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PROJECT MANUAL

FOR

RE-ROOFING AT RIVERBANK HIGH SCHOOL

OWNER:

Riverbank Unified School District
6715 7th Street
Riverbank, CA 95367
(209) 869-2538

ARCHITECT:

TPH Architects
519 McHenry Avenue
Modesto, CA 95354
(209) 571-2232

RE-ROOFING AT RIVERBANK HIGH SCHOOL
 FOR
 RIVERBANK UNIFIED SCHOOL DISTRICT
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RIVERBANK UNIFIED SCHOOL DISTRICT
6715 7th Street, Riverbank, CA 95367

NOTICE TO BIDDERS

Sealed bids for RE-ROOFING AT RIVERBANK HIGH SCHOOL, for RIVERBANK UNIFIED SCHOOL DISTRICT will be received in the District office of RIVERBANK UNIFIED SCHOOL DISTRICT, 6715 7th Street, Riverbank, CA 95367 until **April 28, 2026 at 2:00 p.m.**, at which time they will be opened and read.

Plans and Specifications are on file and may be viewed or downloaded from the website of Timothy P. Huff & Associates Inc., at <http://tpharchitects.com/bidding/>

A mandatory pre-bid job walk is scheduled for **April 21, 2026 at 2:00 p.m. at 6200 Claus Rd, Riverbank, CA 95367.** The pre-bid job walk must be attended by a Principal of the company proposing to submit a bid or an employee of the company who is a Construction Superintendent or a Project Manager. The bid of any Contractor not in attendance at the pre-bid job walk will not be accepted.

If further information is needed, call Jeff Morris, at (209) 571-2232.

Bids shall be submitted on forms included in the Bid Package.

The District has determined the general prevailing rate to be the per diem wages for each craft or type of workman or mechanic needed to execute this contract as set forth in the collective bargaining agreements for Stanislaus, San Joaquin, and Merced Counties, California. COMPLIANCE MONITORING: This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations, Office of the Labor Commissioner. Copies of all collective bargaining agreements relating to the work are on file and available for inspection in the office of the California Department of Industrial Relations, Division of Labor Statistics and Research, 455 Golden Gate Avenue, San Francisco, CA, 94102, (415-703-4780), <http://www.dir.ca.gov/dlsr/> .

In compliance with SB 854, no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

In addition, no contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

A valid C39 contractor's license will be required.

RIVERBANK UNIFIED SCHOOL DISTRICT reserves the right to waive any irregularity or informality in the bidding.

Published: April 12, 2026
April 19, 2026

LIST OF REQUIRED DOCUMENTS TO SUBMIT WITH BID

The following Items are to be included in all submitted bids:

1. Bid Bond.
2. Form of Proposal, including NonCollusion Affidavit.
3. Any Addendums or Clarifications that require an acknowledgment of receipt.

The following Items will be required by the Contractor upon acceptance of bid by School District

1. Performance Bond.
2. Payment Bond.
3. Article 20 Contractor's Guarantee, Page 38 of the General Conditions.
4. Article 31 Criminal History Clearance/Site Protection Certification, Page 39 pf the General Conditions.

Contract Form will be completed by the School District.

INSTRUCTIONS TO BIDDERS

Securing Documents:

Drawings and Specifications are available at: <http://tpharchitects.com/bidding/>.

Proposals:

Proposals to receive consideration shall be made in accordance with the following instructions:

1. Proposals shall be made on a form obtained from the Architect or Owner. All items on the form must be filled out. Numbers must be stated in figures, and the signatures of all individuals must be in longhand. The completed form must be without interlineation, alterations, or erasures.
2. No proposal will be considered which makes exceptions, changes, or in any manner makes reservations to the terms of the Contract Documents.
3. Questions regarding documents, discrepancies, omissions, or doubt as to meanings shall be referred immediately to the Architect who will send written instructions clarifying such questions to each bidder.
4. Each bid must give the full business address of the bidder and be signed by him and his usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and designation of the person signing.

Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below the signature. When requested by the Owner, satisfactory evidence of the authority of the officer signing in behalf of the corporation shall be furnished.

5. Contractor Registration: In compliance with SB 854, no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

In addition, no contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

6. Labor Compliance Requirements: This contract/project is subject to compliance monitoring and enforcement by the Department of Industrial Relations, Office of the Labor Commissioner.

Vendor/Contractor must comply with all labor compliance requirements including but not limited to prevailing wage, SB 854, Labor Code section 1771, 1771.1., 1774-1776, 1777.5, 1813 and 1815, as applicable.

1771.1. (a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

7. Pursuant to the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code of the State of California, every Bidder shall, in his bid, set forth:
 - A. The name, location of the place of business, Contractor's License Number, and DIR Registration Number of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the bidder, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in plans and specifications, in an amount in excess of one-half (1/2) of one percent (1%) of the bidder's total bid.
 - B. The portion of the work which will be done by each such subcontractor. Only one subcontractor shall be listed for each such portion of the work as defined in the bid. If the bidder fails to specify a subcontractor for each portion of the work to be performed under the contract in excess of one-half (1/2) of one percent (1%) of the bidder's total bid, he agrees to perform that portion himself. The successful bidder shall not, without the consent of the Owner either:
 - 1) Substitute any person as subcontractor in place of the subcontractor designated in the original bid.
 - 2) Permit any subcontractor to be assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the bid.
 - 3) Sublet or subcontract any portion of the work in excess of one-half (1/2) of one percent (1%) of the total bid as to which his original bid did not designate a subcontractor.

8. California Nonresident Vendors

- A. California nonresident vendors may be subject to a 7% withholding on payments over \$1500 annually who are paid for:
 - 1) Performing services in California,
 - 2) A rental/lease of property located in California,
 - 3) Rental/lease of machinery and equipment,
 - 4) Royalties.
- B. California nonresident vendors will be required to fully complete and provide the appropriate tax forms as required by the State of California Franchise Tax Board.
- C. California nonresident vendors will also be required to fully complete and provide a Form 587 or 590.
- D. All vendors will be required to fully complete and provide a Form W-9.

9. Proposals must be accompanied with a certified cashier's check, bank issued official check, or bidder's bond, for an amount not less than ten percent (10%) of the amount of the base bid. The certified cashier's check, bank issued official check, or bidder's bond shall be made payable to the order of RIVERBANK UNIFIED SCHOOL DISTRICT. If a bidder's bond accompanied the proposal, said bond shall be secured by a California based surety company satisfactory to RIVERBANK UNIFIED SCHOOL DISTRICT.

Said check or bond shall be given as a guarantee that the bidder will enter into the contract and furnish the necessary bonds and insurance if awarded the work, and in case of refusal or failure to enter into said contract, the check or bond, as the case may be, shall be payable to RIVERBANK UNIFIED SCHOOL DISTRICT and retained as liquidated damages.

10. Proposals shall be sealed and filed in the Purchasing Office, RIVERBANK UNIFIED SCHOOL DISTRICT, 6715 7th Street, Riverbank, CA 95367 no later than April 28, 2026 at 2:00 p.m.

Withdrawal of Proposals:

Proposals may be withdrawn by the bidder prior to the time fixed for the opening of bids.

Opening of Proposals:

Opening of proposals shall be as soon after the hour set as will be possible. Any and all bidders will be permitted to attend. The Board of Trustees is allowed sixty (60) days from that date in which to determine low bidder.

Examination of Contract Documents and Site:

Before submitting a proposal, bidders shall examine the contract documents. They shall visit the site of the proposed work, examine the building, or buildings, if any, and any work that may have been done thereon. They shall fully inform themselves of all conditions, in, at, and about the site, the building or buildings, if any, and any work that may have been done thereon.

Form of Contract:

The form of contract which the successful bidder will be required to execute, if awarded the work, is attached hereto and is made a part hereof. Such contract contains, among other things, matters required by State Law to be inserted in contracts for public work, including wage scale, hours of work per day, etc.

Addenda:

Any addenda or bulletins, issued during the time of bidding, shall form a part of the contract documents loaned to the bidder for the preparation of his proposal, shall be covered in the proposal, and shall be made a part of the contract.

Award of Contract:

Rejection of any or all proposals, to abandon work entirely or waiver of any informality in receiving of bids is reserved as the right of the Owner. Before the contract is awarded, the Board of Trustees may at his sole discretion, require from the proposed Contractor further evidence of the reasonable qualifications of such contractor to faithfully, capable, and reasonable perform such proposed contract and may consider such evidence before making its decision on the award of such proposed contract.

The contract shall be awarded to the lowest responsible bidder as interpreted by the Owner and specified herein and shall be entered into by the successful bidder within the (10) days after being notified by the Owner. Identity of lowest bidder will be determined by adding to or subtracting from the base bid the cost of such alternatives as Owner decided to include in the work and contract. The award, if made, will be made within sixty (60) days after the opening of the proposal.

Public Works Project Award Notification:

The PWC 100 form should be completed on-line by the Awarding Body. The completion and the submission of this form fulfills the required public works project award notification to both the Division of Apprenticeship Standards [Labor Code sec. 1773.3 (replacing former DAS-13 notification) and the Division of Labor Standards Enforcement Public Works Compliance Monitoring Unit [8 Cal. Code Reg. sec. 16451(a)].

Execution of Contract:

The Contract shall be signed by the successful bidder in duplicate counterpart and returned, together with the contract bonds and required insurance certificates, policies and endorsements within ten (10) days after the bidder has received notice that the contract has been awarded. Contractor and Owner shall sign a set of the contract documents for filing with the contract.

Contract Bonds:

Two bonds, as itemized below and in the forms presented in these contract documents, shall be furnished by the successful bidder at the time of entering into contract and filed with the Board of Trustees. They shall be in the form of surety bonds issued by corporations duly and legally licensed to transact business in the State of California, satisfactory to the Owner.

Performance Bond in the amount of one hundred percent (100%) of the contract sum to insure Owner during construction and for one year after completion against faulty or improper materials or workmanship and to assure Owner of full and prompt performance of contract and shall be secured from a California based surety or sureties satisfactory to the Owner.

Contractor's Bond (Labor and Material) in the amount of one hundred percent (100%) of the contract sum in accordance with the laws of the State of California to secure payment of any and all claims for labor and materials used or consumed in performance of this contract and shall be secured from a California based surety or sureties satisfactory to the Owner.

Payments:

Payments to the Contractor on account of the contract shall be made in accordance with the terms of the contract.

Certified Payroll:

All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).

These new requirements will apply to all public works that are subject to the prevailing wage requirements of the Labor Code, without regard to funding source.

Time of Completion and Liquidated Damages:

Time is of the essence in this contract, and all work called for herein and all requirements shall be completed within seventy-five (75) calendar days.

Should said work not be completed within the time limit as may be extended as herein provided, damages will be sustained by the Owner. It is understood and agreed that it is and will be impracticable or extremely difficult to determine the actual amount of damages which the Owner will sustain in the event of and by reason of such delay, and it is therefore agreed that the contractor will pay the Owner liquidated damages as specified in Article 8 of the General Conditions.

Partial Payments:

Once each month during the progress of the work, Contractor shall submit to Architect a progress payment request. The progress payment request shall be based on the approved bid breakdown for the cost of the work completed plus the acceptable materials delivered to the site or stored subject to the control of Contractor and not yet installed. The progress payment request shall be submitted on the monthly anniversary of the day selected by the Owner at job start meeting. Architect shall review and may certify as to the validity of the request. No progress payment shall be made without the certification of Architect. Progress payment requests shall be processed with a minimum of a five percent (5%) retention. This retention is part security for the fulfillment of the contract by Contractor. Progress payments shall not be construed as acceptance of any work which is not in accordance with the requirements of the contract.

END OF SECTION

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____
_____ as principal, and _____
_____ as Surety, are hereby held and firmly bound unto
RIVERBANK UNIFIED SCHOOL DISTRICT, hereinafter called the "Owner", in the sum of:

_____ Dollars
(\$ _____)

for payment of which sum, well and truly to be made, we hereby jointly and severally find ourselves, our heirs, executors, administrators, successors, and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner a certain bid, attached hereto and hereby made a part hereof, to enter into a contract in writing for the:

RE-ROOFING AT RIVERBANK HIGH SCHOOL
for
RIVERBANK UNIFIED SCHOOL DISTRICT

in strict accordance with Contract Documents.

NOW, THEREFORE,

- a. If said bid shall be rejected, or, in the alternate;
- b. If said bid shall be accepted and the Principal shall execute and deliver a contract in the form of agreement attached hereto and shall execute and deliver Performance and Contractor's Bonds in the forms attached hereto (all property completed in accordance with said bid), and shall in all other respects perform the agreement created by the acceptance of said bid;

Then this obligation shall be void, otherwise the same shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated. Surety, for value received, thereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract on the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in anyway affect its obligation 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 or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this bond by the Owner and judgment is recovered the Surety shall pay all costs incurred by the Owner in such suit, including a reasonable attorney's fee to be fixed by the court.

IN WITNESS WHEREOF, the above-bounden parties have executed this Instrument under their several seals this _____ day of _____, 2026 the name and corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In presence of:

_____ (Seal)

(Address)

(Business Address)

(Seal)

(Individual Principal)

(Address)

(Business Address)

Attest:

(Corporate Principal)

(Business Address)

By: _____
(Affix Corporate Seal)

The rate or premium on this bond is _____
per thousand. Total amount of premium charged, \$ _____ .

(This bond must be signed and acknowledged
by both Principal and Surety before a
Notary Public, and acknowledgments
with Notarial Seals attached hereto.)

Surety

By: _____
Attorney-in-fact

(The above must be filled in by Corporate Surety. Surety company must be California admitted insured.)

END OF SECTION

PAYMENT BOND
(Labor & Material)

KNOW ALL MEN BY THESE PRESENTS:

That WHEREAS,

and _____

Hereinafter designated as the "Principal," have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to:

RE-ROOFING AT RIVERBANK HIGH SCHOOL
for
RIVERBANK UNIFIED SCHOOL DISTRICT
6200 Claus Rd, Riverbank, CA 95367

Which said agreement dated _____, 2026, and all of the contract documents attached to or forming a part of said agreement, are hereby referred to and made a part hereof; and

WHEREAS, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by whom the contract is awarded to secure the claims arising under said agreement.

NOW, THEREFORE, THESE PRESENTS WITNESSETH:

That the said Principal and the undersigned _____
_____ as Corporate Surety, are held and firmly bound unto all laborers, material men, and other persons referred to in said statutes in the sum of

_____ Dollars
which sum well and truly be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The conditions of this obligation is that if the said Principal or any of his or its subcontractors, or the heirs, executors, administrators successors, or assigns of any, all, or either of them, shall fail to pay for any materials, provisions, provender or other supplies, or teams, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, that said Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay a reasonable attorney's fee to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporation entitled to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no charge, extension of time, alteration, or addition to the terms of said contract or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this _____ day of _____, 2026.

(To be signed by _____)
(Principal and Surety, _____)
(and acknowledged and _____)
(Notarial Seal Attached. _____)
Principal

Surety

By _____
(Attorney-in-fact)

The above bond is accepted and approved this _____ day of _____, 2026.

END OF SECTION

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____
_____, as Principal, and _____
_____, as Surety, are held and firmly bound unto RIVERBANK
UNIFIED SCHOOL DISTRICT, in the County of _____,
State of California, hereinafter called the "Owner", in the sum of

_____ Dollars
(\$ _____)

for the payment of which sum well and truly made, we bind ourselves, our heirs, executors,
administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the Principal entered into a certain contract
with the Owner, date _____, 2026 for:

RE-ROOFING AT RIVERBANK HIGH SCHOOL
for
RIVERBANK UNIFIED SCHOOL DISTRICT
6200 Claus Rd, Riverbank, CA 95367

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings,
covenants, terms, conditions, and agreements of said contract during the original term of said
contract and any extension thereof that may be granted by the Owner, with or without notice to the
Surety, and during the life of any guaranty required under the contract, and shall also well and truly
perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all
duly authorized modifications of said contract that may hereafter be made, then, this obligation to
be void, otherwise to remain in full force and virtue.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of
time, alternation or addition to the terms of the contract or to the work to be performed thereunder,
or the specifications accompanying the same, shall in anyway affect its obligation on this bond, and
it does hereby waive notice of any such change, extension of time, alteration or addition to the terms
of the contract, or to the work, or to the specifications.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their
several seals this _____ day of _____, 2026, the name and corporate seal of
each corporate party being hereto affixed and these presents duly signed by its undersigned
representative, pursuant to authority of its governing body.

In presence of:

(Individual Principal)	(Seal)
(Address)	(Business Address)

Attest:

	(Corporate Principal)
	(Business Address)
	By: _____
	(Affix Corporate Seal)

Attest:

	(Corporate Surety)
	(Business Address)
	By: _____
	(Affix Corporate Seal)

The rate or premium on this bond is _____ per thousand.

Total amount of premium charged, \$ _____ .

(The above must be filled in by Corporate Surety.)

END OF SECTION

FORM OF PROPOSAL

_____, California

_____, 2026

Board of Trustees
RIVERBANK UNIFIED SCHOOL DISTRICT
6715 7th Street, Riverbank, CA 95367

Members of the Board:

The undersigned doing business under the firm name of _____

_____ understands that the District may select from any line item(s) or combination of line items listed on the Base Bid. Furthermore, the undersigned, having carefully examined the Contract Documents, titled,

RE-ROOFING AT RIVERBANK HIGH SCHOOL

for

RIVERBANK UNIFIED SCHOOL DISTRICT

proposes to furnish all materials and labor called for by them for the entire work, including all taxes for the following amounts:

Base Bid: The undersigned proposes to perform **all** work as defined in the Plans and Specifications to construct the project and all appurtenant work thereto for the sum of:

_____ Dollars
(\$ _____).

If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within sixty (60) days after the date of opening of the bids, or any time thereafter before the bid is withdrawn, the undersigned will, within ten (10) days after the date of such mailing, telegraphing, or delivering of such notice, execute and deliver a contract in the form of agreement present in these contract documents and give Performance and Contractor's Bonds and insurance certificates, endorsements, and/or policies in accordance with the Contract Documents.

The Undersigned hereby designates as his office to which such notice of acceptance may be mailed, telegraphed, or delivered:

Our Public Liability and Property Damage Insurance is placed with:

Our Worker's Compensation Insurance is placed with:

Circular letters, addenda, etc., bound with specifications or issued during the time of bidding are included in the proposal, and, in completing the contract, they are to become part thereof.

The receipt of the following addenda to the specifications is acknowledged:

Addendum No.	_____	Date	_____
Addendum No.	_____	Date	_____
Addendum No.	_____	Date	_____

This bid may be withdrawn by the bidder at any time prior to the scheduled time for the opening of bids. The representations made herein are made under penalty of perjury.

Dated _____ ,

License No. _____

Expiration Date of License _____

By (please print) _____

Signed _____

Business Address _____

Telephone _____

Fax _____

Federal I.D# or Social Security #: _____

Department of Industrial Relations #: _____

Note: If Bidder is a corporation, write state of incorporation under signature, attach notarized proof of authority to bind corporation and list corporation officers; and, if a partnership, give full names of all partners. Use space below to record this information.

Do not include in the envelope any bids for other work.

DESIGNATION OF SUBCONTRACTORS

Contractor's Name: _____

In accordance with the provisions of Division 1, Chapter 4 of the Public Contract Code, known as the "Subletting and Subcontracting Fair Practices Act," the contractor signatory to this agreement shall be known as the prime contractor of the work herein specified, and he shall set forth in his bid the complete name, location of the place of business and license number of each subcontractor who will perform work or labor, or render service to the prime contractor in or about the construction of the work in an amount in excess of one-half (1/2) of one (1) percent of the prime contractor's total bid, and the portion of the work which will be done by each subcontractor if the contract for said work is awarded to said bidder. The prime contractor shall list only one subcontractor for each such portion of the work as is defined by the prime contractor in his bid.

If the prime contractor fails to specify a subcontractor or if he specified more than one subcontractor for any portion of work to be performed under the contract, in excess of one-half (1/2) of one (1) percent of the prime contractor's total bid, he agrees that he is fully qualified to perform that portion himself, and that he shall perform that portion himself. If, after the award of the contract, the prime contractor shall, except as provided for in said Chapter herein above referred to, subcontract any such portion of the work, the prime contractor shall be subject to the penalties provided.

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

Subcontractor Name: _____ **Location:** _____
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Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

ARTICLE 1 - CONTRACT DOCUMENTS

1.1 DEFINITIONS

- 1.1.1 The Contract Documents - The Contract Documents consist of the Contract, the Instructions to Bidders, the Bid Bond, Performance and Payment Bond, the Conditions of the Contract (General, Supplemental, and other Conditions), the Drawings, the Specifications, all Addenda, issued prior to execution of the Contract, and all Modifications thereto. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a written interpretation issued by the Architect pursuant to Subparagraph 1.2.5., or (4) a written order for a minor change in the work issued by the Architect pursuant to Paragraph 12.4. A Modification may be made only after execution of the Contract.
- 1.1.2 The Contract - The Contract Documents form the Contract. The Contract represents the entire and integrated agreement between the parties hereto, and supersedes all prior negotiation, representations, or agreements, either written or oral, including the bidding documents. The Contract may be amended or modified only by a Modification as defined in Subparagraph 1.1.1.
- 1.1.3 The Work - The term work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.
- 1.1.4 The Project - The Project is the total construction designed by the Architect of which the work performed under the Contract Documents may be the whole or a part.
- 1.1.5 Owner - The Owner is RIVERBANK UNIFIED SCHOOL DISTRICT, of Stanislaus County, California, and named as such in the Agreement.
- 1.1.6 District - The District shall mean RIVERBANK UNIFIED SCHOOL DISTRICT, Stanislaus County, California.
- 1.1.7 Estimated Completion Date - The Estimated Completion Date shall be the date set forth as such in the Supplemental General Conditions.
- 1.1.8 Fixed Completion Date - The fixed Completion Date shall be the date set forth as such in the Supplemental General Conditions.

1.2 EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS

- 1.2.1 The Contract Documents, including the Contract in the forms furnished the bidder prior to his bid, shall be signed in not less than triplicate by the Owner and Contractor.
- 1.2.2 By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the work is to be performed, and correlated his observations with the requirements of the Contract Documents.
- 1.2.3 The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. The intention of the Documents is to include all labor, materials, equipment, and other items as provided in Subparagraph 4.4.1 necessary for the proper execution and completion of the work. It is not intended that work not covered under any heading, section, branch, class, or trade of the Specifications shall be supplied unless it is required elsewhere in the Contract Documents or is reasonable inferable therefrom as being necessary to produce the intended results. Words which have well-known technical or trade meanings are used herein in accordance with such recognized meanings.
- 1.2.4 The organization of the Specifications into divisions, sections, and articles, and the arrangement of Drawings shall not control the Contractor in dividing the work among Subcontractors or in establishing the extent of work to be performed by any trade.
- 1.2.5 Written interpretations necessary for the proper execution of progress of the work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Architect and in accordance with any schedule agreed upon. Such interpretations shall be consistent with and reasonable inferable from the Contract Documents, and may be effected by Field Order.

1.3 COPIES FURNISHED AND OWNERSHIP

- 1.3.1 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, six (6) copies of Drawings and Specifications.

ARTICLE 2 - ARCHITECT

2.1 DEFINITION

- 2.1.1 The Architect is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Architect means the Architect or his authorized representative.
- 2.1.2 Nothing contained in the Contract Documents shall create any contractual

relationship between the Architect and the Contractor.

2.2 ADMINISTRATION OF THE CONTRACT

- 2.2.1 The Architect will provide general Administration of the Construction Contract, including performance of the functions hereinafter described.
- 2.2.2 The Architect will be the Owner's representative during construction and until final payment. The Architect will have authority to act on behalf of the Owner to the extent provided in the Contract Documents, unless otherwise modified by written instrument which will be shown to the Contractor. The Architect will advise and consult with the Owner, and all of the Owner's instructions to the Contractor shall be issued through the Architect.
- 2.2.3 The Owner will provide one or more full time inspectors to assist the Architect in providing competent and adequate inspection during all normal working periods. The Inspector is to be approved by the Architect and The Division of the State Architect.
- 2.2.4 The Architect, his representatives, including the inspectors and owner, shall at all times have access to the work wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the architect may perform his functions under the Contract Documents.
- 2.2.5 The Architect will make periodic visits to the site to familiarize himself generally with the progress and quality of the work and to determine, in general, if the work is proceeding in accordance with the Contract Document. On the basis of his on-site observations as an Architect, he will keep the Owner informed of the progress of the work, and will endeavor to guard the Owner against defects and deficiencies in the work of the Contractor. The Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work. The Architect will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connections with the work, and he will not be responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents.
- 2.2.6 Based on such observations and the Contractor's Applications for Payment, the Architect will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in Paragraph 9.4.
- 2.2.7 The Architect will be, in the first instance, the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder by both the Owner and Contractor. The Architect will, within a reasonable time, render such interpretations as he may deem necessary for the proper execution of progress of the

work.

- 2.2.8. Claims, disputes and other matters in question between the Contractor and the Owner relating to the execution or progress of the work or the interpretation of the Contract Documents shall be referred initially to the Architect for decision which he will render in writing within a reasonable time.
- 2.2.9 All interpretations and decisions of the Architect shall be consistent with the intent of the Contract Documents.
- 2.2.10 The Architect's decision in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents.
- 2.2.11 The Architect will have authority to reject work which does not conform to the Contract Documents. Whenever he considers it necessary or advisable to insure the proper implementation of the Contract Documents, he will have authority to require the contractor to stop the work or any portion thereof, or to require special inspection or testing of the work as provided in Subparagraph 7.8.2 whether or not such work be then fabricated, installed or completed. However, neither the Architect's authority to act under this Subparagraph 2.2.11, nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Architect to the Contractor, any subcontractor, any of their agents or employees, or any other person performing any of the work.
- 2.2.12 The Architect will review Shop Drawings and Samples as provided in Subparagraph 4.12.1 through 4.12.8 inclusive.
- 2.2.13 The Architect will prepare Change Orders in accordance with Article 12, and will have authority to order minor changes in the work as provided in Subparagraph 12.5.1.
- 2.2.14 The Architect will conduct inspections to determine the dates of the Substantial Completion and final completion, will review written guarantees and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment.
- 2.2.15 The Architect will not be responsible for the acts or omissions of the Contractor, or any Subcontractors, or any of his or their agents or employees, or any other persons performing any of the work.
- 2.2.16 In case of the termination of the employment of the Architect, the Owner shall appoint an architect whose status under the Contract Documents shall be that of the former architect.

ARTICLE 3 - OWNER

3.1 INFORMATION AND SERVICES REQUIRED OF THE OWNER

- 3.1.1 The Owner shall furnish all surveys describing the physical characteristics, legal limits and utility locations for the site of the project.
- 3.1.2 The Owner shall secure and pay for easements for permanent structures or permanent changes in existing facilities.
- 3.1.3 Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the work.
- 3.1.4 The Owner shall issue all instructions to the Contractor through the Architect.
- 3.1.5 The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Payment and Insurance in Article 9 and 11 respectively.

3.2 OWNER'S RIGHT TO STOP THE WORK

- 3.2.1 If the Contractor fails to correct defective work as required by Paragraph 13.2 or persistently fails to carry out the work in accordance with the Contract Documents, the Owner, by a written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

ARTICLE 4 - CONTRACTOR

4.1 DEFINITION

- 4.1.1 The Contractor is the person or organization identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative.

4.2 REVIEW OF CONTRACT DOCUMENTS

- 4.2.1 The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Architect any error, inconsistency or omission he may discover; but the Contractor shall not be liable to the Owner or the Architect for any damage

resulting from any such errors, inconsistencies or omissions in the Contract Documents. The Contractor shall perform no portion of the work at any time without Contract Documents or where required, approved Shop Drawings, Product Data or Samples for such portion of the work.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- 4.3.1 The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the Contract.
- 4.3.2 The Contractor shall be responsible to the owner for the acts and omissions of his employees, Subcontractors, and their agents and employees, and other persons performing any of the work under a contract with the Contractor.
- 4.3.3 The Contractor shall not be relieved from his obligations to perform the work in accordance with the Contract Documents either by the activities or duties of the Architect in his administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 7.8 by persons other than the Contractor.

4.4 LABOR AND MATERIALS

- 4.4.1 Unless otherwise specifically provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the work, whether temporary or permanent and whether or not incorporated or to be incorporated in the work.
- 4.4.2 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the task assigned to him.

4.5 WARRANTY

- 4.5.1 The Contractor warrants to the Owner and the Architect that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects, and in conformance with the Contract Documents. All work not so conforming to these standards may be considered defective.
- 4.5.2 The warranty provided in this Paragraph 4.5 shall be in addition to and not in limitation of any other warranty or remedy required by law or by the Contract

Documents.

4.6 TAXES

4.6.1 The Contractor shall pay all sales, consumer, use, and other similar taxes required by law.

4.7 PERMITS, FEES, AND NOTICES

4.7.1 The Contractor shall secure and pay for all permits and licenses necessary for the prosecution of the work, including utility fees. District will reimburse Contractor the actual documented cost of such permits, licenses and fees, with no overhead or profit added.

4.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the work. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Architect in writing, and any necessary changes shall be adjusted by appropriate modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Architect, he shall assume full responsibility therefore, and shall bear all costs attributable thereto.

4.7.3 All materials and workmanship shall conform to the California Code of Regulations and Title 24, Parts 1 to 5, Part 9, and Part 12, Division of the State Architect, and the Contractor shall keep a copy of Title 24 on the job at all times. All work and materials shall be in full accordance with the latest Rules and Regulations of the State Fire Marshal, National Board of Fire Underwriters, California Electric Code, Safety Orders of Division of Industrial Safety, California Plumbing Code, and other applicable federal and state laws and regulations. Such laws and regulations shall be considered a part of these specifications, as if set forth herein in full and all work hereunder shall be executed in accordance therewith. Nothing in these plans or specifications is to be construed to permit work not conforming to the Codes.

4.7.4 All materials furnished and all work done under these specifications shall be subject to rigid inspection by the Architect and Owner who shall furnish competent and adequate inspection during normal working periods. When specific inspection is required as called for in plans and specifications, the Contractor shall inform the Architect and Inspector of the schedule of such work. Failure to do so may require such work to be torn out and replaced under proper inspection, and the entire cost of tearing out and replacement including cost of any materials furnished by the Owner and used in the work torn out, shall be borne by the Contractor. Work covered up without the approval of the Architect or the Owner shall be uncovered to the extent required and the Contractor shall similarly bear the cost of performing all the work

and furnishing all the materials necessary for the removal of the covering and its subsequent replacement.

4.7.5 Whenever the Contractor arranges to work at night, or at any time when work is not usually in progress, or to vary the period during which work is carried out each day, he shall give the Owner due notice so that inspection may be provided. Such work shall be done without extra compensation to the Contractor and such additional inspection costs shall be chargeable to the Contractor providing such work is not performed at the request of the Owner to meet earlier completion time than that established in the Contract, or for a cause not under control of the Contractor.

4.8 ALLOWANCES (not used)

4.9 SUPERINTENDENT

4.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the project site during the progress of the work. The superintendent shall be satisfactory to the Architect, and shall not be changed except with the consent of the Architect, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the contractor. Important communications will be confirmed in writing. Other communications will be so confirmed on written request in each case.

4.10 PROGRESS SCHEDULE

4.10.1 The Contractor, immediately after being awarded the Contract, shall prepare and submit for the Architect's approval an estimated progress schedule for the work. The progress schedule shall be related to the entire Project to the extent required by the Contract Documents. This schedule shall indicate the dates for the starting and completion of the various stages of construction and shall be revised as required by the conditions of the work, subject to the Architect's approval.

4.11 DRAWINGS AND SPECIFICATIONS AT THE SITE

4.11.1 The Contractor shall maintain at the site for the Owner one copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other modifications, in good order and marked to record all changes made during construction. these shall be available to the Architect. The Drawings, marked to record all changes made during construction, shall be delivered to the Architect for the Owner upon completion of the work.

4.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- 4.12.1 Shop Drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor, and which illustrate some portion of the work.
- 4.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the work.
- 4.12.3 Samples are physical examples furnished by the Contractor to illustrate materials, equipment, or workmanship, and to establish standards by which the work will be judged.
- 4.12.4 The Contractor shall review, stamp with his approval and submit, with reasonable promptness and in orderly sequence so as to cause no delay in the work or in the work of any other contractor, all Shop Drawings and Samples required by the Contract Documents or subsequently by the Architect as covered by modifications. Shop Drawings and Samples shall be properly identified as specified, or as the Architect may require. At the time of submission the Contractor shall inform the Architect in Writing of any deviation in the Shop Drawings or Samples from the requirements of the Contract Documents.
- 4.12.5 By approving and submitting Shop Drawings, Product Data and Samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated the information contained within such submittal with the requirements of the work and of the Contract Documents.
- 4.12.6 The Architect will review and approve Shop Drawings, Product Data and Samples with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the project and with the information given in the Contract Documents. The Architect's approval of a separate item shall not indicate approval of an assembly in which the item functions.
- 4.12.7 The Contractor shall make any corrections required by the Architect and shall resubmit the required number of corrected copies of Shop Drawings, Product Data or new Samples until approved. The Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections requested by the Architect on previous submissions.
- 4.12.8 The Architect's approval of Shop Drawings, Product Data or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of

the Contract Documents unless the Contractor has informed the Architect in writing of such deviation at the time of submission and the Architect has given written approval to the specific deviation, nor shall the Architect's approval relieve the Contractor from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples.

4.12.9 No portion of the work requiring a Shop Drawing, Product Data, or Sample submission shall be commenced until the submission has been approved by the Architect. All such work shall be in accordance with approval submittal.

4.12.10 The Contractor shall submit to the Architect and Owner for approval, within thirty-five(35) days after the signing of the Contract, a complete list setting forth the brand name and manufacturer of all materials and/or equipment proposed for use under this Contract. The list shall include all items required under the Contract, although the brand name or manufacturer may not be specifically included in the specifications. Where specific brands are specified, substitutions therefore shall be clearly indicated on the material equipment list.

4.12.11 Wherever samples are called for in the specifications, or where it is desired to substitute another material or article for the specified, the Contractor shall submit samples in triplicate to the Architect with all freight charges prepaid. One sample will be returned to him at his expense, with letter stating that it is approved or rejected, and one sample will be returned to the Owner for his records. All materials delivered on the site or placed in the building shall be equal to the sample in every respect.

4.12.12 Where special makes or brands are called for, they are mentioned as a "Standard." Others of equal quality may be used, provided approval is first obtained in writing from the Architect. Unless substitutions are requested, no deviation from the plans and specifications will be allowed. Substitutions shall be requested or offered for investigation in ample time, as no delay or extra time will be allowed on account thereof.

Requests for substitution will only be considered when offered by the General Contractor and such requests must be made within thirty-five (35) days after the award of the Contract.

4.12.13 All materials shall be delivered as to insure a speedy and uninterrupted progress of the work. All materials shall be stored so as to cause no obstruction and so as to prevent overloading of any portion of the structure, and the Contractor shall be entirely responsible for damage or loss by weather or other cause.

4.13 USE OF SITE

4.13.1 The Contractor shall confine operations at the site to areas permitted by law,

ordinances, permits and the Contract Documents and shall not unreasonable encumber the site with any materials or equipment.

4.14 CRIMINAL HISTORY CLEARANCE/SITE PROTECTION CERTIFICATION

4.14.1 The Criminal History Clearance/Site Protection Certification form, see Article 21 of the General Conditions, is required from all successful bidders pursuant to the requirements mandated by California Education Code Sections 33192 and 45124.1 et seq., the Michelle Montoya School Safety Act of 1997. This provides that a school district may require a construction contractor that has a contract with the district to obtain a criminal history clearance from the Department of Justice of all employees working on a school site under that contract.

4.15 CUTTING AND PATCHING OF WORK

4.15.1 The Contractor shall be responsible for all cutting, fitting, or patching that may be required to complete the work or to make its several parts fit together properly.

4.15.2 The Contractor shall not damage or endanger any portion of the work or the work of the Owner or any separate contractors by cutting, patching, or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and of such separate contractor. The Owner shall not unreasonably withhold from the Contractor or any separate contractor his consent to cutting or otherwise altering the work.

4.16 CLEANING UP

4.16.1 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations.

At the completion and during the work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials, and shall clean all glass surfaces and leave the work "broom clean" or its equivalent, except as otherwise specified. The Contractor cannot use the Owner's trash bins.

4.16.2 If the Contractor fails to clean up, the Owner may do so and the cost thereof shall be charged to the Contractor as provided in Paragraph 7.6.

4.17 COMMUNICATIONS

4.17.1 The Contractor shall forward all communications to the Owner through the Architect.

4.18 INDEMNIFICATION

- 4.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Architect and their agents and employees from and against all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from the performance of the work, or the failure, neglect or refusal of the Contractor to perform the work provided that any such claim, damage, loss or expenses (a) is attributable to bodily injury, sickness, disease or death, or in injury to or destruction of tangible property (other than the work itself) including the loss of use resulting there from, and (b) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless or whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party described in this Paragraph 4.18.
- 4.18.2 In any and all claims against the Owner or the Architect or any of their agents or employees by an employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 4.18 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the contractor or any Subcontractor under worker's compensation acts disability benefits acts or other employee benefit acts.

ARTICLE 5 - SUBCONTRACTORS

5.1 DEFINITION

- 5.1. A Subcontractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender, and means a Subcontractor or his authorized representatives. The term Subcontractor does not include any separate contractor or his subcontractors.
- 5.1.2 A Sub-subcontractor is a person or organization who has a direct or indirect contract with the Subcontractor to perform any of the work at the site. The term Sub-subcontractor is referred to throughout the contract Documents as if singular in number and masculine in gender and means a Sub-subcontractor or an authorized representative thereof.
- 5.1.3 Nothing contained in the Contract Documents shall create any contractual relation between the Owner or the Architect and any Subcontractor or Sub-subcontractor.

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

5.2.1 The Contractor shall include with his Bid Proposal the names of each Subcontractor who will perform work or labor or render service to the Contractor in or about the work in an amount in excess of 1/2 of 1% of the bidder's total bid. The Contractor shall not, without written consent of the Owners, make any substitution thereto, or permit any subcontract to be assigned or transferred or performed by anyone other than the original Subcontractor listed in the Bid Proposal. The Contractor agrees that he is as fully responsible to the Owners for the acts and omissions of his Subcontractors and for the persons directly employed by him. The Owner will deal only through the General Contractor, who shall be responsible for the proper execution of the entire work.

Subletting the whole or any part of the Contract, if approved, shall be done only in accordance with the provisions of Sections 4100 to 4114 inclusive of the public Contract Code of the State of California, which are hereby incorporated by reference and made a part hereof.

5.2.2 If, prior to the award of the Contract, the Owner or Architect has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the successful bidder may, prior to the award, withdraw his bid without forfeiture of bid security. If the successful bidder submits an acceptable substitute, the Owner shall accept such substitute without any increase in bid price. If no satisfactory substitute is submitted, the Owner may disqualify the bid. If, after the award, the Owner or Architect refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting a name with respect thereto prior to the award.

5.2.3 The Contractor shall not contract with any Subcontractor or any person or organization proposed for portions of the work designated in the bidding requirements or, if none is so designated, with any Subcontractor proposed for the principal portions of the work who has not been accepted by the Owner and the Architect. The Contractor will not be required to contract with any subcontractor or person or organization against whom he has a reasonable objection.

5.2.4 If the Owner and the Architect requires a change of any proposed Subcontractor or person or organization previously accepted by them, the Contract Sum shall be increased or decreased by the difference in cost occasioned by such change and an

appropriate Change Order shall be issued.

- 5.2.5 The Contractor shall not make any substitution for any Subcontractor or person or organization who has been accepted by the Owner and Architect, unless the substitution is acceptable to the Owner and the Architect.

5.3 SUBCONTRACTUAL RELATIONS

- 5.3.1 All work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor (and where appropriate between Subcontractors and Sub-subcontractors) which shall contain provisions that:

1. Preserve and protect the rights of the Owner and the Architect under the Contract Documents with respect to the work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;
2. Require that such work be performed in accordance with the requirements of the Contact Documents;
3. Require submission to the Contractor of applications for payment under such subcontract to which the contractor is a party, in reasonable time to enable the Contractor to apply for payment in accordance with Article 9;
4. Require that all claims for additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the work shall be submitted to the Contractor (via any Subcontractor or Sub-subcontractor where appropriate) in the manner provided in the Contract Documents for like claims by the Contractor upon the Owner;
5. Waive all right the contracting parties may have against one another for damages caused by fire or other perils covered by the property insurance described in Paragraph 11.2, except such rights as they may have to the proceeds of such insurance help; and
6. Obligate such Subcontractor specifically to consent to the provisions of this Paragraph 5.3, and identify to each Subcontractor any terms and conditions of each proposed Subcontract which may be a variance with the Contract Documents.

5.4 CLAIMS FOR EXTRA WORK / FOR EXTENSIONS OF TIME

- 5.4.1 The Contractor shall not be entitled to the payment of any additional compensation or any extension of time for any cause, including any act, or failure to act by the Architect, or happening of any event, thing or occurrence, unless the Contractor shall

have given the Architect due written notice of potential claims as hereinafter specified. It is the intention of this Section 5.4 that the differences between the parties, arising under and by virtue of the Contract be brought to the attention of the Architect at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. It is also the intention of this Section 5.4 to implement the provisions of Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of the Public Contract Code of California. The Contractor hereby agrees that he or she shall have no right to additional compensation or an extension of time for any claim that may be based on any act, failure to act, event, thing or occurrence for which no written notice of potential claim as hereby required was filed.

All claims shall be filed in writing on or before the times prescribed herein, but in no event later than the date of final payment. Claims shall be filed with the Architect prior to the time that the Contractor commences performance of the work giving rise to the potential claim for additional compensation, if based on any act or failure to act by the Architect, or in all other cases within ten (10) days after the happening of event, thing or occurrence giving rise to the potential claim. All claims shall set forth clearly and in detail, for each item of additional compensation or extension of time claimed, the reasons for the specifications, the nature and the amount of the cost involved, the computations used in determining such costs, and all pertinent factual data necessary to substantiate the claim.

ARTICLE 6 - WORK BY OWNER OR BY SEPARATE CONTRACTORS

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

6.1.1 The Owner reserves the right to perform work related to the Project with his own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar Conditions of the Contract. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, he shall make such claim as provided elsewhere in the Contract Documents.

6.1.2 When separate contracts are awarded for different portions of the Project, "the Contractor" in the Contract Documents in each case shall be the contractor who signs each separate contract.

6.2 MUTUAL RESPONSIBILITY OF CONTRACTORS

6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate his work with theirs.

- 6.2.2 If any part of the Contractor's work depends for proper executioner results upon the work of the Owner or any separate contractor, the Contractor shall inspect and promptly report to the Architect and Inspector any discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the Owner's or the separate Contractor's work as fit and proper to receive his work, except as to defects which may develop in the other separate contractor's work after the execution of the Contractor's work.
- 6.2.3 Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor shall, upon due notice, settle with such other contractor by agreement or arbitration, if he will so settle. If such separate contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor and the Contractor shall defend such proceedings at the Contractor's expense and, if any judgment against the Owner arises therefrom, the Contractor shall pay or satisfy it and shall reimburse the Owner for all attorneys fees and court cost which the Owner has incurred.
- 6.2.4 Any cost caused by defective or ill-timed work shall be borne by the party responsible therefore.

6.3 OWNER'S RIGHT TO CLEAN UP

- 6.3.1 If a dispute arises between the separate contractors as to their responsibility for cleaning up as required by paragraph 4.15, the Owner may clean up and charge the cost thereof to the several contractors as the Architect shall determine to be just.

ARTICLE 7 - MISCELLANEOUS PROVISIONS

7.1 LAW OF THE PLACE

- 7.1.1 The Contract shall be governed by the law of the place where the project is located.

7.2 SUCCESSORS AND ASSIGNS

- 7.2.1 The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due or to become due to him hereunder, without the previous written consent of the Owner.

7.3 WRITTEN NOTICE

7.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

7.4 CLAIMS FOR DAMAGES

7.4.1 Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or if any of his employees, agents or others for whose acts he is legally liable, claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

7.5 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

7.5.1 The Owner shall require the Contractor to furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form and amount as the Owner may prescribe and with such sureties as may be agreeable to the parties. If such bonds are stipulated in the bidding requirements, the premiums shall be paid by the Contractor; if required subsequent to the submission of quotations or bids, the cost shall be reimbursed by the Owner. The Contractor shall deliver the required bonds to the Owner not later than the date of execution of the Contract, or if the work is commenced prior thereto in response to a notice to proceed, the Contractor shall, prior to commencement of the work, submit evidence satisfactory to the Owner that such bonds will be issued.

7.6 OWNER'S RIGHT TO CARRY OUT THE WORK

7.6.1 If the Contractor defaults or neglects to carry out the work in accordance with the Contract Documents or fails to perform any provision of the Contract, the Owner may, after seven days written notice to the Contractor and without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor, the cost of correcting such deficiencies, including the cost of the Architect's and the Owner's inspectors, additional services made necessary by such default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

7.7 ROYALTIES AND PATENTS

7.7.1 The Contractor shall pay all royalties and license fees. He shall defend all suits or

claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Architect.

7.8 TESTS

- 7.8.1 If the Contract Documents, Laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to be inspected, tested, or approved, the Contractor shall give the Architect timely notice of its readiness and of the date arranged so the Architect may observe such inspection, testing or approval. The Owner shall bear all costs of such inspection, tests, and approvals unless otherwise provided.
- 7.8.2 If, after the commencement of the work, the Architect determines that any work requires special inspection, testing, or approval which Subparagraph 7.8.1 does not include, he will, upon written authorization from the Owner, instruct the Contractor to order such special inspection, testing, or approval, and the Contractor shall give notice as in Subparagraph 7.8.1. If such special inspection or testing reveals a failure of the work to comply (1) with the requirements of the Contract Documents or, (2) with respect to the performance of the work, with laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, the Contractor shall bear all cost thereof, including the Architect's and the Owner's inspectors, additional service made necessary by such failure; otherwise the Owner shall bear such costs, and an appropriate Change Order will be issued.
- 7.8.3 All sampling and tests shall be made by a properly qualified person or testing laboratory, approved by the Division of the State Architect, who shall furnish copies of the test results to the Contractor, Architect, Owner, and the Division of the State Architect. All tests as well as sampling and preparation of samples where applicable shall be in accordance with Standards as latest adopted by A.S.T.M.
- 7.8.4 If the Architect wishes to observe the inspections, tests or approvals required by this Paragraph 7.8, he will do so promptly and, where practicable, at the source of supply.
- 7.8.5 Neither the observations of the Architect in his administration of the Contract, nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the work in accordance with the Contract Documents.
- 7.8.6 Payment for Tests and Inspection will be made as follows:
- A. District will pay cost of testing and inspection except the following for which

the Contractor shall reimburse the District:

1. Any retesting and sampling required due to failure of original test.
2. Concrete design mix.
3. Bacteriological Water Analysis testing for new relocatable buildings.

7.8.7 The Inspector of Record is to be employed by the Owner and approved by the Architect and DSA.

ARTICLE 8 - TIME - LIQUIDATED DAMAGES

8.1 DEFINITIONS

8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for substantial completion of the work as defined in Subparagraph 8.1.3, including authorized adjustments thereto.

8.1.2 The date of commencement of the work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract or such other date as may be established therein.

8.1.3 The Date of Substantial Completion of the work or designated portion thereof is the Date certified by the Architect when construction is sufficiently completed, in accordance with the Contract Documents, so the Owner may occupy the work or designated portion thereof for the use for which it is intended.

8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless specifically designated.

8.2 PROGRESS AND COMPLETION

8.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

8.2.2 The Contractor shall begin the work on the date of commencement as defined in Subparagraph 8.1.2. He shall carry the work forward expeditiously with adequate forces and shall complete it within the contract time.

8.3 DELAYS AND EXTENSIONS OF TIME - TIME LIMIT

8.3.1 The project shall be completed in the manner provided for in the Contract on or before the completion date as set forth in the Supplementary General Conditions (hereinafter called the "Fixed Completion Date"), unless extensions of time are granted in accordance with the Contract for delays caused by the perils covered by the insurance required by Article 1 hereof or by any are declared by an enactment of the Congress of the United States of America as set forth herein. Failure to complete the work within such time and in the manner provided for by the Contract shall

subject the Contractor to liquidated damages in accordance with Paragraph 8.4 "Liquidated Damages." Time is and shall be of the essence.

- 8.3.2 The Contractor shall commence work on the Project on or before five (5) calendar days from and after receipt of written "Notice to Proceed" from the Owner to the Contractor, and will diligently prosecute the work to completion. Said Notice to Proceed shall be issued following execution of Contract and the filing by the Contractor of the required bonds and insurance. The Contractor agrees to complete all of the work on or before the Estimated Completion Date. The continuous prosecution of the work within such time shall be subject only to delays caused by any changes in the work or by any default, act or omission of the Owner, or by any other contractor employed by the Owner on the work or by riots, strikes, lock-outs, fire, earthquake, flood and conditions resulting therefrom or by the inability to obtain material, equipment or labor due to Federal Government restrictions or requirements arising out of any defense or war program. Such delays, if any, shall operate only to extend the Estimated Completion Date above specified (not in excess of the period of such delay).
- 8.3.3 In the event it is deemed necessary by the Owner and the Contractor to extend the time of completion of the work to be done under these specifications beyond the dates of required completion herein specified, such extensions as shall be granted by the Owner shall in no way release any guarantee given by the Contractor pursuant to the provisions of the Contract, or to relieve or release the sureties on the bonds executed pursuant to said provision. The sureties in executing the bonds on the Contract shall be deemed to have expressly agreed to any such extension of time. The Owner shall not be required to pay extended overhead cost to the Contractor for allowing an extension of time to the Contract.
- 8.3.4 All claims for extension of time shall be made in writing to the Architect no more than fifteen days after the occurrence of the delay; otherwise they shall be waived. In the case of a continuing cause of delay, only one claim is necessary.
- 8.3.5 If no schedule or agreement is made stating the dates upon which written interpretations as set forth in Subparagraph 1.2.5 shall be furnished, then no claim for delay shall be allowed on account or failure to furnish such interpretations until fifteen days after demand is made for them, and not then unless such claim is reasonable.
- 8.3.6 This Paragraph 8.3 does not exclude the recovery of damages for delay by either party under other provisions of the Contract Documents.

8.4 LIQUIDATED DAMAGES

- 8.4.1 The actual fact of the occurrence of damages and the actual amount of the damages

which the Owner would suffer if the work were not completed within the specified times set forth are dependent upon many circumstances and conditions and could prevail in various combinations, and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages. Damages which the Owner would suffer in the event of delay include loss of the use of the project, and, in addition, include, but are not limited to, expenses of prolonging employment of an engineering staff, costs of administration, inspection, supervision and the loss suffered by the public within the District by reason of the delay in the construction of the project to serve the public at the earliest possible time. Accordingly, the parties hereto agree that the amounts herein set forth shall be presumed to be the amount of damages sustained by the failure of the Contractor to complete the project within the respective times specified.

- 8.4.2 The amount of liquidated damages to be paid by the Contractor to the Owner for failure to complete the work specified will be **\$500.00 for each calendar day** by which completion of the project is delayed beyond the Fixed Completion Date and continuing thereafter to the time at which the Project is completed such amount being in each case the actual cash value agreed upon as the loss to the Owner resulting from the Contractor's default.
- 8.4.3 In the event the Contractor shall become liable for liquidated damages under this section, the Owner, in addition to all other remedies provided by law, shall have the right to withhold any and all retained payments which would otherwise be or become due the Contractor until the liability of the Contractor under this section has been finally determined.

The Owner shall have the right to use and apply such retained amounts, in whole or in part, to reimburse the Owner for all damages due to or to become due to the Owner. Any remaining balance of such retained amounts shall be paid to the Contractor only after discharge in full of all liability incurred by the Contractor under this article. If the retained amount is not sufficient to discharge all liabilities of the Contractor incurred under this article the Contractor and its sureties shall continue to remain liable to the Owner until all such liabilities are satisfied in full.

- 8.4.4 In addition to any other rights it may have, the Owner may terminate the Contract at any time after the Fixed Completion Date unless the Contractor shall have been granted an extension of time for delay pursuant to this Article 8. Upon such termination the Contractor shall not be entitled to any compensation for services rendered by before or after such termination, and he shall be liable to the Owner for liquidated damages for all periods of time beyond such date until the project is fully completed.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.1 CONTRACT SUM - DEFINITION

9.1.1 The Contract Sum is stated in the Contract, or is as may be modified by duly executed change orders, and is the total amount payable by the Owner to the Contractor for their performance of the work under the Contract Documents.

9.2 SCHEDULE OF VALUES

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to the various portions of the work, including quantities if required by the Architect, aggregating the total Contract Sum, divided by section as enumerated in the Project Manual's "Table of Contents", so as to facilitate payments to Subcontractors. Prepare schedule of values on AIA Documents G702 and G703, and supported by such data to substantiate its correctness as the Architect may require. Each item in the schedule of values shall include its proper share of overhead, and profit. This schedule, when approved by the Architect, shall be used as a basis for the Contractor's Applications for Payment.

9.3 PROGRESS PAYMENTS

9.3.1 At least ten days before each progress payment falls due, the Contractor shall submit to the Architect an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Owner or the Architect may require.

9.3.2 If payments are to be made on account of materials or equipment not incorporated in the work but delivered and suitable stored at the site, or at some other location agreed upon in writing, such payments shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest including applicable insurance and transportation to the site.

9.3.3 The Contractor warrants and guarantees that title to all work, materials, and equipment covered by an application for payment, whether incorporated in the project or not, will pass to the Owner upon the receipt of such payment of the Contractor, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens" and that no work, materials, or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing the work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the contractor or such other person.

9.3.4 **SUBMISSION OF CERTIFIED PAYROLL RECORDS:** For all on-site work only, RIVERBANK UNIFIED SCHOOL DISTRICT requires weekly submission of

certified payroll certificates. In addition to the weekly payroll records for your company, you are required to submit the weekly payroll records for all subcontractors.

9.4 CERTIFICATES FOR PAYMENTS

9.4.1 If the Contractor has made Application for Payment as above, the Architect will, with reasonable promptness but not more than seven (7) days after the receipt of the Application, issue a Certificate for Payment to the Owner with a copy to the contractor for such amount as he determines to be properly due or state in writing his reasons for withholding a Certificate as provided in Subparagraph 9.5.1.

9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on his observations at the site as provided in Subparagraph 2.2.4 and the data comprising the Application for Payment, that the work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the work is in accordance with the Contract Documents (subject to an evaluation of the work as a functioning whole upon substantial Completion, to the results of any subsequent tests required by the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in his Certificate and that the Contractor is entitled to payment in the amount certified). In addition, the Architect's final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Subparagraph 9.7.2 have been fulfilled. However, by issuing a Certificate for Payment, the Architect shall not thereby be deemed to represent that he has made exhaustive or continuous on-site inspections to check the quality or quantity of the work or that he has reviewed construction means, methods, techniques, sequences, or procedures, or that he has made any examination to ascertain how or for what purpose the Contractor has used the monies previously paid on account of the Contract sum.

9.4.3 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner provided in the Contract.

9.4.4 No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the project by the Owner, shall constitute an acceptance of any work not in accordance with the Contract Documents.

9.5 PAYMENTS WITHHELD

9.5.1 The Architect may decline to approve an Application for Payment and may withhold his Certificate in whole or in part if in his opinion he is unable to make representations to the Owner as provided in Subparagraph 9.4.2. The Architect may also decline to approve any Applications for Payment or, because of subsequently

discovered evidence or subsequent inspections, he may nullify the whole or any part of any Certificate for payment previously issued to such extent as may be necessary in his opinion to protect the Owner from loss because of:

1. Defective work not remedied;
2. Claims filed or reasonable evidence indicating probably filing of claims;
3. Failure of the Contractor to make payments properly to Subcontractors or for labor, materials, or equipment;
4. Reasonable doubt that the work can be completed for the unpaid balance of the Contract Sum;
5. Damage to another contractor;
6. Reasonable indication that the work will not be completed within the Contract Time; or,
7. Unsatisfactory prosecution of the work by the Contractor.

9.5.2 When the above grounds in Subparagraph 9.5.1 are removed, payment shall be made for amounts withheld because of them.

9.5.3 The Contractor may, in accordance with the provisions of Public Contract Code, Section 22300, substitute securities for any monies which the Owner may withhold to insure performance under the Contract.

9.6 FAILURE OF PAYMENT

9.6.1 If the Architect should fail to issue any Certificate for Payment, through no fault of the Contractor, within ten days after receipt of the Contractor's Application for Payment, or if the Owner would fail to pay the Contractor within twenty days after the date of payment established in the Contract any amount certified by the Architect, then the Contractor may, upon seven (7) additional days written notice to the Owner and the Architect, stop the work until payment of the amount owing has been received.

9.7 SUBSTANTIAL COMPLETION AND FINAL PAYMENT

9.7.1 When the Contractor determines that the work or a designated portion thereof acceptable to the owner is substantially complete, the Contractor shall prepare for

submission to the Architect a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents.

When the Architect on the basis of an inspection determines that the work is substantially complete he will then prepare a Certificate of Substantial Completion, which shall establish the Date of Substantial Completion, which shall state the responsibilities of the Owner and the Contractor for maintenance, heat, utilities, and insurance, and shall fix the time listed therein, said time to be within the Contract Time unless extended pursuant to Paragraph 8.3.

The Certificate of Substantial Completion shall be submitted to the Owner and the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

- 9.7.2 Upon receipt of written notice that the work is ready for final inspection and acceptance, and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when he finds that work acceptable under the Contract Documents and the Contract fully performed, he will promptly issue a final Certificate for Payment stating that to the best of his knowledge, information, and belief, and on the basis of his observations and inspections, the work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable.
- 9.7.3 Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Architect (1) and Affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment and (3) if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens, claims or stop notices, arising out of the Contract, to the extent and in such form as may be designated by the Owner. If any Subcontractor refuses to furnish a release or waiver required by the Owner, the contractor may furnish a bond satisfactory to the Owner to indemnify him against any such lien, claim, or stop notice. If any such lien, claim, or stop notice remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the alter may be compelled to pay in discharging such lien, claim, or stop notice, including all costs and reasonable attorneys fees.
- 9.7.4 If after Substantial Completion of the work final completion thereof is materially delayed through no fault of the Contractor, and the Architect so confirms, the Owner shall, upon certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and

accepted. If the remaining balance for work not fully completed or corrected is less than the retainage stipulated in the Contract, and if bonds have been furnished as required in Subparagraph 7.5.1, the written consent of the surety to the payment of the balance due for that portion of the work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

9.7.5 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:

1. Unsettled liens;
2. Faulty or defective work appearing after Substantial Completion;
3. Failure of the work to comply with the requirements of the Contract Documents; or,
4. Terms of any special guarantees required by the Contract Documents.

9.7.6 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled.

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury, or loss to:

1. Employees on the work and all other persons who may be affected thereby;
2. All the work and all materials and equipment to be incorporated therein whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors; and,
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadway, structures and utilities not designated for removal, relocation or replacement in the course of construction.

- 10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.
- 10.2.3 When the use or storage of explosives or other hazardous material or equipment is necessary for the execution of the work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.
- 10.2.4 Shoring and Trench Safety Plan - Attention is directed to Section 832 of the Civil Code of the State of California relating to lateral and subjacent support, and the Contractor shall comply with this law.
- 10.2.5 In accordance with Section 6705 of the State Labor Code, the Contractor shall submit to the District specific plans to show details of provisions for worker protection from caving ground. Not less than thirty (30) days before beginning excavation for any trench or trenches five feet or more in depth required under this Contract, the Contractor shall furnish to the Architect working drawings of his trench safety plan. The trench safety plan working drawings shall be detailed plans showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground.

If such plan varies from the shoring system standards established by the Construction Safety Orders of the California Division of Industrial Safety or the Federal safety standards of the Department of Health, Education and Welfare, the plan shall be prepared by a registered civil or structural engineer. In no event shall the Contractor use a shoring, sloping, or protective system less effective than that required by said Construction Safety Orders, or less effective than that required by said Federal Safety Standards. Submission of this plan in no way relieves the Contractor from the requirement to maintain safety in all operations performed by him or his Subcontractors.

- 10.2.6 All damage or loss to any property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor, except damage or loss attributable to faulty Drawings or Specifications or to the acts or omissions of the Owner or Architect or anyone employed by either of them or for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor.

- 10.2.7 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to the Owner and the Architect.
- 10.2.8 The Contractor shall not load or permit any part of the work to be loaded so as to endanger its safety.
- 10.2.9 Should the Contractor encounter material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) on the site which has not been rendered harmless, the Contractor shall immediately stop work in the affected area and notify the District and the Architect of the condition in writing. Work in the affected area shall not be resumed except by written agreement of the District and Contractor if the material is asbestos or PCB, or when it has been rendered harmless.
- 10.2.10 The Contractor shall not be required to perform without consent any work relating to asbestos or PCB.

10.3 EMERGENCIES

- 10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 12 for Changes in the work.

ARTICLE 11 - INSURANCE

11.1 PROJECT INSURANCE

- 11.1.1 Scope - Contractor shall procure prior to commencing any activities and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

- 11.1.2 Minimum Limits of Insurance - Contractor shall maintain coverage and limits no less than:

Liability - Comprehensive General Liability Insurance or Commercial General Liability Insurance including coverage for premises and operation, contractual liability, personal injury liability, products/completed operations liability, broad form property damage and owners/contractors protective liability in an amount not less than one million dollars (\$1,000,000) per occurrence, combined aggregate single

limit for bodily injury, personal injury and property damage written on as occurrence form. For protection of the aggregate a separate liability policy must be used for this Contract or an endorsement issued to reserve the required aggregate for this specific contract.

Automobile - Comprehensive Automobile Liability Insurance, including as applicable owned, non-owned, and hired automobile in an amount not less than one million dollars (\$1,000,000) per occurrence combined single limit for bodily injury and property damage written on an occurrence form.

Workers' Compensation - The Contractor shall submit proof that Workers' Compensation Insurance as required by the Labor Code of the State of California is secured. The insurance shall include Employers Liability limits of one million dollars (\$1,000,000) per accident.

11.1.3 Builder's Risk Insurance: The contractor shall take out and maintain until final acceptance of the project, Builder's Risk Insurance against all perils on a special form basis with the customary exclusions. The District shall be named as an additional insured and the policy shall be in sufficient amount to cover fully the replacement cost of structures constituting any part of the project excluding excavation, grading and land filling.

11.2 GENERAL CONDITIONS

11.2.1 Deductibles and Self-Insured Retention - Any deductible or self-insured Retention must be declared to and approved by the District. At the option of the District either the insurer shall reduce or eliminate such deductibles or self-insured Retention as respects the District, its officials and employees; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

11.2.2 Other Provisions - The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverage:

- a. The District, its officials, employees and volunteers are to be covered as additional insured as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor.
- b. The Contractor's insurance coverage shall be primary insurance as

respects the District, its officials, employees and volunteers. Any insurance or self-insurance maintained by the district, its officials, employees and volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officials, employees or volunteers.
- d. Coverage shall state that the contractor's insurance shall apply separately to each insured against who claim is made or suit is brought, except with respect to the limits of the insurer's liability.

ARTICLE 12 - CHANGES IN THE WORK

12.1 ADDENDA

12.1.1 Addenda are to be signed by the Architect and approved by DSA.

12.2 CONSTRUCTION CHANGE DOCUMENTS (CCD)

12.2.1 Construction Change Documents (CCD) shall be the process for documenting changes to the approved Plans or Specifications after the contract has been awarded. CCD's shall comply with DSA Interpretation of Regulations IR A-6. All CCD's shall be signed by the Architect and approved by DSA.

12.3 CHANGE ORDERS

12.3.1 A Change Order is a written order to the Contractor signed by the Owner and the Architect, and approved by the Division of the State Architect, issued after the execution of the Contract, authorizing a Change in the work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time.

12.3.2 The Owner, without invalidating the Contract, may order changes in the work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the work shall be authorized by Change Order, and shall execute under the applicable conditions of the Contract Document. Change Orders shall be approved by the Division of the State Architect and signed by the Contractor, in addition to the Owner and Architect.

12.3.3 The cost or credit to the Owner resulting from a change in the work shall be

determined in one or more of the following ways:

1. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
2. By unit prices stated in the Contract Documents, Form of Proposal or subsequently agreed upon;
3. By costs to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or,
4. By the method provided in Subparagraph 12.2.4.
5. For all changes in the work, the allowance for overhead, profit and bond combined, included in the total cost to the Owner, shall be based upon the following schedule:

For the Contractor, for any work performed by his own force, twelve percent (12%) of the cost;

For each subcontractor involved, work performed by his own forces, twelve percent (12%) of the cost;

For the Contractor, for work performed by his subcontractor, six percent (6%) of the amount due the subcontractor.

Cost shall be limited to the following: cost of materials, including sales tax and cost of delivery, cost of labor, including Social Security, Old Age and Unemployment Insurance (labor cost may include a prorated share of foreman charge); worker's Compensation Insurance; Rental cost of power tools and equipment.

12.3.4 If none of the methods set forth in Clauses 12.2.3.1, 12.2.3.2 or 12.2.3.3 is agreed upon, the Contractor, provided he receives a written order signed by the Owner, shall promptly proceed with the work involved. The cost of such work shall then be determined by the Architect on the basis of the reasonable expenditures and savings of those performing the work attributable to the change, including, in the case of an increase in the Contract Sum, an allowance for overhead and profit in accordance with the schedule set forth above in paragraph 12.2.3.5.

In such case, and also under Clauses 12.2.3.3 and 12.2.3.4 above, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data for inclusion in a Change Order. Unless otherwise provided in the Contract Documents, cost shall be limited to the following:

1. Cost of materials, including sales tax and cost of delivery.
2. Cost of labor, including social security, old age and unemployment insurance and fringe benefits required by collective bargaining agreement or custom.
3. Worker's compensation insurance.
4. Bond premiums.
5. Rental cost of equipment and machinery
6. Additional cost of supervision and field office personnel directly attributable to the change.
7. As-Builts.

Pending final determination of cost to the Owner, payments on account shall be made on the Architect's Certificates for Payment. The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in the Contract Sum will be the amount of the actual net cost as confirmed by the Architect. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any with respect to that change.

12.4 CONCEALED CONDITIONS

12.4.1 Should concealed conditions encountered in the performance of the work below the surface of the ground be at variance with the conditions indicated by the Contract Documents or, should unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change Order upon claim by either party made within a reasonable time after the first observance of the conditions.

12.5 CLAIMS FOR ADDITIONAL COST OR TIME

12.5.1 If the Contractor wishes to make a claim for an increase in the Contract Sum or an extension in the Contract Time, he shall give the Architect and the Construction Manager written notice thereof within ten (10) days time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Subparagraph 12.5.1. No such claim shall be valid unless so made.

If the Owner and the Contractor cannot agree on the amount of the adjustment in the Contract Sum or the Contract Time, it shall be determined by the Architect. Any change in the Contract Sum or Contract Time resulting from such claim shall be authorized by Change Order.

12.5.2 If the Contractor claims that additional cost or time is involved because of (1) any written interpretation issued pursuant to Subparagraph 1.2.5, (2) any order by the Architect to stop the work pursuant to Subparagraph 2.2.11 where the Contractor was not at fault, or (3) any written order for a minor change in the work issued pursuant to Paragraph 12.5, the Contractor shall make such claim as provided in this Paragraph 12.4.1.

12.6 MINOR CHANGES IN THE WORK

12.6.1 The Architect shall have authority to order minor changes in the work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on the Owner and the Contractor. The Owner shall be notified in writing by the Architect of such changes. The Contractor shall carry out such written orders promptly.

12.7 FIELD ORDERS

12.7.1 The Architect may issue written Field Orders which interpret the Contract Documents in accordance with Subparagraph 1.2.5 or which order minor changes in the work in accordance with Paragraph 12.5 without change in Contract Sum or Contract Time. The Contractor shall carry out such Field Orders promptly.

ARTICLE 13 - UNCOVERING AND CORRECTION OF WORK

13.1 UNCOVERING OF WORK

13.1.1 If any work should be covered contrary to the request of the Architect, or to requirement specifically expressed in the Contract Document, it must if required in writing by the Architect, be uncovered for his observation and replaced, at the Contractor's expense.

13.1.2 If any other portion of the work has been covered which the Architect has not specifically requested to observe prior to being covered, the Architect may request to see such work and it shall be uncovered by the Contractor.

If such work be found in accordance with the Contract Documents, the cost of

uncovering and replacement shall be by appropriate Change Order, be charged to the Owner. If such work be found not in accordance with the Contract Document, the Contractor shall pay such costs unless it be found that this condition was caused by the Owner or a separate contractor employed as provided in Article 6, and in that event the Owner shall be responsible for the payment of such costs.

13.2 CORRECTION OF WORK

- 13.2.1 The Contractor shall promptly correct all work rejected by the Architect as defective or as failing to conform to the Contract Documents 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 the cost of the Architect's additional services thereby made necessary.
- 13.2.2 If, within one year after the Date of Substantial Completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition.
- 13.2.3 The Contractor shall remove from the site all portions of the work which are defective or non-conforming and which have not been corrected under Subparagraphs 4.5.1, 13.2.1 and 13.2.2, unless removal is waived by the Owner.
- 13.2.4 If the Contractor fails to correct defective or non-conforming work as provided in Subparagraphs 4.5.1, 13.2.1 and 13.2.2, the Owner may correct it in accordance with Paragraph 7.6.
- 13.2.5 If the Contractor does not proceed with the correction of such defective or non-conforming work within a reasonable time fixed by written notice from the Architect, the Owner may remove it and may store the materials or equipment at the expense of the Contractor.

If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner may upon ten additional days written notice sell such work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the cost that should have been borne by the Contractor, including compensation for additional architectural services. If such proceeds of sale do not cover all cost which the Contractor should have borne, the difference shall be charged the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such

amount, the Contractor shall pay the difference to the Owner.

13.2.6 The Contractor shall bear the cost of making good all work of the Owner or separate contractors destroyed or damaged by such correction or removal.

13.2.7 Nothing contained in this Paragraph 13.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Paragraph 4.5 hereof. The establishment of the time period of one year after the Date of Substantial Completion or such long period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, not to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the work.

13.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

13.3.1 If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case the Change Order will be issued to reflect an appropriate reduction in the Contract Sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

ARTICLE 14 - TERMINATION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

14.1.1 If the work is stopped for a period of thirty (30) days under an order of any court or other public authority having jurisdiction, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the work under a contract with the Contractor, or if the work should be stopped for a period of thirty days by the Contractor because the Architect has not issued a Certificate for Payment as provided in Paragraph 9.6 or because the Owner has not made payment thereon as provided in Paragraph 9.6, then the Contractor may, upon fifteen days written notice to the Owner and the Architect, terminate the Contract and recover from the Owner payment for all work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and damages.

14.2 TERMINATION BY THE OWNER

14.2.1 If the Contractor is adjudged bankrupt, or if he makes general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, or if he persistently or repeatedly refuses or fails, except in cases for which extension

of time is provided, to supply enough property skilled workmen or proper materials, or if he fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules, regulations or order of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, the Owner, upon certification by the Architect that sufficient cause exists to justify such action, may, without prejudice to any right or remedy and after giving the Contractor and his surety, if any, seven days written notice, terminate the employment of the Contractor and take possession of the site, and of all materials, equipment, tools, construction, equipment and machinery thereon owned by the Contractor and may finish the work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the work is finished.

- 14.2.2 If the unpaid balance of the Contract Sum exceeds the costs of finishing the work, including compensation for the Architect's and the Owner's inspectors, additional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the difference to the Owner.

The costs incurred by the Owner as herein provided shall be certified by the Architect.

ARTICLE 15 - GUARANTEE OF WORK

- 15.1.1 In addition to guarantees called for elsewhere in these specifications, the Contractor shall guarantee all of his work for a period of one (1) year after the date of filing of the Notice of Completion against defective material or faulty workmanship that may arise within that period. All guarantees must be submitted to the Owner in the form attached hereto.

ARTICLE 16 - USE OF ASBESTOS

- 16.1.1 The use of asbestos or asbestos containing materials in this project is absolutely forbidden.

ARTICLE 17 - CHECK-IN AT SCHOOL OFFICE

- 17.1.1 California State Law requires that anyone, other than District personnel, must check-in at a school office before beginning work on a school site. Field crews, foremen and sub-contractors must check-in at the school office daily, must give location of work area, must describe work to be performed and must give an estimate of time required to complete the work. Compliance with these requirements will facilitate timely response from District staff including assistance to the Contractor to gain site access.

ARTICLE 18 - DIVISION OF THE STATE ARCHITECT REQUIREMENTS

- 18.1 All addenda shall be signed by the Architect, in compliance with Title 24, Part 1, Section 4-338 and approved by D.S.A.
- 18.2 All work shall be in compliance with Title 24, parts 1 through 5 and Title 19 and copies kept on job site at all times by the Contractor. Copies shall be most recent editions.
- 18.3 The Project Inspector shall be employed by the Owner and approved by the Architect, Structural Engineer and D.S.A. The Inspector must be present during all work proceedings.
- 18.4 The Testing Laboratory shall be employed by the Owner and approved by the Architect and D.S.A.
- 18.5 Changes, deletions or additions shall be documented by the Architect by means of Construction Change Documents, per DSA IR A-6 and approved by the Division of the State Architect.

ARTICLE 19 - ASBESTOS NOTIFICATION

- 19.1 Asbestos Hazard Emergency Response Act (AHERA) B regulations require that every firm doing contract work on a school site be informed of the presence of asbestos in the areas where they would be working. The attached "Short Term Worker Notification" provides that information. Contractors are hereby advised that their work must not disturb the asbestos and that certain health hazards are associated with exposure to asbestos fibers. Short Term Worker Notification form will be completed and signed by LEA Designee and Contractor at the Pre-Construction Conference.

**ARTICLE 20
CONTRACTOR'S GUARANTEE**

GUARANTEE FOR _____

We hereby guarantee the _____

Which we have installed in the _____

at _____ for _____ years from date of final payment.

We Agree to repair or replace to the satisfaction of the Owner any and all such work that may prove defective in workmanship or materials within that period, ordinary wear and tear and unusual abuse or neglect excepted, together with any other work which may be damaged or displaced in so doing. In the event of our failure to comply with the above mentioned conditions within a reasonable time after being notified in writing, we collectively and separately do hereby authorize the Owner to proceed to have the defects repaired and made good at our expense, and we will pay the costs and charges therefore immediately upon demand.

(Signature of Subcontractor)

(Signature of Subcontractor)

Date _____

**ARTICLE 21
CRIMINAL HISTORY CLEARANCE/
SITE PROTECTION CERTIFICATION**

In accordance with statutory, regulatory and constitutional restrictions governing the use and dissemination of criminal offender record information, the above mentioned Education Code sections allow for exceptions from obtaining a criminal history clearance of all employees under the following conditions:

1. The installation of a physical barrier at the worksite to limit contact with pupils.
2. Continual supervision and monitoring of all employees of the contractor by an employee of the contractor whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

Construction contractors are not required to comply with the backgrounding requirements set forth in the Michelle Montoya School Safety Act if one or more of the above mentioned conditions exist.

I, the undersigned, agree to fulfill the terms and requirements of Education Code Sections 33192 and 45125.1 listed above and required that the employee agree to abide by the terms of that statement.

I also, understand that if the District determines that I have either;

- (a) made a false certification herein, or
- (b) violated this certification by failing to carry out the requirements of Sections 33192 and 45125.1,

that the contract awarded herein is subject to termination, suspension of payments or both. I further understand that, should I violate the terms of the Michelle Montoya Safety Act of 1997, I may be subject to punishment in accordance with the requirements of Sections 33192 and 45125.1 et seq.

I acknowledge that I am aware of the provision of Education Code Sections 33192 and 4512.1 et seq., and hereby certify that I will adhere to the requirements of the Michelle Montoya School Safety Act of 1997.

Signature

Date

END OF SECTION

SUPPLEMENTAL GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS

- 1.1 MATERIALS - Materials incorporated in the project, or used, or consumed, in the performance of the work.
- 1.2 BUILDING - Includes the entire structure, drives, walks, steps, approaches, and site.
- 1.3 SIMILAR - Shall be taken in its general sense and not meaning identical, and all details of such work shall be in proper relation to the location and connection of other parts of the work.
- 1.4 PROVIDE - Shall mean, "Furnish and install in place".
- 1.5 (As Directed) Or others of similar meaning which authorize any exercise of judgment shall (Acceptable) be distinctly understood to mean that such power to direct, accept, reject, and (Rejected) approve shall be vested Only in the Owner and/or Architect.
- 1.6 N.I.C. - Where the indication, "N.I.C." is noted on the drawings or listed in the specifications, such item is shown or listed for the purpose of general information is, "Not in Contract." Installation and connection to services for such work are not in the contract.
- 1.7 O.F.C.I. - Where the indication, "O.F.C.I." is noted on the drawings or listed in the specifications, such item is shown or listed for information and will be, "Owner **furnished**, Contractor **installed**." The Contractor shall verify all dimensions and details necessary for the proper installation of this item.
- 1.8 TIME LIMITS - All time limits stated in the contract documents are of the essence of the contract.
- 1.9 CALLED FOR - As called for, shown, noted, and/or indicated in the specifications and/or drawings.

ARTICLE 2 - COMPLETION DATES

- 2.1 FIXED COMPLETION AND ESTIMATED COMPLETION DATE: The Work shall be commenced on the date stated in the Owner's, "Notice to Proceed" (which date will not be less than five (5) consecutive calendar days from and after the date of execution of the Contract) and shall be completed within seventy-five (75) calendar days. Reference Paragraph 8.3 of the General Conditions. This fixed completion date is defined as the Estimate Completion Date.

END OF SECTION

CONTRACT FORM

This agreement made on the _____, at RIVERBANK UNIFIED SCHOOL DISTRICT, in Stanislaus County, California, by and between:

_____ and **RIVERBANK UNIFIED SCHOOL DISTRICT, 6715 7th Street, Riverbank, CA 95367,** hereinafter called the Owner.

WITNESSETH: That the Contractor and the Owner for the consideration hereinafter named agree as follows:

ARTICLE I. The Contractor agrees to furnish all labor and materials, including tools, implements, and appliances required, and to perform all the Work in a good and worker-like manner, free from any and all liens and claims of mechanics, material suppliers, subcontractors, artisans, machinists, teamsters, drayers, and laborers required for:

RE-ROOFING AT RIVERBANK HIGH SCHOOL

for
RIVERBANK UNIFIED SCHOOL DISTRICT

all in strict compliance with the plans, drawings and specifications therefore prepared by Timothy P. Huff, Architect, and other Contract Documents relating thereto.

ARTICLE II. The contractor and the Owner agree that the Advertisement (Notice to Contractors), the Wage Scale, the General Conditions of the Contract, the Supplemental General Conditions of the Contract, Instructions to Bidders, the Specifications, the Drawings and the Addenda and Bulletins thereto, together with this Agreement, form the Contract, and they are as fully a part of the Contract as if thereto attached or therein repeated. The specifications and drawings are intended to cooperate, so that any work exhibited in the drawings and not mentioned in the specifications, or vice versa, is to be executed the same as if both mentioned in the specifications and set forth in the drawings, to the true intent and meaning of the said drawings and specifications when taken together. But no part of said specifications that is in conflict with any portion of this Contract, or that is not actually descriptive of the work to be done thereunder, or of the manner in which the said work is to be executed, shall be considered as any part of this Contract, but shall be utterly null and void, and anything that is expressly stated, delineated or shown in or upon the specifications or drawings shall govern and be followed, notwithstanding anything to the contrary in any other source of information or authority to which reference may be made.

ARTICLE III. The Owner agrees to pay to the Contractor in current funds for the performance of the Contract:

(\$ _____) Dollars

and to make payments or account thereof as provided for in the Contract Documents.

ARTICLE IV. In the event of a dispute between the Owner or Architect and the Contractor as to an interpretation of any of the specifications or as to the quality or sufficiency of material or workmanship, the decision of the Architect shall for the time being prevail and the Contractor without delaying the job, shall proceed as directed by the Architect without prejudice to a final determination by negotiation, arbitration by mutual consent or litigation, and should the Contractor be finally determined to be either wholly or partially correct, the Owner shall reimburse him for any added costs he may have incurred by reason of work done or material supplied beyond the terms of the Contract as a result of complying with the Architect's directions as aforesaid.

ARTICLE V. Pursuant to the provisions of Sections 1773 et seq. of the Labor Code of the State of California, which are hereby incorporated by reference and made a part thereof, the Director of the Department of Industrial Relations has determined the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality of which the Work is to be performed, for each craft, classification or type of workman needed to execute this contract. Per diem wages shall be deemed to include employer payments for health and welfare, pension, vacation, apprenticeship or other training programs, and similar purposes. The director of the Department of Industrial Relations has further determined that the rate of prevailing wage for any craft, classification or type of worker to be employed on the Project is the rate established by the applicable collective bargaining agreement on file at the Director of the Department of Industrial Relations principal office at San Francisco, phone, (415) 972-8846, which rate so provided is hereby adopted by reference and shall be effective for the life of this agreement or until the Director of Department of Industrial Relations determines that another rate be adopted. It shall be mandatory upon the Contractor and on any subcontractor to pay not less than the said specified rates to all workmen employed in the execution of this agreement.

There shall be paid to each worker needed to execute the work to be performed hereunto such travel and subsistence payments as are defined in the applicable collective bargaining agreements filed in accordance with the provision of Labor Code Section 1773.8.

The Contractor as a penalty to the Owner shall forfeit Twenty-five Dollars (\$25.00) for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed.

The difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

The Contractor and each subcontractor shall keep or cause to be kept an accurate record showing the names and occupations of all laborers, workers, and mechanics employed by him in connection with the extension of this Contract or any subcontract thereunder, and showing also the actual per diem wage paid to each of such workers, which records shall be open at all reasonable hours to inspection by the Owner, its officers and agents and to the representatives of the Division of Labor Law Enforcement of the State Department of Industrial Relations.

ARTICLE VI. It is further understood and agreed that in accordance with the provision of Sections 1810 to 1815, inclusive, of the Labor Code of the State of California, which are hereby incorporated and made a part hereof, the time of service of any worker employed by the Contractor or subcontractor doing or contracting to do any part of the work contemplated by this agreement is limited and restricted to eight hours during any one calendar day and forty hours during any one calendar week, provided, however, work may be performed by such employee in excess of said eight hour per day and forty hours per week provided that compensation for all hours worked in excess of eight hours per day and forty hours per week, is paid at a rate not less than one and one-half times the basic rate of pay. Every Contractor and subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work. The records shall be kept open at all reasonable hours to inspection by representatives of the Owner and the Division of Labor Law Enforcement. The Contractor shall as a penalty to the Owner forfeit Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and forty hours in any one calendar week, except as herein provided.

ARTICLE VII. Contractor agrees to comply with Chapter 1, Part 7, Division 2, Section 1777.5 and 1777.6 of the California Labor Code, which are hereby incorporated and made a part hereof. These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one apprentice for each five journeymen (unless an exemption is granted in accordance with Section 1777.5) and that contractors and subcontractors shall not discriminate among otherwise qualified employees as indentured apprentices on any public works solely on the ground of sex, race, religious creed, national origin, ancestry or color.

Only apprentices as defined in Section 3077, who are in training under apprenticeship standards and who have signed written apprentice agreements will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the prime contractor for all apprenticeable occupations.

ARTICLE VIII. The Contractor will indemnify the Owner against and hold it harmless of all and any liability for damages on account of injury to persons or damage to property resulting from or arising out of or in any way connected with the performance by the Contractor of his Contract and reimburse the Owner for all cost, expenses and loss incurred by it in consequence of any claims, demands, and causes of action which may be brought against it arising out of the performance by the Contractor of this Contract.

This indemnity shall be in addition to the other indemnification provisions contained in the Contract Documents.

By this statement the Contractor represents that he has secured the payment of Workers Compensation in compliance with the provisions of the Labor Code of the State of California and during the performance of the work contemplated herein will continue so to comply with said provision of said Code. The Contractor shall supply the Owner with certificates of insurance evidencing that Workers Compensation Insurance is in effect and providing that the Owner will receive 30 days notice of cancellation.

_____	_____ Riverbank Unified School District _____
Contractor	Owner
By _____	By _____
Signature	Signature
_____	_____
Print Name	Print Name
_____	_____
Title	Title

Federal I.D.#

Department of Industrial Relations #

Note: If a corporation is the contractor, state the capacity (i.e., President) of the corporate office signing and affix the corporation seal; if a partnership, all partners should sign under the partnership name.

END OF SECTION

SUBSTITUTIONS
SECTION 01 2500

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special (or Supplementary) Conditions and Division 1 Specifications Section, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. All substitutions and Requests for Information (RFI's) that affect Structural Safety, Fire and Life Safety, Access Compliance or Energy (as applicable) shall be submitted to the Division of the State Architect for review and approval.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1, Section - 01 3300“Submittals” specifies requirements for submitting the Contractor’s construction schedule and the submittal schedule.

1.3 DEFINITIONS

- A. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Changes in products, materials, equipment and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests for substitutions.
- C. The following are not considered to be requests for substitutions:
 - 1. Substitutions requested during the bidding period and accepted by Addendum prior to award of the Contract are included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.
 - 2. Revisions to the Contract Documents requested by the Owner or the Architect.
 - 3. Specified options of products and construction methods included in the Contract Documents.

4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

1.4 SUBMITTALS

- A. Substitution Request Submittal: The Architect will consider requests for substitution if received within thirty five (35) days after commencement of the work. Requests received more than thirty five (35) days after commencement of the work may be considered or rejected at the discretion of the Architect.
 1. Submit three (3) copies of each request for substitution for consideration. Submit requests on the "Substitution Request Form" attached.
 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
 3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information as appropriate. Information must be highlighted and project specific.
 - a. Coordination information, including a list of changes or modifications needed to other parts of the work and to construction performed by the Owner and separate contractors, that will be necessary to accommodate the proposed substitution.
 - b. A detailed comparison of significant qualities of the proposed substitution with those of the work specified. Significant qualities may include elements, such as performance, weight, size, durability and visual effect.
 - c. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - d. Samples, where applicable or requested.
 - e. A statement indicating the substitution's effect on the contractor's construction schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall contract time.
 - f. Cost information, including a proposal of the net change, if any in the contract sum.
 - g. The contractor's certification that the proposed substitution conforms to requirements in the contract documents in every respect and is appropriate for the application indicated.
 - h. The contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.

4. Architect's Action: If necessary, the Architect will request additional information or documentation for evaluation within one (1) week of receipt of a request for substitution. The Architect will notify the Contractor of acceptance or rejection of the substitution within two (2) weeks of receipt of the request, or one (1) week of receipt of additional information or documentation, whichever is later. Acceptance will be in the form of a change order, field order or approved submittal as deemed appropriate by the Architect.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Conditions: The Architect will receive and consider the contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Architect. The Architect will return the requests without action except to record noncompliance with these requirements.
 1. Extensive revisions to the contract documents are not required.
 2. Proposed changes are in keeping with the general intent of the contract documents.
 3. The request is timely, fully documented, and properly submitted.
 4. The specified product or method of construction cannot be provided within the contract time. The Architect will not consider the request if the product or method cannot be provided as a result of failure to pursue the work promptly or coordinate activities properly.
 5. The request is directly related to an "or equal" clause or similar language in the contract documents.
 6. The requested substitution offers the Owner a substantial advantage, in cost, time, energy conservation, or other considerations after deduction additional responsibilities the Owner must assume. The Owner's additional responsibilities may include compensation to the Architect for redesign and evaluation services, increased cost of other construction by the Owner and similar considerations.
 7. The specified product or method of construction cannot receive necessary approval by the governing authority and the requested substitution can be approved.
 8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the contractor certified that the substitution will overcome the incompatibility.

9. The specified product or method of construction cannot be coordinated with other materials and where the contractor certifies that the proposed substitution can be coordinated.
 10. The specified product or method of construction cannot provide a warranty required by the contract documents and where the contractor certifies that the proposed substitution provides the required warranty.
 11. Where a proposed substitution involves more than one prime contractor, each contractor shall cooperate with the other contractors involved to coordinate the work, provide uniformity and consistency and ensure compatibility of products.
- B. The contractor's submittal and the Architect's acceptance of shop drawings, product data or sample for construction activities not complying with the contract documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

PART 3 - EXECUTION

- A. The attached two page form will be reproduced and sequentially numbered by the Contractor for any and all proposed substitutions. No other forms will be accepted.

SUBSTITUTION REQUEST FORM

To: Timothy P. Huff & Associates Inc.
519 McHenry Avenue
Modesto, CA 95354

PLEASE CHECK THE APPROPRIATE BOX BELOW:

- Substitution Request Prior to Award (During Bid Period)
 - Product or System Substitution
 - Design Change Substitution

- Substitution Request After Award of the Contract
 - Product or System Substitution
 - Design Change Substitution

(Contractor Awarded the Contract for this Project shall assign the numbers below - leave blank if submitted during the Bid Period)

SUBSTITUTION REQUEST # _____

WE HEREBY SUBMIT FOR YOUR CONSIDERATION THE FOLLOWING PRODUCT OR METHOD AS SUBSTITUTION FOR THE SPECIFIED OR DRAWING ITEM FOR THIS PROJECT:

PROJECT: _____

SPECIFIED ITEM: _____

Specification Section #	Page #	Paragraph #	Description
-------------------------	--------	-------------	-------------

- OR -

DRAWING ITEM: _____

Drawing Number	Detail Cut Number	Description
----------------	-------------------	-------------

PROPOSED CREDIT IF ANY: _____

The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: _____

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents which the proposed substitution will require for it's proper installation,

The undersigned certifies: (Modifications by the submitter to the following list is cause for automatic rejection without further review)

1. The proposed substitution does not affect dimensions shown on drawings or code requirements indicated.
2. The undersigned will compensate the Architect at a rate of \$90.00 an hour for review, investigation and comments whether or not the request is approved for changes required to the building design, including engineering design, detailing and construction costs caused by the requested substitution. The Architect is herein defined as any of those firms or individuals listed by reference on the Drawings, including all Consultants identified herein.
3. The proposed substitution will have no adverse affect on other trades, the construction schedule, or specified warranty requirements.
4. Maintenance and service pans will be locally available for the proposed substitution.
5. Attach information for a minimum of three projects where the substitution has been used locally within a 200 mile distance of this project, including names, addresses and telephone numbers of Owners who have accepted this product into their projects.
6. Attach all cost data with explanations if different from Specified or Drawing item, include in that explanation a discussion on a quality of proposed substitution and cost differential.
7. The undersigned will pay for any subsequent changes in incorporating the proposed substitution that were not apparent at the time of approval into the Work, including compensation to the Architect as described in Item 2 above.

The undersigned states that the function, appearance and quality are equivalent or superior to the specified or drawing item.

Submitted By (Bidder, Contractor or Sub-Contractor)

Signature _____

Firm _____

Address _____

Date _____

Telephone _____

Additional Signature required:
(The Contractor if submitted after the Award)

Signature _____

Firm _____

Accepted

Accepted as Noted

Not accepted

Received Past Time Period Allowed by Public
Contract Code #3400

By _____

Date _____

Remarks _____

Below is for the use of the Design Consultant only:

SUBMITTALS
SECTION 01 3300

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including but are not limited to:

1. Contractor's construction schedule.
2. Submittal schedule.
3. Daily construction reports.
4. Shop Drawings and Product Data.

- B. Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

1. Applications for payment.
2. Performance and payment bonds.
3. Insurance certificates.
4. List of Subcontractors, including name, address and telephone number, and identify portion of work responsibility.

1.3 DEFINITIONS

- A. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.

1. Preparation of Coordination Drawings is specified in Division 1 Section "Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.

1.4 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
 3. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.
 - a. Allow one (1) week for initial review. Allow additional time if the Architect must delay processing to permit coordination with subsequent submittals.
 - b. If an intermediate submittal is necessary, process the same as the initial submittal.
 - c. Allow one (1) week for reprocessing each submittal.
 - d. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
- B. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
1. Provide a space approximately 4" x 5" (100 by 125mm) on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken. **The submittal will be returned to the Contractor, without action, if the Contractor does not indicate he has first reviewed the material.**
 2. Include the following information on the label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Number and title of appropriate Specification Section.
 - i. Drawing number and detail references, as appropriate.

1.5 CONTRACTORS CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Prepare a fully developed, horizontal bar-chart type Contractor's construction schedule. Submit within 30 days after the date established for "Commencement of the Work".
 - 1. Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the Work as indicated in the "Schedule of Values."
 - 2. Within each time bar indicate estimated completion percentage in 10 percent increments. As Work progresses, place a contrasting mark in each bar to indicate Actual Completion.
 - 3. Secure time commitments for performing critical elements of the Work from parties involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the Work.
 - 4. Coordinate the Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests and other schedules.
 - 5. Indicate completion of the work within the allotted time of the contract.
- B. Work Stages: Indicate important stages of construction for each major portion of the Work, including submittal review, testing and installation.
- C. Area Separation: Provide a separate time bar to identify each major construction area for each major portion of the work. Indicate where each element in an area must be sequenced or integrated with other activities.
- D. Distribution: Following response to the initial submittal, print and distribute copies to the Architect, Owner, Project Inspector, subcontractors, and other parties required to comply with scheduled dates. Post copies in the Project meeting room and temporary field office.
 - 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- E. Schedule Updating: Update the schedule monthly or after an event or activity, when revisions have been recognized or made. Issue the updated schedule concurrently with next construction meeting.

1.6 SUBMITTAL SCHEDULE

- A. Develop a complete schedule of submittals. Submit the schedule within ten (10) days of the contract.
 - 1. Coordinate submittal schedule with the list of subcontractors, schedule of values and the list of products as well as the contractor's construction schedule.

2. Prepare the schedule in chronological order. Provide the following information:
 - a. Scheduled date for the first submittal.
 - b. Related section number.
 - c. Submittal category (Shop drawings, product data or samples).
 - d. Name of the subcontractor.
 - e. Description of the part of the work covered.
- B. Distribution: Following response to the initial submittal, print and distribute copies to the Architect, Owner, Project Inspector, subcontractors and other parties required to comply with submittal dates indicated. Post copies in the project meeting room and field office.
 1. When revision are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.

1.7 DAILY CONSTRUCTION REPORTS

- A. Prepare a daily construction report recording the following information concerning events at the site, and submit duplicate copies to the Architect at weekly intervals.
 1. List of subcontractors working on site.
 2. Approximate count of personnel at the site by trade.
 3. High and low temperatures, general weather conditions.
 4. Accidents and unusual events.
 5. Project meetings, coordinate meetings, and significant decisions.
 6. Stoppages, delays, shortages and losses.
 7. Emergency event and followup procedures (when appropriate).
 8. Orders and requests of governing authorities.
 9. RFI's, Change Orders, ASI's received, implemented.
 10. Services connected, disconnected.
 11. Visitor Log; name of company and purpose of visit.
 12. Equipment or system tests and startups.
 13. Partial completion, occupancies.

1.8 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
- B. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
 1. Dimensions.
 2. Identification of products and materials included by sheet and detail number.

3. Compliance with specified standards.
 4. Notation of coordination requirements.
 5. Notation of dimensions established by field measurement.
 6. Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" (215 by 280 mm) but no larger than 36" x 48" (890 by 1220 mm).
- C. The Contractor shall review, approve and submit to the Architect Shop Drawings and submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work.
- D. The Contractor shall not perform work requiring submittal and review of Shop Drawings until the respective submittal has been reviewed by the Architect. Such work shall be in accordance with submittals.
- E. By approving and submitting Shop Drawings, the Contractor represents he has determined and verified materials, field measurements and field construction criteria and has checked and coordinated the information contained within the submittals with the requirements of the work and of the Contract Documents.
- F. Initial Submittal: Submit six (6) blue- or black-line print for the Architect's review. The Architect will review and return three (3) copies print.
- G. One of the prints returned shall be marked-up and maintained as a "Record Document".
- H. Do not use Shop Drawings without an appropriate final stamp indicating action taken.

1.9 PRODUCT DATA

- A. Collect product data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves.
1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with recognized trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
 - f. Notation of coordination requirements.
 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

3. Submittals: Submit seven (7) copies of each required submittal; submit four (4) copies where required for maintenance manuals. The Architect will retain one, and will return the other marked with action taken and corrections or modifications required.
 - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 4. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - a. Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.
 - b. Do not permit use of unmarked copies of Product Data in connection with construction.
- C. The Contractor shall review, approve and submit to the Architect Shop Drawings and submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work.
- D. The Contractor shall not perform work requiring submittal and review of Shop Drawings until the respective submittal has been reviewed by the Architect. Such work shall be in accordance with submittals.
- E. By approving and submitting Shop Drawings, the Contractor represents he has determined and verified materials, field measurements and field construction criteria and has checked and coordinated the information contained within the submittals with the requirements of the work and of the Contract Documents.

1.10 ARCHITECT'S ACTION

- A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect will review each submittal and shop drawing, mark to indicate action taken, and return promptly.
1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The Architect will stamp each submittal and shop drawing with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
1. Furnish as Submitted: When the Architect marks a submittal "Furnish as Submitted": work covered by the submittal may proceed with the installation/component as shown.
 2. Furnish as Corrected: When the Architect marks a submittal "Furnish as Corrected", the work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents.

3. Revise and Resubmit: When the Architect marks a submittal “Revise and Resubmit”, do not proceed with work covered by the submittal. Do not purchase, fabricate, deliver or any other activity until submittal has been accepted. Revise or prepare a new submittal in accordance with the notations; resubmit without delay.
 - a. Do not use or allow others to use, submittals marked “Revise and Resubmit” at the Project site or elsewhere where Work is in progress.
4. Rejected: When submittals or shop drawings are marked “Rejected”, do not proceed with that part of the work covered by the submittal. Prepare a new submittal in accordance with these Contract Documents and Specifications.
 - a. Do not permit submittals marked "Rejected" to be used at the Project site, or elsewhere where Work is in progress.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

**SITE STANDARDS
SECTION 01 3513**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including without limitation, Site Access, Conditions, and Regulations;
- B. Special Conditions;
- C. Drug-Free Workplace;
- D. Tobacco-Free Environment;
- E. Criminal Background Investigation/Fingerprinting Certification;
- F. Temporary Facilities and Controls.

1.2 REQUIREMENTS OF THE DISTRICT

- A. Drug-Free Schools and Safety Requirements:
 - 1. All school sites and other District Facilities have been declared “Drug-Free Zones.” No drugs, alcohol and/or smoking are allowed at any time in any buildings and/or grounds on District property. No students, staff, visitors, or contractors are to use drugs on these sites.
 - 2. Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property. Contractor shall post: “Non-Smoking Area” in a highly visible location on Site. Contractor may designate a smoking area outside of District property within the public right-of-way, provided that this area remains quiet and unobtrusive to adjacent neighbors. This smoking area is to be kept clean at all times.
 - 3. Contractor shall ensure that no alcohol, firearms, weapons, or controlled substances enter or are used at the Site. Contractor shall immediately remove from the Site and terminate the employment of any employee(s) found in violation of this provision.
- B. Language: Unacceptable and/or loud language will not be tolerated, “Cat calls” or other derogatory language toward students or public will not be allowed.

- C. Disturbing the Peace (Noise and Lighting):
1. Contractor shall observe the noise ordinance of the Site at all times including, without limitation, all applicable local, city, and/or state laws, ordinance, and/or regulations regarding noise and allowable noise levels.
 2. The use of radios, etc., shall be controlled to keep all sound at a level that cannot be heard beyond the immediate area of use. District reserves the right to prohibit the use of radios at the Site, except for handheld communication radios (e.g., Nextel phones or radios).
 3. If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.
- D. Traffic:
1. Driving on the Premises shall be limited to periods when students and public are not present. If driving or deliveries must be made during the school hours, two (2) or more ground guides shall lead the vehicle across the area of travel. In no case shall driving take place across playgrounds or other pedestrian paths during recess, lunch, and/or class period changes. The speed limit on-the Premises shall be five (5) miles per hour (maximum) or less if conditions require.
 2. All paths of travel for deliveries, including without limitation, material, equipment, and supply deliveries, shall be reviewed and approved by District in advance. Any damage will be repaired to the pre-damaged condition by the Contractor.
 3. District shall designate a construction entry to the Site. If Contractor requests, District determines it is required, and to the extent possible, District shall designate a staging area so as not to interfere with the normal functioning of school facilities. Location of gates and fencing shall be approved in advance with District and at Contractor's expense.
 4. Parking areas shall be reviewed and approved by District in advance. No parking is to occur under the drip line of trees or in areas that could otherwise be damaged.
- E. All of the above shall be observed and complied with the Contractor and all workers on the Site. Failure to follow these directives could result in individual(s) being suspended or removed from the work force at the discretion of the District. The same rules and regulations shall apply equally to delivery personnel, inspectors, consultants, and other visitors to the Site.

END OF SECTION

**REGULATORY REQUIREMENTS
SECTION 01 4100**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Obtaining of Permits and Licenses and Work to Comply with All Applicable Regulations.

1.2 DESCRIPTION

This section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

1.3 REQUIREMENTS OF REGULATORY AGENCIES

- A. All statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction of the Work, are hereby incorporated into these Contract Documents as if repeated in full herein and are otherwise specified, including, without limitation, the references in the list below. Contractor shall make available at the Site copies of all the listed documents applicable to the Work as the District and/or Architect/Engineer may request, including, without limitation, applicable portions of the California Code of Regulations (“CCR”).
- B. This Project shall be governed by applicable regulations, including, without limitation, Chapter 4, Part 1, Title 24, CCR, and the most current version on the date the bids are opened and as it pertains to school construction including, without limitation:
 - 1. Test and testing laboratory per Section 4-335 (District shall pay for the testing laboratory).
 - 2. Administration.
 - a. Duties of the Architect & Engineers shall be per Section 4-333(a) and 4-341.
 - b. Duties of the Contractor shall be per Section 4-343.
 - 3. Contractor shall keep and make available a copy of Part 1 and 2 of the most current version of Title 24 at the Site during construction.
 - 4. Addenda and Change Orders per Section 4-338.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF SECTION

TEMPORARY FACILITIES
SECTION 01 5000

PART 1 - GENERAL

1.1 SUMMARY

- A. Furnish required temporary facilities as shown or specified herein plus such facilities as required for proper performance of the Contract. Locate temporary facilities where directed and maintain in a safe and sanitary condition at all times until completion of the Contract. The Conditions of the Contract and the other sections of Division 1 apply to this section as fully as if repeated herein.

1.2 QUALITY ASSURANCE

- A. Comply with governing regulation and utility company regulations and recommendations. Comply with pollution and environmental protection regulations for use of water and energy, for discharge of wastes and storm drainage from project site, and for control of dust, air pollution and noise.

PART 2- PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 TEMPORARY SANITARY FACILITIES

- A. Provide adequate temporary sanitary conveniences for the use of employees and persons engaged on the work, including subcontractors and their employees, as required by law, ordinances, or regulation of public authorities having jurisdiction.
- B. Maintain sanitary facilities in a clean and sanitary condition during the entire course of the work.

3.2 TEMPORARY ELECTRIC FACILITIES

- A. Provide and maintain during the progress of the work, electrical power and wiring requirements to facilitate the work of all trades and services connected with the work. Coordinate with District power source.

3.3 TEMPORARY WATER

- A. Make arrangements and pay costs for water required for construction purposes. Furnish and install piping or hoses to carry water to points needed on the project. Water used on the project shall be potable water. Closest availability of water shall be coordinated with the District and located on site.

- B. Provide adequate fire protection for the duration of work in accordance with local codes, ordinances and Governing Regulations.
- C. The Contractor shall take necessary precaution to guard against and eliminate possible fire hazards and to prevent damage to construction work, building materials, equipment, and public property. The Contractor shall be responsible for providing, maintaining and enforcing fire protection methods.

3.4 CONSTRUCTION EQUIPMENT

- A. Contractor shall erect, equip, and maintain construction equipment in accordance with applicable statutes, laws, ordinance, rules and regulations of authority having jurisdiction.
- B. Contractor shall provide, maintain and remove upon completion of the work all temporary rigging, scaffolding, hoisting equipment, rubbish chutes, barricades around openings and excavations, ladders, fences and other temporary work as required for all work hereunder.
- C. Temporary work shall conform to requirements of State, County, and local authorities and underwriters which pertain to operation, safety and fire hazard. Contractor shall furnish and install items necessary for conformity with such requirements, whether or not called for under the separate divisions of these specifications.

3.5 FENCES AND BARRICADES

- A. Construct and maintain fences, planking, barricades, lights, shoring, and warning signs as indicated on the drawings and as required by local authorities and State safety ordinances and as required to protect the Owner's property from injury or loss and as necessary for the protection of the public as follows:
 - 1. Enclosure Fence: Before excavation begins, install an enclosure fence with lockable entrance gates. Install in a manner that will prevent people from easily entering the site, except by the entrance gates.
 - a. Provide open mesh, chainlink fencing 6' high (minimum) with posts set in a compacted mixture of gravel and earth.

3.6 STORAGE

- A. Operations of the contractor, including storage of materials, shall be confined to areas approved. Contractor shall be liable for damage caused by him during such use of property of the Owner or other parties. Contractor shall save the Owner, its officers and agents, and the Architect and his employees free and harmless from liability of any nature or kind arising from any use, trespass, or damage occasioned by his operations on premises of third persons.
- B. Provide lockable storage containers for the security of materials and equipment as deemed appropriate by the Contractor.

3.7 ENVIRONMENTAL PROTECTION

- A. Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted or that other undesirable effects might result. Use of tools and equipment that produce noise shall comply with OSHA regulations.

3.8 FIRE AND SAFETY PLAN

- A. Contractor is responsible for development of fire safety for personnel and property during the course of construction. Comply with CFC Chapter 33 for precautionary action and safety measures as needed.

3.9 REMOVAL AT COMPLETION

- A. Upon completion of the work, or prior thereto, when so directed by the Architect, Contractor shall remove temporary facilities, structures and installation from the Owner's property. Similarly, return exterior areas utilized for temporary facilities to substantially their original state, or when called for on the drawings, complete the areas as shown or noted. Sanitary facilities shall be properly disinfected and evidence removed from the site.

END OF SECTION

**PROJECT CLOSEOUT
SECTION 01 7050**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to the work of this section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
 - 1. Inspection procedures
 - 2. Project record documents submittal.
 - 3. Operation and maintenance manual submittal.
 - 4. Submittal of warranties.
 - 5. Final cleaning.

1.3 COMPLETION AND FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting inspection for completion complete the following. List exceptions in the request.
 - 1. Advise the Owner of pending insurance changeover requirements.
 - 2. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
 - 3. Obtain and submit releases enabling the Owner unrestricted use of the work and access to services and utilities. Include occupancy permits, operating certificates and similar releases.
 - 4. Submit record documents and similar final record information.
 - 5. Deliver tools, spare parts, extra stock and similar items.
 - 6. Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.
 - 7. Complete startup testing of systems and submit all testing reports and complete instructions of the Owner's operation and maintenance personnel.

8. Complete final cleanup requirements, including touch up painting.
 9. Touch up and otherwise repair and restore marred, exposed finishes.
- B. Inspection Procedures: On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the certificate of completion following inspection or advise the contractor of construction that must be completed or corrected before the certificate will be issued.
1. The Architect will repeat inspection when requested and assured that the work is substantially complete.
 2. Results of the completed inspection will form the basis of requirements for final acceptance.

1.4 FINAL ACCEPTANCE

- A. Submit the final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
- B. Submit a copy of the Architect/Engineer's final punch-list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance and has been endorsed and dated by the Architect/Engineer.

1.5 RECORD DOCUMENT SUBMITTALS

- A. General: Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure, fire resistant 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 which drawing is most capable of showing conditions fully and accurately. Where shop drawings are used, record a cross-reference at the corresponding locations on the contract drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 1. 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 the contract drawings or shop drawings.

3. Not related change order numbers where applicable.
 4. Organize record drawing sheets into manageable sets (ie.: plumbing, mechanical and electrical). Bind sets with durable paper cover sheets; print suitable titles, dates and other identification on the cover of each set.
- C. Maintenance Manuals: Organize operation and maintenance data into suitable sets of manageable size (two copies of all information). Bind properly indexed data in individual, heavy duty, two inch (2"), three (3) ring, vinyl covered binders with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Include the following types of information.
1. Emergency instructions.
 2. Spare parts list.
 3. Copies of warranties.
 4. Wiring diagrams.
 5. Recommended "turn around" cycles.
 6. Inspection procedures.
 7. Shop drawings and product data.
 8. Fixture lamping schedule.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 CLOSEOUT PROCEDURES

- A. Operations 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. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:
1. Maintenance manuals.
 2. Record documents.
 3. Spare parts and materials.
 4. Tools.
 5. Identification systems.
 6. Control sequences.
 7. Warranties and bonds.
 8. Maintenance agreements and similar continuing commitments.

B. As part of instruction for operating equipment, demonstrate the following procedures:

1. Startup.
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. 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.

END OF SECTION

**CUTTING AND PATCHING
SECTION 01 7329**

PART 1 - GENERAL

1.1 SUMMARY

- A. Work included: Cutting and patching for this work includes, but is not necessarily limited to:
1. Sawcutting;
 2. Removal of existing asphalt and concrete;
 3. Trenching and trench backfilling;
 4. Final patching;
- B. Related work described elsewhere:
1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 JOB CONDITIONS

- A. Dust Control: use all means necessary to control dust on and near the Work and on and near all areas if such dust is caused by the Contractor's operations during performance of the Work or if resulting from the condition in which the Contractor leaves the site.
1. Thoroughly moisten all surfaces as required to prevent being a nuisance to the public, neighbors, and concurrent performance of other work on the site.
- B. Protection: Use all means necessary to protect all materials of this section before, during, and after installation and to protect all objects designed to remain.
1. In the event of damage, immediately make all repairs and replace necessary to the approval of the Architect and at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible if identical materials are unavailable or cannot be used. Use materials whose installed performance will equal or surpass that of existing materials.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed before cutting. If unsafe or unsatisfactory conditions are encountered, take corrective action before proceeding.
 - 1. Before proceeding, meet at the project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of work to 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. Avoid cutting existing pipe, conduit or ductwork serving the building but scheduled to be removed or relocated until provisions have been made to bypass them.

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.

- B. Cutting: Cut existing construction using methods least likely to damage elements retained or adjoining construction. Where possible, review proposed procedures with the original Installer; comply with the original Installer's recommendations.
- C. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
 - 1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
 - 2. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. All concrete or asphalt to be removed and patched shall be sawcut in a straight and true line. Replace existing asphaltic concrete with minimum 2" A.C. over minimum 4" aggregate base, over 90% compacted grade. Replace existing concrete with 4" minimum concrete over 90% compacted grade. Finish shall match that of existing.
 - 4. Compaction of trenches shall be done by mechanical means and all lines shall be inspected for proper inspection by the Inspector prior to backfilling of trenches.
 - 5. All round holes through concrete slabs or walls shall be core drilled with a diamond drill bit. In no case shall any concrete beam or column be cut.
 - 6. Asphalt trenches which are to be patched shall be prepped by cleaning the existing surfaces so to be free of debris and dust. Area shall be primed prior to asphalt being applied.
 - 7. Patching which shows evidence of settling shall be removed and replaced at the Contractors expense. The Contractor shall provide appropriate means to protect asphalt and concrete from acts of vandalism until material is cured.

3.4 CLEANING

- A. Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty and similar items. Thoroughly clean piping, conduit and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.

END OF SECTION

**CLEANING
SECTION 01 7423**

PART 1 - GENERAL

1.1 SUMMARY

- A. Throughout the construction period, maintain the site in a standard of cleanliness as described in this Section.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. In addition to standards described in this Section, comply with requirements for cleaning as described in pertinent other Sections of these Specifications.

1.2 QUALITY ASSURANCE

- A. Conduct daily inspection, and more often if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section, comply with pertinent requirements of governmental agencies 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 only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material.

PART 3 - EXECUTION

3.1 DUST CONTROL

- A. Take appropriate actions daily to check the spread of dust and dirt to avoid the creation of a nuisance within the construction area (fenced area) and surrounding area. Do not use water if it results in hazardous or objectionable conditions, such as ice, flooding or pollution. Comply with all dust regulations imposed by local air pollution agencies.
- B. Coordinate all clean up operations outside of the construction are with District through the Inspector.

3.2 PROGRESS CLEANING

- A. General:
 - 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.
 - 2. Do not allow accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
 - 3. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
 - 4. At least twice each month, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.
 - 5. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.
 - 6. Weekly, and more often if necessary, inspect all arrangements of materials stored on the site. Re-stack, tidy, or otherwise service arrangements to meet the requirements of subparagraph 3.2-A-1 above.
 - 7. Maintain the site in a neat and orderly condition at all times.

3.3 FINAL CLEANING

- A. "Clean," for the purpose of this Article, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.

- B. Prior to completion of the Work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Section 01705, Part 3.2 above.
- C. Site:
 - 1. Unless otherwise specifically directed by the Architect, broom clean paved areas on the site and public paved areas adjacent to the site.
 - 2. Completely remove resultant debris.
- D. Schedule final cleaning as approved by the Architect to enable Owner to accept a completely clean Work.

3.4 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 shall be as determined by the Architect in accordance with the General Conditions of the Contract.

END OF SECTION

**ROUGH CARPENTRY
SECTION 06 1000**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Wood blocking, and nailers.
 - 2. Plywood Sheathing.

1.3 DEFINITIONS

- A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed, unless otherwise indicated.
- B. Exposed Framing: Dimension lumber not concealed by other construction.
- C. Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1. NELMA - Northeastern Lumber Manufacturers Association.
 - 2. NLGA - National Lumber Grades Authority.
 - 3. RIS - Redwood Inspection Service.
 - 4. SPIB - Southern Pine Inspection Bureau.
 - 5. WCLIB - West Coast Lumber Inspection Bureau.
 - 6. WWPA - Western Wood Products Association.

1.4 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, with the experience and capability to conduct the testing indicated, as documented according to ASTM E 548.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber, plywood, and other panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Metal Framing Anchors:
 - a. Simpson Strong-Tie Company, Inc.

2.2 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
 - 3. Provide dressed lumber, S4S, unless otherwise indicated.
 - 4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.
- B. Wood Structural Panels:
 - 1. Plywood: Either DOC PS 1 or DOC PS 2, unless otherwise indicated.
 - 2. Thickness: As needed to comply with requirements specified on the structural drawings but not less than thickness indicated.
 - 3. Factory mark panels according to indicated standard.
- C. Exposed Fascia Board:
 - 1. Select structural grade.

2.3 DIMENSION LUMBER

- A. General: Provide dimension lumber of grades indicated on the Drawings according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.
- B. Joists, Rafters, and Other Framing Not Listed Above: No. 2 grade and of the following species:
 - 1. Douglas fir-larch; WCLIB or WWPA.

2.4 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
 - 3. Furring.
- B. For items of dimension lumber size, provide No. 2 grade lumber with 19 percent maximum moisture content and the following species:
 - 1. Douglas Fir-Larch; WCLIB or WWP.
- C. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

2.5 SHEATHING

- A. Plywood Roof Sheathing: CD Exterior plywood.
 - 1. Span Rating: Not less than 32/16
 - 2. Thickness: Not less than 15/32 inch .
 - 3. Plywood shearwall panels:
 - a. See Drawings for panel thickness.

2.6 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
 - 1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Powder-Driven Fasteners: CABO NER-272.
- D. Wood Screws: ASME B18.6.1.

2.7 METAL FRAMING ANCHORS

- A. General: Provide framing anchors made from metal indicated, of structural capacity, type, and size indicated, on the structural drawings and as follows:
 - 1. Research/Evaluation Reports: Provide products acceptable to authorities having jurisdiction and for which model code research/evaluation reports exist that show compliance of metal framing anchors, for application indicated, with building code

in effect for Project.

- B. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking,, and similar supports to comply with requirements for attaching other construction.
- B. Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- C. Apply field treatment complying with AWWA M4 to cut surfaces of preservative-treated lumber and plywood.
- D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. CABO NER-272 for power-driven fasteners.
 - 2. Published requirements of metal framing anchor manufacturer.
 - 3. Table 2304.9.1, "Fastening Schedule," in the 2010 California Building Code.
- E. Use common wire nails, unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required.

3.2 WOOD SLEEPER, BLOCKING, AND NAILER INSTALLATION

- A. Install where indicated and where required for screeding or attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated. Build anchor bolts into masonry during installation of masonry work. Where possible, secure anchor bolts to formwork before concrete placement.

END OF SECTION

PREFORMED (MANUFACTURED) WALL PANELS
SECTION 07 4200

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. The work includes, but is not necessarily limited to, furnishing and installation of all preformed metal wall, soffit panels, and accessories as indicated on the drawings and specified herein.

1.2 RELATED SECTIONS

- A. Edit for project conditions. Section Numbers indicated are those recommended by CSI Masterformat; revise if numbers differ from those used in Project Manual.
1. Rough Carpentry: Section 06 1000.
 2. Metal Flashings and Sheet Metal: Section 07 6000.
 3. Sealants and Caulking: Section 07 9200.
 4. Painting: Section 09 9000.

1.3 SUBMITTALS

- A. **PRODUCT DATA**
1. Submit manufacturer's technical product data, installation instructions and recommendations for each type of roofing and wall panels required. Include data substantiating that materials comply with requirements.
- B. **SAMPLES**
1. Prior to ordering products, submit Manufacturer's standard color Samples for Architect's/Engineer's selection.
 2. Prior to starting work, submit (quantity) 12" long Panel Sample showing shape and a representative color chip for Architect's/Engineer's acceptance.
- C. **SHOP DRAWINGS**
1. Show panel layout, trim installation, and panel attachment.
- D. **SITE CONDITIONS**
1. Provide completed site condition form for the specified finish to suit project condition.

1.4 QUALITY ASSURNACE

A. INSTALLER'S QUALIFICATIONS

1. Installation of panels and accessories by installers with a minimum of 5 years experience on panels project of this nature.

B. MANUFACTURER'S QUALIFICATIONS

1. Manufacturer shall have a minimum of 10 years experience supplying metal roofing/siding to the region where the work is to be done.
2. Manufacturer shall provide proof of \$2,000,000 liability insurance for their metal roof system and comply with current independent testing and certification as specified. See specific product literature for testing information.
3. Panel manufacturers without full supporting literature, Flashings & Details Guides, Guide Specifications and Technical Support shall not be considered equal to the specified product.

C. REGULATORY AGENCY REQUIREMENTS

1. Comply with UBC and local Building Code requirements if more restrictive than those specified herein.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protect against damage and discoloration.
- B. Handle panels with non-marring slings.
- C. Do not bend panels.
- D. Store panels above ground, with one end elevated for drainage.
- E. Protect panels against standing water and condensation between adjacent surfaces.
- F. If panels become wet, immediately separate sheets, wipe dry with clean cloth, and allow to air dry.
- G. Remove any strippable film coating prior to installation and do not allow it to remain on the panels in extreme cold, heat or in direct sunlight.

1.6 WARRANTY

A. MANUFACTURER'S PRODUCT WARRANTY

1. Manufacturer's standard coating performance warranty, as available for specified installation and environmental condition. (Contact an AEP Span representative to determine actual warranty criteria.)

B. CONTRACTOR'S WARRANTY

1. Warrant panels, flashings, sealants, fasteners and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion date.

PART 2 - PRODUCT

2.1 ACCEPTABLE MANUFACTURER

- A. AEP Span, A Division of ASC Profiles Inc, 2110 Enterprise Boulevard, West Sacramento, California 95691 800-733-4955
Fontana: 10905 Beech Avenue, Fontana, California 92337

B. PANEL DESIGNATION

1. Box Rib Siding; 36" Net Coverage; Rib Depth 1 ½"; 22 Gauge.

2.2 MATERIALS

A. PANELS

1. Base Metal:
 - a. Materials:
 - 1) Steel conforming to ASTM A792 Zincolume®/Galvalume®, minimum yield 50,000 psi, thickness 22.
 - 2) G-90 Galvanized, minimum yield 40,000 psi, thickness 24 gauge (non-standard).
 - b. Protective Coating:
 - 1) Conform to ASTM A792, AZ50 (Zincolume/Galvalume).
 - c. Trim: Gauge and finish to match adjacent panel.
2. Exterior Finish:
 - a. DuraTech® 5000 (Polyvinylidene Fluoride), full 70% Kynar® 500/Hylar 5000® consisting of a baked-on 0.15-0.20 mil corrosion resistant primer and backed-on 0.70-0.80 mil finish coat with a specular gloss of 10-30% when tested in accordance with ASTM D-523-89 at 60°. (At areas of painted accent, omit Kynar paint. Provide custom paint in field.)
3. Interior Finish:
 - a. Primer Coat Material: Corrosion-resistant primer; primer coat dry film thickness: 0.15 mils; finish coat material: polyester paint, finish coat dry film thickness: 0.35 mils.
 - b. Color: Off-White to Light Gray.
4. Color:
 - a. Custom field painted color.

B. FABRICATION

1. Unless otherwise shown on drawings or specified herein, panels shall be full length. Fabricate flashings and accessories in longest practical lengths.
2. Roofing panels shall be factory formed. Field formed panels are not acceptable.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXISTING CONDITIONS

1. Inspect installed work of other trades and verify that such work is complete to a point where this work may continue.
2. Verify that installation may be made in accordance with approved shop drawings and manufacturer's instructions.

3.2 PREPARATION

A. FIELD MEASUREMENTS

1. Verify prior to fabrication.
2. If field measurements differ from drawings dimensions, notify Architect/Engineer prior to fabrication.

B. PROTECTION

1. Treat, or isolate with protective material, and contacting surfaces or dissimilar materials to prevent electrolytic corrosion.
2. Require workmen who will be walking on Roofing Panels to wear clean, soft-soled work shoes that will not pick up stones or other abrasive material, which could cause damage or discoloration.
3. Protect work of other trades against damage and discoloration.

C. SURFACE PREPARATION

1. Clean and dry surfaces prior to applying sealant.

3.3 INSTALLATION

A. PANELS

1. Follow roof panel manufacturer's directions.
2. Install panel seams (choose one) vertically or horizontally.
3. Lap panels away from prevailing wind direction.
4. Do not stretch or compress panel side-laps.
5. Secure panels without warp or deflection.

B. ALLOWABLE ERECTION TOLERANCE

1. Maximum Alignment Variation: 1/4 inch in 40 feet.

C. FLASHING

1. Follow manufacturer's directions and architect approved Shop Drawings.
2. Overlap roof panels at least 6 inches.
3. Install flashings to allow for thermal movement.
4. Remove strippable protective film, if used, immediately preceding flashing installation.

D. CUTTING AND FITTING

1. Neat, square and true. Torch cutting is prohibited where cut is exposed to final view.
2. Opening 6 inches and larger in any direction: Shop fabricate and reinforce to maintain original load capacity.
3. Where necessary to saw-cut panels, debur cut edges.

3.4 CLEAN UP AND CLOSE OUT

A. PANEL DAMAGE AND FINISH SCRATCHES

1. Do not apply touch-up paint to damaged paint areas that involve minor scratches.
2. Panels or flashings that have severe paint and/or substrate damage shall be replaced as directed by the Architect's or Owner's representative.

B. CLEANING AND REPAIRING

1. At completion of each day's work and at work completion, sweep panels, flashings and gutter clean. Do not allow fasteners, cuttings, filings or scraps to accumulate.
2. Remove debris from project site upon work completion or sooner, if directed.

END OF SECTION

THERMOPLASTIC MEMBRANE ROOFING SYSTEM
SECTION 075400

PART 1 - GENERAL

The project, Re-roofing at Cardozo Middle School located in Riverbank, CA, includes the provision of a complete Elevate roofing, wall, and lining system UltraPly™ TPO XR Externally Reinforced Thermoplastic Membrane Roofing System.

1.1 SUMMARY

- A. Furnish and install elastomeric sheet roofing system, including:
1. Roofing manufacturer's requirements for the specified warranty.
 2. Preparation of roofing substrates.
 3. Wood nailers of roofing attachment.
 4. Insulation.
 5. Cover boards.
 6. Externally reinforced (fleeced back) elastomeric membrane roofing.
 7. Metal roof edging and coping.
 8. Flashings.
 9. Walkway pads.
 10. Other roofing-related items specified or indicated on the drawings or otherwise necessary to provide a complete weatherproof roofing system.
- B. Disposal of demolition debris and construction waste is the responsibility of Contractor. Perform disposal in manner complying with all applicable federal, state, and local regulations.
- C. Comply with the published recommendations and instructions of the roofing membrane manufacturer, at www.holcimelevate.com
- D. Commencement of work by the Contractor shall constitute acknowledgment by the Contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by roofing membrane manufacturer. No modification of the Contract Sum will be made for failure to adequately examine the Contract Documents or the project conditions.

1.2 RELATED SECTIONS

- A. Section 06 1000 - Rough Carpentry: Wood nailers associated with roofing and roof insulation.
- B. Section 07 6000 - Sheet Metal Flashing and Trim: Formed metal flashing and trim items associated with roofing.

1.3 REFERENCES

- A. Referenced Standards: These standards form part of this specification only to the extent they are referenced as specification requirements.
1. ASTM C 1177/C 1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2004.
 2. ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2013.
 3. ASTM C 1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer; 2004.
 4. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics; 2003.
 5. ASTM D 1004 - Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting; 2003.
 6. ASTM D 3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in a Environmental Chamber; 2000.
 7. ASTM D 6878 - Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing; 2003.
 8. ASTM E 84 - Standard Test Methods for Surface Burning Characteristics of Building Materials; 2005.
 9. ASTM E 136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C; 2004.
 10. FM 1-28 - Design Wind Loads; Factory Mutual System; 2002.
 11. FM 1-29 - Roof Deck Securement and Above Deck Roof Components; Factory Mutual System; 2005.
 12. PS 1 - Construction and Industrial Plywood; 1995.
 13. PS 20 - American Softwood Lumber Standard; 2005.
 14. SPRI ES-1 - Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems; 2003. (ANSI/SPRI ES-1).

1.4 SUBMITTALS

- A. Product Data:
1. Provide membrane manufacturer's printed data sufficient to show that all components of roofing system, including insulation and fasteners, comply with the specified requirements and with the membrane manufacturer's requirements and recommendations for the system type specified; include data for each product used in conjunction with roofing membrane.
 2. Where UL or FM requirements are specified, provide documentation that shows that the roofing system to be installed is UL-Classified or FM-approved, as applicable; include data itemizing the components of the classified or approved system.
 3. Installation Instructions: Provide manufacturer's instructions to installer, marked up to show exactly how all components will be installed; where instructions allow installation options, clearly indicate which option will be used.

- B. Shop Drawings: Provide:
 - 1. The roof membrane manufacturer's standard details customized for this project for all relevant conditions, including flashings, base tie-ins, roof edges, terminations expansion joints, penetrations, and drains.
- C. Pre-Installation Notice: Copy to show that manufacturer's required Pre-Installation Notice (PIN) has been accepted and approved by the manufacturer.
- D. Executed Warranty.
- E. Specimen Warranty: Submit prior to starting work.
- F. Samples: Submit samples of each product to be used.

1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: Roofing installer shall have the following:
 - 1. Current Elevate roofing, wall, and lining systems Master Contractor status.
 - 2. At least five years' experience in installing specified system.
 - 3. Capability to provide payment and performance bond to building owner.
- B. Pre-Installation Conference: Before start of roofing work, Contractor shall hold a meeting to discuss the proper installation of materials and requirements to achieve the warranty.
 - 1. Require attendance with all parties directly influencing the quality of roofing work or affected by the performance of roofing work.
 - 2. Notify Architect well in advance of meeting.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver product in manufacturer's original containers, dry and undamaged, with seals and labels intact and legible.
- B. Store materials clear of ground and moisture with weather protective covering.
- C. Keep combustible materials away from ignition sources.

1.7 WARRANTY

- A. Comply with all warranty procedures required by manufacturer, including notifications, scheduling, and inspections.

- B. Warranty: Elevate 20-years, Red Shield™ Limited Warranty covering membrane, roof insulation, and membrane accessories.

Warranty

Duration

20 years

Membrane Thickness

required minimums

.060 UltraPly TPO XR

Systems specified with a warranty duration of 20 years of greater or a wind speed coverage above 55 mph require additional attachment and detail considerations. Consult the manufacturer's design guidelines for further information. Source a 30-year System specification especially drafted for your project from your local Elevate roofing, wall, and lining systems Representative. To locate your rep, visit www.holcimelevate.com and click on 'Find a Sales rep' under the ROOFING tab.

1. Limit of Liability: No dollar limitation.
 - a. Scope of Coverage: Repair leaks in the roofing system caused by:
 - b. Ordinary wear and tear of the elements.
 - c. Manufacturing defect in Elevate roofing, wall, and lining systems brand materials.
 - d. Defective workmanship used to install these materials.
 - e. Damage due to winds up to 80 mph.
2. Not Covered:
 - a. Damage due to winds in excess of 80 mph.
 - b. Damage due to hurricanes or tornadoes.
 - c. Hail.
 - d. Intentional damage.
 - e. Unintentional damage due to normal rooftop inspections, maintenance, or service.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer- Roofing System: Elevate roofing, wall, and lining systems, Nashville, TN. www.holcimelevate.com
- B. Roofing systems manufactured by others may be acceptable provided the roofing system is completely equivalent in materials and warranty conditions and the manufacturer meets the following qualifications:
1. Specializing in manufacturing the roofing system to be provided.
 2. Minimum ten years of experience manufacturing the roofing system to be provided.
 3. Able to provide a no dollar limit, single source roof system warranty that is backed by corporate assets in excess of one billion dollars.
 4. ISO 9001 certified.
 5. Able to provide polyisocyanurate insulation that is produced in own facilities.

- C. Manufacturer of Insulation and Cover Board: Same manufacturer as roof membrane.
- D. Manufacturer of Metal Roof Edging: Same manufacturer as roof membrane.
 - 1. Metal roof edging products by other manufacturers are not acceptable.
 - 2. Field-or shop- fabricated metal roof edging are not acceptable.

2.2 ROOFING SYSTEM DESCRIPTION

- A. Roofing System:
 - 1. Membrane: Externally Reinforced (Fleece Backed) Thermoplastic Polyolefin (TPO).
 - 2. Thickness: As specified elsewhere.
 - 3. Membrane Attachment: Adhered.
 - 4. Slope: Deck is sloped but not enough; provide additional slope of 1/4 inch per foot (1:48) by means of tapered insulation.
 - 5. Comply with applicable local building code requirements.
 - 6. Provide assembly having Underwritten Laboratories, Inc. (UL) Class A, Fire Hazard Classification.
 - 7. Provide assembly complying with Factory Mutual Corporation (FM) Roof Assembly Classification, FM DS 1-28 and 1-29, and meeting minimum requirements of FM 1-90 wind uplift rating.

- B. Insulation:
 - 1. Total System R Value: No minimum required. Provide tapered insulation as needed to provide minimum slopes required.
 - 2. Maximum Board Thickness: 2 inches (50 mm); use as many layers as necessary; stagger joints in adjacent layers.

Iso Insulation Thickness [IN (mm)]	Insulation R Value*
1.00 (25.4)	5.7
1.50 (38.1)	8.6
1.75 (44.5)	10.0
2.00 (50.8)	11.4
2.30 (58.4)	13.2
2.50 (63.5)	14.4
2.80 (71.1)	16.2
3.00 (71.1)	17.4
3.25 (82.6)	18.9
3.50 (88.9)	20.5
3.75 (95.3)	22.0
4.00 (101.6)	23.6

** Long Term thermal Resistance (LTTR) values provide a 15- year time weighted average in accordance with ASTM 1289-13.*

Total Iso Insulation Thickness, nominal	System R Value
3.5 inches	20R
4.5 inches	25R
5.25 inches	30R
6.25 inches	35R

Use of **Elevate ISOGARD™ HD cover board** can provide an additional 2.5R vs. cover boards. [Example: 2.0-inch Iso (11.4R) + 2.0 inch Iso (11.4 R) + .5-inch HD Iso cover board (2.5 R) = 25.3 R]

3. Base Layer: Polyisocyanurate foam board, non-composite.
 - a. Attachment: Mechanical Fastening
 4. Top Layer: Polyisocyanurate foam board, non-composite.
 - a. Attachment: Mechanical Fastening
- C. Cover Board: Gypsum-Board Cover Board:
1. Thickness: 0.25 inch (6.4mm)
 2. R-Value: negligible.
 - a. Attachment: Mechanical Fastening

2.3 TPO MEMBRANE MATERIALS

- A. Membrane: Flexible, heat weldable sheet composed of thermoplastic polyolefin polymer and ethylene propylene rubber; complying with ASTM D 6878, with polyester weft inserted reinforcement and an 8 ounce polyester fleece backing and the following additional minimum characteristics:
1. Thickness 0.060 inch (1.52 mm) plus/minus 10 percent, with coating thickness over reinforcement of 0.021 inch (0.53 mm) plus/minus 10 percent.
 2. Puncture Resistance: 390 lbf (1,735 N), minimum, when tested in accordance FTM 101C Method 2031.
 3. Tear Strength: 120 lbf(534 N).
 4. Solar Reflectance: 0.79, minimum, when tested in accordance with ASTM E 1549. [white].
 5. Solar Reflectance: 0.81, minimum, when tested in accordance with ASTM E 903. [white]
 6. Color: White or gray where indicated on plans.
 7. Acceptable Product: UltraPly TPO XR by Elevate roofing, wall, and lining systems.
- B. Membrane Fasteners (supplemental, where required): Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; use only fasteners furnished by roof membrane manufacturer.

- C. Curb and Parapet Flashing: Same material as membrane, with encapsulated edge which eliminates need for seam sealing the flashing-to-roof splices; precut to 18 inches (457 mm) wide.
- D. Formable Flashing: Non-reinforced, flexible, heat weldable sheet, composed of thermoplastic polyolefin polymer and ethylene propylene rubber.
 1. Thickness: 0.060 inch (1.52 mm) plus/minus 10 percent.
 2. Tensile Strength: 1550 psi (10.7 Mpa), minimum, when tested in accordance with ASTM D 638 after heat aging.
 3. Elongation at Break: 650 percent, minimum, when tested in accordance with ASTM D 638 after heat aging.
 4. Tearing Strength: 12 lbf (53 N), minimum, when tested in accordance with ASTM D 1004 after heat aging.
 5. Color: Same as field membrane.
 6. Acceptable Product: UltraPly TPO Flashing by Elevate roofing, wall, and lining systems.
- E. Tape Flashing: 5-1/2-inch (140 mm) nominal wide TPO membrane laminated to cured rubber polymer seaming tape, overall thickness 0.065-inch (1.6 mm) nominal; TPO QuickSeam Flashing by Elevate roofing, wall, and lining systems.
- F. Membrane Adhesive: Two-component, low-rise polyurethane adhesive designed to attach fleece backed roofing membranes to a variety of acceptable substrates; XR Stick by Elevate roofing, wall, and lining systems.
- G. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing; Pourable Sealer by Elevate roofing, wall, and lining systems.
- H. Seam Plates: Steel with barbs and Galvalume coating; corrosion-resistance complying with FM 4470.
- I. Termination Bars: Aluminum bars with integral caulk ledge; 1.3 inches (33 mm) wide by 0.10 inch (2.5 mm) thick; Elevate Termination Bar by Elevate roofing, wall, and lining systems.
- J. Cut Edge Sealant: Synthetic rubber-based, for use where membrane reinforcement is exposed; UltraPly TPO Cut Edge Sealant by Elevate roofing, wall, and lining systems.
- K. General Purpose Sealant: EPDM-based, one-part, white general-purpose sealant; UltraPly TPO General Purpose Sealant by Elevate roofing, wall, and lining systems.
- L. Molded Flashing Accessories: Unreinforced TPO membrane pre-molded to suit a variety of flashing details, including pipe boots, inside corners, outside corners, etc.; UltraPly TPO Small and Large Pipe Flashing by Elevate roofing, wall, and lining systems.

- M. Roof Walkway Pads: Non-reinforced TPO walkway pads, 0.130 inch (3 mm) by 30 inches (760 mm) by 40 feet (12.19 m) long with patterned traffic bearing surface; UltraPly TPO Walkway Pads by Elevate roofing, wall, and lining systems.
- N. Yellow Safety Strip: To designate areas of caution on the roof or around rooftop objects. 5.5 inches wide (140 mm) by 100 feet long (30 m) strip and nominal 30 mil (0.76 mm) thick yellow TPO membrane laminated to a white, cured, seam tape. Compatible with TPO and EPDM; QuickSeam Yellow Safety Strip by Elevate roofing, wall, and lining systems.

2.4 ROOF INSULATION AND COVER BOARDS

- A. Polyisocyanurate Board Insulation: Closed cell polyisocyanurate foam with black glass reinforced mat laminated to faces, complying with ASTM C 1289 Type II Class 1, with the following additional characteristics:
 1. Thickness: As indicated elsewhere.
 2. Size: 48 inches (1220 mm) by 96 inches (2440 mm), nominal.
 3. Exception: Insulation to be attached using adhesive or asphalt may be no larger than 48 inches (1220 mm) by 48 inches (1220 mm), nominal.
 4. R-Value (LTTR): 1.0-inch (25 mm) Thickness: 5.7R, minimum.
 5. Compressive Strength: 20 psi (138 kPa) when tested in accordance with ASTM C 1289.
 6. Ozone Depletion Potential: Zero; made without CFC or HCFC blowing agents.
 7. Recycled Content: 19 percent post-consumer and 15 percent post-industrial, average.
 8. Acceptable Product: ISO 95+™ GL/ ISOGARD™ GL polyiso board insulation by Elevate roofing, wall, and lining system.
- B. High Density Polyisocyanurate Cover Board: Non-combustible, water-resistant high density, closed cell polyisocyanurate core with coated glass mat facers, complying with ASTM D 1623, and with the following additional characteristics:
 1. Size: 48 inches (1200 mm) by 96 inch (2440 mm), nominal.
 - a. Exception: Board to be attached using adhesive or asphalt may be no larger than 48 inches (1220 mm) by 48 inches (1220 mm), nominal.
 2. Thickness: 0.5 inch (12.7 mm)
 3. R-Value: 2.5 R based on ASTM tests C158 and C177.
 4. Surface Water Absorption: <3%, maximum, when tested in accordance with ASTM C 209.
 5. Compressive Strength: 120 psi, when tested in accordance with ASTM 1621.
 6. Density: 5pcf, when tested in accordance with ASTM 1622.
 7. Factory Mutual approved for use with FM 1-60 and 1-90 rated roofing assemblies.
 8. Mold Growth Resistance: Passed, when tested in accordance with ASTM D 3273.

9. Acceptable Product: ISO GARD HD Cover Board by Elevate roofing, wall, and lining systems.
- C. Insulation Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; use only fasteners furnished by roof membrane manufacturer.
- D. Contact Adhesive: Type as required by roof membrane manufacturer for roofing system and warranty to be provided; use only adhesive furnished by roof membrane manufacturer.
- E. Low Rise Polyurethane Foam Adhesive: Type as required by roof membrane manufacturer for roofing system and warranty to be provided; use only adhesive furnished by roof membrane manufacturer.

2.5 METAL ACCESSORIES

- A. Metal Roof Edging and Fascia: Continuous metal edge member serving as termination of roof membrane and retainer for metal fascia; watertight with no exposed fasteners; mounted to roof edge nailer.
 1. Wind Performance:
 - a. Membrane Pull-Off Resistance: 100 lb/ft (1460 N/m), minimum, when tested in accordance with ANSI/SPRI ES-1 Test Method RE-1, current edition.
 - b. Fascia Pull-Off Resistance: At least the minimum required when tested in accordance with ANSI/SPRI ES-1 Test Method RE-2, current edition.
 - c. Provide product listed in current Factory Mutual Research Corporation Approval Guide with at least FM 1-270 rating.
 2. Description: Two-piece; 45 degree sloped galvanized steel sheet edge member securing top and bottom edges of formed metal fascia; Elevate EdgeGard™.
 3. Fascia Face Height: 5 inches (127 mm).
 4. Edge Member Height: 5 inches (127 mm).
 5. Length: 144 inches (3650 mm).
 6. Functional Characteristics: Fascia retainer supports while allowing for free thermal cycling of fascia.
 7. Aluminum Bar: Continuous 6063-T6 alloy aluminum extrusion with pre-punched slotted holes; miters welded; injection molded EPDM splices to allow thermal expansion.
 8. Anchor Bar Cleat: 20-gauge, 0.036-inch (0.9 mm) G90 coated commercial type galvanized steel with pre-punched holes.
 9. Curved Applications: Factory modified.
 10. Fasteners: Factory-provided corrosion resistant fasteners, with drivers; no exposed fasteners permitted.

11. Special Shaped Components: Provide factory-fabricated pieces necessary for complete installation, including miters, scuppers, and end caps; minimum 14 inches (355 mm) long legs on corner pieces.
 12. Scuppers: Welded watertight.
 13. Accessories: Provide matching brick wall cap, downspout, extenders, and other special fabrications as shown on the drawings.
- B. Parapet Copings: Formed metal coping with galvanized steel anchor/support cleats for capping any parapet wall; watertight, maintenance free, without exposed fasteners; butt type joints with concealed splice plates; mechanically fastened as indicated; Elevate PTCF.
1. Wind Performance:
 - a. At least the minimum required when tested in accordance with ANSI/SPRI ES-1 Test Method RE-3, current edition.
 - b. Provide product listed in current Factory Mutual Research Corporation Approval Guide with at least FM 1-90 rating.
 2. Description: Coping sections allowed to expand and contract freely while locked in place on anchor cleats by mechanical pressure from hardened stainless steel springs factory attached to anchor cleats; 8 inch (200 mm) wide splice plates with factory applied dual non-curing sealant strips capable of providing watertight seal.
 3. Material and Finish: 24 gage, 0.024 inch (0.06 mm) thick galvanized steel with Kynar 500 finish in manufacturer's standard color; matching concealed joint splice plates; factory-installed protective plastic film.
 4. Dimensions:
 - a. Wall Width: As indicated on the drawings.
 - b. Piece Length: Minimum 144 inches (3650 mm).
 - c. Curved Application: Factory fabricated in true radius.
 5. Anchor/Support Cleats: 20 gage, 0.036 inch (0.9 mm) thick pre-punched galvanized cleat with 12 inch (305 mm) wide stainless steel spring mechanically locked to cleat at 72 inches (1820 mm) on center.
 6. Special Shaped Components: Provide factory-fabricated pieces necessary for complete installation, including miters, corners, intersections, curves, pier caps, and end caps; minimum 14 inch (335 mm) long legs on corner, intersection, and end pieces.
 7. Fasteners: Factory-furnished; electrolytically compatible; minimum pull out resistance of 240 pounds (109 kg) for actual substrate used; no exposed fasteners.

2.6 ACCESSORY MATERIALS

- A. Wood Nailers: PS 20-dimension lumber, Structural Grade No. 2 or better Southern Pine, Douglas Fir; or PS 1, APA Exterior Grade Plywood; pressure preservative treated.
1. Width: 3-1/2 inches (90 mm), nominal minimum, or as wide as the nailing flange of the roof accessory to be attached to it.

2. Thickness: Same as thickness of roof insulation.

PART 3 - INSTALLATION

3.1 GENERAL

- A. Install roofing, insulation, flashings, and accessories in accordance with roofing manufacturer's published instructions and recommendations for the specified roofing system. Where manufacturer provides no instructions or recommendations, follow good roofing practices and industry standards. Comply with federal, state, and local regulations.
- B. Obtain all relevant instructions and maintain copies at project site for duration of installation period.
- C. Do not start work until Pre-Installation Notice has been submitted to manufacturer as notification that this project require a manufacturer's warranty.
- D. Perform work using competent and properly equipped personnel.
- E. Temporary closures, which ensure that moisture does not damage any completed section of the new roofing system, are the responsibility of the applicator. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition.
- F. Install roofing membrane only when surfaces are clean, dry, smooth, and free of snow or ice; do not apply roofing membrane during inclement weather or when ambient conditions will not allow proper application; consult manufacturer for recommended procedures during cold weather. Do not work with sealants and adhesives when material temperature is outside the range of 60 to 80 degrees F (15 to 25 degrees C).
- G. Protect adjacent construction, property, vehicles, and persons from damage related to roofing work; repair or restore damage caused by roofing work.
 1. Protect from spills and overspray from bitumen, adhesive, sealants, and coatings.
 2. Particularly protect metal, glass, plastic, and painted surfaces from bitumen, adhesives, and sealants within the range of wind-borne overspray.
 3. Protect finished areas of the roofing system from roofing related work traffic and traffic by other trades.
- H. Until ready for use, keep materials in their original containers as labeled by the manufacturer.

- I. Conduit membrane manufacturer's instructions, containers labels, and Safety Data Sheets (SDS) for specific safety instructions. Keep all adhesives, sealants, primers, and cleaning materials away from all sources of ignition.

3.2 EXAMINATION

- A. Examine roof deck to determine that it is sufficiently rigid to support installers and their mechanical equipment, and the deflection will not strain or rupture roof components or deform deck.
- B. Verify that surfaces and site conditions are ready to receive work. Correct defects in the substrate before commencing with roofing work.
- C. Examine roof substrate to verify that it is properly sloped to drains.
- D. Verify that the specifications and drawings details are workable and not in conflict with the roofing manufacturer's recommendations and instructions; start of work constitutes acceptable of project conditions and requirements.

3.3 PREPARATION

- A. Take appropriate measures to ensure that fumes from adhesive solvents are not drawn into the building through air intakes.
- B. Prior to proceeding, prepare roof surface so that it is clean, dry, and smooth, and free of sharp edges, fins, roughened surfaces, loose or foreign materials, oil, grease, and other materials that may damage the membrane.
- C. Fill all surface voids in the immediate substrate that are greater than 1/4 inch (6 mm) wide with fill material acceptable insulation to membrane manufacturer.

3.4 INSULATION AND COVER BOARD INSTALLATION

- A. Install insulation in configuration and with attachment method(s) specified in PART 2, under Roofing System.
- B. Install insulation in a manner that will not compromise the vapor retarder integrity.
- C. Install only as much insulation as can be covered with the completed roofing system before the end of the day's work or before the onset of inclement weather.
- D. Lay roof insulation in courses parallel to roof edges.

- E. Neatly and tightly fit insulation to all penetrations, projections, and nailers, with gaps not greater than 1/4 inch (6 mm). Fill gaps greater than 1/4 inch (6 mm) with acceptable insulation. Do not leave the roofing membrane unsupported over a space greater than 1/4 inch (6 mm).
- F. Mechanical Fastening: Using specified fasteners and insulation plates, engage fasteners through insulation into deck to depth and in pattern required by Factory Mutual for FM Class specified in PART 2 and membrane manufacturer, whichever is more stringent.
- G. Adhesive Attachment: Using specified adhesive, engage deck to pattern and extent required by Factory Mutual for FM Class specified in PART 2 and membrane manufacturer, whichever is more stringent.

3.5 SINGLE-PLY MEMBRANE INSTALLATION

- A. Beginning at low point of roof, place membrane without stretching over substrate and allow to relax at least 30 minutes before attachment or splicing; in colder weather allow for longer relax time.
- B. Lay out the membrane pieces so that field and flashing splices are installed to shed water.
- C. Install membrane without wrinkles and without gaps or fishmouths in seams; bond and test seams and laps in accordance with membrane manufacturer's instructions and details.
- D. Install membrane adhered to the substrate, with edge securement as specified.
- E. Adhered Membrane: Bond membrane sheet to substrate using membrane manufacturer's recommended bonding material, application rate, and procedures.
 - 1. Do not apply bonding material to fleece backing or to seaming areas of membrane.
- F. Roll the installed membrane with a weighted roller to ensure full contact with the substrate.
- G. Edge Securement: Secure membrane at all locations where membrane terminates or goes through an angle change greater than 2 in 12 inches (1:6) using mechanically fastened reinforced perimeter fastening strips, plates, or metal edging as indicated or as recommended by roofing manufacturer.
 - 1. Exceptions: Round pipe penetrations less than 18 inches (460 mm) in diameter and square penetrations less than 4 inches (200 mm) square.
 - 2. Metal edging is not merely decorative; ensure anchorage of membrane as intended by roofing manufacturer.

3.6 FLASHING AND ACCESSORIES INSTALLTION

- A. Install flashings, including laps, splices, joints, bonding, adhesion, and attachment, as required by membrane manufacturer's recommendations and details.

- B. Metal Accessories: Install metal edging, gravel stops, and copings in locations indicated on the drawings, with horizontal leg of edge member over membrane and flashing over metal onto membrane.
 - 1. Follow roofing manufacturer's instructions.
 - 2. Remove protective plastic surface film immediately before installation.
 - 3. Install water block sealant under the membrane anchorage leg.
 - 4. Flash with manufacturer's recommended flashing sheet unless otherwise indicated.
 - 5. Where single application of flashing will not completely cover the metal flange, install additional piece of flashing to cover the metal edge.
 - 6. If the roof edge includes a gravel stop and sealant is not applied between the laps in the metal edging, install an additional piece of self-adhesive flashing membrane over the metal lap to the top of the gravel stop; apply seam edge treatment at the intersections of the two flashing sections.
 - 7. When the roof slope is greater than 1:12, apply seam edge treatment along the back edge of the flashing.

- C. Existing Scuppers: Remove scupper and install new scupper.

- D. Roofing Expansion Joints: Install as shown on drawings and as recommended by roofing manufacturer.

- E. Flashing at Walls, Curbs, and other Vertical and Sloped Surfaces: Install weathertight flashing at all walls, curbs, parapets, curbs, skylights, and other vertical and sloped surfaces that the roofing membrane abuts to; extend flashing at least 8 inches (200 mm) high above membrane surface.
 - 1. Use the longest practical flashing pieces.
 - 2. Evaluate the substrate and overlay and adjust installation procedure in accordance with membrane manufacturer's recommendations.
 - 3. Complete the splice between flashing and the main roof sheet with specified splice adhesive before adhering flashing to the vertical surface.
 - 4. Provide termination directly to the vertical substrate as shown on roof drawings.

- F. Roof Drains:
 - 1. Existing Drains: Remove all existing flashings, drain leads, roofing materials and cement from the drain; remove clamping ring.

2. Taper insulation around drain to provide smooth transition from roof surface to drain. Use specified pre-manufactured tapered insulation with facer or suitable bonding surface to achieve slope; slope not to exceed manufacturer's recommendations.
 3. Position membrane, then cut a hole for roof drain to allow ½ to ¾ inch (12 to 19 mm) of membrane to extend inside clamping ring past drain bolts.
 4. Make round holes in membrane to align with clamping bolts; do not cut membrane back to bolt holes.
 5. Apply sealant on top of drain bowl where clamping ring seats below the membrane.
 6. Install roof drain clamping ring and clamping bolts; tighten clamping bolts to achieve constant compression.
- G. Flashing at Penetrations: Flash all penetrations passing through the membrane; make flashing seals directly to the penetration.
1. Pipes, round Supports, and Similar Items: Flash with specified pre-molded pipe flashings wherever practical; otherwise use specified self-curing elastomeric flashing.
 2. Pipe Clusters and Unusual Shaped Penetrations: Provide penetration pocket at least 2 inches (50 mm) deep, with at least 1 inch (25 mm) clearance from penetration, sloped to shed water.
 3. Structural Steel Tubing: If corner radii are greater than ¼ inch (6 mm) and longest side of tube does not exceed 12 inches (305 mm), flash as for pipes; otherwise, provide a standard curb with flashing.
 4. Flexible and Moving Penetrations: Provide weathertight gooseneck set in sealant and secured to deck, flashed as recommended by manufacturer.

3.7 FINISHING AND WALKWAY INSTALLATION

- A. Install walkways at access points to the roof, around rooftop equipment that may require maintenance, and where indicated on the drawings.
- B. Walkway Pads: Adhere to the roofing membrane, spacing each pad at minimum of 1.0 inch (25 mm) and maximum of 3.0 inches (75 mm) from each other to allow for drainage.
1. If installation of walkway pads over field fabricated splices or within 6 inches (150 mm) of splice edge cannot be avoided, adhere another layer of flashing over the splice and extending beyond the walkway pad a minimum of 6 inches (150 mm) on either side.
 2. Prime the membrane, remove the release paper on the pad, press in place, and walk on pad to ensure proper adhesion.

3.8 FIELD QUALITY CONTROL

- A. Inspection by Manufacturer: Provide final inspection of the roofing system by a Technical Representative employed by roofing system manufacturer specifically to inspect installation for warranty purposes (i.e. not a salesperson).
- B. Perform all correction necessary for issuance of warranty.

3.9 CLEANING

- A. Clean all contaminates generated by roofing work from building and surrounding areas, including bitumen, adhesive, sealants, and coatings.
- B. Repair or replace building components and finished surfaces damaged or defaced due to the work of this section; comply with recommendations of manufacturers of components and surfaces.
- C. Remove leftover materials, trash, debris, equipment from project site and surrounding areas.

3.10 PROTECTION

- A. Where construction traffic must continue over finished roof membrane, provide durable protection, and replace or repair damaged roofing to original condition.

END OF SECTION

METAL FLASHINGS AND SHEET METALWORK
SECTION 07 6000

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
1. Prefabricated counterflashing assemblies.
 2. Prefabricated curbs.
 3. All other flashings and sheet metal items shown or required to make the building weathertight and not specified in other Sections.
- B. Related work:
1. Division 7 for single ply roofing.
 2. Division 9 for finish painting flashings and sheet metalwork.

1.2 PERFORMANCE REQUIREMENTS

- A. General: Install the work of this Section to withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failing, rattling, leaking, and fastener disengagement.
- B. Thermal movements:
1. Provide sheet metal flashing and trim that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, hole elongation, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects.
 2. Provide clips that resist rotation and avoid shear stress as a result of sheet metal and trim thermal movements.
 3. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 4. Temperature change (range) of 120-degree F ambient; 180-degree F, material surfaces.
- C. Water infiltration: Provide sheet metalwork and flashings that do not allow water infiltration to building interior, and to damage materials, such as insulation, in exterior walls.

1.3 SUBMITTALS

- A. Data: Printed specifications, installation instructions and general recommendations for installation of prefabricated assemblies.
- B. Shop drawings:
 - 1. Show typical and atypical details, material weight, methods of joining and attachment, and relationship with adjacent materials and supports.
 - 2. Detail interface with adjacent materials. For interface between flashings with different profiles and conditions difficult to illustrate in 2-dimension, furnish isometric drawings.
- C. Samples: Assembled samples of the following. Make samples at least 6 inches long, except as otherwise specified. Mount on plywood and include all components to be installed under this Section for each sample.
 - 1. Counterflashing with receiver.

1.4 HANDLING

- A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing and trim materials away from uncured concrete and masonry.
- B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to the extent necessary for the period of sheet metal flashing and trim installation.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Sheet steel: Commercial quality carbon steel sheets complying with ASTM A 653, lock-forming grade, galvanized with a G90 zinc coating, 22-gage minimum unless otherwise indicated.
- B. Sheet lead for roof drains: 4 lb./square-foot, ASTM B 29 desilverized pig lead.
- C. Nails for attaching sheet steel to wood: Large fiat head "stronghold" type roofing nails with barbed point, formed of hot-dip galvanized steel of sufficient length to penetrate a minimum of 1- inch into the wood nailer.

- D. Hot dip galvanized self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads.
 - 1. Fasteners for flashing and trim: Blind fasteners or self-drilling screws, gasketed with hex washer head.
 - 2. Blind fasteners: High-strength aluminum or stainless-steel rivets.
- E. Solder and flux:
 - 1. For galvanized sheet metal: 50-50 lead/tin solder complying with ASTM B 32, used with a non-corrosive flux.
 - 2. For lead: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead.
- F. Burning rod for lead: Same composition as lead sheet.
- G. Sealing tape:
 - 1. Pressure-sensitive, 100 percent solids, polyisobutylene compound sealing tape with release-paper backing.
 - 2. Provide permanently elastic, nonsag, non-toxic, non-staining tape.
- H. Expansion-joint sealant: For hooked-type expansion joints, which must be free to move, provide non-setting, non-hardening, non-migrating, heavy-bodied polyisobutylene sealant.
- I. Bituminous coating:
 - 1. Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil dry film thickness per coat.
 - 2. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

2.2 PREFABRICATED ASSEMBLIES

- A. Counterflashing assemblies: Formed of 24-gage galvanized sheet steel, of the profiles shown on the Drawings, complete with factory-formed internal and external corners, and end closures by one of the following.
 - 1. Basis of design is for Fry Reglet Corp. Type ST (stucco).
 - 2. Keystone Flashing Co.
 - 3. CF Cheney Flashing Co.
 - 4. MM Systems Corp.

2.3 FABRICATION

A. General:

1. Shop fabricate flashings and sheet metal work to comply with profiles and sizes indicated on the Drawings and standard Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) detail plates of the "Architectural Sheet Metal Manual".
2. Form sheet metal on bending brake with straight, sharp edges. Shape, trim, and hand seam sheet metal on bench; keep job site forming to a minimum.
3. Comply with metal producers' recommendations for tinning, soldering, and cleaning flux from metal.
4. Fabricate with joints and corners accurately machined, filed and fitted, and rigidly framed together and connected.

B. Fabricate in as long length as possible to minimize field joints.

C. Prefabricate intersections, including counterflashings, with mitered, riveted joints. Make corners and intersections with legs a minimum of 24-inch long extending in each direction.

D. Tinning and soldering:

1. Tin edges on both sides of sheet steel to be soldered.
2. Perform soldering slowly, thoroughly heating seams and completely sweating solder through full width of seams.

E. Exposed edges: Neatly double back sheet metal 1/2 inch to stiffen edges and to provide a finished appearance.

F. Provisions for attachment to structure: Furnish supports, hangers, bracing, anchors and other devices shown, specified or necessary for reinforcement and proper attachment of flashings and sheet metal to building.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions and measurements affecting the work of this Section at site.

- B. Correct conditions detrimental to the proper and timely completion of this work before proceeding with installation.

3.2 GENERAL REQUIREMENTS

- A. In addition to the assemblies listed above, provide required prefinished sheet metal flashings, counterflashings, transitional and interface flashings required to achieve a properly weatherproofed, flashed and counterflashed building envelope, including sheet metal flashings in the angles formed where exterior waterproofed decks abut walls, and as well at curbs, platforms, ventilators, pipes, roof hatches, and other vertical and horizontal surfaces, where indicated and necessary to make the Work weatherproof. Flashings in contact with single-ply roofing is specified in Section 07544.
- B. Comply with manufacturer's installation instructions, where applicable, and applicable SMACNA and NRCA details, except as indicated and specified.
- C. Install counterflashing assemblies at a constant height above the roof.
 - 1. Anchor counterflashing securely into reglet by friction, or provide lead wedges spaced 2- foot o.c. maximum.
 - 2. Use manufacturer's standard splice plates and preformed corners for a weathertight assembly.
- D. Coordinate this work with other trades whose work penetrates, intersects and adjoins flashings and sheet metal work, to permit the correct sequencing and the watertightness of the assemblies.

3.3 INSTALLATION

- A. General:
 - 1. Install sheet metal work in accordance with the approved shop drawings.
 - 2. Attach work securely to supporting construction, plumb, level, with tight, flush joints allowing for thermal movements.
 - 3. Install work with lines, arises, and angles sharp and true.
 - 4. Fold exposed edges neatly to form a 1/2-inch hem on the concealed side; hem all exposed edges, unless otherwise indicated.
 - 5. Assemble work so that face of metal in contact has hairline joints, except where required for expansion or fitting. Provide back-up plates at joints.

6. Conceal fastenings and reinforcement where they would be visible by the public and the building occupants.
 7. Finish work shall be straight, smooth and continuous, without dimples, dents and other damage.
- B. Soldering: Solder all joints not intended for expansion and contraction.
1. Clean material and tin prior to soldering.
 2. Solder slowly. Heat the seams thoroughly, and completely fill with solder.
 3. Make exposed soldering on finish surfaces neatly, full flowing and smooth.
 4. Wash acid flux with a soda solution after soldering and remove soldering flux on exposed surfaces.
- C. Nailing:
1. Confine nailing of sheet metal generally to sheet metal having a maximum width of 18 inches. Nailing of flashings shall be confined to one edge only.
 2. Space nails evenly not over 12 inches o.c., and approximately 2 inches from the edge.
 3. Face nailing is not permitted. Do not nail sheet metal assemblies on horizontal surfaces.
 4. Where sheet metal is applied to surfaces other than wood, furnish detailed shop drawings showing locations of required sleepers and nailing strips specified in Section 06100.
- D. Bolts, rivets, and screws:
1. Install bolts, rivets, and screws where indicated or required.
 2. Provide compatible washers to protect surface of sheet metal and to provide a watertight connection.
- E. Dissimilar material protection:
1. Protect sheet metal in contact with dissimilar metals, concrete, masonry and plaster with a heavy coating of bituminous paint, approved separation tape, or building felt or paper.
 2. Set sheet metal assemblies supported by pressure-treated wood on building paper or felt attached to the wood nailer, except set copings on flexible flashing specified. Lap on vertical surfaces at least 2 inches.

- F. Seams - General: Make seams straight, and uniform in width and height with no solder showing on the face.
 - 1. Flat-lock seams: Finish not less than 3/4 inch wide made in the direction of water flow.
 - 2. Lap seams: Finish soldered seams not less than 1 inch wide. Overlap seams not soldered at least 3 inches.
 - 3. Loose-lock expansion seams: No less than 3-inch wide, designed to provide minimum 1 inch movement within the joint. Fill joint completely with sealant applied at not less than 1/8 inch thick bed.
 - 4. Standing seams: Not less than 1 inch high, double locked without solder.
- G. Expansion and contraction:
 - 1. Provide for thermal and building movement without over-stressing the material, breaking connections or producing wrinkles and distortion in finished surfaces. Make sheet metal installations weathertight at all locations.
 - 2. Provide expansion and contraction joints at not more than 40-foot intervals, except that where the distance between the last expansion joint and the end of the continuous run is more than half the required interval spacing, provide an additional joint. Where expansion and contraction joints are exposed to view, their location is subject to the Architect's approval.
 - 3. Exposed surfaces shall be free from visible wave, warp, and buckle.
- H. Install roof curbs level and square with tight, waterproof joints; attach securely to deck.
- I. Completed work: Completed flashings and sheet metal work shall be watertight, free of tool marks, dents, scratches and other damages, with joints and corners accurately machined, filed and fitted, and rigidly framed together and connected.

END OF SECTION

**SEALANTS AND CAULKING
SECTION 07920**

PART 1 - GENERAL

1.1 SUMMARY

- A. The work includes the furnishing and installing of all caulking and sealing work required to weatherproof the building, including interior caulking and sealing, as shown and noted on the drawings and specified herein. The conditions of the contract and division 1 apply to this section as fully as if repeated herein.

1.2 SUBMITTALS

- A. Prior to ordering materials or their installation, submit for selection, samples indicating the color range available for each caulking and sealant material intended for installation in exposed locations. Materials installed prior to selection of color will be subject to removal and replacement with approved materials. Color of finished caulking and sealant shall match approved samples.
- B. See section 01300 for number and manner of submittals.

1.3 DELIVERY, STORAGE AND HANDLING

- A. Do not expose caulking and sealants to excessive heat, cold or other conditions that would adversely affect the serviceability of the materials. Do not store caulking and sealants past the shelf-life recommended by the manufacturer.

1.4 JOB CONDITIONS

- A. Apply caulking and sealants only when weather conditions are within the manufacturer's recommended limits for satisfactory installation.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Caulking and Sealant Compounds: Compounds shall be products and manufacturers listed herein or equal products approved in accordance with section 01630.
 - 1. Metal roof restoration/sealing:
Titebond metal roof Weather Master Sealant. Color to match existing roof system.
 - 2. Exterior Vertical Applications: One part low modulus silicone sealant; Dow Corning No. 790, General Electric "Silpruf" or equal.

3. Exterior Horizontal Applications: Two component, self leveling, polyurethane base sealant, Mameco "Vulkem 245", Pecora, "NR200 Urexpan", Sonneborn "Sonolastic Paving Joint Sealer" or equal.
- B. Primers: Primers shall be quick-drying, colorless, non-staining sealer of type of consistency as recommended by the manufacturer of the caulking and sealant material for the particular surfaces to be caulked or sealed.
- C. Packing: Sealant backup and packing for caulking and sealant compounds shall be non-staining resilient material, such as glass fiber rope, or neoprene, butyl, polyurethane, or other open cell foams, compatible with the compound used.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Inspect joint sizes and surfaces prior to start of work. Do not start work until deficiencies or other conditions that would adversely affect performance, installation or quality of the application have been corrected. Start of work constitutes acceptance of joint surfaces.

3.2 SURFACE PREPARATION

- A. Joints and spaces to be caulked or sealed shall be completely cleaned of dirt, dust, mortar, oil, and other foreign materials which might adversely affect the caulking and sealant work. Where necessary, degrease with an approved solvent or commercial degreasing agent. Surfaces shall be thoroughly dry before application of caulking compounds.
- B. If recommended by manufacturer, remove paint and other protective coatings from surfaces to be caulked or sealed prior to priming and caulking or sealant application.
- C. All joints shall be enclosed on three sides. Where grooves for adequate caulking or sealing have not been provided, suitable grooves shall be cleaned out to the depth required or as indicated on drawings and ground to a minimum width of 1/4 inch without damage to the adjoining work. No grinding shall be required on metal surfaces.
- D. Preparation of surfaces to receive caulking or sealant compound shall conform to the compound manufacturer's specifications. Use air pressure or other approved methods to achieve required results. Use masking tape to keep compound off surfaces that will be exposed in the finished work.

3.3 APPLICATION

- A. Caulk and seal around all openings in exterior walls, and other locations shown or required for waterproofing the building. Caulk and seal all other joints as herein specified, shown on drawings, and required to properly complete the building.
- B. Caulking and sealants shall be applied by experienced mechanics using specified materials and proper tools. Preparatory work (cleaning etc.) And application of caulking and sealants shall be as specified herein and in accordance with the manufacturer's printed instruction and recommendations.
- C. Plaster and other porous surfaces, and other surfaces if recommended by the manufacturer, shall be primed before applying caulking and sealants. Primer shall be applied with a brush that will reach all parts of joints to be filled with compound.
- D. Joints and spaces deeper than ½ inch shall be filled with packing as specified to within ½ inch of the surface.
- E. Caulking and sealants shall not be used when they become too jelled to be discharged in a continuous flow from the gun. Modification of compounds by addition of liquids, solvents, or powders will not be permitted.
- F. Compounds shall be applied with guns having proper size nozzles. Sufficient pressure shall be used to fill all voids and joints solid. In caulking and sealing around openings, include entire perimeter of each impracticable, suitable hand tools shall be used.
- G. Caulked and sealed joints shall be neatly pointed on flush surfaces with beading tool and internal corners with eaving tool. Excess material shall be cleanly removed. Caulking and sealant where exposed, shall be free of wrinkles and uniformly smooth. Caulking and sealing shall be complete before final coat of paint are applied.

3.4 MISCELLANEOUS CAULKING AND SEALING WORK

- A. The entire extent of caulking and sealing work is not necessarily fully or individually described herein. Caulking and sealing shall be provided wherever required to prevent light leakage as well as moisture leakage. Refer to drawings for conditions and related parts of the work.

3.5 CLEANING

- A. Clean surfaces of materials adjoining caulked and sealed joints of smears of compound or other soiling due to caulking and sealing application.

END OF SECTION

**PAINTING
SECTION 099000**

PART 1 - GENERAL

1.1 GENERAL CONDITIONS

- A. The Contractor shall provide all paints, tools, equipment, scaffolding and all other necessary equipment and supplies to perform a complete repaint of all exterior surfaces indicated on the Drawings.
- B. The Contractor shall cooperate with the Owner's representative in every way including conducting the work at a time as agreed.
- C. Damage to existing property of any nature, caused by the Contractor, shall be repaired to the satisfaction of the Owner at the Contractor's expense.
- D. The Contractor shall carry Workers Compensation, Public Liability and Property Damage Insurance.
- E. Referenced Sections:
 - 1. Section 013300 - Submittals.
 - 2. Section 07920 - Sealants and Caulking.

1.2 WORK INCLUDED

- A. The intent and requirements of this section, is that all work, items and surfaces which are normally painted and finished in a building of this type and quality, shall be so included in this contract, whether or not said work, item or surface is specifically called out and included in the schedules and notes on the drawings, or is, or is not, specifically mentioned in these specifications.

1.3 COLORS

- A. A five (5) color scheme; (1= field, 4=accent) will be provided by Architect prior to start of work.
- B. Mock-ups to be provided, 8"x10" brush outs of each color utilized. Label each brush out with product name, number, sheen etc. and submit to Architect for review prior to starting painting work.
- C. Provide one gallon of each type and color of finish coat used for extra stock at completion of the work.

1.4 QUALITY ASSURANCE

- A. This Contractor shall have a minimum of five (5) years proven satisfactory experience and shall show proof before commencement of work that he will maintain a qualified crew of painters throughout the duration of the work. When requested, Contractor shall provide a list of the last three comparable exterior repainting jobs including, name, location, specifying authority / project manager, start / completion dates and value of the work.
- B. Only qualified journey persons, as defined by local jurisdiction, shall be engaged in exterior repainting work. Apprentices may be employed provided they work under the direct supervision of a qualified journey-person in accordance with trade regulations.
- C. All paint work shall be inspected by a District Staff and/or Project Inspector. Inspections shall be performed after wall preparation, prior to application of first coat, and then an inspection for each following coat.

1.5 GUARANTEE

- A. Guarantee the painting work, in writing, against peeling, fading, cracking, blistering, or crazing for a period of two (2) years from the time of Notice of Completion is filed.

1.6 REGULATORY REQUIREMENTS

- A. Conform to work place safety regulations for storage, mixing, application and disposal of all paint related materials to requirements of those authorities having jurisdiction.
- B. Conform to safety precautions in accordance with the latest requirements to Industrial Health and Safety Regulations, latest edition, of authorities having jurisdiction.
- C. Fully cooperate at all times with the requirements of the Project Inspector in the performance of their duties, including providing access and assistance as required to complete inspection work.
- D. To reduce the amount of contaminants entering waterways, sanitary / storm drain systems or into the ground the following procedures shall be strictly adhered to:
 - 1. Retain cleaning water for water based materials to allow sediments to be filtered out. In no case shall equipment be cleaned using free draining water.
 - 2. Retain cleaners, thinners, solvents and excess paint and place in designated containers and ensure proper disposal.
 - 3. Return solvent and oil soaked rags used during painting operations for contaminant recovery, proper disposal, or appropriate cleaning and laundering.

4. Dispose of contaminants in an approved legal manner in accordance with hazardous waste regulations.
 5. Empty paint cans are to be dry prior to disposal or recycling (where available).
 6. Close and seal tightly partly used cans of materials including sealant and adhesive containers and store protected in well ventilated fire safe area at moderate temperature.
- E. Where paint recycling is available, collect waste paint by type and provide for delivery to recycling or collection facility.
- F. Conform to State Environmental Requirements.

1.7 PROJECT/SITE REQUIREMENTS

- A. UNLESS specifically pre-approved by the specifying body, Paint Inspection Agency and the applied product manufacturer, perform no repainting work when the ambient air and substrate temperatures are below 50° F (10° C).
- B. Perform no paint work unless environmental conditions are within MPI and paint manufacturer's requirements or until adequate weather protection is provided. Where required, suitable weatherproof covering and sufficient heating facilities shall be in place to maintain minimum ambient air and substrate temperatures for 24 hours before, during and after paint application.
- C. Perform no paint work when the relative humidity is above 85% or when the dew point is less than 5° F (3° C) variance between the air/surface temperature.
- D. Perform no paint work when the maximum moisture content of the substrate exceeds:
1. 15% for wood.
- E. Conduct all moisture tests using a properly calibrated electronic Moisture Meter.
- F. Test concrete and masonry surfaces for alkalinity as required.
- G. Apply paint only to dry, clean, and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.

PART 2 - PRODUCTS AND HANDLING

2.1 MATERIALS

- A. Materials shall be pure, unadulterated first quality and shall be delivered to the project in original unbroken packages bearing the manufacturer's name and product number. Material shall be **(DE) Dunn Edwards** (basis of design) or Equal in accordance with section 01 3300. Materials shall comply with all current health, safety and environmental regulations.
- B. Paint mixing thinning, if necessary, shall be to manufacturer's instructions. Primer-sealer coats may be thinned up to 10% with paint manufacturer's recommendations. All other coats shall not be thinned. Any mixing and thinning of materials shall be done in specified work and storage areas. Paint thinners, tools, rags and partially filled containers returned to storage area at the completion of each dat.
- C. Secure the Color Schedule before undercoating. Unless otherwise specified, all undercoats shall be tinted slightly to approximate the color of the finish coat. Approval of color shall be obtained before proceeding with the work.
- D. Where a specific name is not given for a product ro ingredient, such item shall be of the best quality of the approved manufacturer, which is normally used for the intended purpose.
- E. Material shall be stacked no more than three high in five-gallon containers and put in categorized area.

2.2 PAINT SCHEDULE

- A. All previously painted surfaces and items not specifically listed that form a part of, or are concerning the above-indicated work, shall be painted.

2.3 EXTERIOR

A. FERROUS METAL

1st Coat	Primer DE Enduraprime Ferrous Metal Primer (If shop primed, only touch-up is required)	(ENPR00) (2.0 mils)
2nd Coat	DE Enduracoat DTM Acrylic Semi-Gloss Enamel	(ENCT50) (1.5 mils)
3rd Coat	DE Enduracoat DTM Acrylic Semi-Gloss Enamel	(ENCT50) (1.5 mils)

B. GALVANIZED METAL

Etch	Etching Solution Krud Kutter Metal Clean & Etch	
1st Coat	Primer DE Enduraprime Galvanized Metal Primer	(ENGM00) (2.0 mils)
2nd Coat	DE Enduracoat DTM Acrylic Semi-Gloss Enamel	(ENCT50) (1.5 mils)
3rd Coat	DE Enduracoat DTM Acrylic Semi-Gloss Enamel	(ENCT50) (1.5 mils)

C. CONCRETE

1st Coat	Primer DE Eff-Stop Select Masonry Primer	(ESSL00) (2.0 mils)
2nd Coat	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)
3rd Coat	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)

D. STUCCO and CMU

1st Coat	Primer DE Eff-Stop Select Masonry Primer	(ESSL00) (2.0 mils)
	New CMU – Primer Smooth Blocfil Select	(SBSL00) (7.0 mils)
2nd Coat	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)
3rd Coat	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)

E. TILE

1st Coat	Primer DE Super-Loc adhesion Promoting Primer	(SLPR00) (2.0 mils)
2nd Coat	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)
3rd Coat	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)

F. WOOD SIDING

1st Coat:	Primer DE Ultra-Grip Select Universal Primer	(UGSL00) (2.0 mils)
2nd Coat:	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)
3rd Coat:	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)

G. EAVES, WOOD TRIM and FASCIA

1st Coat:	Primer DE Ultra-Grip Select Universal Primer	(UGSL00) (2.0 mils)
2nd Coat:	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)
3rd Coat:	DE Spartashield 100% Acrylic Velvet Sheen	(SSHL20) (1.5 mils)

H. WOOD DOORS and FRAMES

1st Coat:	Primer DE Ultra-Grip Select Universal Primer	(UGSL00) (2.0 mils)
2nd Coat:	DE Spartashield 100% Acrylic Semi-Gloss Sheen	(SSHL50) (1.5 mils)
3rd Coat:	DE Spartashield 100% Acrylic Semi-Gloss Sheen	(SSHL50) (1.5 mils)

I. METAL DOORS and FRAMES

1st Coat: Primer DE Ultra-Grip Select Universal Primer (UGSL00) (2.0 mils)
2nd Coat: DE Enduracoat DTM Acrylic Semi-Gloss Enamel (ENCT50) (1.5 mils)
3rd Coat: DE Enduracoat DTM Acrylic Semi-Gloss Enamel (ENCT50) (1.5 mils)

J. METAL CANOPIES and CARGO CONTAINERS

1st Coat: Primer DE Enduraprime Ferrous Metal Primer (ENPR00) (2.0 mils)
2nd Coat: DE Enduracoat DTM Acrylic Semi-Gloss Enamel (ENCT50) (1.5 mils)
3rd Coat: DE Enduracoat DTM Acrylic Semi-Gloss Enamel (ENCT50) (1.5 mils)

K. WROUGHT IRON FENCING, GATES, RAMP RAILING and HAND RAILS

1st Coat: Primer DE Enduraprime Ferrous Metal Primer (ENPR00) (2.0 mils)
2nd Coat: DE Enduracoat DTM Acrylic Semi-Gloss Enamel (ENCT50) (1.5 mils)
3rd Coat: DE Enduracoat DTM Acrylic Semi-Gloss Enamel (ENCT50) (1.5 mils)

L. GALVANIZED DOWN SPOUTS and GUTTERS

1st Coat: Primer DE Ultra-Grip Select Universal Primer (EZSL00) (2.0 mils)
2nd Coat: DE Spartashield 100% Acrylic Velvet Sheen (SSHL20) (1.5 mils)
3rd Coat: DE Spartashield 100% Acrylic Velvet Sheen (SSHL20) (1.5 mils)

M. ATTIC VENTS, HVAC UNITS, UTILITY BOX COVERS, METAL SCREENS
METAL CONDUITS and GAS PIPING

1st Coat: Primer DE Ultra-Grip Select Universal Primer (EZSL00) (2.0 mils)
2nd Coat: DE Spartashield 100% Acrylic Velvet Sheen (SSHL20) (1.5 mils)
3rd Coat: DE Spartashield 100% Acrylic Velvet Sheen (SSHL20) (1.5 mils)

N. TRAFFIC SURFACES of RAMPS

1st Coat: Primer-Wood or Concrete - Dex-Coat Floor & Deck (Self-Priming) or
Monobond High Adhesion Primer - Metal - Monobond Direct-To-Metal Rust
Inhibitive Primer
2nd Coat: Dex-Coat Floor & Deck Coatings / Smooth or Textured
3rd Coat: Dex-Coat Floor & Deck Coatings / Smooth or Textured

PART 3 - EXECUTION

3.1 SCHEDULING OF WORK

- A. Contractor shall coordinate the commencement of all work with Owners so as not to cause inconvenience to the facility.
- B. Contractor shall post notices in conspicuous areas three to five days in advance of beginning work on specified phase, noting start date, any instructions to owner and business phone number.
- C. Contractor shall provide a list of items that need to be moved by owner at least seven (7) days prior to starting work in area.

3.2 INSPECTION

- A. Closely examine all surfaces. Any surfaces that are in question or that will affect the execution or quality of work must be brought to the attention of the Owner's representative before painting will begin.
- B. Thoroughly examine the specification at the site, in similar conditions under which work will be performed, before submitting a proposal. Clarify any questions or conditions with Owner.
- C. **No allowance for lack of knowledge of obvious conditions will be made after bids have been opened.**

3.3 WORKMANSHIP

- A. Provide best quality workmanship, performed by skilled mechanics.
- B. Perform work conditions best suited to the production of acceptable work.
- C. All work will be subject to approval by the Owner. Correct all work, which does not comply with the intent of the specifications.
- D. Protect all adjacent areas and surfaces from damage.
- E. Insure that hardware is removed or protected before painting, and then replaced or uncovered when painting in that area is complete.
- F. Dust Control: Provide continuous dust control as required to protect adjacent areas.
- G. The Contractor shall take all necessary steps to protect the public, property and vehicles from damage during this operation.

- H. **Do not** apply paint in rain, fog, mist or when surface temperature is below 50 degrees Fahrenheit. **Do not** spray paint in windy conditions.
- I. Immediately clean up all accidental splatters, spills and misplaced paint, and restore the affected area to its original condition.
- J. Provide a clean and liability-free work environment.

3.4 **SURFACE PREPARATION**

- A. Prepare surfaces in a skillful manner to produce finish work of first class appearance and durability. Prior to any painting, all surfaces should be clean and dry, free of all foreign matter and contaminants that could otherwise impede proper adhesion, appearance and performance of the Specified Finish Paint. This shall include pressure washing, scraping and wire brushing when necessary to provide a suitable surface. Areas such as soffits and entry doors should be avoided when pressure washing to avert the unintended introduction of water. All areas pressure washed should then be allowed to dry at least two days or until the moisture content of the surface to be painted is no more than 15%. When mechanically high-pressure water washing please check with local City and County Environmental Regulations. Some areas do not allow pressure washing, or require a special permit.
 - 1. Metal: Remove dirt contaminants, rust scale or oxides and loose and peeling paint. Any excess rust, loose or peeling paint not removed by this method should be hand-tooled wire brushed, scraped or sanded as necessary to provide a smooth surface for paint application. Prime all bare and rusted metal with recommended primer.
 - 2. Wood: Remove dirt contaminants, dust and loose or peeling paint. All loose or peeling paint not removed by this method shall be hand tool wire brushed, scraped or sanded as necessary to provide a smooth surface for paint application. All protruding nail heads shall be driven back flush and primed with appropriate primer before finish coat is applied. Holes, splits and scratches shall be puttied or spackled smooth after prime coat.
 - 3. Concrete, CMU and Stucco: Remove contaminants, dirt, dust, and loose and peeling paint. All loose or peeling paint not removed by this method shall be hand tool wire brushed, scraped or sanded as necessary. If efflorescence exists, spot prime affected areas with appropriate primer to inhibit condition. In the areas where the concrete or stucco is failing and causing the paint to peel, perform a pH test to assure acceptable pH level prior to coating. Where stucco is cracked, repair with specified product and spot prime repaired area.

4. General Mildew Removal: Remove mildew with a solution of one part household bleach to three parts water to leave an uncontaminated, clean surface for paint. Mix cleaning solutions stronger as necessary to produce the desired level of cleanliness. Scrub where necessary with a soft bristle brush.
 5. Hard-to-Stick Surfaces: Use specific premium primer-sealer coat designed for excellent adhesion on hard-to-stick surfaces. See manufacture guidelines for prep and application of product.
- B. Spot prime all bare surfaces with appropriate primer after preparation has been completed. The Owner or Owner's Representative shall inspect preparation before the application of paint finishes. Rework surfaces not properly prepared to receive paint finishes to the satisfaction of the Owner or Owner's Representative.
- C. Mask off equipment.

3.5 APPLICATION

- A. Application: Apply paints by brush or roller except as otherwise specified. Use paint of proper consistency for each coat, well brush-out or flowed-on to obtain a uniform finish free from holidays, brush marks, sags, crawls, or other defects.
- B. Materials shall be applied in accordance with the approved manufacturer's directions and specifications. Thinning required, shall be done in the manner and the type of reducer recommended by manufacturer.
- C. The proper number of coats of paints and other finished specified, properly applied, will result in the desired effect. Should this effect not be attained, additional applications of the specified materials and methods shall be made.
- D. Each coat of painted work shall vary in shade from the proceeding coat in a manner that will make each coat readily distinguishable without affecting the finish color.
- E. In enclosed spaces, the application and drying of paint shall be performed only when the temperature is 65 degrees F., or above and maintained constantly to prevent condensation.
- F. Enamel coats shall be sanded smooth prior to re-coating. All defects and unevenness in previously applied coatings shall be repaired before applying the next coat.
- G. Where questions occur as to the indicated surfaces inform the Architect and receive clarification therefrom.

3.6 CLEANING, TOUCH-UP AND REFINISHING

- A. Touch-up and Refinishing: Runs, sags, misses, holidays, stains and other defects in the painted surfaces, including inadequate coverage and mil thickness shall be satisfactorily touched up, or refinished, or repainted as necessary to produce a first-class workman like job.
- B. Cleaning:
 - 1. Carefully remove all spattering, spots and blemishes caused by work under this section from surfaces throughout the project.
 - 2. Upon completion of painting work remove all rubbish, paint cans, and accumulated materials resulting from work.

3.7 ACKNOWLEDGMENT (Contractor's Responsibility)

- A. Furnish in accordance with the attached schedule for the surface and finish desired. Catalog names and numbers refer to products manufactured and distributed by Dunn Edwards Paint Company or approved equal as per Section 2.1.
- B. This specification is not to be considered as inclusive or exclusive of any or all areas. The Owner may, upon proper notification, before bidding, remove, and solicit separate bids for any area listed or not listed. This specification is for general reference and is considered binding only when mutually agreed upon by the Owner and Contractor.

END OF SECTION