, composition and quantity of fly ash.
 - 5) Specific Gravity and gradation of each aggregate.
 - 6) Ratio of fine to total aggregate per cubic yard.
 - 7) Weight (surface dry) of each aggregate per cubicyard.
 - 8) Brand, type, and ASTM designation, active chemical ingredients and quantity of each admixture.
 - Copy of the Building and Safety Research Report Approval for each concrete admixture.
 - 10) Air content.
 - 11) Compressive strength based on 7 day and 28 day compression tests, including standard deviation calculations, corroborative data (if applicable), and required average comprehensive strength per ACI 318, Section 5.
 - 12) Time of initial set.
 - 13) Certification stamp and signature by a Civil or Structural engineer registered in state of California.
 - 14) Certificate of Compliance for Cement.
 - 2. Certified Delivery Tickets: Where ready-mix concrete is used, the CONTRACTOR shall provide certified weighmaster delivery tickets at the time of delivery of each load of concrete. Each certificate shall show the public weighmaster's signature, and the total quantities, by weight of cement, sand, each class of aggregate, admixtures, and the amounts of water in the aggregate and added at the batching plant as well as the amount of water allowed to be added at the site for the specific design mix. Each certificate shall, in addition, state the mix number, total yield in cubic yards, and the time of day, to the nearest minute, corresponding to when the batch was dispatched, when it left the plant, when it arrived at the job, the time that unloading began, and the time that unloading was finished.
 - 3. When a water reducing admixture is to be used, the CONTRACTOR shall furnish mix designs for concrete both with and without the admixture.
 - The CONTRACTOR shall furnish a Certificate of Compliance signed by the supplier identifying the type of fly ash and stating that the fly ash complies with ASTM C 618

and these Specifications, together with all supporting test data prior to the use of the fly ash the sample represents. The supporting data shall also contain test results confirming that the fly ash in combination with the cement and water to be used meets all strength requirements and is compatible with air-entraining agents and other admixtures.

5. The CONTRACTOR shall submit to the ENGINEER for review the design mix for fly ash concrete together with the design mix for portland cement (non-fly ash) concrete as specified in this Section.

1.4 QUALITY ASSURANCE

- A. Testing for Portland Cement Concrete shall be sampled and tested in accordance with the Standard Specifications for Public Works Construction, Latest Edition, Section 201-1.1.5.
- B. Samples for strength tests of each class of concrete placed each day shall be taken not less than once a day, or not less than once for each 50 cubic yards of concrete, or not less than once for each 2,000 square feet of surface area for slabs. Additional samples for seven-day compressive strength tests shall be taken for each class of concrete at the beginning of the concrete work or whenever the mix or aggregate is changed.
- C. Concrete for testing shall be supplied by the CONTRACTOR at no cost to the Owner, and the CONTRACTOR shall provide assistance and facilities to the INSPECTOR in obtaining samples, and disposal and cleanup of excess material.
- Curbs and gutters shall be staked by a Land Surveyor licensed to practice in the State of California.
- E. Job Mock-Up
 - General
 - a. Make samples on-site; revise as required; obtain Architect's approval, <u>10</u> days prior to casting finished work.
 - b. Finished work to match approved samples.
 - c. <u>Approved</u> sample may be incorporated into the work. Retain samples until completion of all concrete work.
 - d. Include typical tooled joint control in sample.
 - 2. Broom Finished Concrete; Exterior Flatwork: Provide sample, 20 s.f. minimum area.
 - 3. "Sacked" Vertical Surface; Exterior Wall: Provide sample, 5 sf. minimum area.
- F. Construction Tolerances: The CONTRACTOR shall set and maintain concrete forms and perform finishing operations so as to ensure that the completed work is within the tolerances specified herein. Surface defects and irregularities are defined as finishes and are to be distinguished from tolerances. Tolerance is the specified permissible variation from lines, grades, or dimensions shown. Where tolerances are not stated in the specifications, permissible deviations will be in accordance with ACI347.
- G. Construction tolerances shall not violate dimensions, grades, slopes required by CBC for accessibility requirements. Adjust work accordingly to comply with requirements.
- H. The following construction tolerances are hereby established and apply to finished walls and slab unless otherwise shown:

Item	Tolerance

I.

Variation of the constructed linear outline

from the established position in plan.

Variation from the level or from the grades In 10 feet: 1/4-inch;

shown.

Variation from the plumb In 10 feet: 1/4-inch;

Variation in the thickness of slabs and walls.

Minus 1/8-inch;

Plus 1/4-inch

Variation in the locations and sizes of slabs

and wall openings.

Plus or minus 1/8-inch

In 10 feet: 1/4-inch;

PART 2 - PRODUCTS

2.1 CONSTRUCTION MATERIALS

- A. Materials shall be delivered, stored, and handled so as to prevent damage by water or breakage. Only one brand of cement shall be used. Cement reclaimed from cleaning bags or leaking containers shall not be used. All cement shall be used in the sequence of receipt of shipments.
- B. All materials furnished for the work shall comply with the requirements of Sections 201, 203, and 204 of ACI 301, as applicable.
- C. Storage of materials shall conform to the requirements of Section 205 of ACI 301.
- D. Form Materials: Plywood, metal, metal-framed plywood, or other acceptable panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces. Conform to Section 303-5.2 of the Standard Specifications.
 - 1. Use flexible or curved forms for curves of a 100-foot or less radius.
- E. Reinforcing Materials: As follows:
 - Steel Reinforcing Bars: ASTM A 615 deformed grade 40 billet steel, plain finish, unless otherwise specified on Construction Document. Fabrication, sampling and jobsite handling shall conform to the requirements in ASTM Designation: D 3963, except the 2 samples shall be 30 inches long.

Dowels:

- a. Dowel bars shall be plain round smooth conforming to the requirements in ASTM Designation: A 615/A 615M, Grade 40 except that the two samples required in ASTM Designation: D 3963/D 3963M shall be 18 inches long. Dowel bars shall be free from burrs or other deformations detrimental to free movement of the bars in the concrete
- b. Dowel bars shall be lubricated with a bond breaker over the entire bar. A bond breaker application of petroleum paraffin based lubricant or white- pigmented curing compound shall be used to coat the dowel bars completely prior to placement. Oil and asphalt based bond breakers shall not be used. Paraffin based lubricant shall be Dayton Superior DSC BB-Coat or Valvoline Tectyl 506 or an approved equal. Paraffin based lubricant shall be factory applied. White pigmented curing compound shall conform to the requirements of ASTM Designation: C 309, Type 2, Class A,

and shall contain 22 percent minimum nonvolatile vehicles consisting of at least 50 percent paraffin wax. Curing compound shall be applied in 2 separate applications, the last application not more than 8 hours prior to placement of the dowel bars. Each application of curing compound shall be applied at the approximate rate of one gallon per 15 square yards.

- 3. Epoxy for bonding tie bars and dowel bars to portland cement concrete shall be a two-component, epoxy-resin, conforming to the requirements of ASTM Designation: C 881, Type V, Grade 3 (Non-Sagging), Class B or C. The class used shall be dependent on the internal temperature of the hardened concrete at the time the epoxy is to be applied. Class B shall be used when the internal temperature is from 40 °F to 60 °F. Class C shall be used when the internal temperature is above 60 °F, but not higher than recommended by the manufacturer. A copy of the manufacturer's recommended installation procedure shall be provided to the Engineer at least 7 days prior to the start of work. Epoxy shall be applied in conformance with the manufacturer's recommendations.
 - Simpson Strong-Tie Set-XP Epoxy Adhesive (or approved equal) ICC-ES ESR-2508.

F. Concrete Materials: As follows:

- 1. Cement shall be standard brand portland cement conforming to ASTM C 150 for Type II. Portland cement shall contain not more than 0.60 percent alkalies. The term "alkalies" referred to herein is defined as the sum of the percentage of sodium oxide and 0.658 times the percentage of potassium oxide (Na20 + 0.658 K20). These oxides shall be determined in accordance with ASTM C 114. A single brand of cement shall be used throughout the work, and prior to its use, the brand shall be acceptable to the ENGINEER. The cement shall be suitably protected from exposure to moisture until used. Cement that has become lumpy shall not be used. Sacked cement shall be stored in such a manner so as to permit access for inspection and sampling. Certified mill test reports for each shipment of cement to be used shall be submitted to the INSPECTOR.
- 2. Concurrent with strength design criteria, concrete shall also be proportioned to provide the requisite durability to satisfy the exposure conditions imposed by either environment and/or service. Durability, in this context, refers to the ability of the concrete to resist deterioration from the environment or service in which it is placed. Concrete proportioned in accordance with ACI 318, chapter 4, Durability Requirements, will meet this criteria.
- Combined Aggregate: 1" maximum coarse aggregate size conforming to Grading C of Standard Specifications Section 201-1.3.2(A). Aggregates shall be obtained from pits acceptable to the INSPECTOR, shall be non-reactive, and shall conform to ASTM C 33.
- 4. Water: Shall be potable, clean, and free from objectionable quantities of silty organic matter, alkali, salts and other impurities. The water shall be considered potable, for the purposes of this Section only, if it meets the requirements of the local governmental agencies.
- 5. "Pea gravel" mix is not acceptable, unless specifically approved in writing by the Civil Engineer of Record prior to construction.

G. Admixtures:

1. The ENGINEER may require the use of admixtures or the CONTRACTOR may propose to use admixtures to control the set, effect water reduction, and increase workability. In either case, the addition of an admixture shall be at the

CONTRACTOR's expense. The use and continued use of an admixture shall be approved by the ENGINEER. Admixtures specified herein, other than calcium chloride, shall conform to the requirements of ASTM C 494. The required quantity of cement shall be used in the mix regardless of whether or not an admixture is used. Admixtures shall contain no free chloride ions, be non-toxic after 30 days, and shall be compatible with and made by the same manufacturer as the air entraining admixture.

- These admixtures shall not be used in greater doses than those recommended by the manufacturer or permitted by the ENGINEER. The permitted dosage of the admixture shall not exceed that which will result in an increase in the driving shrinkage of the concrete in excess of 20 percent when used in precast or prestressed concrete, or 10 percent when used in any other structural concrete. The strength of concrete containing the admixture in the amount of proposed shall, at the age of 48 hours and longer be not less than that of similar concrete without the admixture. The admixture shall not adversely affect the specified air content, unless permitted by the ENGINEER.
- 3. Set controlling admixture shall be either with or without water-reducing properties. Where the air temperature at the time of placement is expected to be consistently over 80 degrees F, a set retarding admixture such as [Sika Chemical Corporation's Plastiment], [Master Builder's Pozzolith 300R], or equal shall be used. Where the air temperature at the time of placement is expected to be consistently under 40 degrees F, a set accelerating admixture such as [Sika Chemical Corporation's Plastocrete 161FL], [Master Builder's Pozzolith 50C], or equal shall be used.
- 4. Low range water reducer shall conform to ASTM C 494, Type A. It shall be either a hydroxylated carboxylic acid type or a hydroxylated polymer type. The quantity of admixture used and the method of mixing shall be in accordance with the manufacturer's instructions and recommendations.
- High range water reducer shall be sulfonated polymer conforming to ASTM C 494,
 Type F or G.
 - a. If the high range water reducing agent is added to the concrete at the batch plant, it shall be second generation type, [Daracem 100, as manufactured by W.R. Grace & Co.]; [Pozzolith 430R, as manufactured by Masterbuilders]; or equal. High range water reducer shall be added to the concrete after all other ingredients have been mixed and initial slump has been verified.
 - b. If the high range water reducer is added to the concrete at the job site, it shall be used in conjunction with a low range water reducer and shall be [Pozzolith 400N and Pozzolith MBL82, as manufactured by Masterbuilders]; [WRDA 19 and WRDA 79, as manufactured by W.R. Grace & Co.]; or equal. Concrete shall have a slump of 3-inches ± 1/2-inch prior to adding the high range water reducing admixture at the job site. The high range water reducing admixture shall be accurately measured and pressure injected into the mixer as a single dose by an experienced technician. A standby system shall be provided and tested prior to each day's operation of the job site system.
- 6. Air-entraining agent meeting the requirements of ASTM C 260, shall be used. Sufficient air-entraining agent shall be used to provide a total air content of 3 to 4 percent; provided that, when the mean daily temperature in the vicinity of the worksite falls below 40 degrees F for more than one day, the total air content provided shall be 5 to 6 percent. The Owner reserves the right, at any time, to sample and test the air-entraining agent received on the job by the CONTRACTOR. The air-entraining agent shall be added to the batch in a portion of the mixing water.

The solution shall be batched by means of a mechanical batcher capable of accurate measurement.

- 7. Calcium Chloride: Except as otherwise provided herein, calcium chloride will not be permitted to be used in concrete.
- 8. Fly ash/pozzolan shall conform to ASTM C 618 and the following supplementary requirements:

a. Class F fly ash

o Loss on ignition, maximum 4 percent o S03 content, maximum 3 percent o Moisture content, maximum 1 percent

- b. Class F fly ash, as a percent by weight of total cementitious material, <u>shall not exceed 15 percent</u>
- c. When Sulfate Resistant or Special Exposure Concrete is specified, test results shall be submitted to the Engineer as specified in Section 2-5.3 of the Standard Specifications. The test result shall show that the fly ash to be used is effective in contributing to sulfate resistance in conformance with ASTM C618, Table 3 (optional physical requirements) as tested in accordance with ASTM C 1012. The data submitted shall be less than 6 months old.

H. Curing Materials:

- 1. Concrete curing compound shall conform to the requirements of ASTM C309 Type 1-D (clear or translucent with a fugitive dye), Class B (Resin Type Only), except the loss of water shall not exceed 0.15 kilograms per square meter in 24 hours nor 0.45 kilograms per square meter in 72 hours when tested in accordance with ASTM C 156. The CONTRACTOR shall provide, when requested by the ENGINEER, certified copies of vendor's test report showing compliance with ASTM C 309 and these specifications. The testing and the report shall be supplied without cost to the Agency. All compounds shall be furnished by the CONTRACTOR in sealed original containers labeled in accordance with ASTM C 309 and with the date of manufacture.
- Polyethylene sheet for use as concrete curing blanket shall be white and conform to ASTM C 171. The loss of moisture when determined in accordance with the requirements of ASTM C 156 shall not exceed 0.055 grams per square centimeter of surface.
- Polyethylene-coated burlap for use as concrete curing blanket shall conform to ASTM C 171. The loss of moisture, when determined in accordance with the requirements of ASTM C 156, shall not exceed 0.055 grams per square centimeter of surface.

I. Expansion Joint Filler Material

- 1. Curb & Gutter: Nonextruding and Resilient Filler: Celotex "Flexcell", or approved equal, 1/4-inch thick material conforming to ASTM D1751.
- 2. Concrete Walk and Slab: Joint filler material shall be preformed expansion joint filler conforming to the requirements of ASTM D994. A Certificate of Compliance for the joint filler material shall be furnished to the Engineer. The certificate shall be accompanied with a certified test report of the results of the required tests performed on the joint filler material within the previous 12 months prior to proposed use. The

- certificate and accompanying test report shall be provided for each lot of joint filler material prior to use on the project.
- 3. Silicone Joint Sealant: Premium-grade, high-performance, moisture-cured, single-component, polyurethane-based, non-sag elastomeric sealant. Meets Federal specification TT-S-00230C. Meets ASTM C-920, Type S, Class 25 or 35; Grade NS, Use T or NT, Shore A Hardness (21 day) 35-45. A Certificate of Compliance for the silicone sealant shall be furnished to the Engineer. The Certificate shall also be accompanied with a certified test report of the results of the required tests performed on the sealant material within the previous 12 months prior to proposed use. The Certificate and accompanying test report shall be provided for each lot of silicone joint sealant prior to use on the project.
 - a. Sika Corporation, Sikaflex-1A.
 - b. Tremco, Inc., Dymonic.
 - c. Tremco, Inc., Vulkem 116.
 - d. Bostik Construction Products Div., Chem-Calk 900.
- 4. Zip-Top Control Joints: NOT PERMITTED.
- J. Related Materials: As follows:
 - 1. Damp-proofing agent shall be an asphalt emulsion, Sonneborn Hydrocide 660, or approved equal.
 - 2. Epoxy adhesives shall be the following products for the applications specified:
 - a. For bonding freshly-mixed, plastic concrete to hardened concrete, Sikadur Hi-Mod Epoxy Adhesive, as manufactured by Sika Chemical Corporation, or approved equal.
 - b. For bonding hardened concrete or masonry to steel, Sikadur Hi-Mod Gelor approved equal.
- K. Curbs / Curb & Gutter Mix Design: At a minimum, concrete for curbs and curbs & gutters shall conform to the Standard Specifications for Public Works Construction, Section 201- 1.1.2, mix class 520-C-2500.
 - 1. Compressive Strength: minimum of 2,500 psi at 28 days compressive strength.
 - 2. Slump Limit: 4 inches at point of placement.
 - 3. Cement per cu yard (sacks): 5.5 (minimum).
 - 4. Air Content: 4% +/- 1% percent
- L. Driveways, Flatwork & Swale Mix Design: At a minimum, concrete for driveways, flatwork areas, and swales shall conform to the Standard Specifications for Public Works Construction, Section 201-1.1.2, <u>mix class 560-C-3250</u>:
 - 1. Compressive Strength: minimum of 3,250 psi at 28 days compressive strength.
 - 2. Slump Limit: 4 inches at point of placement.
 - 3. Cement per cu yard (sacks): 6.0 (minimum).
 - 4. Air Content: 4% +/- 1% percent.

M. Slurry Mix Design:

- 1. Compressive Strength: 100 psi at min. 28 days compr. strength.
- Slump Limit: 5 inches at point of placement.
- 3. Cement per cu yard (sacks): 1.0
- 4. Aggregate Gradation: "E" per S.S.P.W.C. table 201-1.3.2(A).
- 5. Air Content: 4% +/- 1% percent.

PART 3 - EXECUTION

3.1 PREPARATION OF SURFACES FOR CONCRETING

- A. General: Earth surfaces shall be thoroughly wetted by sprinkling, prior to the placing of any concrete, and these surfaces shall be kept moist by frequent sprinkling up to the time of placing concrete thereon. The surface shall be free from standing water, mud, and debris at the time of placing concrete.
- B. Subgrade Preparation:
 - It is required that the undocumented fill material, below the concrete pavement, be over excavated to the recommended minimum depth of 5 feet, brought to near optimum moisture content and rolled with heavy compaction equipment. Soil should be re-compacted to at least 90% of the maximum dry density obtainable by ASTM D1557 method of compaction.
 - 2. It is required that the exposed bottom surface soils, below over-excavation, be scarified to the recommended depth of 8" (inches), brought to near optimum moisture content and rolled with heavy compaction equipment. Exposed soil should be compacted to at least 90% of the maximum dry density obtainable by ASTM D1557 method of compaction.
- C. The compacted surface shall be firm, hard and unyielding. The term "firm, hard and unyielding" as used in S.S.P.W.C. Section 301-1.3 shall mean that when the heaviest construction and hauling equipment used on the project drives over the subgrade, no permanent deformation shall occur either before or during pavement construction. On areas where the underlying material appears to be wet or soft, or where it deflects under wheel loads, the Contractor shall employ excavation and work techniques which do not worsen the subgrade condition.
- D. The above subgrade preparation recommendations are based on the assumption that soils encountered during field exploration are representative of soils throughout the site. However, there can be unforeseen and unanticipated variations in soils between points of subsurface exploration. For this reason, the actual scarification depths will have to be determined on the basis of in-grading observations and testing performed by representatives of the project geotechnical consultant.
- E. A California Licensed Surveyor (LS) must provide grade stakes and elevations for the Geotechnical Engineer to verify that the over-excavation depths, shown on the construction drawings for concrete pavement structural sections, have been achieved prior to recompaction.
- F. Joints in Concrete: Concrete surfaces upon or against which concrete is to be placed, where the placement of the old concrete has been stopped or interrupted so that, as determined by the ENGINEER, the new concrete cannot be incorporated integrally with that previously placed, are defined as construction joints. The surfaces of horizontal joints shall

be given a compacted, roughened surface for good bond. Except where the Drawings call for joint surfaces to be coated, the joint surfaces shall be cleaned of all laitance, loose or defective concrete, and foreign material. Such cleaning shall be accomplished by sandblasting followed by thorough washing. All pools of water shall be removed from the surface of construction joints before the new concrete is placed.

- G. Embedded Items: No concrete shall be placed until all formwork, installation of parts to be embedded, reinforcement steel, and preparation of surfaces involved in the placing have been completed and ACCEPTED by the INSPECTOR at least 24 hours before placement of concrete. All surfaces of forms and embedded items that have become encrusted with dried grout from concrete previously placed shall be cleaned of all such grout before the surrounding or adjacent concrete is placed.
- H. All inserts or other embedded items shall conform to the requirements herein.
- I. All reinforcement, anchor bolts, sleeves, inserts, and similar items shall be set and secured in the forms where shown or by shop drawings and shall be acceptable to the INSPECTOR before any concrete is placed. Accuracy of placement is the responsibility of the CONTRACTOR.
- J. Where concrete is to be cast against old concrete, (greater than 60 days of age), the surface of the old concrete shall be thoroughly cleaned and roughened by sand-blasting, exposing the aggregate. In concrete shear-walls, suspended slabs and roof slabs, the interface surface at construction joints shall be roughened to a full amplitude of one quarter inch. The hardened surface shall be cleaned of all latent foreign material and washed clean, prior to the application of an epoxy bonding agent.
- K. No concrete shall be placed in any structure until all water entering the space to be filled with concrete has been properly cut off or has been diverted by pipes, or other means, and carried out of the forms, clear of the work. No concrete shall be deposited underwater nor shall the CONTRACTOR allow still water to rise on any concrete until the concrete has attained its initial set. Water shall not be permitted to flow over the surface of any concrete in such manner and at such velocity as will injure the surface finish of the concrete. Pumping or other necessary dewatering operations for removing ground water, if required, will be subject to the review of the ENGINEER.
- L. Corrosion Protection: Pipe, conduit, dowels, and other ferrous items required to be embedded in concrete construction shall be so positioned and supported prior to placement of concrete that there will be a minimum of 2-inches clearance between said items and any part of the concrete reinforcement. Securing such items in position by wiring or welding them to the reinforcement will not be permitted.
- M. Openings for pipes, inserts for pipe hangers and brackets, and the setting of anchors shall, where practicable, be provided for during the placing of concrete.
- N. Anchor bolts shall be accurately set, and shall be maintained in position by templates while being embedded in concrete.
- O. Cleaning: The surfaces of all metalwork to be in contact with concrete shall be thoroughly cleaned of all dirt, grease, loose scale and rust, grout, mortar, and other foreign substances immediately before the concrete is placed.

3.2 HANDLING, TRANSPORTING, AND PLACING

- A. General: Placing of concrete shall conform to the applicable requirements of ACI 301 and the requirements of this Section.
- B. The total elapsed time between the addition of water at the batch plant and the completion of the discharge of the P.C.C. from the mixer shall not exceed 90 minutes. All P.C.C. remaining

in the mixer after said 90-minute time limit shall be rejected and removed from the project site.

- C. Non-Conforming Work or Materials: Concrete which upon or before placing is found not to conform to the requirements specified herein shall be rejected and immediately removed from the work. Concrete which is not placed in accordance with these Specifications, or which is of inferior quality, shall be removed and replaced by and at the expense of the CONTRACTOR.
- D. Whenever batch trucks or other paving equipment cause rutting of the subgrade or subbase in concrete placement areas, inspectors shall immediately stop construction. Construction shall not be allowed to resume until distorted subgrade or subbase is repaired. Contractors and inspectors should locate by proof rolling, any questionable unstable areas in advance to avoid distortion under equipment. Wet, unstable areas must be dried out or replaced before starting placement of asphalt. Locating wet or soft areas in advance can be accomplished by testing finished subgrade or subbase with a loaded truck. Construction of concrete pavement should not proceed unless testing gives a reasonable indication that distortions will not occur during construction of overlying pavement. When repair, aeration, and recompaction are required to correct damage from Contractor's operation, all necessary repair will be done at Contractor's expense. However, if the Engineer determines that additional depth of aeration and recompaction are needed, that should be paid by change order.
- E. All pull boxes, meter boxes, valve covers and manholes shall be adjusted to proposed finish grade prior to placement of the P.C.C.
- F. Concrete shall not be placed until the forms and reinforcement have been inspected, all preparations for the placement have been completed, and the preparations have been checked by the project inspector, all subject to the observation of the engineer or architect.
- G. Casting New Concrete Against Old: An approved epoxy adhesive bonding agent shall be applied to the old surfaces according to the manufacturer's written recommendations. This provision shall not apply to joints where waterstop is installed.
- H. Conveyor Belts and Chutes: All ends of chutes, hopper gates, and all other points of concrete discharge throughout the CONTRACTOR'S conveying, hoisting and placing system shall be so designed and arranged that concrete passing from them will not fall separated into whatever receptacle immediately receives it. Conveyor belts, if used, shall be of a type acceptable to the INSPECTOR. Chutes longer than 50 feet will not be permitted. Minimum slopes of chutes shall be such that concrete of the specified consistency will readily flow in them. If a conveyor belt is used, it shall be wiped clean by a device operated in such a manner that none of the mortar adhering to the belt will be wasted. All conveyor belts and chutes shall be covered. Sufficient illumination shall be provided in the interior of all forms so that the concrete at the places of deposit is visible from the deck or runway.
- I. Placement in Slabs: Concrete placed in sloping slabs shall proceed uniformly from the bottom of the slab to the top, for the full width of the pour. As the work progresses, the concrete shall be vibrated and carefully worked around the slab reinforcement, and the surface of the slab shall be screeded in an up-slope direction.
- J. Temperature of Concrete: The temperature of concrete when it is being placed shall be not more than 90 degrees F nor less than 40 degrees F in moderate weather, and not less than 50 degrees F in weather during which the mean daily temperature drops below 40 degrees F. Concrete ingredients shall not be heated to a temperature higher than that necessary to keep the temperature of the mixed concrete, as placed, from falling below the specified minimum temperature. If concrete is placed when the weather is such that the temperature of the concrete would exceed 90 degrees F, the CONTRACTOR shall employ effective means, such as precooling of aggregates and mixing water using ice or placing at night, as necessary to maintain the temperature of the concrete, as it is placed, below 90 degrees F.

The CONTRACTOR shall be entitled to no additional compensation on account of the foregoing requirements.

- K. Cold Weather Placement: Earth foundations shall be free from frost or ice when concrete is placed upon or against them. Fly ash concrete shall not be placed when the air temperature falls below 50 degrees F.
- L. A transverse construction joint shall be constructed, including dowel bars, at the end of each day's work or where concrete placement is interrupted for more than 30 minutes, to coincide with the next contraction joint location. If sufficient concrete has not been mixed to form a slab to match the next contraction joint, when an interruption occurs, the excess concrete shall be removed and disposed of back to the last preceding joint. The cost of removing and disposing of excess concrete shall be at the Contractor's expense. Excess material shall become the property of the Contractor and shall be disposed of. A metal or wooden bulkhead (header) shall be used to form the joint. The bulkhead shall be designed to accommodate the installation of dowel bars.
- M. Float Finish: Begin floating when bleed water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surfaces to true planes within a tolerance of 1/4 inch in 10 feet as determined by a 10-foot-long straightedge placed anywhere on the surface in any direction. The finished surface shall be free from humps, sags, blemishes or other irregularities Cut down high spots and fill low spots. Refloat surface immediately to a uniform granular texture.

N. Broom Finish Type:

- 1. <u>Surfaces Sloped Less than 6%</u>: Provide a medium salt (medium broom) finish by drawing a soft bristle broom across concrete surface, perpendicular to line of traffic, to provide a uniform fine line texture.
- 2. <u>Surfaces Sloped greater than 6%</u>: Provide a slip resistant (heavy broom finish) by striating surface 1/16 inch to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

O. Joints:

- 1. Joints: Joints in concrete curb, gutter, and walk shall be designated as expansion joints and control joints. Joints for concrete flatwork shall be provided as shown on the plans. Expansion joints for swales, curbs / curb & gutter shall be placed at no greater than 30 feet on center or as indicated on construction drawings.
 - Expansion Joints: Provide 1/2" premolded joint filler, material meeting Section 2.011 herein. Construct expansion joints in conformance with Standard Specification Section 303-5.4.2 and the details on the construction documents.
 - 1) Extend expansion joint fillers full-width and depth of joint, and 1/4" below finished surface where joint filler is indicated. If no joint sealer is called for, place top of premolded joint filler flush with top of concrete or curb.
 - 2) Where silicone joint sealer is noted on the construction documents, the premolded joint filler strips shall be placed 1" below the surface of the concrete or curb, the full width of the expansion joint. The remainder of all joints shall be filled to within 1/4" below the surface of the concrete with the silicone joint sealant.
 - 3) Provide expansion joint filler strips, with elastomeric sealer, between p.c.c. walk and curb, p.c.c. walk and buildings, & p.c.c. walk and

retaining walls and at locations noted on the construction documents. The depth of the filler strip shall be the depth of the p.c.c. walk plus 1 inch with the top set flush with the specified grade of the top of curb or walk.

b. Control Joints:

- 1) Control joints in site work concrete shall comply with Standard Specification Section 302-6.5.4, except that the configuration of the joint, shall be as indicated on the construction documents.
- 2) Control joints in concrete curbs, sidewalks and gutters shall comply with Standard Specification Section 303-5.4.3, except that the joint configuration shall be as indicated below.
- 3) Location: As shown on construction documents, but in any case not more than ten (10) feet O.C. both ways in concrete sidewalks. In swales and gutters, including gutter integral with curb, joints shall be at regular intervals not exceeding ten (10) feet. Where integral curb and gutter is adjacent to concrete pavement, the joint shall be aligned with the pavement joints where practical.
- P. Protection: In hot, dry, and windy weather protect concrete from rapid moisture loss before and during finishing operations with an evaporation-control film. Apply according to manufacturer's instructions after screeding and bull floating, but before floating.

3.3 LIGHT STANDARD BASES, FLAGPOLE BASES, POST BASES AND SIMILAR SITE STRUCTURES

- A. Forms: Suitable material and type, size, shape, quality and strength to insure construction as designed, true to line and sufficiently rigid to resist deflection during placing of concrete. Clean forms of all dirt, mortar and foreign matter before use.
- B. Reinforcement: Place accurately and hold in position, using metal chairs, spacers, metal hangers, supporting wires and other devices of sufficient strength to resist crushing under full load. Clean reinforcing steel of mortar, oil, dirt, loose mill scale loose or thick rust and coatings.
- C. Coordinate installation of conduits, cast in place items and other inserts.
- D. Finish: Grind or sack as required as determined by the Architect to produce a smooth, straight, plumb and acceptable finish without burrs or form marks. For horizontal surfaces: provide float finish.
- E. Curing: Cure surfaces utilizing one of the following methods:
 - 1. Spraying: Spray water over slab areas and maintain wet for 7 days.
 - Spread polyethylene film over slab areas, lapping edges and sides, minimum 6 inches and sealing with pressure sensitive tape; cover with plywood or otherwise protect film from damage; maintain in place for 7 days.
 - 3. Apply liquid curing compound at rate of 200 square feet per gallon, using power sprayer equipped with agitator. Do not apply liquid curing compound to surfaces scheduled to receive paving units or finish of anykind.

3.4 TAMPING AND VIBRATING

A. As concrete is placed in the forms or in excavations, it shall be thoroughly settled and compacted, throughout the entire depth of the layer which is being consolidated, into a

dense, homogeneous mass, filling all corners and angles, thoroughly embedding the reinforcement, eliminating rock pockets, and bringing only a slight excess of water to the exposed surface of concrete during placement. Vibrators shall be high speed power vibrators (8000 to 10,000 rpm) of an immersion type in sufficient number and with (at least one) standby units as required.

- B. Care shall be used in placing concrete around waterstops. The concrete shall be carefully worked by rodding and vibrating to make sure that all air and rock pockets have been eliminated. Where flat-strip type waterstops are placed horizontally, the concrete shall be worked under the waterstops by hand, making sure that all air and rock pockets have been eliminated. Concrete surrounding the waterstops shall be given additional vibration, over and above that used for adjacent concrete placement to assure complete embedment of the waterstops in the concrete.
- C. Concrete in walls shall be internally vibrated and at the same time rammed, stirred, or worked with suitable appliances, tamping bars, shovels, or forked tools until it completely fills the forms or excavations and closes snugly against all surfaces. Subsequent layers of concrete shall not be placed until the layers previously placed have been worked thoroughly as specified. Vibrators shall be provided in sufficient numbers, with standby units as required, to accomplish the results herein specified within 15 minutes after concrete of the prescribed consistency is placed in the forms. The vibrating head shall be kept from contact with the surfaces of the forms. Care shall be taken not to vibrate concrete excessively or to work it in any manner that causes segregation of its constituents.

3.5 CURING

- A. Comply with 2013 California Building Code, Title 24, Part 2, Volume 2, Section 1905A.11.
 - 1. Begin final curing procedures immediately following initial curing and before concrete has dried. Continue final curing for at least seven (7) days in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.
- B. Curing Methods: Perform curing of concrete by curing as herein specified.
 - 1. Provide moisture-curing by the following methods:
 - a. Keep concrete surface continuously wet by covering with water.
 - b. Continuous water-fog spray.
 - c. Covering concrete surface with specified absorptive cover, thoroughly saturating cover with water and keeping continuously wet. Place absorptive cover to provide coverage of concrete surfaces and edges, with 4 inch lap over adjacent absorptive covers.
 - Provide curing and sealing compound to exposed exterior slabs, walks, and curbs, as follows:
 - a. Apply specified curing and sealing compound to concrete slabs as soon as final finishing operations are complete (within 2 hours). Apply uniformly in continuous operation by power-spray or roller in accordance with manufacturer's directions. Re-coat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - b. Do not use membrane curing compounds on surfaces which are to be covered with coating material applied directly to concrete, liquid, floor hardener, waterproofing, dampproofing, membrane roofing, flooring (such

as ceramic or quarry tile, glue-down carpet), painting, and other coatings and finish materials, unless otherwise acceptable to Architect.

- C. Concrete slabs and paving shall be properly cured and protected against damage and defacement of nature during construction operations. If weather is hot or surface has dried out, spray surface with fine mist of water starting not later than two hours after final troweling. Surface of finish shall be kept continuously wet for at least ten days. Wetting is considered emergency work and shall be performed on weekends and holidays if necessary.
- D. Concrete Sealer Application: Apply specified concrete sealer in continuous operation in accordance with manufacturer's instructions and recommendations.
 - 1. Prior to starting application, protect adjoining Work, including sealant bond surfaces, from spillage or blow-over of concrete sealer.
 - a. Cover adjoining and nearby surfaces of aluminum and glass where there is the possibility of the concrete sealer being deposited onsurfaces.
 - b. Cover live plants and grass.
 - c. Immediately clean concrete sealer from adjoining surfaces, complying with manufacturer's cleaning recommendations.
 - Apply concrete sealer under temperature conditions according to manufacturer's instructions.
 - 3. Apply concrete sealer in light, even coats using garden sprayer, airless sprayer or paint brush.
 - 4. Apply concrete sealer at rate to suit porosity of portland cement concrete but not less than no more than coverage rates recommended by manufacturer for effective sealing of surface.
- E. The CONTRACTOR shall protect all concrete against injury or damage from excessive heat, lack of moisture, overstress, or any other cause until final acceptance by the Owner. Particular care shall be taken to prevent the drying of concrete and to avoid roughening or otherwise damaging the surface. Any concrete found to be damaged, or which may have been originally defective, or which becomes defective at any time prior to the final acceptance of the completed work, or which departs from the established line or grade, or which, for any other reason, does not conform to the requirements of the Contract Documents, shall be satisfactorily repaired or removed and replaced with acceptable concrete at the CONTRACTOR'S expense. Exclude traffic from concrete paving for at least 7 days after placement.
- F. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep concrete paving not more than 2 days prior to date scheduled for Substantial Completion inspections.

3.6 PUMPING OF CONCRETE

- A. General: If the pumped concrete does not produce satisfactory end results, the CONTRACTOR shall discontinue the pumping operation and proceed with the placing of concrete using conventional methods.
- B. Pumping Equipment: The pumping equipment must have 2 cylinders and be designed to operate with one cylinder only in case the other one is not functioning. In lieu of this requirement, the CONTRACTOR may have a standby pump on the site during pumping.
- C. The minimum diameter of the hose (conduits) shall be 4-inches.

- D. Pumping equipment and hoses (conduits) that are not functioning properly, shall be replaced.
- E. Aluminum conduits for conveying the concrete will not be permitted.
- F. Proportioning: Minimum compressive strength, cement content, and maximum size of aggregates shall be as specified herein.
- G. Gradation of coarse aggregates shall conform to ASTM C 33 and shall be as close to the middle range as possible.
- H. Gradation of fine aggregate shall conform to ASTM C 33, with 15 to 30 percent passing the number 50 screen and 5 to 10 percent passing the number 100 screen. The fineness modulus of sand used shall not be over 3.00.
- I. Water and slump requirements shall conform to the requirements of this Section.
- J. Cement and admixtures shall conform to the requirements of this Section.
- K. Field Control: Concrete samples for slump per ASTM C 143 and test cylinders per ASTM C 31 and C 39.

3.7 TREATMENT OF SURFACE DEFECTS

- A. As soon as forms are removed, all exposed surfaces shall be carefully examined and any irregularities shall be immediately rubbed or ground in a satisfactory manner in order to secure a smooth, uniform, and continuous surface. Plastering or coating of surfaces to be smoothed will not be permitted. No repairs shall be made until after inspection by the ENGINEER. In no case will extensive patching of honeycombed concrete be permitted. Concrete containing minor voids, holes, honeycombing, or similar depression defects shall have them repaired as specified herein. Concrete containing extensive voids, holes, honeycombing, or similar depression defects, shall be completely removed and replaced.
 - 1. All repairs and replacements herein specified shall be promptly executed by the CONTRACTOR at its own expense.
- B. Defective surfaces to be repaired shall be cut back from trueline a minimum depth of 1/2- inch over the entire area. Feathered edges will not be permitted. Where chipping or cutting tools are not required in order to deepen the area properly, the surface shall be prepared for bonding by the removal of all laitance or soft material, and not less than 1/32-inch depth of the surface film from all hard portions, by means of an efficient sandblast. After cutting and sandblasting, the surface shall be wetted sufficiently in advance of shooting with shotcrete or with cement mortar so that while the repair material is being applied, the surfaces under repair will remain moist, but not so wet as to overcome the suction upon which a good bond depends. The material used for repair purposes shall consist of a mixture of one sack of cement to 3 cubic feet of sand. For exposed walls, the cement shall contain such a proportion of Atlas white portland cement as is required to make the color of the patch match the color of the surrounding concrete.
- C. Holes left by tie-rod cones shall be reamed so as to leave the surfaces of the holes clean and rough. These holes then shall be repaired in an approved manner with non-shrink grout. Holes left by form-tying devices having a rectangular cross-section, and other imperfections having a depth greater than their least surface dimension, shall not be reamed but shall be repaired in an approved manner with non-shrink grout.
- D. All repairs shall be built up and shaped in such a manner that the completed work will conform to the requirements of this Section, as applicable, using approved methods which will not disturb the bond, cause sagging, or cause horizontal fractures. Surfaces of said

- repairs shall receive the same kind and amount of curing treatment as required for the concrete in the repaired section.
- E. Prior to filling any structure with water, all cracks that may have developed shall be repaired to the satisfaction of the ENGINEER. This repair method shall be done on the water bearing face of members. Prior to backfilling, faces of members in contact with fill, which are not covered with a waterproofing membrane, shall also have cracks repaired as specified herein.
- F. The finished surface shall be free from humps, sags, blemishes or other irregularities.

3.8 FIELD QUALITY CONTROL

- A. Correction of Mix Design for Failed Concrete Tests: If the compressive cylinder strength test for in place PCC yields test results below the specified 28-day PCC compressive strength and the Engineer determines a corrective change is necessary, the Contractor shall, at its own expense, make corrective changes in the mix proportions. The Engineer shall approve the changes in the mix proportions or PCC placement procedures, before any additional PCC is placed on the job.
- B. Flood Tests: Before final acceptance, and after concrete has thoroughly cured, all concrete pavement, including swales and curb & gutter, shall be water tested to ensure proper drainage as directed by the Inspector. The Contractor shall provide water for this purpose. The flooding shall be done by water tank truck. Concrete work where water ponds and does not run off in a reasonable amount of time (1-hour), shall be removed to the nearest score or joint line and replaced to provide proper drainage.

3.9 CARE AND REPAIR OF CONCRETE

- A. General: The CONTRACTOR shall protect all concrete against injury or damage from excessive heat, lack of moisture, overstress, or any other cause until final acceptance by the Owner. Particular care shall be taken to prevent the drying of concrete and to avoid roughening or otherwise damaging the surface. Any concrete found to be damaged, or which may have been originally defective, or which becomes defective at any time prior to the final acceptance of the completed work, or which departs from the established line or grade, or which, for any other reason, does not conform to the requirements of the Contract Documents, shall be satisfactorily repaired or removed and replaced with acceptable concrete at the CONTRACTOR'S expense.
- B. The contractor shall barricade and protect placed Portland Cement Concrete from all damage, marks, mars and/or graffiti. Any Portland Cement Concrete damaged, defaced, discolored or defective shall be replaced at the contractor's expense.

END OF SECTION

STABILIZED DECOMPOSED GRANITE SURFACING

SECTION 32 15 40

1. PART 1 - GENERAL

1.1 SUMMARY

A. Provide all decomposed granite surfacing work, complete.

1.2 REFERENCES

A. The publications listed below from a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 1557 1991 Laboratory Compaction

Characteristics of Soil Using Modified Effort

(55,000 ft-lb/ft (2,700 KN-M/m))

1.3 QUALITY CONTROL

A. Deliver one sample bag of the decomposed granite to the project site for approval by the District Construction Manager prior to delivery of the remainder.

2. PART 2 - PRODUCTS

2.1 MATERIALS

A. DECOMPOSED GRANITE OR 3/8-INCH MINUS CRUSHEDAGGREGATE SCREENINGS

- 1. Clean, non-plastic, free from deleterious or foreign matter, natural or manufactured from the crushing and screening of naturally friable granite. Blending of course sand with rock dust is not acceptable.
- 2. Crushed Stone Sieve Analysis Percentage of Weight Passing:

Square Mesh Sieve AASHTO T011-05-UL and T027-1111-UL

Conform to the grading requirements shown below:

SIEVE DESIGNATION	PERCENT PASSING
3/8"	100
No. 4	95-100
No. 8 (2.36 mm)	75-80
No. 16 (1.18 mm)	55-65
No. 30 <i>(0.600</i> mm)	40-50
No. 50 (0.300 mm)	25-35
No. 100 (0.150 mm)	15-20
No. 200 <0.07 5 mm)	10-15

Acceptable local supplier: KRC Rock Inc. Santee, CA (619) 443-8153 or Southwest Boulder & Stone, Fallbrook, California (760) 451-3333, or approved equal.

- WEED CONTROL FABRIC Acceptable Manufacturers: Note needle punched material is unacceptable.
 - 1. Typar #3401 thermally spunbonded polypropylene, not-woven, thin geotextile weed control fabric, 4.0 oz/lineal yard weight.
 - 2. Mirafi TenCate N Series, non-woven polypropylene geotextile.
 - 3. CSI Geotextile Fabric, polypropylene, non-woven, weed control fabric.

STABILIZED DECOMPOSED GRANITE SURFACING

C. STABILIZER

- 1. Provide a stabilizing organic non-toxic binder, buff in color and without a marked odor. The swell volume shall have a minimum of 35 ml/g with a minimum mucilliod content of 80 percent. The light extraneous matter shall not exceed a maximum of 20 percent with the heavy extraneous matter not exceeding 5 percent. The material shall be screened with 90-100 percent passing a 200 mesh sieve.
- 2. Natracil, or equal, provided by: KRC Rock Inc., Santee, California (619) 443-8153

3. PART 3 - EXECUTION

3.1 PLACING DECOMPOSED GRANITE

- A. All areas not otherwise surfaced shall receive a 4-inch layer (compacted thickness) of decomposed granite, unless indicated otherwise on the drawings.
- B. Evenly spread over entire areas to designated lines and grades; moisten or aerate to optimum moisture content, then compact to a 4-inch thickness with a 5 ton (or larger) roller to a dense firm surface (at least 90 percent maximum dry density, ASTM D 1557) smoothly finished and uniformly pitched. Correct high or low spots in excess of 0.20 inch above or below a 10 foot straight edge in any direction.

3.2 BLENDING STABILIZER

A. Blend a minimum 12 lbs. of Stabilizer per ton of decomposed granite or crushed 3/8" minus aggregate screenings. It is critical that Stabilizer be thoroughly and uniformly mixed throughout decomposed or crushed 3/8" minus aggregate screenings.

3.3 WEED CONTROL FABRIC

A. Fabric shall be installed between the compacted subgrade and crushed aggregate screenings to prevent weeds from growing up through the crushed stone trail; pre-emergent chemicals are to be used prior to installing fabric. Place fabric across the entire surface to receive aggregate; overlap ends of rolls a minimum of 6 inches.

3.4 CLEAN-UP

A. Clean-up spills and remove surplus materials to an off-site legal disposal area. Leave adjacent walks and paved areas broom clean.

END OF SECTION