



**CONSTRUCTION CONTRACT DOCUMENTS**

**BID # 20-01**

*WOODSIDE SCHOOL DISTRICT*

**Underground Utility Gas Piping Repair  
At  
Woodside Elementary School**

**DSA APPLICATION NUMBER: 01-118889**

**3195 Woodside Road  
Woodside, CA 94062**

PROFESSIONAL STAMP	DESIGN TEAM
	<p>Civil Engineer: BKF Engineers 255 Shoreline Drive, #200 Redwood City, CA 94065 Tel: (650) 482-6300</p> <p>Contact: Dale Leda, PE Project Manager</p>

**DOCUMENT 000110 – TABLE OF CONTENTS**

Division    Section Title \_\_\_\_\_ # Pages

**INTRODUCTORY INFORMATION**

00 01 01 PROJECT TITLE PAGE ..... 1  
          PROFESSIONAL STAMP PAGE..... 2  
00 01 10 TABLE OF CONTENTS..... 3

**CONTRACTING REQUIREMENTS**

NOTICE TO BIDDERS and BID INSTRUCTIONS ..... 5  
BID FORM..... 3  
BID BOND ..... 2  
FORMS ..... 7  
    NONCOLLUSION DECLARATION  
    DESIGNATION OF SUBCONTRACTORS  
    STATEMENT OF COMPLIANCE  
    IRAN CONTRACTING ACT CERTIFICATION  
    NOTICE TO CONTRACTORS REGARDING CRIMINAL RECORD CHECKS  
AGREEMENT ..... 9  
    ARTICLE 1 – THE PROJECT  
    ARTICLE 2 – THE AGREEMENT  
    ARTICLE 3 – CONTRACTOR’S LICENSE  
    ARTICLE 4 – COMPLETION DATE/NOTICE TO PROCEED  
    ARTICLE 5 – CONTRACT SUM  
    ARTICLE 6 – LIQUIDATED DAMAGES  
    ARTICLE 7 – EARLY COMPLETION  
    ARTICLE 8 – PAYMENT  
    ARTICLE 9 – EARLY TERMINATION  
    ARTICLE 10 – TERMINATION FOR CAUSE  
    ARTICLE 11 – PERFORMING A PORTION OF THE WORK  
    ARTICLE 12 – USE OF SUBCONTRACTORS  
    ARTICLE 13 – PREVAILING WAGE RATES  
    ARTICLE 14 – WORKING HOURS  
    ARTICLE 15 – EMPLOYMENT OF APPRENTICES  
    ARTICLE 16 – INSURANCE  
    ARTICLE 17 – INDEMNIFICATION AGAINST LIABILITY  
    ARTICLE 18 – MISCELLANEOUS PROVISIONS  
PERFORMANCE BOND ..... 2  
PAYMENT BOND ..... 2  
GENERAL CONDITIONS ..... 33  
    ARTICLE 1 – DEFINITIONS  
    ARTICLE 2 – CONTRACT DOCUMENTS  
    ARTICLE 3 - ENGINEER OF RECORD  
    ARTICLE 4 – DISTRICT  
    ARTICLE 5 – CONTRACTOR  
    ARTICLE 6 – SEPARATE CONTRACTS  
    ARTICLE 7 – PERFORMANCE AND PAYMENT BONDS  
    ARTICLE 8 – PAYMENTS AND COMPLETION  
    ARTICLE 9 – PROTECTION OF PERSONS AND PROPERTY  
    ARTICLE 10 – CHANGE ORDERS

ARTICLE 11 –	DELAYS AND TIME EXTENSIONS	
ARTICLE 12 –	DISPUTES	
ARTICLE 13 –	WARRANTY OF SUPPLIES, EQUIPMENT AND RELATED SERVICES	
ARTICLE 14 –	TRENCHING	
ARTICLE 15 –	STORM WATER DISCHARGE PERMIT	
ARTICLE 16 –	TOXIC SUBSTANCES CONTROL	
ARTICLE 17 –	INSPECTIONS	
ARTICLE 18 –	AUDITING PROCEDURES	
ARTICLE 19 –	MISCELLANEOUS	

00630 GUARANTEE FORM .....	1
00700 SCOPE OF WORK .....	1
00800 SPECIAL CONDITIONS .....	1
Exhibit A Site Logistics and Phasing Plan .....	1

**DIVISION 01 - GENERAL REQUIREMENTS**

01 11 00 SUMMARY OF WORK .....	3
01 21 00 CASH ALLOWANCES .....	1
01 23 00 ALTERNATES.....	1
01 26 36 ADDITIONAL REQUIREMENTS FOR DSA-REVIEWED PROJECTS .....	2
01 33 00 SUBMITTAL PROCEDURES .....	8
01 42 00 REFERENCES.....	6
01 45 00 QUALITY CONTROL .....	3
01 50 00 TEMPORARY FACILITIES AND CONTROLS .....	3
01 73 29 CUTTING AND PATCHING .....	4
01 74 23 FINAL CLEANING.....	3

**DIVISION 31 – EARTHWORK**

31 21 00 UTILITY TRENCHING AND BACKFILL .....	14
---	----

**DIVISION 32 - EXTERIOR IMPROVEMENTS**

32 50 00 RESTORATION OF SURFACES .....	2
--	---

**DIVISION 33 - UTILITIES**

33 21 00 WATER SYSTEMS .....	12
33 52 16.23 NATURAL GAS PIPING .....	8

## NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN that the Woodside School District ("District") will receive sealed bids for the Utility Replacement project located at Woodside Elementary School, 3195 Woodside Road, Woodside, California in accordance with the plans and specifications prepared by **BKF Engineers** ("Civil Engineer" or "Engineer of Record" or "EOR").

This is a state funded project Yes \_\_\_\_\_ No X (Bidders are advised that state funded projects are subject to certain additional conditions, including with respect to prequalification of certain subcontractors, DVBE services, and prevailing wages monitoring through the State Department of Industrial Relations' Compliance Monitoring Unit (CMU), that are more fully described herein.)

1. Time of Opening: Bids will be opened on **Thursday, April 30, 2020**. Bid documents must be sealed, marked with the project name and bid title. All Bids must be received at the Woodside School District office, at 3195 Woodside Road, Woodside, California 94062 **BEFORE 2:00:00 p.m.** Bids which are submitted on or after **2:00:00 p.m.** or facsimile bid transmissions will not be accepted.

2. Contractors Requirements:

a. All Bidders must have and maintain a General Contractor "A" Class or Specialty Contractor C36 contractor's license in order for their bids to be considered responsive. Bidder may bid only on work of a kind for which it is properly licensed by the California Contractors' State License Board. Joint venture Bidders must possess a joint venture license. The Bidder must be licensed at the time of bid and the license must remain current for the duration of the Project. Failure to supply complete license requirement information and signature under penalty of perjury on the bid form may result in the bid being considered non-responsive and rejected.

b. Pursuant to Senate Bill (SB) 854, all bidders on public works, including any project resulting from this bid process, must register with the California Department of Industrial Relations (DIR) and pay an annual renewal fee to the DIR. Only bidders that have registered with the DIR and that are current in payment of annual renewal fees are eligible to bid as contractors or subcontractors on any project resulting from this bid process. Likewise, only contractors and subcontractors that have registered with the DIR and who are current in payment of their annual renewal fees shall be eligible to receive a contract or subcontract or to perform work under any contracts resulting from this bid process. Pursuant to the California Labor Code, the general prevailing rate of per diem wages and for holiday and overtime work shall be paid to all workers employed by the contractor selected for this project. Copies of prevailing rates of per diem wages are available upon request at the District's Offices or at [www.dir.ca.gov](http://www.dir.ca.gov). The Department of Industrial Relations/Labor Commissioner will monitor and enforce compliance with applicable prevailing wage requirements on this project and enforce compliance with applicable prevailing wage requirements in accordance with the California Labor Code, including sections 1771, 1774, 1776, 1777.5, 1813, and 1815. Contractors on any project resulting from this bid process will be required to submit certified payroll records in electronic format to the California Labor Commissioner unless excused by the Labor Commissioner from this requirement.

3. Duration of Bid: All bid proposals submitted shall be considered irrevocable offers to perform the work in accordance with the Contract Documents if a Notice of Award is issued within thirty (30) days from the bid opening.

4. **Plans and Specifications:** Plans and specifications for the above mentioned project will be available on Wednesday, April 8, 2020. Plans and specifications may be purchased, at the contractor's expense, from Prints Charles Reprographics, 1653 S. Main Street, Milpitas, CA 95035, Phone (408) 240-3330 email: incoming@printscharlesrepro.com. Please contact Owner's Representative, Tim Doane, for further information at timd@capitalpm.com or (916) 553-4400.

5. **Inspection of Site:** Non-Mandatory Pre-Bid Site Inspection and Conference will be held at the school site, 3195 Woodside Road, Woodside, CA 94062 on **Thursday, April 16, 2020 at 3:30 p.m.** All attendees are to meet in front of the Administration office. Meeting will be held outside with COVID-19 social distancing requirements for this essential project. Attendees must sign in by scheduled time. The District shall have the discretion to bar attendees who fail to arrive by scheduled time from signing in if the circumstances warrant. Before submitting a bid proposal, Bidders shall examine the drawings, read the specifications, the form of Agreement, and other Contract Documents. They shall visit the site of the proposed Project; examine the building, or buildings, if any, and any work that may have been done thereon. They shall fully inform themselves of all conditions on, in, at, and about the site, the buildings, if any, and any work that may have been done thereon.

6. **Format of Bids:** Bid proposals shall be made on the Bid Form included with the Contract Documents. All items on the form must be filled out. Numbers on the Bid Form document shall be written as Arabic numbers and shall also be written out as words and the signatures of all individuals must be in longhand. The completed form should be without interlineations, alterations, or erasures. A bid response to any specific item of this bid with terms such as "negotiable" "will negotiate" or similar, will be considered as nonresponsive to that specific term.

7. **Listing of Alternates:** Bidders shall provide pricing for all requested alternates. Should the contractor fail to provide pricing for an alternate, the bid will be deemed non-responsive.

8. **Method of Determining Lowest Bidder:** The lowest bidder will be determined based on the lowest Total Base Bid as described on the Bid Form. The District has also included deductive alternates which requires all bidders to price as part of their bid.

9. **Signatures on Bids:** Each bid must give the full business address of the Bidder. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership's 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 the 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 District, satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished.

10. **Taxes:** Taxes shall be included in the bid prices. Federal excise taxes are generally not applicable to school districts.

11. **Use of Subcontractors:** Pursuant to the provisions of sections 4100 to 4114, inclusive, of the California Public Contract Code, every Bidder shall, in its bid, set forth:

a. The name and location of the place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the Project 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 Project 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 Project which will be done by each such subcontractor. If the Bidder fails to specify a subcontractor for any portion of the Project to be performed under the Agreement

in excess of one-half (1/2) of one percent (1%) of the Bidder's total bid, it agrees to perform that portion itself. The successful Bidder shall not, without the consent of the District, either:

- i. Substitute any person as subcontractor in place of the subcontractor designated in the original bid.
- ii. Permit any subcontractor to be assigned or transferred or allow the work to be performed by anyone other than the subcontractor.
- iii. Sublet or subcontract any portion of the Project in excess of one-half (1/2) of one percent (1%) of the total bid as to which its original bid did not designate a subcontractor. In accordance with Public Contract Code section 7106, each Bidder shall be required to complete the Non-Collusion Declaration form, which is included in and is part of the Contract Documents.

Further, pursuant to SB 854, only subcontractors who have registered with the DIR and who are current in paying the annual renewal fee to the DIR shall be eligible to perform work on the project resulting from this bid process.

12. Sureties: Any bonds must be issued by an admitted surety insurer, as defined in California Code of Civil Procedure sections 995.010, *et seq.*

13. Bid Proposal Security: Bid proposals should be accompanied by a certified cashier's check or Bidder's bond for an amount not less than ten percent (10%) of the maximum contract price. The cashier's check or bid bond shall be made payable to the order of the District. The cashier's check or bond shall be given as a guarantee that the Bidder will enter into the Agreement if awarded the Project, and in the case of refusal or failure to enter into the Agreement within ten (10) calendar days after notification of the award of the Agreement, the cashier's check or bond, as the case may be, shall be retained by the District as liquidated damages. Failure to provide bid security, or bid security in the proper amount, may result in rejection of the bid. Cashiers or certified checks that are filed with the bid will be returned to the unsuccessful Bidder(s) within ten (10) calendar days after the award of the Agreement resulting from this bid process.

14. Evidence of Responsibility: Prior to awarding a contract, the District may require the Bidder to submit evidence of the Bidder's and/or the Bidder's subcontractor's qualifications to perform the proposed agreement. The District may consider such evidence before making its decision awarding the proposed agreement. Failure to submit evidence of the Bidder's or its subcontractors' responsibility to perform the proposed agreement may result in rejection of the bid.

15. Bid Protest: Bid protests shall be filed in writing with the Woodside School District, Office of the Superintendent, at 3195 Woodside Road, Woodside, CA 94062 by registered mail, not later than three (3) working days after the bid opening. The protest shall specify the reasons and facts upon which the protest is based.

16. Award of Agreement/Rejection of Bids: The District's administration may issue a "Notification of Apparent Low Bid" to the bidder that it determines to be the lowest responsible and responsive bidder. The District reserves the right to reject any or all proposals, to contract work with whomever and in whatever manner, to abandon the Project entirely, or to waive any informality in bids received. Unless and until a "Notice to Proceed" is issued by the District, no obligation on behalf of either party exists. Upon issuance of the "Notice to Proceed", the successful bidder will post all required bonds and submit proper evidence of insurance coverage as called for by the Contract Documents. If this is not accomplished within ten (10) calendar days, the District reserves the right to cash bidder's bid security check to cover the differential in the higher bid award and the District administrative costs, and award the bid to the next lowest responsible and responsive bidder or otherwise proceed as allowed by law.

17. Form of Agreement: The form of contract which the successful Bidder will be required to execute, if awarded the Project, shall be substantially similar to that contained in the bid package. The Agreement shall contain, among other things, matters required by State law to be inserted in contracts for public work.

18. Payment and Performance Bonds: The successful Bidder, upon notice of award of bid and prior to commencing Project, shall furnish in duplicate a labor and material bond in the amount of one hundred percent (100%) of the contract sum and a faithful performance bond in the amount of one hundred percent (100%) of the contract sum.

19. Insurance: Prior to commencing work, the Contractor is required to furnish the District Certificates of Insurance for workers' compensation, and comprehensive General Liability including broad form property damage, automobile liability and all additional requirements per Article 16 of the Agreement. As set forth more fully in Article 16 of the Agreement, the District has reserved the right to modify the insurance requirements contained in the Agreement, including but not limited to, by implementing, an Owner Controlled Insurance Program ("OCIP") for the Project.

20. Prevailing Wage Rates: In accordance with the provisions of section 1770 of the Labor Code, the Director of the Department of Industrial Relations of the State of California has determined the general prevailing rates of wages and employee payments for health and welfare, pension, vacation, travel time, working hours and apprenticeable training requirements which must be paid to all workers on public work contracts. (See Labor Code § 1770, *et seq.*)

21. Non-Discrimination: The District will affirmatively ensure that in any contract entered into pursuant to this advertisement, qualified contractors will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, creed, sex or national origin in consideration for award.

22. Withdrawal or Modification of Bid Proposals: Bid proposals may be withdrawn or modified by the Bidder prior to the time fixed for the opening of bids. A notice of withdrawal or modification to a bid must be signed by the Bidder or its designated representative. Following bid opening, a Bidder shall not be relieved of its bid unless by consent of the District or Bidder's recourse to Public Contract Code sections 5100-5108. Bidders must hold their bids open for one hundred and twenty (120) days after the Bid Opening Date.

23. Prevailing Law: In the event of any conflict or ambiguity between these instructions and state or federal law or regulations, the latter shall prevail.

24. Inquiries; Addenda: Questions regarding documents, discrepancies, omissions, or doubt as to meanings shall be referred immediately in writing to the Project Manager, Tim Doane, at Capital Program Management at: **timd@capitalpm.com** who will review and if applicable forward to the Engineer of Record who will send written addenda clarifying such questions to each Bidder. Oral responses will not be binding upon the District. If, in the opinion of the bidder, the construction details indicated on the drawings or otherwise specified are in conflict with accepted industry standards for quality construction and therefore might interfere with the bidder's full guaranty of any work covered by this bid process, the bidder must promptly bring this information to the attention of the Project Manager in writing, for appropriate action before submission of a bid. Any addenda or bulletins issued during the time of bidding, shall be covered in the bid, and shall be made a part of the Contract Documents.

26. Forms to Submit with Bid: Except for Deferred Items, all bid proposals shall include the following documents, each complete in its entirety. Deferred Items shall be submitted within 24 hours after submission of Bid. Failure by the bidder to submit the documents/forms will render the bid non-responsive.

Bid Form  
Bid Bond  
Non-Collusion Declaration  
Designation of Subcontractors  
Statement of Compliance



Iran Contracting Act Certification  
Notice to Contractors Regarding Criminal Record Checking

Publication Dates:

April 8, 2020  
April 15, 2020

**BID FORM**

**Woodside School District**

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

**Underground Utility Gas Piping Repair**

\_\_\_\_\_  
(Date)

Woodside School District  
3195 Woodside Road  
Woodside, CA 94062

The Undersigned, doing business under the firm name of \_\_\_\_\_, hereby proposes and agrees to enter into an agreement, to furnish any and all labor, materials equipment and services for the completion of work described hereinafter and in the Contract Documents entitled construction of:

**Underground Utility Gas Piping Repair**

Prepared by:

\_\_\_\_\_  
(Estimator Name)

for the sum quoted below:

- A. BASE BID:** Based upon all work required to satisfactorily complete the work indicated in the related Plans and Specifications complying with the Division of State Architect and in Section 00700 Scope of Work, excluding the Alternate Bids.

**TOTAL BASE BID:** Utility Replacement as indicated on the plans.

LUMP SUM IN WORDS & FIGURES

\_\_\_\_\_ DOLLARS

\$ \_\_\_\_\_

**DEDUCTIVE BID ALTERNATE:** Remove from scope the replacement of the water lines where not joint trenched with gas lines as indicated on Plans. Purpose of this alternate is to determine potential cost reductions if the specified scope of work was removed from the project. Note that water lines that are joint trenched with gas lines are not part of this Bid Alternate.

LUMP SUM IN WORDS & FIGURES

\_\_\_\_\_ DOLLARS

\$ \_\_\_\_\_

**The low bidder will be determined based on above "Total Base Bid".**

**B. ALLOWANCES:** The Bidder's Base Bid shall **NOT** include the following Allowance(s). The District will add some or all of the following Allowance(s) amount(s) to the successful bidder's Contract, at the District's discretion. Contractor shall be permitted to invoice for Work under an Allowance as a Change Order.

<b>Allowance #1:</b> Allowance for unforeseen site conditions and repair of existing underground utilities damaged during excavation	<b>\$40,000.00</b>
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**C. LETTER OF INTENT TO AWARD:** The undersigned hereby designates as its office to which the Notice of Apparent Low Bid may be mailed, e-mailed, or delivered:

\_\_\_\_\_

\_\_\_\_\_

**D. INSURANCE:**

(1) Our Public Liability and Property Damage Insurance is placed with

\_\_\_\_\_

\_\_\_\_\_

(2) Our Workers' Compensation Insurance is placed with

\_\_\_\_\_

\_\_\_\_\_

**E. COMPLETION DATE.**

Contractor agrees that all work required to be performed by the Contract Documents shall be completed by all milestone dates specified in Section 00800 Special Provisions. Contractor acknowledges that it shall be liable for liquidated damages if the Project is not completed by these dates.

**F. ADDENDA.**

Contractor acknowledges receipt of the following addenda:

Addendum No. _____	Date of Document: _____
Addendum No. _____	Date of Document: _____
Addendum No. _____	Date of Document: _____
Addendum No. _____	Date of Document: _____

**G. EXECUTION OF BID.**

If the Bidder is a corporation, state the capacity/title of the corporate officer signing and affix the corporate seal; if a partnership, all partners should sign under the partnership name on a separate page attached to and made part of the bid. Unsigned bids will not be accepted. The undersigned declares under

penalty of perjury under the laws of the State of California that the representations made in this bid are true and correct.

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**TITLE**

\_\_\_\_\_  
**NAME OF COMPANY AS LICENSED**

\_\_\_\_\_  
**CONTRACTOR LICENSE NO.**

\_\_\_\_\_  
**ADDRESS**

\_\_\_\_\_  
**CLASS**

\_\_\_\_\_  
**EXPIRATION DATE**

\_\_\_\_\_  
**CITY**

\_\_\_\_\_  
**STATE**

\_\_\_\_\_  
**ZIP**

\_\_\_\_\_  
**TELEPHONE NUMBER**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**DIR REGISTRATION NO.**

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS that we the undersigned \_\_\_\_\_ as Principal and \_\_\_\_\_ as Surety, are hereby held and firmly bound unto the [Woodside School District] "District" in the sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) for payment of which sum, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

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

**Woodside School District**

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

**Underground Utility Gas Piping Repair**

in strict accordance with Contract Documents.

NOW, THEREFORE,

- a. If said bid shall be rejected, or, in the alternative;
- 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 Payment Bonds in the forms attached hereto (all properly 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 full 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, hereby 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 hereunder, or the specifications accompanying the same, shall in any way 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 District and judgment is recovered, the Surety shall pay all costs incurred by the District in such suit, including a reasonable attorney's fee to be fixed by the court.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under several seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, 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:

(Notary Seal)

\_\_\_\_\_  
(Principal)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(Corporate Surety)

By: \_\_\_\_\_

\_\_\_\_\_  
(Business Address)

The rate or premium of this bond is \_\_\_\_\_ per thousand, the total amount of premium charged, \$\_\_\_\_\_.

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

**NONCOLLUSION DECLARATION**

**Woodside School District**

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

**Underground Utility Gas Piping Repair**

I, \_\_\_\_\_, declare that I am the party making the foregoing bid, that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix any overhead, profit, or cost element of the bid price, or of that of any other Bidder, or to secure any advantage against the public body awarding the Agreement of anyone interested in the proposed Agreement; that all statements contained in the bid are true, and, further, that the Bidder has not, directly or indirectly, submitted its bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member of agent thereof to effectuate a collusive or sham bid.

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

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Official Capacity)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Company Address)

\_\_\_\_\_  
(Company Telephone Number)

## DESIGNATION OF SUBCONTRACTORS

Bidders shall state the portion of work by trade (electrical, painting, etc.) that each subcontractor will perform. Additionally, the Bidder shall state the name and business address for all designated subcontractors. Failure to provide this information in a legible manner may result in the rejection of an otherwise acceptable bid.

In compliance with the provisions of sections 4100 to 4113, inclusive, of the California Public Contract Code, and any amendments thereof, each Bidder shall set forth below the name and the location of the mill, shop, or office of each subcontractor who will perform work or labor or render service to the Bidder on, in, or about the construction of the work or improvement to be performed under these specifications and the portion of the work which will be done by each subcontractor. In addition, effective July 1, 2014, pursuant to Assembly Bill 44 (AB 44), Contractors are required to list the license numbers of all subcontractors required to be listed below. AB 44 provides a grace period of twenty-four hours after bid opening for Bidders to provide subcontractor license numbers that were omitted or incorrect as of the time of bid opening. Further, pursuant to Senate Bill 854 (SB 854), only subcontractors who have registered with the California Department of Industrial Relations (DIR) and who are current in paying the annual renewal fee to the DIR shall be eligible to perform work on the project resulting from this bid process.

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

Subletting or subcontracting of any portion of the work as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the legislative body of the District.

[USE FORM ON THE FOLLOWING PAGE]





STATEMENT OF COMPLIANCE

**Woodside School District**

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

**Underground Utility Gas Piping Repair**

\_\_\_\_\_  
(Company Name)

(hereinafter referred to as "prospective Contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 and provisions of the California Code of Regulations promulgated pursuant to Section 12990 in matters relating to the development, implementation, and maintenance of a nondiscrimination program. Prospective Contractor agrees not to unlawfully discriminate against any employee or applicants for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status.

I, \_\_\_\_\_  
(Name of Official)

hereby swear that I am duly authorized to legally bind the prospective Contractor to the above-described certification. I am fully aware that this certification, signed on \_\_\_\_\_  
(date)

in the County of \_\_\_\_\_, is made under the penalty of perjury  
(County)

under the laws of the State of California.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print or Type Title)

**IRAN CONTRACTING ACT CERTIFICATION  
(Public Contract Code Section 2200, et seq.)**

**Woodside School District: Underground Utility Gas Piping Repair**

**Contractor Name:** \_\_\_\_\_

I, the person who is identified below and who has signed this certification, hereby certify, subject to penalty for perjury, that: (i) I have inherent authority, or I have been duly authorized by the Contractor, to execute this certification on behalf of the Contractor; and (ii) the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200, et seq.) is true and correct:

- The Contractor is not:
  - (i) identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
  - (ii) a financial institution that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.
- The District has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the District will be unable to obtain the goods and/or services to be provided pursuant to the Contract.
- The Final Contract Sum, as defined in Section 5 of the Agreement, payable to the Contractor for the Project as of the date of this certification does not exceed \$1,000,000.

Certifier Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date Executed: \_\_\_\_\_

**Please note:** In accordance with Public Contract Code Section 2205, false certification of this form may result in civil penalties equal to the greater of \$250,000 or twice the contract amount, termination of the contract and/or ineligibility to bid on contracts for three years.

NOTICE TO CONTRACTORS REGARDING CRIMINAL RECORD CHECKS  
(CALIFORNIA EDUCATION CODE SECTION 45125.2)

**Woodside School District: Underground Utility Gas Piping Repair**

In bidding on the Project and/or entering into a contract with the District for the Project, the below indicated bidder certifies that it is aware of the following provisions of the California Education Code and agrees to comply with them if the bidder is selected as the Contractor for the Project:

Section 45125.2: Construction, etc. contractors; pupil safety

- a. A school district contracting with an entity for the construction, reconstruction, rehabilitation or repair of a school facility where the employees of the entity will have contact, other than limited contact, with pupils shall ensure the safety of the pupils by one or more of the following methods:
  - 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 entity by an employee of the entity whom the Department of Justice has ascertained has not been convicted of a violent or serious felony. For purposes of this paragraph, an employee of the entity may submit his or her fingerprints to the Department of Justice pursuant to subdivision (a) of Section 45125.1 and the department shall comply with subdivision (d) of Section 45125.1. As further required by Education Code Section 45125.1, attached hereto as Attachment "A" is a list of the names of the employees of the undersigned who may come in contact with pupils.
- b. An entity that contracts with a school district for the construction, reconstruction, rehabilitation or repair of a school facility is not required to comply with the requirements of Section 45125.1 if one or more of the methods described in subdivision (a) are utilized.
- c. For purposes of this section, a violent felony is any felony listed subdivision (c) of Section 667.5 of the Penal Code and a serious felony is any felony listed in subdivision (c) of Section 1192.7 of the Penal Code.
- d. This section shall not apply to an entity providing construction, reconstruction, rehabilitation or repair services to a school district in an emergency or exceptional situation, such as when pupil health or safety is endangered or when repairs are needed to make school facilities safe and habitable.

Certifier Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date Executed: \_\_\_\_\_

NOTICE TO CONTRACTORS REGARDING CRIMINAL RECORD CHECKS  
(CALIFORNIA EDUCATION CODE SECTION 45125.2)  
**ATTACHMENT A:**

**CONTRACTOR CERTIFICATION REGARDING BACKGROUND CHECKS**

*(INSERT NAMES OF EMPLOYEES WHO MAY COME IN CONTACT WITH PUPILS)*

## AGREEMENT

This Agreement made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, between the Woodside School District, San Mateo County, California ("District"), and \_\_\_\_\_ ("Contractor").

Contractor and District agree as follows:

**ARTICLE 1 - THE PROJECT.** Contractor agrees to obtain all necessary permits and licenses as are required by law, furnish all labor and materials, including required tools, implements, and appliances and to perform all the work in a good and workmanlike manner, free from any and all liens and claims of mechanics, material, men, subcontractors, artisans, machinists, teamsters, and laborers required in the bid proposal, all in strict compliance with the plans, drawings, and other Contract Documents, required for the Project, which, for purposes of this Agreement, refers to the following:

**Woodside School District**

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

**Underground Utility Gas Piping Repair**

Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials, equipment, transportation, and other facilities and services necessary for the proper execution and completion of the Project. The Contractor shall at all times enforce strict discipline and good order among Contractor's employees and shall not employ on the Project any unfit person or anyone not skilled in the task assigned.

**ARTICLE 2 - THE AGREEMENT:** The Contractor and the District agree that the Contract Documents are composed of all those documents described in paragraph 2.1 of the General Conditions, all of which are incorporated herein by reference. The specifications and drawings are to be read together such that any work exhibited in the drawings and not mentioned in the specifications, or vice versa, is to be executed 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 Agreement shall be considered as part of this Agreement.

**ARTICLE 3 - CONTRACTOR'S LICENSE:** Contractor shall have, and maintain in good standing, and require the same of all its subcontractors, the appropriate classification of California State contractor's license during the entire term of this Project. Contractor confirms that, pursuant to SB 854, it has registered with the California Department of Industrial Relations (DIR) and that it has, through the date of this Agreement, paid all annual renewal fees due to the DIR. Contractor shall pay all annual renewal fees to the DIR that come due during the term of the Agreement.

**ARTICLE 4 - COMPLETION DATE / NOTICE TO PROCEED:** Contractor agrees that all work required to be performed by the Contract Documents shall be completed by the milestone dates specified in the Section 00800 Special Provisions. Contractor acknowledges that it shall be liable for liquidated damages as set forth in this Agreement if the Project is not completed by these dates.

**ARTICLE 5 - CONTRACT SUM:** The contract sum is the total amount payable by the District to Contractor for the performance of work under the Contract Documents. The contract sum is \_\_\_\_\_ Dollars (\$\_\_\_\_\_) ("Contract Sum"), unless modified in writing in accordance with the Contract Documents.

**ARTICLE 6 - LIQUIDATED DAMAGES:** The Completion Date specified in Article 4 is of the essence of the Agreement. The Contractor shall complete the Project by the date specified in Article 4 unless the District agrees in writing to an extension of time.

Failure to complete the Project within the time and in the manner provided for by the Contract Documents shall subject the Contractor to liquidated damages. The actual occurrence of damages and the actual amount of the damages which the District would suffer if the Project were not completed within the specified times set forth are dependent upon many circumstances and conditions which 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 District would suffer in the event of delay include, but are not limited to, loss of the use of the Project, disruption of school activities, costs of administration, inspection, supervision and the loss suffered by the public within the District.

Accordingly, the parties agree that the amount herein set forth shall be presumed to be the amount of damages which the District shall directly incur upon failure of the Contractor to complete the Project within the time specified: **Five Hundred Dollars (\$500.00)**, plus the extra inspection costs incurred by the District, during or as a result of each calendar day by which the substantial completion of the Project is delayed beyond the date specified in Article 4 of the Agreement and **Five Hundred Dollars (\$500.00)**, plus the extra inspection costs incurred by the District, during or as a result of each calendar day by which final completion of the Project is delayed beyond the date specified in the Article 4 of the Agreement.

If the Contractor becomes liable for liquidated damages under this section, the District, in addition to all other remedies provided by law, shall have the right to withhold any and all retained percentages of payments, and to collect the interest thereon, which would otherwise be or become due the Contractor until the liability of the Contractor under this section has been finally determined. If the retained percentage 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 District until all such liabilities are satisfied in full.

If the District accepts any work or makes any payment under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of completion and liquidated damages.

**ARTICLE 7 - EARLY COMPLETION:** Regardless of the cause therefore, the Contractor may not maintain any claim or cause of action against the District for damages incurred as a result of its failure or inability to complete its work on the Project in a shorter period than established in Article 4 of this Agreement, the parties stipulating that such period is a reasonable time within which to perform the work on the Project.

**ARTICLE 8 – PAYMENT:** The District agrees to pay the Contractor in current funds for the performance of the Agreement the amount proposed in this bid, including approved change orders, and to make payments on account thereof as follows: Each calendar month, ninety-five percent (95%) of the value, proportionate to the amount of the Agreement, of labor and materials incorporated in the Project up to the first day of that month as estimated by the District, and Project Manager, less the aggregate of previous payments. On substantial completion of the entire Project, a sum sufficient to increase the total payments to ninety-five percent (95%) of the contract sum set forth in Article 5 of this Agreement, and thirty-five (35) days after the Notice of Completion has been recorded, provided the Project is fully completed and the Agreement fully performed, the balance due under the Agreement. The payment of progress payments by the District shall not be construed as an acceptance of the work done up to the time of such payments, except as to such matters as are open and obvious. The entire Project is to be subjected to inspection and approval of the District or Project Manager to defects not obvious upon inspection during the progress of the work at the time when it shall be claimed by the Contractor that the Agreement is completed. The District and Project Manager shall exercise all reasonable diligence in the discovery, and report to the Contractor as the Project progresses, materials and labor which are not satisfactory to the District, so as to avoid unnecessary trouble and cost to the Contractor in making good defective parts or work.

In accordance with the provisions of Public Contract Code section 22300, the District shall, at the request and expense of the Contractor, permit the substitution of securities or the payment of funds equivalent to the amount of monies withheld as retention from progress payments.

**ARTICLE 9 - EARLY TERMINATION:** Notwithstanding any provision herein to the contrary, if for any fiscal year of this Agreement the governing body of the District fails to appropriate or allocate funds for future periodic payments under the Agreement after exercising reasonable efforts to do so, the District may, upon thirty (30) days written notice, order work on the project to cease. The District will remain obligated to pay for the work already performed but shall not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the work has not been done.

**ARTICLE 10 - TERMINATION FOR CAUSE:** If Contractor (1) should be adjudged bankrupt; (2) should make a general assignment for the benefit of its creditors; (3) should persistently or repeatedly refuse or fail, except in cases for which an extension of time is provided, to supply enough properly skilled workers or proper materials; (4) should fail to make prompt payment to subcontractors or for material or labor; (5) persistently disregards laws, ordinances or the instructions of the District; or if any of its subcontractors should persistently violate any of the provisions of the Agreement; or (6) a receiver should be appointed on account of Contractor's insolvency, then the District may serve written notice upon the Contractor and its surety of its intention to terminate the Agreement. Unless, within five (5) days after the serving of such notice, such violations shall cease and satisfactory arrangements for corrections thereof be made, the Agreement shall, upon the expiration of said five (5) days, at the District's option, terminate.

In the event of any such termination, the District shall immediately serve written notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and perform the Agreement; provided, however, that if the surety, within ten (10) days after the serving upon it of Notice of Termination, does not give the District written notice of its intention to take over and perform the Agreement or does not commence performance within ten (10) days from the date of the serving of such notice, the District may take over the Project and prosecute the same to completion by Agreement or by any other method it may deem advisable, for the account and at the expense of the Contractor, and the Contractor and the surety shall be liable to the District for any excess cost occasioned the District thereby. In such event, the District may without liability for so doing, take possession of and utilize in completing the Project, such materials, appliances and other property belonging to the Contractor as may be on the site of the Project and necessary therefore. In such case the Contractor shall not be entitled to receive any further payment until the Project is finished. If the unpaid balance of the contract sum shall exceed the expense of finishing the Project, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the District.

**ARTICLE 11 - PERFORMING A PORTION OF THE WORK:** If the Contractor fails to correct defective work or persistently fails to carry out the work in accordance with the Contract Documents, the District, by written order, may order the Contractor to stop the work, or any portion thereof, until the cause of such order has been eliminated. The District shall not have any duty to stop the work for the benefit of the Contractor or any other person or entity. If the District chooses to correct or carry out the work itself, it shall normally give the Contractor seven (7) days after providing written notice to commence and continue correction of such default or neglect with diligence and promptness. If, however, the condition constitutes an emergency which may subject the District to penalties or termination of the Project by outside jurisdictional agencies, the District may do so without notice to the Contractor. In either 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 compensation for the Project Manager's and consultants' additional services made necessary by such default, neglect, or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor and its surety shall pay the District the difference.

**ARTICLE 12 - USE OF SUBCONTRACTORS:** Contractor agrees that, as required by State law and the Instruction to Bidders, all subcontractors which will perform work on this project shall be listed on the Designation of Subcontractors form, provided with the Contract Documents.



**ARTICLE 13 - PREVAILING WAGE RATES:** In accordance with the provisions of section 1720, *et seq.*, of the California Labor Code, the Director of the California Department of Industrial Relations has determined the general prevailing rates or wages and employer payments for health and welfare, pension, vacation, travel time, and subsistence pay as provided for in section 1770, *et seq.*, of the California Labor Code. **Pursuant to the California Labor Code, the general prevailing rate of per diem wages and for holiday and overtime work shall be paid to all workers employed by the Contractor selected for this project. Copies of prevailing rates of per diem wages are available at [www.dir.ca.gov](http://www.dir.ca.gov). If this project is state funded, the Department of Industrial Relations will monitor and enforce compliance with applicable prevailing wage requirements on this project through the Compliance Monitoring Unit (CMU) and enforce compliance with applicable prevailing wage requirements in accordance with the California Labor Code, including sections 1771, 1774, 1776, 1777.5, 1813, and 1815. Further information regarding this requirement is available at <https://www.dir.ca.gov/t8/16450.html>.**

Contractor may be responsible for paying subcontractors' employees' prevailing wages if it does not comply with the provisions of Labor Code sections 1770, *et seq.*

***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 it in connection with the execution of this Agreement 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 District, its officers and agents and to the representatives of the Division of Labor Standards Enforcement of the State Department of Industrial Relations (DIR). Attention is directed to the provisions in section 1777.5 and section 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under it.***

Pursuant to Senate Bill (SB) 854, Contractor will electronically submit certified payroll records to the Labor Commissioner/DIR unless the Labor Commissioner excuses Contractor from this requirement. The parties understand and agree that the project will be subject to compliance monitoring and enforcement by the DIR.

This Agreement may be subject to a labor compliance program, as described in Section 1771.5 of the Labor Code. As required by law, the Department of Industrial Relations will monitor and enforce compliance with applicable prevailing wage requirements.

**ARTICLE 14 - WORKING HOURS:** In accordance with the provisions of the California Labor Code, eight (8) hours labor shall constitute a day's work, and no laborer, workman or mechanic in the employ of the Contractor, or any subcontractor, doing or contracting to do any part of the work contemplated by this Agreement, shall be required to or permitted to work more than eight (8) hours in one calendar day or forty (40) hours during any one calendar week unless such work is compensated at the lawful overtime rate set forth in the California Labor Code. The Contractor and each subcontractor shall also keep an accurate record showing the names and actual hours worked of all workers employed by it in connection with the work contemplated by this Agreement, which record shall be open at all reasonable hours to the inspection of the District, or its officers or agents and to the Chief of the Division of Labor Standards Enforcement of the DIR, its deputies or agents; and it is hereby further agreed that Contractor shall forfeit as a penalty to the District the sum of twenty-five dollars (\$25.00) for each laborer, workman or mechanic who is required or permitted to labor more than eight (8) hours a day or forty (40) hours a week in violation of this Article 14.

**ARTICLE 15 - EMPLOYMENT OF APPRENTICES:** Contractor agrees to comply with all provisions of the law regarding the employment of apprentices, including, but not limited to Labor Code §§ 1773.3, 1777.5, 1777.6 and 3077, *et seq.* These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one (1) apprentice hour for each five (5) journeyman hours, unless an exemption is granted, and that contractors and subcontractors shall not discriminate among otherwise qualified employees as indentured apprentices on any public work on the grounds of race, religious creed, color, national origin, ancestry, sex, or age. Only apprentices who are in training under written apprenticeship agreements will be employed on public works in apprenticeable occupations. The

responsibility for compliance with these provisions for all apprenticeable occupations rests with the Contractor.

#### **ARTICLE 16 – INSURANCE:**

The Contractor shall procure and maintain for the duration of this Contract and for two years thereafter, 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, and Contractor's agent, representatives, employees, or subcontractors. Contractor shall include in all of its contracts with Subcontractors provisions requiring such Subcontractors to meet the same insurance requirements as set forth herein.

Comprehensive or commercial general liability (CGL) insurance, on Insurance Office Services Form CG 00 01 (or a form at least as broad as Form CG 00 01) covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than \$5,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this Project and location or the general aggregate limit shall be twice the required occurrence limit.

Automobile Liability Insurance, on Insurance Services Office Form Number CA 0001 covering Code 1 (any auto) with limits no less than \$5,000,000 per accident for bodily injury and property damage.

Workers' Compensation, including Employers' Liability Insurance, as required by the State of California with Statutory Limits, and Employers' Liability insurance with a limit of no less than \$1,000,000 each accident, injury or disease. The Contractor shall require subcontractors to provide workers' compensation insurance for all subcontractors' employees engaged in Work under the subcontract. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. If the Contractor fails to maintain such insurance, the District, at its sole option and without incurring any further obligation to provide insurance, may take out Workers' Compensation insurance to cover any compensation payable under the provisions of the Act by reason of any employee of the Contractor or a subcontractor being injured or killed, and to deduct the amount of the premium for such insurance from any sums due the Contractor. If injury occurs to any employee of the Contractor for which the employee, or its dependents in the event of its death, is entitled to compensation from the District under the provisions of said Act, or from the sums due the Contractor under these Contract Documents the District may deduct and retain an amount sufficient to cover such compensation or payment of such compensation.

The Contractor shall sign and file with the District the following certification prior to performing the Work of the Contract: "I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the Work of the Contract."

Builder's Risk/All Risk: The District, during the progress of the Work and until the District's final acceptance of the Work upon completion of the entire Contract, shall maintain Builder's Risk/"All Risk," course-of-construction insurance, issued on a completed value basis on all insurable Work included under the Contract Documents, including completed Work and Work in progress to the full insurable value of the entire Work which is the subject of this Agreement. Coverage is to provide extended coverage and insurance against vandalism, malicious mischief, perils of fire, sprinkler leakage, civil authority, sonic boom, collapse, wind, lightning, smoke, riot, debris removal including demolition, and reasonable compensation for the Project Manager's services and expenses required as a result of insured loss. Notwithstanding the foregoing, Contractor shall pay, or reimburse the District for any amounts paid by the District, for all \$10,000 of the deductible required to be paid in connection with any claims under the terms of the Builder's Risk/All Risk insurance (or for any amount beyond the \$10,000 deductible if this deductible amount should increase during the term of this Agreement).

Fire insurance on all Work subject to loss or damage by fire. Contractor shall maintain fire insurance in an amount of fire insurance shall be sufficient to protect the Project and all appurtenant structures against loss of damage in full until the Work is accepted by the District.

Coverage for debris removal limits not less than \$1,000,000. In the event that the Contractor is performing abatement of hazardous or contaminated materials work or employs a subcontractor or entity for abatement of hazardous or contaminated materials, environmental liability and pollution insurance, with limits not less than \$1,000,000. The policy shall be written on an occurrence form and any deductible shall not exceed \$25,000.

Minimum Amounts Required. The amounts of insurance coverage stated above are the minimums that Contractor is required to procure and maintain. If Contractor maintains higher limits than the minimums stated above, the District requires, and shall be entitled to, coverage for the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the District.

Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either the Contractor shall cause the insurer to reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, officials, employees and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

Required Endorsements. The insurance policies required in this Article 16 of this Agreement shall contain or shall be endorsed to contain the following provisions:

(a) The District, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor, including materials, parts, or equipment furnished in connection with work or operation and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10, CG 11 85 or both CG 20 10 and CG 20 37 if later revisions are used);

(b) For any claims related to the Project, the Contractor's insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the District, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute to it; and

(c) Each insurance policy required by this Agreement shall provide that coverage shall not be canceled, except with prior written notice to the District.

Acceptability of Insurers: Insurance companies providing coverage required under this Agreement shall be legally licensed and admitted through the California Department of Insurance to engage in the business of furnishing insurance in the State of California. All insurance companies shall have an "A-VII" in Bests Rating Guide and shall be satisfactory to the District.

Waiver of Subrogation: Contractor hereby waives the right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the District for all work performed by the Contractor, its employees, agents, and subcontractors.

In the event of any damage, not insured by the District, as identified in this agreement under Builder's Risk/All Risk section, it shall be the Contractor's responsibility to perform at its expense all required repair and replacement including damage to adjacent areas.

Verification of Coverage. Before commencement of the Work under this Agreement, certificates of insurance shall be furnished to the District, with complete copies of policies to be furnished to the District

promptly upon request. All policies of insurance, exclusions, deductibles, self-insured retentions, and certificates shall be reviewed by, and satisfactory to the District before Contractor commences work on the Project. Approval of the insurance by the District shall not relieve or decrease the extent to which the Contractor or subcontractor of any tier may be held responsible for payment of any and all damages resulting from its action, inaction or operations. Further, failure by Contractor to obtain the required documents prior to work beginning on the Project shall not relieve the Contractor of the obligation to obtain them or constitute a waiver by the District of Contractor's obligation to provide them. The District reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by this Agreement, at any time.

Liability insurance shall be on an occurrence basis. The coverage afforded thereby shall be primary and non-contributory to any other existing valid and collectable insurance to the full limit of liability stated in the declaration, and such insurance shall apply separately to each insured against whom claim is made or suit is brought, but the inclusion of more than one (1) insured shall not operate to increase the insurer's limits of liability.

Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices. Certificates and insurance policies shall include the following clause: "This policy shall not be non-renewed, canceled, or reduced in required limits of liability or amounts of insurance until notice has been mailed to the District. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice." If, at any time during the life of this Agreement, the Contractor fails to maintain any item of the required insurance in full force and effect, all Work of this Agreement may, at District's sole option, be discontinued immediately, and all payments due or that become due under the Agreement will be withheld, until notice is received by the District as provided hereinabove that such insurance has been restored to full force and effect and that the premiums therefrom have been paid for a period satisfactory to the District.

Any failure to maintain any item of the required insurance may, at District's sole option, be considered material breach of the Agreement and, in such an event, the District may immediately terminate this Agreement.

Subcontractors. Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated in this Agreement and Contractor shall ensure that the District is an additional insured on insurance required from subcontractors. For CGL coverage, subcontractors shall provide coverage with a format at least as broad as ISO Form CG 20 38 04 13.

#### Reservation of Rights to Implement Owner Controlled Insurance Program.

Notwithstanding the foregoing requirements set forth in this Article 16 of the Agreement, the District hereby reserves the right to modify the insurance requirements set forth in the Agreement, including but not limited to reserving the right to implement an Owner Controlled Insurance Program ("OCIP") for the Project.

In the event an OCIP is implemented, the OCIP will provide certain specified insurance coverages for District, and any Contractor or Subcontractor working on the Project who are eligible for, and are properly enrolled in the OCIP. The insurance coverages that may potentially be included in the OCIP include, but are not limited to, workers compensation insurance, commercial general liability insurance, and excess liability insurance. The selection of insurance coverages that may be included in the OCIP, and the limits, terms, and conditions of coverage, shall be established by the District, in its sole discretion. The coverages included in the OCIP will be identified by District, in writing, if and when the District decides to implement an OCIP for the Project.

In the event an OCIP is implemented, Contractor and any Subcontractor eligible for the OCIP shall be required to enroll in the OCIP. As part of the OCIP enrollment process, Contractor and each eligible Subcontractor shall be required to provide information to District, or its agents, sufficient to enable District to determine each Contractor's and Subcontractor's reduction in insurance costs due to enrollment in the OCIP. In order to enroll in the OCIP, Contractor and any eligible Subcontractor will be required to accept an insurance credit, either by accepting a deductive credit to their contract price, or by agreeing to exclude

from their contract price an amount equal to their reduction insurance costs due to enrollment in the OCIP. The methodology and procedures for identifying the insurance credit, and enrolling in the OCIP, will be established in writing, by the District, if and when an OCIP is implemented.

In the event an OCIP is implemented, Contractor and all Subcontractors will still be required to maintain other insurance coverages that are not provided under the OCIP. For example, Contractor and Subcontractor will generally still be required to maintain off-site workers compensation, off-site commercial general liability, and commercial automobile liability insurance consistent with the terms of the Agreement, or as further directed by District.

**ARTICLE 17 - INDEMNIFICATION AGAINST LIABILITY:** Notwithstanding any other provision of the Contract Documents, Contractor agrees to indemnify, defend and save harmless the District, its Governing Board, related entities and divisions, officers, agents, consultants and employees from and against any and all claims, demands, losses, defense costs, or liabilities of any kind or nature which they may sustain or incur or which may be imposed upon them for injury to or death of persons, damage to property, or delay or damage to another contractor, or for attorney's fees incurred in defending or prosecuting suits to enforce laws relating to public works contracts, resulting or arising out of, or in any manner connected with Contractor or Contractor's agents, employees or subcontractors' performance or failure to perform under the terms of the Contract Documents, excepting only liability arising out of the sole negligence or willful misconduct of the District. The parties stipulate that any such claims, demands, losses, defense costs, or liabilities would be above, beyond, and entirely separate from, those damages which would be liquidated pursuant to Article 6.

**ARTICLE 18 - MISCELLANEOUS PROVISIONS:**

a. Entire Agreement: This Agreement constitutes the entire agreement between the parties, and supersedes any prior agreement between the parties, oral or written, including the District's award of the Project to Contractor, unless such agreement is expressly incorporated herein. The District makes no representations or warranties, express or implied, not specified in this Agreement.

b. Execution of Other Documents: The parties to this Agreement shall cooperate fully in the execution of any and all other documents and in the completion of any additional actions that may be necessary or appropriate to give full force and effect to the terms and intent of this Agreement.

c. Execution in Counterparts: This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy, or an original, with all signatures appended together, shall be deemed a fully executed agreement.

d. Binding Effect: Contractor, by execution of this Agreement, acknowledges that Contractor has read this Agreement, understands it, and agrees to be bound by its terms and conditions. This Agreement shall inure to the benefit of and shall be binding upon the Contractor and the District and their respective successors and assigns.

e. Severability: If any provision of this Agreement shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.

f. Amendments: The terms of this Agreement shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by the parties.

g. Assignment of Agreement: The Contractor shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on the payment bond, the surety on the performance bond and the District.

h. Written Notice: 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 or courier to the last business address known to it who gives the notice.

i. Anti-discrimination: It is the policy of the District that in connection with all work performed under purchasing contracts there shall be no discrimination against any prospective or active employee engaged in the Project because of race, color, ancestry, national origin, sex or religious creed. Therefore, the Contractor agrees to comply with applicable federal and California laws including, but not limited to, the California Fair Employment and Housing Act. In addition, the Contractor agrees to require like compliance by all subcontractors employed on the Project by it.

IN WITNESS WHEREOF the parties have executed this Agreement on the date first hereinabove written.

CONTRACTOR,  
(By signing below, also certifies awareness of and compliance with Labor Code Sections 1861 and 3700 concerning Worker's Compensation Law.)

By: \_\_\_\_\_  
Signature Date

Type or Print Name: \_\_\_\_\_

Official Capacity: \_\_\_\_\_ (Affix Corporate Seal)

By: \_\_\_\_\_  
Signature Date

Type or Print Name: \_\_\_\_\_

Official Capacity: \_\_\_\_\_

WOODSIDE SCHOOL DISTRICT

By: \_\_\_\_\_  
Mr. Steve Frank Date  
District Superintendent

**Note to Contractor:**

a. For corporations, the contract must be signed by two officers. The first signature must be that of the chairman of the board, president or vice president; the second signature must be that of the secretary or chief financial officer. The signatures must be acknowledged by a Notary Public and seal attached.

b. If Partnership, all partners should sign under the partnership name. The signatures must be acknowledged by a Notary Public and seal attached.

## PERFORMANCE BOND

Woodside School District ("District") and \_\_\_\_\_ ("Contractor") have entered into a contract for the furnishing of all materials and labor, services and transportation which are necessary, convenient, and proper to construct:

### Woodside School District

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

### Underground Utility Gas Piping Repair

WHEREAS, the Agreement between the District and the Contractor dated \_\_\_\_\_, 20\_\_, and all of the documents attached to or forming a part of the Contract Documents, are hereby referred to and made a part hereof; and

WHEREAS, the Contractor is required by the Agreement, before entering upon the performance of the work, to file a good and sufficient bond with the District to ensure Contractor's good and faithful performance thereunder.

NOW, THEREFORE, the Contractor and \_\_\_\_\_ ("Surety"), as Corporate Surety, hereby bind themselves, their heirs, executors, administrators, successors, or assigns, jointly and severally, unto the District in the sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), to be paid to the District upon the occurrence of the condition set forth below.

THE CONDITION OF THIS OBLIGATION IS that if the Contractor shall fail to well and truly perform and fulfill all the undertakings, covenants, terms, and conditions of the Agreement during the original term of the Agreement and any extensions thereof that may be granted by the District, and during the life of any guaranty required under the Agreement, or shall fail to well and truly perform and fulfill all the undertakings, covenants, terms, and conditions of any and all duly authorized modifications to the Agreement that may hereafter be made, then the Surety shall indemnify the District for any damage or loss suffered thereby. In case suit is brought upon this bond the Surety shall pay all court costs, expenses and reasonable attorney's fees.

IT IS HEREBY EXPRESSLY STIPULATED AND AGREED that no change, extension of time, alteration, or addition to the terms of the contract or the work to be performed thereunder or the specifications accompanying the same, shall in any way diminish the Surety's obligation on this bond, and the Surety does hereby waive notice of any such change, extension, alteration, or addition.

SHOULD THE CONDITION of this bond be fully performed, this obligation becomes void; otherwise the obligation shall remain in full force and effect.

IN WITNESS WHEREOF, this instrument has been duly executed by the Contractor and Surety this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

(Notary Seal)

\_\_\_\_\_  
(Principal)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Corporate Surety)

By: \_\_\_\_\_

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_

The rate or premium of this bond is \_\_\_\_\_ per Thousand Dollars; the total amount of premium charged, \$\_\_\_\_\_.

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



**PAYMENT BOND**  
(Labor and Material)

Woodside School District ("District") and \_\_\_\_\_ ("Principal") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to construct:

**Woodside School District**

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

**Underground Utility Gas Piping Repair**

WHEREAS, the Agreement between the District and the Principal dated \_\_\_\_\_, 20\_\_, and all of the documents attached to or forming a part of the Contract Documents, are hereby referred to and made a part hereof; and

WHEREAS, the Principal is required by the Agreement, 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 the Agreement.

NOW, THEREFORE, the Principal and the undersigned \_\_\_\_\_ ("Surety"), as Corporate Surety, hereby bind themselves, their heirs, executors, administrators, successors, or assigns, jointly and severally, unto the District for the use and benefit of all persons provided under Civil Code section 9554, subdivision (b), in the sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_).

THE CONDITION OF THIS OBLIGATION IS that if the Principal or a subcontractor, or their heirs, executors, administrators, successors, or assigns fails to pay any of the persons named in Civil Code section 9100, or any of the amounts due as specified in Civil Code section 9554, subdivision (b), Surety will pay the same in an amount not exceeding the amount hereinabove set forth. Additionally, Surety shall pay all court costs, expenses and reasonable attorneys' fees as fixed by the Court associated with any suit brought upon this bond, including costs and attorneys' fees incurred by the District.

IT IS HEREBY EXPRESSLY STIPULATED AND AGREED that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond.

IT IS FURTHER EXPRESSLY STIPULATED AND AGREED that no change, extension of time, alteration, or addition to the terms of said contract or the specifications accompanying the same, shall in any manner diminish the Surety's obligations on this bond, and the Surety does hereby waive notice of any such change, extension, alteration, or addition.

SHOULD THE CONDITION of this bond be fully performed, then this obligation shall become void; otherwise the obligation shall be and remain in full force and effect.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

(Notary Seal)

\_\_\_\_\_  
(Principal)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(Corporate Surety)

By: \_\_\_\_\_

\_\_\_\_\_  
(Business Address)

The rate or premium of this bond is \_\_\_\_\_ per thousand; the total amount of premium charged, \$\_\_\_\_\_.

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

## GENERAL CONDITIONS

### Article 1

#### **DEFINITIONS**

- 1.1 Project Manager: Individual designated to represent the District. The term "District" shall also be defined to include the District's Representative. The Project Manager will be the Contractor's primary contact during construction of the Project.
- 1.2 Day: The term "day" as used in the Contract Documents shall mean calendar day.
- 1.3 CO: Change Order.
- 1.4 COR: Change Order Request.
- 1.5 Submit/Submission: An application for payment, request for information, substitution, or change order or requests for approval of samples or submittals or shop drawings. Includes resubmission after initial denial or direction to provide additional information.
- 1.6 Beneficial Occupancy: Notwithstanding any common law principal to the contrary, occupancy by the District shall be "beneficial" when occupancy for teaching purposes is safe and convenient (considering all visual, sound, and odor factors); the Project is weather-tight, functional, and aesthetically pleasing; all portions of the Project (including finishes, painting, hardware, services, safety systems and utilities) are complete and operational; and any remaining punch list work may be conveniently and effectively performed after 3:30 p.m. and/or on weekends and can and shall be completed within the immediately subsequent twenty eight (28) days after such occupancy.
- 1.7 Substantial Completion: Substantial Completion is the stage in progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents, except for minor punch list items, that the building may be Beneficially Occupied.
- 1.8 Final Completion: The point at which Contractor fully completes all contract work including punch list work and has submitted closeout documentation to the satisfaction of the District and Project Manager.

### Article 2

#### **CONTRACT DOCUMENTS.**

- 2.1 The Contract Documents are the following:
1. Agreement
  2. Bid Form
  3. Bid Bond
  4. Payment Bond
  5. Performance Bond
  6. Insurance Forms
  7. Notice to Bidders and Instructions
  8. Designation of Subcontractors Form
  9. Non-Collusion Affidavit
  10. Iran Contracting Act Certification
  11. Notice Regarding Criminal Background Checks and Attachment A
  12. General and Special Conditions
  13. Conditional Waiver and Release Upon Progress Payment for General Contractor

14. Conditional Waiver and Release Upon Progress Payment for Subcontractor (when requested)
15. Unconditional Waiver and Release Upon Progress Payment for General Contractor
16. Unconditional Waiver and Release Upon Progress Payment for Subcontractor (when requested)
17. Conditional Waiver and Release Upon Final Progress Payment for General Contractor
18. Conditional Waiver and Release Upon Final Progress Payment for Subcontractor
19. Contractor's Affidavit of Release of Liens
20. Consent of Surety Company to Final Payment
21. Contractor's Affidavit of Payment of Debts and Claims
22. Contractor's Affidavit of Payment of Prevailing Wage
23. Subcontractor's Affidavit of Payment of Prevailing Wage
24. Supplementary Conditions (if applicable)
25. Plans and Specifications and Drawings
26. District's Schedule of Milestones
27. Other Forms and Attachments (if applicable)
28. Addenda or Clarifications to any of the above

2.2 The District must approve any additions to the listed Contract Documents. Any modification amending or extending the Work covered by the Contract Documents shall be as binding as if originally included in the Contract Documents.

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 necessary for the proper execution, completion, and operation of the Project. 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 reasonably 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.

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 Project among subcontractors or in establishing the extent of work to be performed by any trade. Neither the stated description nor the division of the Plans and Specifications to various sections, which is done solely for convenience, shall be deemed to limit the work required, divide or indicate it by labor jurisdiction or trade practice, or set up any bidding barriers to the various sub-contractors or suppliers.

2.5 The Contractor shall be responsible for the proper execution of all work required by the Contract Documents and for allocating such portions as it sees fit to the various sub-contractors. The Contractor is cautioned that the various individual sections may not contain all work that the Contractor may wish to allocate to a particular sub-contractor or everything bearing on the work of a particular trade, some of which may appear in other portions of the Plans or Specifications.

2.6 Intent of Drawings and Specifications.

2.6.1 The Contractor shall make its own layout of lines and elevations and shall be responsible for the accuracy of both its and the subcontractors' work resulting therefrom. All dimensions affecting proper fabrication and installation of all contract Work must be verified prior to fabrication by taking field measurements of the true conditions. The Contractor shall take, and assist subcontractors in taking, all field dimensions required in performance

of the work, and shall verify all dimensions and conditions on the site. If there are any discrepancies between dimensions in drawings and existing conditions which will affect the work, the Contractor shall bring such discrepancies to the attention of the Project Manager for adjustment immediately and in any case before proceeding with the Work. The Contractor shall be responsible for the proper fitting of all Work and for the coordination of all trades, subcontractors and persons engaged upon this Contract.

- 2.6.2 It is the intent of the Contract Plans and Specifications to show and describe complete installations. Items shown but not specified, or specified but not shown, shall be included unless specifically omitted. These Plans and Specifications shall be deemed to include and require everything necessary and reasonably incidental to the completion of all work described and indicated on the drawings, whether or not particularly mentioned or shown.
- 2.6.3 The specifications and drawings are intended to be explanatory of each other. Any work shown on the drawings, and not in the specifications, or vice versa, is to be treated as if indicated in both. In the case of conflict or inconsistency, the Supplementary Conditions (if any) shall control over the General Conditions and the specifications shall control over the drawings. In case of conflict within the drawings, larger scale drawings shall govern smaller scale drawings, written dimensions shall govern over scaled dimensions and figured dimensions shall control over scaled measurements. In all cases, the more costly or expensive interpretation is deemed to control and is to be the interpretation incorporated into the Contract Documents and Contract Sum.
- 2.7 Ambiguities, Errors, and Inconsistencies: If, in the opinion of the Contractor, the construction details indicated on the drawings or otherwise specified are in conflict with accepted industry standards for quality construction and therefore might interfere with Contractor's full guarantee of the Work involved, the Contractor shall promptly bring its opinion and the basis for it to the attention of the Project Manager for appropriate action before submittal of the bid. Contractor's failure to request clarification or interpretation of an apparent ambiguity, error or inconsistency waives that Contractor's right to thereafter claim any entitlement to additional compensation based upon an ambiguity, inconsistency, or error, which should have been discovered by a reasonably prudent Contractor, subject to the limitations of Public Contract Code §1104. During the Project, should any discrepancy appear or any misunderstanding arise as to the import of anything contained in the Contract Documents, the matter shall be promptly referred to the Project Manager, who will issue instructions or corrections.
- 2.8 Lines and Planes: All lines and planes appearing on Contract drawings to be horizontal or vertical and not explicitly indicated otherwise shall be constructed true and plumb. All lines and planes appearing on Contract drawings to intersect at right angles and not explicitly indicated otherwise shall be constructed at true right angles. Where details are indicated covering specific conditions, such details also apply to all similar conditions not specifically indicated.
- 2.9 Standards: The specification standards of the various sections of the Specifications shall be the procedural, performance, and material standards of the applicable association publications identified and shall be the required level of installation, materials, workmanship, and performance for the applicable work. Except where a specific date of issue is mentioned hereinafter, references to specification standards shall mean the edition, including amendments and supplements, in effect on the date of the Notice to Bidders for the Project. Where no standard is identified and a manufacturer is specified, the manufacturer's specifications are the standards. All standards shall be subordinate to the requirements of the applicable codes and regulations.

- 2.10 Reference to the Singular: Wherever in the Specifications an article, device or piece of equipment is referred to in the singular number, such reference shall include as many such items as are shown on drawings or required to complete the installation.

### **Article 3** **PROJECT MANAGER**

- 3.1 Nothing contained in the Contract Documents shall create any contractual relationship between the Project Manager and the Contractor.
- 3.2 The Project Manager will be the District's representative during construction and until final payment. Unless directed otherwise herein, all communications and correspondence from the Contractor shall be directed jointly to the Project Manager and the District.
- 3.3 The Project Manager shall at all times have access to the Project wherever it is in preparation and progress.
- 3.4 The Project Manager will make periodic visits to the Project site to familiarize itself generally with the progress and quality of the work and to determine in general if the Project is proceeding in accordance with the Contract Documents and will keep the District informed of its observations.
- 3.5 Based on such observations and the Contractor's applications for payment, the Project Manager will determine and verify the amounts owing to the Contractor and will issue recommendations for payment to the District as provided herein.
- 3.6 The Project Manager's decision in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents.
- 3.7 The Project Manager will have authority to reject work which does not conform to the Contract Documents. Whenever, in its reasonable opinion, the Project Manager considers it necessary or advisable to ensure the proper implementation of the intent of the Contract Documents, it will have authority to require the Contractor to stop the Project or any portion thereof, or to require special inspection or testing of the work as provided herein whether or not such work be then fabricated, installed or completed. However, neither the authority to act under this subparagraph, nor any decision made by the Project Manager in good faith, either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Project Manager to the Contractor, any subcontractor, any of their agents or employees, or any other person performing any of the work.
- 3.8 Submittals.
- 3.8.1 The Project Manager will monitor the submittal process. The Project Manager and Engineer will review or take other appropriate action upon the Contractor's submittals, such as shop drawings, product data and samples, but only for the limited purpose of checking for conformance with the information given and design concept expressed in the Contract Documents. Contractor shall assume that the Project Manager may take as many as fourteen (14) days to review submittals and shall include such review period in its Project schedule. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents.
- 3.9 The Project Manager will have authority to order minor changes in the Project *after notifying the District*. The Project Manager will prepare change orders in accordance with the Contract Documents. Upon a change order request by the District, the Contractor is to

submit a breakdown of all costs and/or credits incurred to accomplish the requested change. The breakdown is to be of sufficient detail to allow justification of additional costs and/or credits. All change orders shall be signed by the District, Project Manager, and Contractor, and must be approved by the Division of the State Architect (DSA).

- 3.10 The Project Manager will conduct inspections to determine the dates of Substantial Completion and Final Completion. The Project Manager will receive written guarantees and waivers and related documents required of and assembled by the Contractor, and, upon review by the design team, will recommend issuance of a final certificate of payment.
- 3.11 The duties, responsibilities and limitations of authority of the Project Manager as the District's representative during construction as set forth in these General Conditions will not be modified without written consent of the District which the modification will be shown to the Contractor.
- 3.12 The Project Manager will not be responsible for the acts or omissions of the Contractor, or any subcontractors, or any of its agents or employees, or any other persons performing any of the work.

#### **Article 4**     **DISTRICT.**

- 4.1 The District shall not be held responsible for delays caused by the period of time during which the DSA or any other state or local government agency reviews change order requests, requests for information or submittals unless (and then only to the extent to which) the District caused the delay.
- 4.2     Information and Services:
- 4.2.1 The District shall furnish all existing surveys describing the physical characteristics, known utility locations, legal limitations, and a legal description of the Project site.
- 4.2.2 Except as provided herein, the District shall secure and pay for necessary approvals, easements, assessments, and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.
- 4.2.3 The District shall forward all instructions to the Contractor through the Project Manager.
- 4.2.4 The District will pay all fees required by the DSA.
- 4.3     District's Right to Carry Out the Work. If the Contractor defaults or neglects to carry out any portion of the work for the Project in accordance with the Contract Documents and fails within seven (7) days after receipt of written notice from the District to commence and continue correction of such default or neglect with diligence and promptness, the District may, without prejudice to any other remedy it 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 compensation for the additional services of the Engineers, and other representatives and consultants made necessary by such default, neglect, or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amount, District shall have the right to recover the difference from the Contractor or its sureties.

- 4.4 Use of Completed Parts of the Work before Acceptance.
- 4.4.1 Prior to Substantial Completion, whenever the work or any part thereof is in a condition making use thereof possible, and the best interest of the District requires such use, the District may take possession of, connect to, open for public use, or use the work or a part thereof. When so used, maintenance and repairs due to ordinary wear and tear or vandalism will be made at the District's expense.
- 4.4.2 The use by the District of the work or part thereof as contemplated in this section shall in no case be construed as constituting acceptance of the work or any part thereof and shall not constitute Substantial Completion until the District may take Beneficial Occupancy, as such is defined in these General Conditions. Such use shall neither relieve the Contractor of any of its responsibilities under the Contract nor act as a waiver by the District of any of the conditions thereof. Contractor shall continue to maintain all required insurance on the Project.

## **Article 5** **CONTRACTOR.**

- 5.1 Review of Contract Documents.
- 5.1.1 The Contractor shall carefully study and compare the Agreement, general conditions, drawings, specifications, addenda and modifications and shall at once report to the Project Manager any error, inconsistency or omission it may discover. The Contractor shall do no work without proper drawings and specifications or interpretations. If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency or omission in the Contract Documents without such notice to the Project Manager, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.
- 5.1.2 The District will not be responsible for the cost of delays related to Contractor's failure to submit complete RFIs, submittals, or requests for substitution in sufficient time to receive a response prior to commencement of the related work.
- 5.1.3 The Contractor shall perform all the work and activities required by the Contract Documents and furnish all labor, materials, equipment, tools and appurtenances necessary to perform the work and complete it to the District's satisfaction within the time specified. The Contractor shall at all times perform the work of this Contract in a competent and workmanlike manner and, if not specifically stated, accomplish the work according to the best standards of construction practice. The Contractor in no way is relieved of any responsibility by the activities of the Project Manager, Architect, Engineer, Inspector of Record or DSA in the performance of such duties.
- 5.1.4 Contractor shall make the layout of lines and elevations and shall be responsible for the accuracy of both the Contractor's and the Subcontractors' work resulting therefrom. All dimensions affecting proper fabrication and installation of all Contract work must be verified by the Contractor prior to fabrication and installation by taking field measurements of the true conditions. The Contractor shall take, and assist Subcontractors in taking, all field dimensions required in performance of the work, and shall verify all dimensions and conditions on the site. If there are any discrepancies between dimensions in drawings and existing conditions which will affect the work, the Contractor shall promptly bring such discrepancies to the attention of the Project Manager for adjustment before proceeding with the work. Contractor shall be responsible for the proper fitting of all work and for the coordination of all trades, Subcontractors and persons engaged upon this Contract.



- 5.1.5 Contractor shall do all cutting, fitting, or patching of Contractor's work that may be required to make its several parts come together properly and fit it to receive or be received by work of other contractors as shown, or reasonably implied by, the drawings and Specifications for the completed work. Any cost incurred by the District due to defective or ill-timed work shall be borne by the Contractor.
- 5.2 Personnel.
- 5.2.1 The Contractor shall comply with Education Code Section 45125.2 regarding Contractor/Subcontractor personnel and pupil safety and Contractor will take, and will ensure that all subcontractors take, all measures mandated under section 45125.2. Contractor acknowledges that it has responsibility for Contractor's and all Subcontractors' compliance with this requirement and that failure to comply shall with this requirement shall be a material breach of this Agreement.
- 5.2.2 All persons working for Contractor and subcontractors on the Project will refrain from using profane or vulgar language, or any other language that is inappropriate if it were spoken by employees of the District, on the job site. Contractor will take all reasonable measures to ensure that its personnel and personnel of all subcontractors comply with this Section 5.2.2 of these General Conditions.
- 5.2.3 The Contractor shall employ a full-time, on site competent superintendent and necessary assistants who shall have complete authority to act for the Contractor on all matters pertaining to the work, who shall be designated in writing by the Contractor prior to commencement of work on the Project. The superintendent shall have a minimum of five (5) years of experience in construction supervision. The superintendent shall be satisfactory to the District and, if not satisfactory, shall be replaced by the Contractor with one that is acceptable. The superintendent shall not be changed without the written consent of the District unless the superintendent ceases to be employed by the Contractor.
- 5.2.4 The Contractor shall employ a competent estimator and necessary assistants, or contract for sufficient services of an estimating consultant who shall be designated in writing by the Contractor prior to commencement of work on the Project. The estimator shall have a minimum of five (5) years of experience in estimating. The estimator shall be satisfactory to the District and, if not satisfactory, shall be replaced by the Contractor with one that is acceptable. The estimator shall not be changed without the written consent of the District unless the estimator ceases to be employed by the Contractor.
- 5.2.5 The Contractor shall employ a competent scheduler and necessary assistants, or contract for sufficient services of a scheduling consultant who shall be designated in writing by the Contractor prior to commencement of work on the Project. The scheduler shall have a minimum of five (5) years of experience in scheduling. The scheduler shall be satisfactory to the District and, if not satisfactory, shall be replaced by the Contractor with one that is acceptable. The scheduler shall not be changed without the written consent of the District unless the scheduler ceases to be employed by the Contractor.
- 5.2.6 Contractor shall at all times enforce strict discipline and good order among Contractor's employees, and shall not employ on the Project any unfit person or anyone not skilled in the task assigned.
- 5.2.7 If Contractor or any subcontractor on the Project site fails to comply with any provision of this paragraph 5.2 of these General Conditions, the District may have the non-complying person(s) immediately removed from the Project site, and such person(s) shall be replaced, at no additional expense to the District, within three (3) days of such removal. Contractor, on behalf of it and its subcontractors, hereby waives any claim that the provisions of this

paragraph or the enforcement thereof interferes, or has the potential to interfere, with its right to control the means and methods of its performance of its duties under this Contract.

5.3 Subcontractors.

5.3.1 Within ten (10) days of the date that the District executes the Agreement, the Contractor shall provide the Project Manager with signed contracts with all of its subcontractors (including those which need not be listed in the Bid), and a typed list of all subcontractors, which shall include the following information:

1. Address
2. Telephone and Facsimile numbers
3. Contractor's License Type and Number
4. Contractor's DIR Number
5. Contact Person
6. Portion of Work to be Performed
7. Subcontractor Bid Proposal
8. Contract Amount

5.4 The list shall be accompanied by proof of all required bonds to be carried by subcontractors.

5.4.1 If the Contractor elects to enter into any subcontract for any section of the work, the Contractor assumes all responsibility for ascertaining that the sub-contractor for the work is competent, solvent and thoroughly acquainted with all conditions of the work and has included all materials and appurtenances in connection therewith.

5.4.2 It shall be the responsibility of the Contractor to notify its Subcontractors of all portions of specifications or plans that the Contractor intends to include as part of the subcontract.

5.4.3 The Contractor shall insert the following language into all of its contracts with its subcontractors: "[Subcontractor's name] hereby warrants that it has reviewed all portions of [contractor's name]'s contract with the District, including all scheduling requirements. Such Contract Documents are hereby incorporated into this Agreement, and subcontractor shall be as responsible for carrying out the provisions thereof which relate to its scope of work as if it had contracted directly with the District."

5.4.4 The Contractor shall be responsible to its subcontractors for damages justifiably incurred by the subcontractors, including delay damages, except those which are caused by the action or inaction of that subcontractor or those with whom that subcontractor has contracted. The Contractor shall be responsible to the District for the acts and omissions of all employees, agents and all other persons performing any of the work on behalf of the Contractor or any subcontractor.

5.5 Communication Procedures.

5.5.1 The Contractor shall attend a mandatory Pre-Construction Conference, during which the District's Representative, Engineer of Record, and Project Inspector shall review the Project reporting procedures and other requirements.

5.5.2 The Contractor shall meet weekly with the District's Representative, Engineer of Record, and Project Inspector to review the project status. The Contractor shall provide copies of its superintendent's daily logs for the previous week, current project schedules and logs of outstanding submittals, requests for information, and requests for change orders (which shall include respective dates of submittal and required responses and shall designate the party whose response is pending).

- 5.5.3 The Project Manager will prepare minutes of the weekly construction meetings describing all agreements and commitments made (including who made them and when the commitments are to be fulfilled) and shall endeavor to distribute a copy to each required attendee, whether its representative attended or not, within three (3) days. Attendees will have two (2) days after receipt of the minutes to advise the Engineer of Record of any difference in understanding of what occurred at the meeting.
- 5.5.4 When the Contractor sends correspondence regarding samples, submittals, or shop drawings, Contractor shall send them to the Project Manager who will forward them onto the appropriate party(ies).
- 5.6 The Contractor shall supervise and direct the work, using its best skill and attention. It shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Project under the Contract Documents.
- 5.7 Timing of Design Team Review.
- 5.7.1 The Contractor shall provide a revised and updated Priority Schedule with each RFI and submittal. The Priority Schedule shall include a listing of pending requests, including the most current request, ranked in order of priority.
- 5.7.2 The Project Manager shall endeavor to respect the Contractor's requested order of priorities. The total response time is subject to the complexity of the RFIs and submittals, the number of RFIs or submittals submitted concurrently and any re-prioritization by the Contractor.
- 5.7.3 The District will not be responsible for the costs of delays related to Contractor's failure to submit RFIs, submittals, or requests for substitution in sufficient time to receive a response prior to commencement of the related work.
- 5.8 Shop Drawings, Product Data, Samples and Similar Submittals.
- 5.8.1 Shop Drawings are drawings, diagrams, illustrations, schedules, and other data that is specifically prepared by the Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the work.
- 5.8.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the work.
- 5.8.3 Samples are physical examples, which illustrate materials, equipment or workmanship, and establish standards by which the work will be judged.
- 5.8.4 Shop drawings, product data, samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents.
- 5.8.5 All submittals shall be forwarded to the Project Manager within thirty (30) days of issuance of the Notice to Proceed if not requested earlier in the scope of work or supplementary conditions document. Contractor must make any request for extension of this time period within this time for any incomplete submittal. Any such request must include a schedule reflecting the anticipated submission, which incorporates adequate time for review and procurement, so as not to impede progress of the Project.

- 5.8.6 The Contractor shall perform no portion of the work requiring submittal and review of shop drawings, product data, samples or similar submittals until the respective submittal has been approved by the Project Manager. All such work shall be in accordance with approved submittals. In the event Contractor makes substitutions in materials, equipment, or designs without approval of the District and Engineer of Record, the Contractor shall remove the improper material and install the correct material and restore the area as if the unapproved substitution had never occurred.
- 5.8.7 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor thereby represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the work, Schedule, and Contract Documents.
- 5.8.8 Samples which are of value after testing will remain the property of the Contractor.
- 5.8.9 All requests for substitution shall be submitted the Project Manager no fewer than ten (10) days prior to the bid date. The Contractor shall clearly identify any request for substitution and provide sufficient product data to facilitate review by the Engineer of Record. No substitutions will be considered for any board-approved District standard items.
- 5.9 Requests for Information.
- 5.9.1 The Contractor shall review any request for information prior to submission to the Project Manager to insure that the information requested in such RFI is not already provided in the Contract Documents. RFIs shall contain information regarding any potential cost or schedule impacts. RFIs shall come only from the Contractor and not from any subcontractor.
- 5.10 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, it shall obtain advance approval from the District. 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 District to meet an earlier completion time than that established in the Agreement.
- 5.11 The Contractor shall maintain at the site for the District one stamped 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, which shall be available to the District's Representative, Engineer of Record, and Project Inspector. The drawings, marked to record all changes made during construction, shall be delivered to the District upon completion of the Project.
- 5.12 Review of the Contractor's submittals shall not:
1. relieve the Contractor of any of the Contractor's obligations;
  2. constitute approval of safety precautions, construction means, methods, techniques or procedures;
  3. relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Project Manager in writing of such deviation at the time of submission and the Project Manager has given written approval of such deviation; or
  4. Indicate approval of an assembly of which the item is a component.
- 5.13 Temporary Office and Site Conditions.

- 5.13.1 The Contractor shall obtain District Approval for any space or area used for temporary facilities and staging requirements. All work, storage, and layout areas must be fenced at all times. Refer to Phasing and Logistics Plan included in bid documents for phasing and temporary fencing requirements.
- 5.13.2 The Contractor shall obtain permits for, install and maintain in safe condition whatever scaffolds, hoisting equipment, barricades, walkways, or other temporary structures that may be required to accomplish the work or pursuant to State or local regulations. Such structures shall be adequate for the intended use and capable of safely accepting all loads that may be imposed upon them. They shall be installed and maintained in accordance with all applicable federal, state and local codes and regulations.
- 5.14 Portable chemical toilets or water closets and urinals shall be provided by the Contractor for the use of its employees, trade contractors, subcontractors and their employees; and in no case shall the permanent plumbing fixtures of buildings on the site be used for such purpose.
- 5.14.1 The Contractor shall promptly remove all such temporary facilities when they are no longer needed for the work or on completion of the project and shall make any necessary repairs caused by such use and removal.
- 5.14.2 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.
- 5.14.3 The Contractor will provide, at its expense, water and utilities, excluding telephone, including all connections and related charges.
- 5.14.4 The Contractor shall provide and maintain temporary heat from an approved source whenever in the course of the work it may become necessary for curing, drying or warming spaces as may be required for the installation of materials or finishes. The Contractor shall provide and maintain any and all facilities that may be required for dewatering in order that work may proceed on the project. If it is necessary for dewatering to occur continually, the Contractor shall have on hand whatever spare parts or equipment that may be required to avoid interruption of service.
- 5.14.5 The Contractor shall submit written request to the District for any utility shut downs no fewer than five (5) days prior to any utility (including, but not limited to, water, electricity, gas, and sewer) being disconnected or turned off, and shall inform the District of the anticipated duration of the unavailability of such utility.
- 5.15 Contractor's Safety Program.
- 5.15.1 Each Contractor who will perform work at the site shall prepare and submit to the District for general review a safety program, as required by the Contract Documents and all other governing laws and ordinances. The safety program, in addition to normal regulatory and statutory requirements of a safety program, will address the additional requirements to provide for the safety of anyone using the school site, to separate the construction area from the remaining school property, and to prohibit the use of school facilities by Contractor's employees unless specifically permitted otherwise. Contractor's Safety Program to include COVID-19 social distancing, precautionary measures, and PPE requirements.

- 5.15.2 The District, the Project Manager, the Engineer of Record, and their representatives shall not be responsible for Contractor's implementation of or compliance with its safety programs, or for initiating, maintaining, monitoring or supervising the implementation of such programs or the procedures and precaution associated therewith, or for the coordination of any of the above with others at the site.
- 5.16 The Contractor shall perform all the work required by the Contract Documents and furnish all labor, materials, plant, equipment, tools and appurtenances necessary to perform said work and complete it within the time specified. The Contractor shall at all times perform the work of this Contract in a competent and workmanlike manner and, if not specifically stated, accomplish the work according to the best standards of construction practice.
- 5.17 Contractor shall do all cutting, fitting, or patching of its work that may be required to make its several parts come together properly and fit it to receive or be received by work of other contractors as shown, or reasonably implied by, the Contract Plans and Specifications for the completed structure, and shall restore finishes to the satisfaction of the Project Manager. Any cost caused by defective or ill-timed work shall be borne by the party responsible therefore.
- 5.18 The Contractor shall cooperate and coordinate with technical inspection and testing required of other contractors.
- 5.19 The Contractor shall submit Verified Reports as defined in Sections 4-336 and 4-343(c), Group 1, Chapter 4, Part I, Title 24, and California Code of Regulations.
- 5.20 Instructions and Manuals.
- 5.20.1 Prior to Final Completion of the Project, the Contractor shall compile manufacturers' operations and maintenance manuals, warranties and guarantees, and certificates, and index into two (2) bound copies and one electronic copy in an organized manner. This information shall then be submitted to the Project Manager for approval within seven (7) days of Substantial Completion.
- 5.20.2 The Contractor shall instruct the District's personnel in the operation and maintenance of the more complex equipment incorporated into the Project prior to final acceptance of the Project.
- 5.20.3 Receipt of complete instructions and manuals by the Engineer of Record is a condition precedent to release of payments by the District to the Contractor.
- 5.20.4 All manufacturers' application/installation instructions shall be given to the Project Manager at least ten (10) days prior to first material application or installation of the item.
- 5.21 The Contractor shall maintain at the work site a separate complete set of contract drawings which will be used solely for the purpose of recording changes made in any portion of the work during the course of construction, regardless of the reason for the change. As changes occur, there will be included or marked on this **record set on a daily basis**. Actual locations to scale shall be identified on the drawings for all runs of mechanical and electrical work, including all site utilities, etc., installed underground, in walls, floors, and furred spaces, or otherwise concealed. Deviations from the drawings shall be shown in detail. All main runs, whether piping, conduit, ductwork, drain lines, etc., shall be located in addition by dimension and elevation. Progress payments shall be withheld until such time as the record set is brought up to date.

- 5.22 The Contractor shall not unnecessarily interfere with use of any roadway, walkway or other facility for vehicular or pedestrian traffic at the Project site, by any party entitled to use it. Wherever such interference becomes necessary for the proper and convenient performance of the work and no satisfactory detour route exists, the Contractor shall, before beginning the interference, provide a satisfactory detour, temporary bridge, or other proper facility for traffic to pass around or over the interference, shall maintain it in satisfactory condition as long as the interference continues and shall coordinate and obtain the approval of the authority having jurisdiction over the affected right of way or property all without extra payment unless otherwise expressly stipulated in the Contract Documents.
- 5.23 Project Completion.
- 5.23.1 When the work to be performed under this Contract is completed to the point that the District can take Beneficial Occupancy, the Contractor shall notify the Project Manager in writing. The Contractor, Project Manager, Engineer of Record, Project Inspector and subcontractor representatives shall thereafter inspect the work. As a result of this inspection, the Engineer of Record will prepare a list of items that are incomplete or not installed according to the Contract Documents (the "punch list"). Failure to include items on this list does not relieve the Contractor from fulfilling all requirements of the Contract.
- 5.23.2 After receipt of the "punch list" the Contractor shall have seven (7) days to make good, correct or otherwise properly address all items. If it is not feasible to complete all items within the stipulated time the Contractor shall immediately submit in writing a request for time extension including an explanation for such request. Should the Contractor not complete all items within the allotted time the District reserves the right to perform the work per section Article 11 of the Agreement.
- 5.23.3 On completion of all items on the punch list, verified by a final inspection, and all other Contract requirements, the District will issue a Notice of Acceptance to the Contractor and file a Notice of Completion with the County Recorder.
- 5.23.4 If, through no fault of the District, more than one inspection is required to determine whether the punch list has been completed, the Contractor will be back charged for the costs of the District's representatives' time, at the rate of Seven Hundred Fifty Dollars (\$750) per additional inspection.
- 5.23.5 Final cleaning, such as sweeping, dusting, vacuuming, dry and wet mopping, polishing, sealing, waxing and other finish operations normally required on newly installed work shall be taken to indicate the required finished conditions of the various new and existing surfaces at the time of acceptance. At the time of acceptance, all marks, stains, fingerprints, dust, dirt, splattered paint and blemishes resulting from the various operations shall be removed in all areas of the Project. Stair treads and risers shall be wet-mopped. Glass, new and existing, shall be left clean and polished both inside and outside. Plumbing fixtures and light fixtures shall be washed clean. Hardware and other unpainted metals shall be cleaned and all building papers and other temporary protections shall be removed throughout the building, or portion of the building where Contractor was involved. Finally, the exterior of the buildings shall be pressure-washed prior to Beneficial Occupancy and the play field, courts, streets and planting spaces shall be clean and in good order. Such measures shall be taken to the satisfaction of the Project Manager.
- 5.23.6 Prior to Final Completion of the Project, the Contractor shall submit one set of as-built drawings on a clean set of plans for the Project Manager review and Engineer of Record approval. This information shall then be submitted to the Project Manager for approval within twenty eight (28) days of substantial completion.

- 5.24 The Contractor and subcontractors shall investigate and become aware of the amount of time required for the manufacture and delivery of all equipment and materials required to perform the work under this Contract. No extension of time or damages shall be granted due to failure to order said equipment and materials sufficiently before their incorporation into the work so as to avoid delay to the Project.
- 5.25 The Contractor and subcontractors shall provide and maintain sufficient labor, materials, and equipment to ensure a rate of construction progress that will complete the Project within the time specified and according to the schedule of work. If, in the District's reasonable discretion, the Contractor and/or its subcontractors are not prosecuting the work at a sufficient rate of progress to meet the Project schedule, the District may direct the Contractor to (1) provide additional labor, materials or equipment; (2) work additional hours, holidays or weekends; and/or (3) contract with a Subcontractor without additional cost to the District until the work is progressing in a manner satisfactory to the District. Failure to prosecute the work in a timely manner and according to the Project schedule shall be a material breach of Contract and is cause for termination of the Contract pursuant to Article 10 of the Agreement between the parties.
- 5.26 If any person or subcontractor employed by the Contractor appears to the District to be incompetent, he shall be discharged immediately upon the request of the District, and such subcontractor or person shall not again be employed on the Project.
- 5.27 Contractor shall pay all sales, consumer, use and other similar taxes required by law and shall secure and pay for all permits, fees and licenses necessary for the execution of the Project.
- 5.28 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by Contractor's operations. At the completion of the Project, Contractor shall remove all Contractor's waste materials and rubbish from and about the Project as well as Contractor's tools, construction equipment, machinery and surplus materials. If the Contractor fails to clean up, the District may do so and charge the cost to the Contractor.

## **Article 6**     **SEPARATE CONTRACTS.**

- 6.1             District's Right to Award Separate Contracts.
- 6.1.1           The District reserves the right to award other contracts in connection with other portions of the Project under these or similar conditions.
- 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 other 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 Contractor's work with theirs.
- 6.2.2           If Contractor's work depends for proper execution or results upon the work of any other separate contractor, the Contractor shall inspect and promptly report to the Project Manager any patent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to inspect and report such shall constitute acceptance of the other contractor's work as fit and proper to receive work.



6.2.3 If, through acts of negligence on the part of this Contractor, any other contractor or subcontractor shall suffer loss or damage to the work, this Contractor shall make a reasonable effort to settle with such other contractor and subcontractor. If such other contractor or subcontractor shall assert any claim against the District, the Project Manager, or Engineer of Record, on account of any damage alleged to have been so sustained, the District, the Project Manager, or Engineer of Record shall notify this Contractor which shall defend such proceedings at its own expense and indemnify and save harmless the District, Project Manager, and Engineer of Record from any such claim.

6.3 Cutting & Patching Under Separate Contracts.

6.3.1 The Contractor shall do all cutting, fitting, or patching of work that may be required to fit it to receive or be received by the work of other contractors shown upon, or reasonably implied by, the Contract Documents. The Contractor shall not endanger any work of any other contractors by cutting, excavating or otherwise altering any work and shall not cut or alter the work of any other contractor except with the written consent of the Project Manager and Engineer of Record.

6.3.2 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefore.

**Article 7 PERFORMANCE AND PAYMENT BONDS.**

7.1 In order to ensure that any Change Order work will be as fully bonded as work envisioned under the original Contract Documents, the Contractor shall provide, within five (5) days of the Execution Date of the Agreement, written proof, satisfactory to the District, that (1) it has pre-reserved bonding capacity in the amount of One Hundred Fifteen Percent (115%) of the Contract amount; or (2) its bonding company will bond any Change Order work which may be added to the Contract.

7.2 During the period covered by the Contract, if any of the sureties upon the bonds shall become insolvent or unable, in the opinion of the District, to pay promptly the amount of such bonds to the extent to which surety might be liable, the Contractor, within ten (10) days after notice given by the District to the Contractor, shall provide supplemental bonds or otherwise substitute another and sufficient surety approved by the District in place of the surety becoming insolvent or unable to pay. If the Contractor fails within such ten (10) day period to substitute another and sufficient surety, the Contractor shall, if the District so elects, be deemed to be in material breach of the Agreement and to be in default with respect to the payment bond, and the District, in addition to any and all other remedies, may terminate the Contract or bring any proper suit or other proceedings against the Contractor and the sureties or any of them, or may deduct from any monies then due or which thereafter may become due the Contractor under the Contract, the amount for which the surety, insolvent or unable to pay as aforesaid, shall have justified on the bonds, and the monies so deducted shall be held by the District as collateral security for the performance of the conditions of the bonds.

7.3 Corporate sureties on these bonds and on bonds accompanying bids must be admitted surety insurers as defined in California Code of Civil Procedure section 995.120(a), legally authorized to engage in the business of furnishing surety bonds in the State of California. All sureties and bond forms must be satisfactory to the District. Bond forms are furnished herewith.

## **Article 8      PAYMENTS AND COMPLETION.**

- 8.1            Before the first application for payment, the Contractor shall submit to the Project Manager a schedule of values of the various portions of the Project, including quantities aggregating the total Contract Sum set forth in Article 5 of the Agreement, divided so as to facilitate payments to subcontractors, prepared in such form as specified, supported by such substantiating data as the Project Manager may require. Each item in the schedule of values shall include its proper share of overhead and profit. The schedule, when approved by the Project Manager and Engineer of Record, shall be used as a basis for the Contractor's applications for payment under the terms of the Agreement. Should any scope of work be later deleted in its entirety by Change Order, the value of that work shall be as stated in the schedule of values.
- 8.2            Progress Schedules.
- 8.2.1         Contractor shall, prior to commencing construction and with each application for payment, submit to the Project Manager a Critical Path Method (CPM) schedule for the remainder of the Project showing anticipated beginning and ending dates for all critical path activities and the logical connection between and among such activities. Any changes in logic on subsequent schedules must be noted.
- 8.2.2         If Contractor wishes to construct the Project in a shorter period of time than that stated in Article 4 of the Agreement, any difference between the Contractor's desired performance period and the stipulated performance period shall be incorporated into the schedule as float.
- 8.2.3         Either party responsible for an event or condition which delays the Project shall be entitled to take advantage of any remaining float in the Contractor's Progress Schedule.
- 8.2.4         Submission of schedules pursuant to this paragraph is a condition precedent to payment. Even if Contractor does not submit a Progress Payment Request, it must submit all other documents which are required to be submitted with the Request at the designated time.
- 8.3            Releases.
- 8.3.1         The Contractor shall submit the following with each specified application for payment.
- 8.3.1.1       Progress Payment. Contractor shall submit the following documents in support of all applications for a progress payment:
- Application for Payment on the standard AIA Form. (Each Application for Payment shall be consistent with previous applications and payments as certified by the Engineer of Record and shall include any the signatures of the Project Manager and Project Inspector.)
  - A conditional waiver and release upon progress payment from the General Contractor.
  - An unconditional waiver and release upon progress payment from the General Contractor and, when requested, the General Contractor must supply an unconditional waiver and release for each subcontractor.
  - Schedule of Values.
  - Certified Payroll for the General Contractor and all Subcontractors MUST be submitted as required under section 16461 of Title 8 of the California Code of Regulations and as may be required by any additional District and Project-specific requirements, which the District will inform Contractor of. As required under section 16461(b) of Title 8 of the

California Code of Regulations, certified payroll for state funded projects shall be submitted to the Department of Industrial Relation's Compliance Monitoring Unit at least monthly. The District and/or the Owner's Representative will detail in writing any additional submittal requirements and such additional requirements shall be deemed incorporated herein by reference. Certified Payroll cannot be more than two weeks in arrears for each payment application submitted. At the end of the Project ALL certified payroll must be submitted before Final Retention is released. Contractor will cooperate with any efforts by the Compliance Monitoring Unit to confirm the accuracy of payroll records submitted by Contractor and will include in its contracts with subcontractors a requirement that such subcontractors will likewise cooperate.

**Note: The Contractor understands and agrees that it is required to retain copies of all certified payroll records for this Project for a minimum of 3 years after project completion and the Contractor will include in its contracts with all subcontractors a requirement that they retain certified payroll records for this Project for a minimum of three years after project completion.**

8.3.1.2. Final Progress Payment. Contractor will submit the following in support of an application for Final Progress Payment:

- All of the above documents listed as required under Section 8.3.1.1., above, for a "Progress Payment".
- A Conditional waiver and release upon FINAL progress payment from Contractor and each subcontractor.

8.3.1.3. Retention Payment. A Notice of Completion (NOC) will be filed after the District approves the Project as complete. Retention may be released, at a minimum, 31 days after filing of the NOC with the County Recorder.

- All of the above documents listed above under Section 8.3.1.1. as required for a "Progress Payment." (Note: Payment application MUST note "Final Retention")
- If an Escrow Account has been set up, a letter to the Escrow holder, requesting release of funds, MUST accompany this application.
- An Unconditional waiver and release upon FINAL progress payment from the Contractor and release of liens evidenced by an Affidavit of Release of Liens (see below).

**The following Notarized Affidavits MUST be submitted with the Final Retention Payment Request**

- Contractor's Affidavit of Release of Liens.
- Contractor's Affidavit of Payment of Debts and Claims.
- Consent of Surety Company to Final Payment
- Affidavit from the General Contractor certifying that during ALL payroll periods for ALL personal employed by Contractor under this project have been paid the specified prevailing rate as per diem wages and any amounts due pursuant to Section 1813 of the California Labor Code

8.3.2 An Affidavit, signed by each subcontractor, under penalty of perjury, that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees

on this public works project and any amounts due pursuant to Section 1813 (LC1775 (b)(4))

8.3.3 If the Contractor is unable to comply with paragraph 8.3 for an individual subcontractor due to a dispute about the subcontractor's quality of work or scope of work, the Contractor shall submit a statement to the Project Manager stating such, in lieu of that Waiver and Release.

8.4 Payments Withheld.

8.4.1 The Project Manager, Engineer of Record, or District may also decline any applications for payment or, because of subsequently discovered evidence or subsequent inspections, may nullify the whole or any part of any certificate of payment previously issued to such extent as may be necessary, in its opinion to protect the District from loss because of, but not limited to:

1. defective work not remedied;
2. reasonable doubt that the Project can be completed for the unpaid balance of the Contract Sum;
3. reasonable indication that the Project will not be completed within the contract time;
4. unsatisfactory prosecution of the work by the Contractor;
5. Contractor's failure to pay subcontractors or materialmen;
6. damage to another contractor;
7. failure to provide waivers, schedules, labor compliance and other required documentation; or
8. Breach of any provision of the Contract Documents.

8.4.2 When any of the factors listed in Article 8.4 of these General Conditions resulting in withholding of payment is satisfactorily addressed by the Contractor, payment shall be made for amounts withheld because of them.

8.4.3 The granting of any progress payment or payments by the District or the receipt thereof by the Contractor, shall not constitute acceptance of the work or of any portion thereof, and shall in no way lessen the liability of the Contractor to replace unsatisfactory work or material.

8.4.4 It is mutually understood and agreed that when under any provision of this Agreement the District shall charge any sums of money against the Contractor, the amount of such charge shall be deducted and retained by the District from the amount of the next succeeding progress estimate, or from any other monies due or that may become due the Contractor on account of the Agreement. If on completion or termination of the Agreement such monies due the Contractor are found insufficient to cover the District's charges against it, the District shall have the right to recover the balance from the Contractor or its sureties.

8.5 Completion and Final Payment. Upon receipt of written notice that the Project is ready for final inspection and acceptance, and upon receipt of a final application for payment, less retention, the Project Manager, Project Inspector, and Engineer of Record will promptly make such inspection. When the Project Manager finds the Project acceptable under the Contract Documents and the Agreement fully performed, the Project Manager will process the Contractor's final pay application and include a statement indicating that to the best of its knowledge, information, and belief, and on the basis of observations and inspections,

the Project has been completed in accordance with the terms and conditions of the Contract Documents and that it recommends payment of the remainder of the Agreement balance.

**Article 9      PROTECTION OF PERSONS AND PROPERTY.**

- 9.1            Until Substantial Completion of the Project, the Contractor shall have the charge and care of all work, complete or incomplete, permanent or temporary, and of the materials to be used therein, including materials for which it has received partial payment.
- 9.2            The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury, or loss to the following until the work is accepted by the District:
1.            all employees of the Contractor, subcontractors of every tier, and their respective agents, officers, employees or representatives on the Project 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, its subcontractors, sub-subcontractors or their officers, agents or employees; and
  3.            other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 9.3            If the Contractor encounters any facilities or utilities not shown on the drawing or reasonably inferable therefrom, it shall promptly notify the Project Manager, and it shall do no further work which may cause damage to same.
- 9.4            If it is determined that some action needs to be taken regarding facilities not shown, the Contractor will be given directives on what action to take, and any additional cost to the Contractor incurred thereby will be addressed through Change Order.
- 9.5            The Contractor shall obtain permits for, install and maintain in safe condition all barricades, walkways, fences, railings, and whatever other safeguards that may be necessary to protect persons and property from damage as a result of the construction under this Agreement.
- 9.6            Contractor shall not endanger any Project Work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other Contractor except with the written consent of the Project Manager and the Engineer of Record, nor overload any new or existing structures by the placing or storage of materials, equipment, or other items thereon. If necessary, Contractor shall provide calculations proving the safety in so doing.
- 9.7            If it is necessary to work at night, or where daylight is obscured, the Contractor shall provide and maintain lighting of adequate level to properly prosecute the work and to permit thorough inspection of same.
- 9.8            Contractor shall take extraordinary care to prevent fires and keep all flammable materials and oily rags in tightly closed metal containers. Contractor shall exercise particular care when welding or cutting, and with regard to the disposition of waste materials, the nature and quantity of which might create or increase a fire hazard.
- 9.9            The Contractor and each subcontractor of every tier shall supply to their respective employees and, where site is occupied, to the District, copies of Material Safety Data

Sheets for hazardous substances that may be used in the course of the work, together with notice of actual hazardous substances to which employees may be exposed while performing work and appropriate protective measures.

- 9.10 Contractor shall secure the site, as well as all doors and windows thereon, prior to leaving the site each work Day. If Contractor fails to do so, the District may secure the site, doors, and windows itself, and may back charge Contractor for its associated costs.
- 9.11 When the Contractor's superintendent is not on site, the District may take all necessary steps to affect required emergency work and may back charge Contractor for the costs of such work.
- 9.12 Unless caused by the District's willful act or sole negligence, the Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the materials occasioned by any cause before its Final Completion and acceptance and shall bear the expense thereof. Should improper work of any trade be covered by another and damage or defects result, the whole work affected shall be made good to the satisfaction of the Project Manager, Engineer of Record and the District without expense to the District.
- 9.13 Upon commencement of work and until Substantial Completion, Contractor assumes all risk of loss or damage to the Project arising from any cause save the sole negligence of the District.

**Article 10 CHANGE ORDERS.**

- 10.1 In addition to any statement governing change orders elsewhere in the Contract Documents, the Contractor and the District agree that changes in the Agreement or in the Project to be done under the Agreement shall become effective only when written in the form of supplemental agreement or change order and approved and signed by the Project Manager, the Engineer of Record, and the Contractor and approved by the District and DSA, as applicable. DSA approval of the Construction Change Directive (C.C.D.) must be evidenced by an official approval stamp and appropriate signatures as an attachment to the Change Order.
- 10.2 All Contractors are warned against acting on verbal instructions. If verbal instructions are necessary for expediting the work and are accepted by the Contractor, it shall then be the responsibility of the Contractor to obtain written instructions of the work involved conforming to the verbal instructions from the Project Manager issuing such verbal instructions. No work will be accepted by the District that differs from the Plans and Specifications that has not been approved pursuant to the required written approvals.
- 10.3 The Contractor shall not be entitled to any adjustment of the Contract Sum or Contract Time for extra work, without prior written approval or directive from the Engineer of Record and/or the Project Manager. Failure to agree on an adjustment of the Contract Sum or Contract Time shall not excuse the Contractor from proceeding with the execution of the work as changed. If there is no agreement on cost, a construction change directive may be issued approving or directing that the work be compensated on a Force Account basis.
- 10.4 It is specifically agreed that the District shall have the right to direct any alterations, deviations, reductions, or additions to the Contract Documents and the amount of the cost thereof shall be added to or deducted from the amount of Contract Sum by fair and reasonable valuations.

- 10.5 If the Contractor wishes to make a claim for an increase in the Contract Sum, it shall submit a complete itemized estimate to the District written within seven (7) days after the occurrence of the event giving rise to such claim for increase. This Request for Change Order shall be given by the Contractor **before** proceeding to execute the work, except in an emergency endangering life or property. Failure to present such claim within the stipulated timeframe constitutes a waiver of such claim. Any change in the Contract Sum resulting from such claim shall be authorized by written Change Order.
- 10.6 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be assumed by inspection, shall be accompanied by a complete itemization of costs including labor, materials and subcontracts. Labor and materials shall be itemized in a manner deemed acceptable by the Project Manager. Where major cost items are subcontracts, they shall be itemized also with backup documentation.
- 10.7 In determining the cost of any additive change order, Contractor agrees that the percentage markup for all overhead and profit shall be calculated as follows:
- 10.7.1 If the Contractor performs the work with its own forces, its percentage markup for overhead and profit shall not exceed fifteen percent (15%) of its hard costs.
- 10.7.2 If the Contractor performs the work through a subcontractor that is not owned or controlled by it, its percentage markup shall not exceed five percent (5%) of its subcontractor's hard costs for such work.
- 10.7.3 If the Contractor performs the work through a subcontractor that is not owned or controlled by it, subcontractor's percentage markup shall not exceed ten percent (10%) of its subcontractor's hard costs for such work.
- 10.7.4 The **total** percentage markup on any change order shall not exceed fifteen percent (15%) of the actual cost of such work.
- 10.7.5 The above percentage markups for overhead and profit (including that for work performed by subcontractors) are understood to include Contractor's and subcontractor's site supervision costs, home office overhead, profit margin, insurance, general conditions, small tools, consumables, and all other factors. The **actual cost** of additional bond capacity, not to exceed two percent (2%) of the increased value of the Contract, shall be added to change orders.
- 10.8 Direct Cost of Materials: For all materials purchased by the Contractor and used in this specific Work, it shall receive the actual cost of such materials including freight charges, as shown by original receipted invoices for materials and freight.
- 10.8.1 If the actual costs, in the opinion of the Project Manager and/or Engineer of Record, are excessive, or if the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, then the cost of such materials shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site.
- 10.9 Direct Labor Costs: For all craft labor and foremen engaged in the specific operation, the Contractor shall receive the wage prevailing and paid on the project for each and every hour that said labor and foremen are actually engaged in such work, an amount equal to the Contractor's cost of Workmen's Compensation Insurance, Social Security taxes, Public Liability and Property Damage Insurance, and any and all fringe benefit costs required by prevailing wage agreement.

- 10.10 Direct Equipment Costs: For any machine, apparatus, or equipment which shall be deemed necessary or desirable to use, the Contractor shall be allowed a reasonable rental price, which shall be approved in writing before commencing such work, for each and every hour that said machinery, apparatus, or equipment is in use on such work.
- 10.10.1 Rental rates shall be deemed to include the cost of fuel, oil, lubrication, supplies, brooms or brushes, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, bonds and all incidentals.
- 10.10.2 A reasonable rental price for non-rented equipment will be the rental rates listed for such equipment in the California Department of Transportation publication entitled Labor Surcharge and Equipment Rental Rates (hereinafter "State Rental Rates"), which is in effect on the date upon which the work is accomplished. If it is deemed necessary to use equipment not listed in said publication, a suitable rental rate for such equipment shall be established by the Project Manager. The Contractor may furnish any cost data which might assist the Project Manager in the establishment of such rental rate.
- 10.10.3 A reasonable rental price for rented equipment shall be based on the actual and reasonable hourly rate shown on the rental agency invoice or agreement for the time used on force account work. If a minimum equipment rental amount is required by the local equipment rental agency, the actual amount charged will be paid to the Contractor. Approval for payment of rental equipment will be based on Contractor's paid vouchers approved by the Project Manager and Engineer of Record. If the Contractor does not furnish satisfactory evidence of the cost of the use of such equipment, the cost then shall be determined by the Project Manager and Engineer of Record as the lesser of (a) the rental rates listed for the equipment in the State Rental Rates, or (b) the rental rates for such equipment prevailing in the locality from local equipment rental agencies.
- 10.10.4 Individual pieces of tools or equipment not listed in said publication and having a replacement value of \$500.00 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.
- 10.10.5 Time for the rental period of equipment already on site shall be based on the time the equipment is in operation on the subject work being performed. Moving time, loading and transporting costs will not be paid for if the equipment is used at the site of the subject work for other than such subject work, unless in the determination of the Project Manager and Engineer of Record, the payment would cover costs that the Contractor would not otherwise have incurred.
- 10.10.6 Time for the rental period for equipment not already on the site shall begin at the time the equipment is unloaded at the site, shall include each day that the Contractor reasonably has the equipment at the site, excluding Saturdays, Sundays, and legal holidays unless the equipment is used to perform the subject work on such days, and shall terminate at the earlier of the end of the day on which the work for which the equipment is reasonably required to be present is completed and the end of the day on which the Project Manager and/or Engineer of Record directs the Contractor to discontinue the use of such equipment. When hourly rates are listed in the State Rental Rates, Contractor shall be paid a minimum of four (4) hours. When daily rates are listed in the State Rental Rates, Contractor shall be paid (i) 1/2 day if the equipment is not used, and (ii) one day if the equipment is used.
- 10.10.7 Contractor shall be entitled to no payment for any cost associated with any temporary or permanent equipment breakdown, including without limitation costs of transportation for repair purposes or costs of repair and replacement parts. Contractor, however, shall be entitled to payment for time of actual use of any equipment substituted for equipment



subject to breakdown, and for moving the substitute equipment. In computing the time to be paid for equipment, the Project Manager and/or Engineer of Record shall not count any period of delay caused by equipment breakdown, and to the extent feasible, shall merge into a single period the time of use before breakdown and the time of use thereafter of the repaired equipment or any substitute equipment.

- 10.11 The value of any work resulting from a change order shall be determined in one or more of the following ways:
- 10.11.1 By Contractor's estimate with a detailed breakdown showing labor, materials profit and overhead. Such estimates shall be promptly provided upon receipt of a change request and in no case more than ten (10) days after the change is issued.
- 10.11.2 By unit price stated in the Contract or subsequently agreed upon;
- 10.11.3 By cost and the percentage allowed by this Contract or by cost and a fixed fee.
- 10.12 If none of the above methods mentioned in section 10.11 of these General Conditions is agreed upon, the Contractor, provided it received a written order to proceed from the Project Manager, shall proceed with the work. The cost of such work shall then be determined by the District. In such case, the Contractor shall keep and present in such form as the Project Manager and/or Engineer of Record may prescribe, an itemized accounting together with appropriate supporting data as may be required by the Project Manager or Engineer of Record.
- 10.13 If the Contractor disagrees as to the amount to be paid for the work performed pursuant to the Change Order, the Contractor shall give to the District written notice of its disagreement, the basis therefore, and all supporting documentation within ten (10) days after delivery to the Contractor of the Project Manager's determination of cost. Such notice of disagreement does not excuse performance by the Contractor of all obligations under the Contract Documents and the Contractor shall proceed with the work. Payments shall be made to the Contractor based on the District's or Engineer of Record's determination of cost. Failure to present such notice of disagreement constitutes a waiver by the Contractor of any entitlement to additional cost above the amount determined by the Project Manager and/or Engineer of Record.
- 10.14 Force Account. If it is impossible, because of the nature of the work, or for any other reason, to fix an increase in price in advance, the Change Order may fix a maximum price and time extension period, which shall not under any circumstances be exceeded.
- 10.14.1 Subject to such limitation, such alteration, modification or extra shall be paid for at the actual necessary cost as determined by the sum of the following items 1 to 5, inclusive:
1. Labor, computed at prevailing wage rates, plus related tax(es);
  2. Material, including sales taxes and other taxes pertaining to materials;
  3. Necessary plant and equipment rental;
  4. Overhead and profit computed as indicated under 10.2; and
  5. The proportionate cost of premiums on bonds, computed as indicated under section 10.7.5 of these General Provisions, of the total Items 1 to 4, inclusive.

- 10.14.2 At the end of each day, the Contractor and the Project Manager shall compare records of extra work which is compensated on a force account basis. Said reports shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit by the District.
- 10.14.2.1 The daily force account work reports shall be on forms satisfactory to the Project Manager and Engineer of Record, and itemize the materials, state the direct cost of labor, state equipment used or on site and its direct cost. Separate daily force account work reports shall be submitted for Contractor and each subcontractor for each separate item of force account work.
- 10.14.2.2 The daily force account work reports shall show names or identifications, classifications or workers, the hourly rate of pay and hours worked, and the size, type and identification number of equipment, whether the equipment is rented, the time the equipment is on-site and hours the equipment was operated.
- 10.14.2.3 Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily force account work reports, or if not available, they shall be submitted with subsequent daily force account work reports or as soon thereafter as may be practicable. Should said vendor's invoices not be submitted within 50 days after the date of delivery of the material or within 15 days after completion of the work under this Agreement, whichever occurs first, the District reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available in the quantities concerned delivered to the work on the date of delivery.
- 10.14.2.4 Rented equipment charges shall be substantiated by valid copies of lessor's invoices. Such invoices shall be submitted with the daily force account work reports, or if not available, they shall be submitted with subsequent daily force account work reports or as soon thereafter as may be practicable. Should a lessor's invoice not be submitted within 60 days after the last day of use on the job site of rented equipment which would be covered by such invoices, or within 15 days after completion of the work of the contract, whichever occurs first, the District reserves the right to establish the cost of use of the rented equipment as the lesser of (a) rental rates listed for the equipment in the State Rental Rates, and (b) the rental rates for such equipment prevailing in the locality.
- 10.14.3 The Contractor's cost records pertaining to work paid for on a force account basis shall be open to inspection and/or audit by representatives of the District during the life of the contract and for a period of three years after the date of acceptance thereof, and the Contractor shall retain such records for that period. Where payment for materials or labor is based on the cost thereof to forces other than the Contractor, the Contractor shall make every reasonable effort to ensure that the cost records of such other forces will be on the same terms and conditions as the cost records of the Contractor. If an audit is to be commenced more than 60 days after the acceptance date of the contract, the Contractor will be given a reasonable notice of time when such audit is to begin
- 10.15 Contractor shall provide the Project Manager and Engineer of Record with all information requested to substantiate the cost of the change order and to inform the Project Manager and Engineer of Record whether the work will be done by the Contractor or a subcontractor.
- 10.16 The Contractor shall submit with the proposed change order its request for time extension (if any), and include sufficient information and dates to demonstrate whether and to what

extent the change will delay the completion of the Project. In the event of an agreed upon extension of time, the Contractor shall not be subject to any claim for liquidated damages for this period of time, but the Contractor shall have no claim for any compensation for any such delay other than that set forth in the change order itself.

- 10.17 If the Contractor believes it is entitled to a change order for work it is being required to perform, or is entitled to an extension of time greater than that agreed to by the District, and the District refuses to issue a change order or include the requested extension of time in the change order, Contractor must, at least twenty-four (24) hours prior to commencing the disputed work, inform the District of the reason for the dispute and the amount of the requested change order. No change order will later be approved, or compensation made, for work performed without such prior notice to the District.
- 10.18 No change or modification by Change Order shall release or exonerate any surety upon any guarantee or bond given in connection with the Contract Documents.
- 10.19 All Change Orders must comply with the procedures and obtain the approvals required by Title 24 of the California Code of Regulations, section 4-338.

## **Article 11 DELAYS AND TIME EXTENSIONS.**

- 11.1 The date of completion of Project or designated portion thereof is the date certified by the Engineer of Record when construction is complete and in accordance with the Contract Documents.
- 11.2 If the Contractor seeks an extension of time, it must present the request to the District within five (5) calendar days of the commencement of the act or occurrence of the event causing the delay that gives rise to the need for extension. The Contractor's failure to provide notice of such a request within the stipulated timeframe constitutes a waiver of such claim.
- 11.3 Requests for extensions of time must:
- 11.3.1.1 include a revised schedule, as described in paragraph **8.2.1**, showing the effect of the delaying event; and
  - 11.3.1.2 document all damages incurred or to be incurred by the Contractor as a result of such delay.
- 11.3.2 In order to document damages, the Contractor and its subcontractors must provide or make available all of its correspondence, bid-related documents, accounting records, superintendent's records, payroll documents, and other pertinent data relating to the Project.
- 11.4 The Contractor may be granted a time extension if it encounters an Excusable Delay of the work. For purposes of the Agreement and these General Conditions, an "Excusable Delay" is defined as a delay which occurs due to causes completely beyond the control of the Contractor and which it could not have avoided by the exercise of reasonable care, prudence, foresight and diligence.
- 11.4.1 Excusable Delays: Excusable Delays are any acts of the public enemy, act of God, fire, strike, lockout or commandeering of materials, products, plants, or facilities by the Government, acts of another Contractor in the performance of another contract with the District, action or inaction on the part of the DSA, priority of a governmental agency for

materials or equipment, flood, violent wind storm, epidemic, quarantine restriction, or freight embargo, or weather of an unusually severe nature. The financial inability of the Contractor or any subcontractor and default of any subcontractor, without limitation, shall not be deemed conditions beyond the Contractor's control and are therefore not Excusable Delays. The Contractor will not be granted time extensions for weather conditions which are normal for the location of the Project. Excusable Delays shall be grounds for an extension of time, measured in length by the amount of delay to the Project actually suffered by Contractor as a result thereof, but shall not be grounds for any increase in compensation to the Contractor, whether for home, office, general or administrative expenses, field expenses, increased costs of materials or labor, or any other thing.

- 11.4.2 Compensable Delay: Compensable Delays are, for purposes any delay of the completion of the work beyond the expiration date of the Contract Time caused by the gross negligence or willful acts of the District, Project Manager, or Engineer of Record, and which delay is unreasonable under the circumstances involved, and not within the contemplation of the parties. A Compensable Delay may entitle the Contractor to an extension of the Contract Time and/or increase in the Contract Sum. Except as provided herein, the Contractor shall have no claim for damage or compensation for any delay, interruption, hindrance, or disruption.
- 11.4.3 Inexcusable Delay: Inexcusable Delays are any delays of the completion of the Project beyond the expiration of the Contract Time resulting from causes other than those listed above. An Inexcusable Delay shall not entitle the Contractor to an extension of the Contract Time or an adjustment of the Contract Sum.
- 11.5 The Contractor may make a Claim for an extension of the Contract Time, for an Excusable Delay or a Compensable Delay, subject to the following:
- 11.5.1 If an Excusable Delay and a Compensable Delay occur concurrently, the maximum extension of the Contract Time shall be the number of days from the commencement of the first delay to the cessation of the delay which ends last.
- 11.5.2 If an Inexcusable Delay occurs concurrently with either an Excusable Delay or a Compensable Delay, the maximum extension of the Contract Time shall be the number of days, if any, by which the Excusable Delay or the Compensable Delay exceeds the Inexcusable Delay.
- 11.5.3 If an Inexcusable Delay occurs concurrently with both an Excusable Delay and a Compensable Delay, the maximum extension in the Contract Time shall be the number of days determined pursuant to Subparagraph (a) exceeds the number of days of the Inexcusable Delay.
- 11.5.4 For a Compensable Delay, the Contractor shall only be entitled to an adjustment in the Contract Sum in an amount equal to the actual additional labor costs, material costs, and unavoidable equipment costs incurred by the Contractor as a result of the Compensable Delay, plus the actual additional wages or salary and fringe benefits and payroll taxes of supervisory and administrative personnel necessary and directly employed at the Project site for the supervision of the work during the period of Compensable Delay. Except as provided herein, the Contractor shall have no claim for damage or compensation for any delay, interruption, hindrance, or disruption. There shall be no Compensable Delay unless the event or occurrence giving rise to the Compensable Delay extends the actual completion of the Project past the Contract Time.
- 11.6 Regardless of the cause of a delay the Contractor may not maintain any claim or cause of action against the District for damages incurred or claimed to be incurred as a result of

Contractor's failure or inability to complete its work on the Project in a shorter period than established in this Agreement, the parties stipulating to such period as a reasonable time within which to perform the work on the Project.

- 11.7 Compliance with this Article is a condition precedent to the District's duty to pay for damages incurred by the Contractor as a result of delays.

## **Article 12 DISPUTES.**

- 12.1 If a dispute arises between the District and the Contractor as to an interpretation of any of the specifications or Contract Documents or as to the quality or sufficiency of materials or workmanship, the decision of the District shall for the time being prevail, and the Contractor, without delaying the job, shall proceed with all work to be performed under the Contract as directed by the District without prejudice to a final determination of the dispute.
- 12.2 All claims against the District must be filed by the Contractor in writing. The Contractor must include all documents necessary to substantiate that claim.
- 12.3 The Contractor shall not be entitled to the payment of any additional compensation for any act or failure to act on the part of the District or its representatives, including failure or refusal to issue a change order, or for the happening of any event, thing, occurrence, or other cause, unless it shall have given the District due written notice of potential claim, in the manner described in paragraphs 11.2 and 12.4.
- 12.4 The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and, insofar as possible, and the amount of the potential claim. The said notice as above required must be given to the District prior to the time that the Contractor performs the work giving rise to the potential claim for additional compensation, if based on an act or failure to act by the District, and in all other cases, within five (5) days after the happening of the event, thing, occurrence, or other cause, giving rise to the potential claim. Notwithstanding this paragraph, if another provision of these General Conditions specifies that a notice of claim must be given to the District in a shorter period of time, that shorter time period shall prevail.
- 12.5 In resolving all claims, whatever the amount of the claim, the parties shall proceed pursuant to the terms of California Public Contract Code section 20104, *et seq.*

## **Article 13 WARRANTY OF SUPPLIES, EQUIPMENT AND RELATED SERVICES.**

- 13.1 In addition to warranties called for elsewhere in these specifications, Contractor shall warranty all work and materials, for a minimum period of at least two (2) years after recordation of Notice of Completion, against defective material or faulty workmanship that may arise within that period.
- 13.2 Additionally, the Contractor agrees to repair or replace, to the satisfaction of the District, 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. If the Contractor fails to comply with the above mentioned conditions within five (5) calendar days after being notified in writing, the District may have the defects repaired and made good at the Contractor's expense and the Contractor will pay the costs and charges incurred by the District as a result, including the costs for additional services of the District's Project Manager, Engineer of Records, engineers, and other representatives, immediately upon

demand. Any and all warranties and guarantees offered by manufacturers of equipment used or installed in the Project shall also be extended to the District.

13.3 Notwithstanding inspection and acceptance by the Engineer of Record of all supplies, equipment and related services furnished under the Agreement, the Contractor warrants that:

1. All supplies, equipment and related services under the Agreement will be free from defects in material or workmanship and will comply with the specifications of the Agreement; and
2. All aspects of the shipment of the supplies and equipment related to the Agreement will conform to the specifications of the Agreement.

13.4 Within a reasonable time the District may either:

1. By written notice, require the prompt correction or replacement of any supplies, equipment or related services that are defective, or that are not shipped in accordance with the specifications of the Agreement, or that otherwise do not conform to the Agreement; or
2. Retain such defective, improperly shipped, or otherwise nonconforming supplies, equipment and related services; whereupon the contract sum shall be reduced by an amount that is equitable under the circumstances and the Contractor shall promptly make appropriate repayment.

13.5 When correction or replacement is required, the District may return such supplies, equipment and related services. Transportation charges and risk of loss or damage for such quantities returned while in transit shall be borne by the Contractor.

13.6 If the Contractor fails to correct or replace the nonconforming supplies, equipment or related services within ten (10) days (or such longer period if so specified by the District in writing) after receipt of notice specifying such failure, the District may, by contract or otherwise, correct or replace them with supplies, equipment and related services of similar quality, at the expense of the Contractor. If the Contractor fails to furnish timely disposition instructions, the District may dispose of the defective, improperly shipped or otherwise nonconforming supplies, equipment and related services in a reasonable manner. In such case, the District is entitled to reimbursement for the costs related to disposition from the Contractor and/or from any proceeds generated by the disposition of such supplies, equipment and related expenses.

13.7 Any replacement supplies, equipment or related services furnished by the Contractor to remedy a defect or nonconformity under the warranty shall also be covered by the terms of the warranty.

13.8 The Contractor shall indicate the total period of the warranty after the supplies, equipment and related services are placed into service. Any defects shall be promptly corrected by the Contractor to the satisfaction of the District and without expense to the District.

13.9 Warranty of Title. The Contractor warrants that title to all work, materials or equipment included in a request for payment shall pass over to the District whether or not they are installed or incorporated in the Project, free from any claims, liens or encumbrances, when such payment is made to the Contractor. It further warrants that no such work, materials or equipment have been purchased for work under the Agreement subject to an agreement by which an interest therein or an encumbrance thereon is retained by the seller or supplier.

Notwithstanding this provision, the Contractor retains the responsibility for full replacement of any portion of the Project which is damaged or destroyed prior to the Notice of Completion, as specified elsewhere in this Agreement.

13.10 The rights and remedies included in the warranty are in addition to and do not limit the District's rights under any other clause of the Contract Documents.

#### **Article 14 TRENCHING.**

14.1 The Contractor shall take reasonable precautions and make reasonable efforts to detect and protect electrical utilities and appurtenances, including hand digging and use of underground detection instruments and services. Contractor will be required to, at its own cost, promptly and satisfactorily repair damages, which could otherwise have been avoided.

14.2 The Contractor shall comply with Government Code section 4216, *et seq.*, relating to subsurface installations and the Regional Notification Center System.

14.3 If the Agreement involves the excavation of any trench five (5) feet or more in depth, the Contractor shall submit in advance of such excavation, for approval of the Project Manager, Engineer of Record, and District, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any such trench.

14.4 Contractor shall promptly, and before the following conditions are disturbed, notify the Project Manager and Engineer of Record, in writing, of any:

1. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the California Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
2. Subsurface or latent physical conditions at the site differing from those indicated, or
3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Agreement.

14.5 If any condition described in paragraphs 14.3 is discovered, the District shall promptly investigate the conditions, and if it finds that the conditions differ materially from the conditions described in the bid package, or do involve hazardous waste, and cause a material decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Project, it may issue a change order to the Contractor or contract with another to perform work necessitated by such condition.

14.6 In the event that a dispute arises between the District and the Contractor regarding whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Project, the Contractor shall not be excused from any scheduled completion date provided for in the Agreement, but shall proceed with all work to be performed under the Agreement.

The Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between contracting parties.

**Article 15** **STORM WATER DISCHARGE PERMIT.** – Applies if checked

15.1 Not Used

15.2 Not Used

**Article 16** **TOXIC SUBSTANCES CONTROL ACT.**

The Engineer of Record, in accordance with 40 CFR, Part 763, EPA Final Rule under Section 203 of Title II of the Toxic Substances Control Act (TSCA), 15, U.S.C. 2641 - 2654, must submit a statement to the District verifying that no asbestos containing building material (ACBM) was specified as a building(s) material, and to the best of its knowledge no ACBM was used as a building material in the building(s). The signed statement shall be submitted prior to Engineer of Record's making recommendation to the Board that the building(s) be accepted.

**Article 17** **INSPECTIONS.**

17.1 The District will provide a full time Project Inspector (PI) to assist the Engineer of Record in providing competent and adequate inspection during all normal working periods. No work shall be performed except under the inspection of a PI.

17.2 The Project Inspector:

1. shall personally examine items used in the Project for compliance with the Contract Documents and technical instructions from the Engineer of Record;
2. shall report to the Engineer of Record any related work to be installed prior to final approval of shop drawings by the Engineer of Record.
3. shall inspect all materials to determine whether they comply with the Contract Documents and are in a good and acceptable condition;
4. shall monitor materials to determine whether those accepted are the materials that are installed;
5. shall be responsible for monitoring time and material work, by accounting for materials used and logging actual time the Contractor worked on the task;
6. shall supervise on-site testing and ensure that all required tests are performed by a competent testing laboratory; and
7. shall ensure that the Contractor's payment requests accurately reflect progress on the Project and all work completed in compliance with plans and specifications.

17.3 The PI shall recommend to the Engineer of Record to cause the removal and replacement of rejected material and to recommend deduction of the cost thereof from any monies due or to become due the Contractor.

17.4 The PI shall not do any of the following: authorize any deviations from the Contract Documents; advise on, or issue directions relative to, any aspect of the building technique or sequence unless a specific technique or sequence is called for in the Contract Specifications; or approve shop drawings or samples.



- 17.5 Notwithstanding the foregoing, the Contractor may not rely upon the PI to perform any function for which it would otherwise be responsible. For example, that the PI is expected to attempt to anticipate unacceptable construction practices and to relay such concerns to the Contractor does not remove any responsibility from the Contractor to perform such functions itself.
- 17.6 When specific inspection is required, the Contractor shall inform the Engineer of Record and PI of the schedule of such work.
- 17.7 Consistent with requirements of Title 21 and Title 24, Part 1, of the California Code of Regulations, test samples or specimens of material for testing shall be taken by the Engineer of Record, the Project inspector or a representative of the testing agency. In no case shall the Contractor or the Contractor's inspector take the sample. The Engineer of Record shall forward one copy of all test reports to the DSA, if required. Testing and inspection shall be paid by the District. Retesting and inspection costs shall be reimbursed to the District by the Contractor.
- 17.8 Uncovering of Work.
- 17.8.1 If any work is covered contrary to the request of the District or Engineer of Record, it shall be uncovered for observation and replaced, at the Contractor's expense.
- 17.8.2 If any other work has been covered which the Engineer of Record has not specifically requested to observe prior to being covered, the Engineer of Record may request to see such work and it shall be uncovered by the Contractor. If such work was performed in accordance with the Contract Documents, the cost of uncovering the replacement shall, by appropriate change order, be charged to the District. If such work was not performed in accordance with the Contract Documents, the Contractor shall pay such costs.
- 17.9 Correction of Work.
- 17.9.1 The Contractor shall promptly correct all work rejected by the District/Engineer of Record 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 for additional services of the District's representatives thereby made necessary.
- 17.9.2 The Contractor shall bear the cost of making good all work of separate contractors that is destroyed or damaged by removal or correction.
- 17.10 Final Inspections. The Contractor will be allowed two (2) inspections by the District, the Project Inspector or the District's representatives at the close of the Project to determine completion. The first inspection will be a pre-final inspection. The second inspection, if required, will be the final inspection. All items listed on the pre-final list and any other items required by the Contract Documents and brought to the attention of the Contractor a minimum of five (5) working days before the final inspection shall be completed prior to the final inspection. Any visits to the Project by the District or the District's representative to confirm the completeness of the Project after the final inspection will be charged to the Contractor at the District and the District's representative's normal hourly rates and deducted from the contract sum.
- 17.11 If work is performed on Saturdays, Sundays, holidays, or after regular work hours during the week, the Contractor shall reimburse the District for all inspection costs incurred during such hours.

**Article 18**    **AUDITING PROCEDURES.**

- 18.1            Upon written notice to Contractor, the District shall have the right to audit all records and documents of any nature whatsoever under the custody or control of the Contractor or Contractor's agents, subcontractors, or representatives, which relate to the Project. Upon the District's request, Contractor shall make these records available to the District, the District's auditors or other representatives appointed by the District.
- 18.2            The Contractor agrees to comply with the provisions of Sections 1776 and 1812 of the California Labor Code, included, but not limited to the requirement that the Contractor and each subcontractor of every tier shall keep or cause to be kept an accurate record showing the names, addresses, social security numbers, work classifications, activity code for the work provided, straight time and overtime hours worked each day and week of all workmen employed by it in connection with the execution of this Contract or any subcontract thereunder and showing the actual wages paid to each of such workers. These records shall be certified under penalty of perjury as stated in Section 1776 of the California Labor Code and shall be made available for inspection by the Chief of the Division of Labor Standards Enforcement of the State Department of Industrial Law Enforcement of the State Department of Industrial Relations, his deputies and agents.
- 18.3            Contractor shall ensure that all subcontractors maintain appropriate records relating to the Project. Contractor agrees to furnish records of any subcontractors or other agents of Contractor to the District upon request. If the District requests records relating to a subcontractor or other agent's involvement in the Project, such requests shall be processed through the Contractor. A Contractor's failure to abide by the provisions of the Article shall be deemed a material breach of the contract and, upon the District's election, may be considered a default.

**Article 19**    **MISCELLANEOUS.**

- 19.1            All practices, materials, and workmanship shall conform to all provisions of law applicable to public works projects, including but not limited to: the California Code of Regulations, Titles 19, 21, and 24; regulations promulgated by the DSA; Public Contract Code Sections 4100-14; Government Code Section 4215; Labor Code Sections 1720-35, 1770-81, 1810-15, 1860, and 3700; Education Code Sections 39140-59; the National Electric Code; the Uniform Plumbing Code; the Uniform Mechanical Code; and all other applicable laws and regulations, each of which are incorporated into this Agreement by reference. Further, all work and materials shall be in full accordance with the most current rules and regulations of the Fire Marshal and the Division of Industrial Safety. 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 all requirements of law. The Contractor shall keep a copy of Titles 19, 21, and 24 of the California Code of Regulations on the job at all times.
- 19.2            The Contractor may not assign or delegate all or any portion of this Contract without the written consent of the District and no such consent shall be given which would relieve the Contractor or its surety of their responsibilities under the Contract. The Contractor may assign monies due it under the Contract to banks, trust companies or other financial institutions provided written notice thereof is promptly delivered to the District. Assignment of monies earned by the Contractor shall be subject to the same retention as other payments made to it, and shall also be subject to any prior liens for labor, services, materials, equipment or other appliances supplied for the performance of Work under this Contract.

19.3

AS-BUILT DRAWINGS: The Contractor and all Subcontractors shall maintain on the work site a separate complete set of contract drawings which will be used solely for the purpose of recording changes made in any portion of the work during the course of construction, regardless of the reason for the change. As changes occur, there will be included or marked on this record set on a daily basis if necessary to keep them up to date at all times. Actual locations to scale shall be identified on the drawings for all runs of mechanical and electrical work, including all site utilities installed underground, in walls, floors, and furred spaces, or otherwise concealed. Deviations from the drawings shall be shown in detail. All main runs, whether piping, conduit, duct work, drain lines, etc., shall be located in addition by dimension and elevation. Progress payments may be delayed or withheld until such time as the record set is brought up to date to the satisfaction of the Engineer of Record. The Contractor shall verify that all changes in the work are included in the "AS-BUILT" drawings and deliver the complete set thereof to the Engineer of Record for review and approval within thirty (30) calendar days after District's notice of completion. District's acceptance and approval of the "AS-BUILT" drawings are a necessary condition precedent to the release of the final retention.

END OF SECTION

**00630  
GUARANTEE FORM**

**Woodside School District**

**Woodside Elementary School  
3195 Woodside Road  
Woodside, CA 94062**

**Underground Utility Gas Piping Repair**

We hereby guarantee that the \_\_\_\_\_ work performed for the Woodside School District ("District") for Underground Utility Gas Piping Repair at Woodside Elementary School has been performed in accordance with the Drawings and Specifications and that the work, as installed, will fulfill the requirements of the Guarantee included in the Specifications. We agree to repair or replace all of our work, together with adjacent work which may be displaced by so doing, that may be proven to be defective in its workmanship or materials within a period of Two (2) year(s) from date of recordation of Notice of Completion for the above named project by the District, without any expense whatsoever to the said District, ordinary wear and tear and unusual abuse or neglect excepted.

Further, we agree that the guarantee period for corrected defective work shall continue for a duration equivalent to the original guarantee period.

In the event of our failure to comply with the above mentioned conditions within seven (7) days after being notified in writing by the District, we collectively or separately do hereby authorize the District to proceed to have said defects repaired and made good at our expense and we will honor and pay the costs and charges therefrom upon demand.

Date: \_\_\_\_\_ Signed: \_\_\_\_\_  
(Subcontractor) (Supplier)

Date: \_\_\_\_\_ Signed: \_\_\_\_\_  
(Contractor)

Date: \_\_\_\_\_ Signed: \_\_\_\_\_  
(Trade Contractor Countersignature if applicable)

Local Representative to be contacted for services:

Name: \_\_\_\_\_ Phone No. \_\_\_\_\_

Address: \_\_\_\_\_

## **00700 SCOPE OF WORK**

Note: Following is a general summary of the scope of work. It is in no way to limit the scope of work as indicated in the Plans and Specifications. In the event of any conflict between specific requirements in this summary and the project Plans and Specifications and Drawings, the Plans and Specifications and Drawings shall control. In the event that there are any items included below that may not be addressed elsewhere, these requirements shall be included in Project Scope.

The overall intent of the scope of work is to replace old underground utility gas pipelines and associated valves that are deteriorated and pose a safety hazard. The replacement of old underground water lines is also included in the project scope to take advantage of joint trenched areas and where the age of the water line warranted replacement.

There are many existing underground utilities in all areas where trenching will be required. Therefore, it is required that the Contractor employ an underground locator service to identify all existing utilities and conduct pot-holing as may be necessary. Contractor is to take cautionary measures to protect existing utilities not scheduled to be replaced. Open trenching is required to ensure any damaged existing utilities can be identified and properly repaired.

The campus is scheduled to be occupied during the construction period with Kids Sports Camp (Decathlon) that will be held on the campus concurrent with construction activity. Therefore, the attached phasing plan is required to accommodate both activities concurrently. Due to the need to maintain water services to areas used by the Camp, temporary water service connections are required.

### **Scope of work includes:**

1. Identify existing underground utility locations.
2. Installation of temporary construction phasing in all areas where work and storage areas is to occur.
3. Installation of protective measures to protect existing items from damage during construction.
4. Layout of trench locations.
5. Removal and storage of pavers for reinstallation.
6. Removal of landscaping and either attempt to storage in pots for reinstallation or provide replacement plants and sod. Note that irrigation needs to be maintained during construction in areas not immediate in work areas.
7. Concrete and asphalt saw cutting.
8. Demolition removal and off-haul of existing concrete, asphalt, piping, valves, debris, and spoils.
9. Replacement of underground utility gas piping.
10. Replacement and addition of gas shut off valves.
11. Replacement of underground utility water piping.
12. Replacement and addition of water shut off valves.
13. Trenching, backfill and compaction per Soils Engineer requirements.
14. Reinstallation of existing pavers and landscaping.
15. Replacement of damaged landscaping and turf with sod.
16. Replacement of concrete to match existing depths and reinforcement.
17. Replacement of asphalt paving to match existing depths.
18. Final cleaning.
19. Repaint pavement stripping damaged during construction.

**00800  
SPECIAL PROVISIONS**

**CONSTRUCTION MILESTONE SCHEDULE**

The time for completion of all Work is within **62 calendar days** of the date of the Notice to Proceed which shall be scheduled in accordance with the General Conditions.

Time for completion of milestones is as set forth in the below Construction Milestone Schedule. Any extensions of time for completion of milestones are governed by the same terms and restrictions as applicable to extensions of the Contract Time referenced in the General Conditions.

**Schedule of Work to accommodate the following milestone requirements:**

Anticipated Issuance of Notice of Intent to Award .....	May 7, 2020
Anticipated DSA Approval (If full 8 Weeks DSA Review) .....	June 3, 2020
Anticipated Board Approve Construction Contract .....	June 9, 2020
Anticipated Notice to Proceed (NTP) .....	June 10, 2020
Mobilization and Start of Construction .....	5 days
Phase 1 Complete (Parking Lot Area at North West Portion of Campus) .....	7 days
Phase 2 Complete (East Side of Campus) .....	18 days
Phase 3 Work Complete & Final Cleanup (West Side of Campus) .....	18 days
Punch list .....	3 days
Complete all Punch list Items and Closeout Documents .....	11 days

**DISTRICT ALLOWANCE**

District allowance listed on the bid form is to be used only for approved change orders. District allowance shall be a line item in the Schedule of Values. Any unused allowance shall be credited to the District via Change Order.



**SECTION 01 11 00**  
**SUMMARY OF WORK**

PART 1 GENERAL

1.01 PROJECT DESCRIPTION

- A. The furnishing of all labor, materials, equipment, services and incidentals necessary for work of the **Underground Utility Gas Piping Repair** located at **Woodside Elementary School, Bid #20-01**.

1.02 RELATED DOCUMENTS

- A. General Conditions.  
B. Supplementary Conditions.

1.03 STANDARD REFERENCES

- A. Any material or procedure specified by reference to number, symbol, or title of a specific standard, such as a commercial standard, a Federal Specification, a trade association standard, or other similar standard document shall comply with requirements in latest revision thereof and any amendment or supplement thereto in effect on date of executed Contract, except as limited to type, class or grade, or modified in such reference.

1.04 REQUIREMENTS OF REGULATORY AGENCIES

- A. Construction shall be in conformance with the most currently adopted editions of the following Codes:
1. Title 24, Part 1 - 2013 California Building Standards Administrative Code
  2. Title 24, Part 2 - 2013 California Building Code (Based upon 2012 International Building Code)
  3. Title 24, Part 3 - 2013 California Electrical Code (Based upon 2011 National Electrical Code)
  4. Title 24, Part 4 - 2013 California Mechanical Code (Based upon 2012 Uniform Mechanical Code)
  5. Title 24, Part 5 - 2013 California Plumbing Code (Based upon 2012 Uniform Plumbing Code)
  6. Title 24, Part 6 - 2013 California Energy Code
  7. Title 24, Part 9 - 2013 California Fire Code (Based upon 2009 International Fire Code)
  8. Title 24, Part 11 - 2013 California Green Building Standards Code
  9. Title 24, Part 12 - 2013 California Referenced Standards
  10. Comply with CFC Chapter 14, Fire Safety During Construction and Demolition
  11. NFPA 10, 2013 Edition, Portable Fire Extinguishers
  12. NFPA 13, 2013 Edition, Installation of Automatic Sprinkler Systems and CA Amendments
  13. NFPA 14, 2013 Edition, Installation of Standpipe, Private Hydrants and Hose Systems
  14. NFPA 24, 2013 Edition, Installation of Private Fire Service Mains and CA Amendments



15. NFPA 72, 2013 Edition, National Fire Alarm Code – See CA Amendments
16. NFPA 80, 2013 Edition, Fire Doors and Other Opening Protectives
17. 2010 Americans With Disabilities Act (ADA)
18. California Code of Regulations, Title 19, State Fire Marshall Regulations

#### 1.05 OCCUPATIONAL SAFETY AND HEALTH ACT REQUIREMENTS

- A. During the entire construction period, it shall be the responsibility of the Contractor to maintain conditions at the Project site so as to meet in all respects the requirements of the Federal Occupational Safety and Health Administration (OSHA). This provision shall cover the Contractor's employees and all other persons working upon or visiting the site. To this end, the Contractor shall inform himself and his representatives of Federal OSHA standards.

#### 1.06 COORDINATION REQUIREMENTS

- A. It is the Contractor's responsibility to coordinate the Work so as to minimize conflicts and optimize efficiency.
- B. Coordinate scheduling, submittals, and Work of the various Sections of Specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- C. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. District occupancy of premises requires Contractor to coordinate access to site for Work, correction of defective Work, and Work not in accordance with Contract Documents, to minimize disruption of District's activities.

#### 1.07 UTILITY AND BUILDING SYSTEM COORDINATION

- A. Notify Project Manager if conditions are discovered which would prevent the completed construction from conforming to the requirements of the Work.
- B. Coordinate space requirements and installation of mechanical and electrical work that are indicated diagrammatically on Drawings.
- C. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. Follow routing shown for pipes, ducts, and conduit, as closely as practicable. Place runs parallel with line of building or partitions.
- E. Configure piping, conduit, and rack installation to permit access into drop ceilings with minimum clearance above ceiling.
- F. Do not install ductwork, conduit, piping, or other building system components on support systems for other components unless specifically designed to accommodate such shared use and only with approval of the Architect.

#### 1.08 WORK INDICATED AS N.I.C.

- A. The term "NIC" shall be construed to mean that portions of the Project are not to be furnished, installed or performed by the Contractor. The term shall mean "Not in this Contract" or "Not a Part of the Work to be performed by the Contractor" except that coordination and installation of certain NIC items specified shall be the Contractor's responsibility. Buildings or portions of buildings listed as NIC in one discipline may still need to be provided with services or equipment in another discipline. Refer to all drawings from all disciplines.
- B. "NIC" construction is indicated and specified herein as an aid to the Contractor in scheduling the amount of time and materials necessary for the completion of the Contract.

#### 1.09 CONTRACTOR'S USE OF THE PREMISES

- A. General: Contractor shall have full use of premises for construction operations, including use of Project site, during construction period. Contractor's use of premises is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. The Contractor shall be responsible for the following:
- C. Coordinate the use of the premises under the direction of the District.
- D. Assume full responsibility for the protection and safekeeping of products under this Contract, which are stored at the site.
- E. Move stored products that are under the Contractor's control, which interfere with operations of the District.
- F. Obtain and pay for the use of additional storage or construction areas needed for operations.
- G. The Contractor shall make provisions to insure the security of the building.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

Not Used.

END OF SECTION

**SECTION 01 21 00  
CASH ALLOWANCES**

PART 1 GENERAL

1.01 SUMMARY

- A. To provide a budget to cover scope of work not precisely determined by the Contract Documents prior to bidding, allow within the proposed Contract Sum the amounts described in this Section.
  
- B. Related work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, Bidding and Contract Requirements, General Requirements and related Technical Requirements.
  - 2. Other provisions concerning Cash Allowances are stated in General Conditions Section.
  - 3. Other provisions concerning Cash Allowances also may be stated in other Sections of the Project Manual.

1.02 SPECIFIC CASH ALLOWANCES

**BID PACKAGE # 20-01**

- A. The District will add to the Bid Award amount a **\$40,000** Allowance for unforeseen site conditions. All work performed under this allowance will be treated as a Change Order in accordance with the General Conditions. Prior authorization required and must be directed and approved by the Project Manager. This allowance may be expended under a "cost plus" basis using current prevailing wage rates. All unused portions of the allowance will be deducted from the contract through a change order.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

**SECTION 01 23 00  
ALTERNATES**

1.01 ALTERNATES

BID PACKAGE #20-01 Re- Underground Utility Gas Piping Repair at Woodside Elementary School

- A. **DEDUCTIVE BID ALTERNATE:** Remove from scope the replacement of the water lines where not joint trenched with gas lines as indicated on Plans. Purpose of this alternate is to determine potential cost reductions if the specified scope of work was removed from the project. Note that water lines that are joint trenched with gas lines are not part of this Bid Alternate.

END OF SECTION

**SECTION 01 26 36**  
**ADDITIONAL REQUIREMENTS FOR DSA-REVIEWED PROJECTS**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. The following additional requirements apply to this Project, which is being reviewed by the Division of the State Architect (DSA).

**1.02 ADDITIONAL REQUIREMENTS**

- A. The Contractor shall maintain full compliance with the requirements specified in Parts 1 thru 5 and Part 9, Title 24, California Code of Regulations (CCR). Unless otherwise indicated or specified, work shall be performed in full conformance with the latest edition of applicable regulatory requirements. All work shall be performed in accordance with the rules and regulations, Title 24, Parts 1-5 and Part 9, California Code of Regulations, and the Office of Regulation Services, Division of the State Architect, and a copy shall be kept on the job at all times during construction. The codes adopted by the City, County, State and Federal agencies shall govern minimum requirements for this Project. The Contractor shall notify the District of any conflicts between the requirements of the Contract Documents and the requirements of this paragraph.
- B. In addition to the duties specified in the Contract Documents, the duties of the Contractor shall be in accordance with the requirements specified in Section 4-343 of Part 1, Title 24, California Code of Regulations (CCR).
- C. In addition to the duties specified in the Contract Documents, the duties of the Architect and the Architect's consultants shall be in accordance with the requirements specified in Section 4-341 of Part 1, Title 24, CCR.
- D. Neither DSA, nor the decisions and instructions rendered by DSA are subject to arbitration proceedings.
- E. Architect shall notify DSA at start of construction in accordance with 4-341(e) of Part 1, Title 24, CCR.
- F. All Addenda and Change Orders shall be signed by the District and approved by the Architect and submitted for DSA approval. Do not begin work under a written order until a Change Order has been submitted to and approved by DSA in accordance with Section 4-338 of Part 1, Title 24, CCR.
- G. Substitutions are changes to the Contract Documents and shall be considered Change Orders, and shall be approved by DSA prior to fabrication or use.
- H. Contractor shall submit verified reports in accordance with Sections 4-343(c) of Part 1, Title 24, CCR. Architect and Engineers shall submit verified reports in accordance with Sections 4-341(f) of Part 1, Title 24, CCR.
- I. DSA may supervise construction, reconstruction, or repair in accordance with Section 4-334 of Part 1, Title 24, CCR.

- J. Construction shall be observed by a full-time Project Inspector employed by the District, approved by the Architect, Structural Engineer and DSA in accordance with Sections 4-333(b) and 4-342 of Part 1, Title 24, CCR.
- K. A DSA accepted Testing Laboratory directly employed by the District shall conduct all the required tests and inspection for the Project. Testing requirements of District's Testing Laboratory shall be in accordance with Section 4-335 of Part 1, Title 24, CCR.
- L. Special inspection of masonry construction, lumber, wood framing using timber connections, ready-mixed concrete, high strength steel bolt installation, welding, and mechanical and electrical work shall be as required by Section 4-333(c) of Part 1, Title 24, CCR. The costs of special inspection will be paid for by the District.
- M. The intent of these Drawings and Specifications is that the work of the alteration, rehabilitation or reconstruction is to be in accordance with Title 24, California Code of Regulations. Should any existing conditions such as deterioration or non-complying construction be discovered which is not covered by the Contract Documents wherein the finished work will not comply with Title 24, California Code of Regulations, a change order, or separate set of plans and specifications, detailing and specifying the required work shall be submitted to and approved by DSA before proceeding with the work.

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

END OF SECTION

## **SECTION 01 33 00 SUBMITTAL PROCEDURES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections:
  - 1. General Conditions, Article 5.8: "Shop Drawings, Product Data, Samples and Similar Submittals" for product submittal and shop drawings.
  - 2. General Conditions, Article 8: "Payments and Completion" for submitting Project Schedule, Applications for Payment, and the schedule of values.

#### **1.3 SUBMITTAL ADMINISTRATIVE REQUIREMENTS**

- A. General Requirements: Project Manager will return submittals, without review, received from sources other than Contractor.
  - 1. Project Manager will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Engineer's Digital Data Files: Electronic copies of CAD Drawings of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.

4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
  - a. Project Manager reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
  
- D. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Project Manager's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  1. Initial Review: Allow 14 calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 14 calendar days for review of each resubmittal.
  4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 calendar days for initial review of each submittal.
  5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 14 calendar days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
  
- E. Electronic (PDF) Submittals: Indicate on label or title block on each submittal item for identification.
  1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Provide a space approximately 4 by 5 inches on label or beside title block for Architect's review stamp and approval markings.
  3. Provide a space approximately 2 by 3 inches on label or beside title block for Contractor's review stamp and approval markings.
  4. Include the following information for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name of Project M.
    - d. Name of Contractor.
    - e. Name of subcontractor.
    - f. Name of supplier.
    - g. Name of manufacturer.
    - h. Submittal number or other unique identifier, including revision identifier.
      - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
    - i. Number and title of appropriate Specification Section.
    - j. Drawing number and detail references, as appropriate.



- k. Location(s) where product is to be installed, as appropriate.
  - l. Other necessary identification.
- F. Product Options:
  - 1. Clearly identify product options required to comply with the Contract Documents.
  - 2. Clearly identify product options requiring selection by the Engineer.
- G. Deviations: Clearly identify deviations from requirements in the Contract Documents including minor variations and limitations.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
  - 1. Note date and content of previous submittal.
  - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, and others as necessary for performance of construction activities.
- J. Use for Construction: Use only final submittals that are marked with approval notation from Architect's action stamp.

## PART 2 - PRODUCTS

### 2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit via e-mail submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  - 1. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
  - 2. Test and Inspection Reports Submittals: Comply with requirements specified in Division 01 Section "Quality and Testing Requirements."
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.

- d. Statement of compliance with specified referenced standards.
  - e. Testing by recognized testing agency.
  - f. Application of testing agency labels and seals.
  - g. Notation of coordination requirements.
  - h. Availability and delivery time information.
4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams showing factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  5. Submit Product Data before or concurrent with Samples.
  6. Submit Product Data in the following format:
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of applicable Specification Section.
    - e. Specification paragraph number and generic name of each item.
  3. Disposition: Maintain sets of reviewed Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

- a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
  - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
- a. Number of Samples: Submit one full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
- a. Number of Samples: Submit 3 sets of Samples. Architect will retain 2 Sample sets; remainder will be returned.
    - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
1. Type of product. Include unique identifier for each product.
  2. Manufacturer and product name, and model number if applicable.
  3. Number and name of room or space.
  4. Location within room or space.
  5. Submit product schedule in the following format:
- F. Contractor's Construction Schedule: Comply with requirements specified in General Conditions.
- G. Application for Payment and Schedule of Values: Comply with requirements specified in General Conditions.
- H. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified.

- I. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified.
- J. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- K. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on American Welding Society (AWS) forms. Include names of firms and personnel certified.
- L. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- M. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- N. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- O. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- P. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- Q. Product Test Reports: Submit written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- R. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.
  - 6. Test procedures and results.
  - 7. Limitations of use.
- S. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- T. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed

before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

- U. Field Test Reports: Submit reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- V. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

## 2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
  - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit 6 paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
  - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S REVIEW

- A. Product Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in General Conditions.
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### 3.2 PROJECT MANAGER and ENGINEER ACTION

- A. General: Project Manager and Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Submittals: Project Manager and Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action as follows:
  - 1. Reviewed: Final unrestricted release, work may proceed, provided it complies with contract documents.
  - 2. Furnish as Corrected: Final but restricted release, work may proceed, provided written confirmation is delivered to Architect by Contractor that installed work complied with notations and corrections on submittal and with contract documents.
  - 3. Revise and Resubmit: Returned for resubmittal, do not proceed with work. Revise submittal in accordance with notations thereon, and resubmit without delay to obtain an acceptable action marking. Do not allow submittals with this marking (or unmarked submittals where a marking is required) to be used in connection with performance of the Work.
  - 4. Rejected: Returned for resubmittal, do not proceed with work. Revise submittal in accordance with notations thereon, and resubmit without delay to obtain an acceptable action marking. Do not allow submittals with this marking (or unmarked submittals where a marking is required) to be used in connection with performance of the Work.
- C. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- D. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION

## SECTION 01 42 00 REFERENCES

### PART 1 GENERAL

#### 1.01 SUMMARY

##### A. DESCRIPTION:

1. General: Standards, codes, definition of words and terms, are identified in this Section.

#### 1.02 REFERENCES

- A. GENERAL: References are made throughout the technical specifications to various standard specifications, codes, practices, and requirements for materials, work quality, installation, inspections and tests, which are published and issued by the organizations, societies and associations listed below by abbreviation and name.
- B. REFERENCED STANDARDS: Obtain copies direct from publication sources as needed for proper performance and completion of the Work. Addresses for these organizations are available from the Program Manager.

#### 1.03 STANDARDS

- A. GENERAL: All references to established Standards mean and include the latest edition of such Standards, as of the date of issue of this Project Manual.

#### 1.04 CODES

- A. GENERAL: Work of this project shall conform to applicable codes, current editions adopted by enforcing agencies.
- B. APPLICABLE CODES:
  1. California Building Code (CBC), 2013 Edition: With amendments.
  2. California Code of Regulations (CCR): Title 19, Public Safety; Title 24, Building Standards, Parts 1, 2, 3, 4, 5 and 9; Title 25, Energy Insulation Standards, 2013 Edition.
  3. California Mechanical Code (CMC), 2013 Edition: With amendments.
  4. California Plumbing Code (CPC), 2013 Edition: With amendments.
  5. California Electric Code (CEC), 2013 Edition: With amendments.
  6. Americans with Disabilities Act (ADA): 2010 edition.
  7. National Fire Protection Association (NFPA): Life Safety Code - NFPA 10, 2013 Edition.
  8. Environmental Protection Agency (EPA): National Standards.
  9. California Environmental Protection Agency (CalEPA): State and local Standards

## 1.05 DEFINITIONS

### A. WORDS AND TERMS:

1. **General:** The following are used in addition to those defined in the General Conditions, and are defined as follows:
2. **Accepted Equal:** Reviewed and accepted by the Architect as being equal in quality, utility and appearance.
3. **Approved:** As accepted by the Architect.
4. **As Required:** As required by regulatory requirements, referenced standards, existing conditions, or by the Contract Documents.
5. **Building Code or Code:** Refers to regulations of governmental agencies having jurisdiction.
6. **Directed:** As instructed by the Architect in writing.
7. **Furnish:** Supply and deliver to the site.
8. **Indicated:** As shown, noted, or scheduled on the Drawings.
9. **Install:** Anchor, fasten, or connect in place and adjust for use; place or apply in proper position and location; establish in place for use or service.
10. **Product:** Includes materials, systems and equipment.
11. **Provide:** Furnish and install.
12. **Shown:** As indicated, noted or scheduled on the Drawings.
13. **Site:** Area to be occupied by the Project. Use of the word "jobsite" or "site" shall be interpreted to be synonymous with "site of the Work" or "Work Site".

### B. ABBREVIATIONS:

1. **General:** Definition of abbreviations and symbols used on the Drawings are identified on the Drawings.
2. **Governing Dictionary:** The definitions of words and abbreviations used in these Specifications are given in "The American Heritage Dictionary of the English Language".

## PART 2 PRODUCTS

### 2.01 REFERENCE STANDARDS

- A. **GENERAL:** The reference standards applicable to this Project are specifically identified in the technical specification Sections listed in the Table of Contents - Divisions 2 through 16.
- B. **ASSOCIATION NAMES:** The following abbreviation or acronym shall be understood to mean the full name of the respective organization or document, as follows:

AA	Aluminum Association
AABC	Associated Air Balance Council
AAC	Aluminum Anodizers Council
AAMA	American Architectural Manufacturers Association
AAN	American Association of Nurserymen



AASHTO	American Association of State Highway and Transportation Officials
AATCC	American Association of Textile Chemists and Colorists
AAU	Amateur Athletic Union
ABMA	American Boiler Manufacturers Association
ACI	American Concrete Institute
ACIL	American Council of Independent Laboratories
ACPA	American Concrete Pipe Association
ADC	Air Diffusion Council
AFPA	American Forest and Paper Association
AGA	American Gas Association
AGC	Associated General Contractors of America
AHA	American Hardboard Association
AHAM	Association of Home Appliance Manufacturers
AI	Asphalt Institute
AIA	American Institute of Architects
AIA	American Insurance Association (successor to NBFU)
AIHA	American Industrial Hygiene Association
AIMA	Acoustical and Insulating Materials Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALI	Associated Laboratories, Inc.
ALSC	American Lumber Standards Committee
AMCA	Air Movement and Control Association
ANSI	American National Standards Institute
AOSA	Association of Official Seed Analysts
APA	American Plywood Association
API	American Petroleum Institute
ARI	Air-Conditioning and Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASA	Acoustical Society of America
ASC	Adhesive and Sealant Council
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASPA	American Sod Producers Association
ASPE	American Society of Plumbing Engineers
ASSE	American Society of Sanitary Engineering
ASTM	American Society for Testing and Materials
ATIS	Alliance for Telecommunications Industry Solutions
AWI	Architectural Woodwork Institute
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builder's Hardware Manufacturers Association
BIA	Brick Industry Association
BIFMA	The Business and Institutional Furniture Manufacturer's Association
BSI	Building Stone Institute
CAGI	Compressed Air and Gas Institute
CalTrans	State of California, Department of Transportation

CAUS	Color Association of the United States
CBHF	Bureau of Home Furnishings and Thermal Insulation, State of California, Dept. of Consumer Affairs
CBM	Certified Ballast Manufacturers
CCC	Carpet Cushion Council
CDA	Copper Development Association
CFFA	Chemical Fabrics and Film Association, Inc.
CGA	Compressed Gas Association
CISCA	Ceiling and Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturing Institute
CRA	California Redwood Association
CRI	Carpet and Rug Institute
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard
CSA	Canadian Standards Association
CSI	Construction Specifications Institute
CPSC	Consumer Product Safety Commission
CSSB	Cedar Shingle and Shake Bureau
CTI	Ceramic Tile Institute of America
DHI	Door Hardware Institute
DIPRA	Ductile Iron Pipe Research Association
DLPA	Decorative Laminate Products Association
DSA	Division of the State Architect, Office of Regulations Services
EIA	Electronic Industries Association
EIMAEIFS	Industry Manufacturers Association
EJMA	Expansion Joint Manufacturers Association
ETLETL	Testing Laboratories
FCI	Fluid Controls Institute
FCICA	Floor Covering Installation Contractors Association
FGMA	Flat Glass Marketing Association
FM	Factory Mutual Research and Engineering Corporation
FMRC	Factory Mutual Research Corporation
FTI	Facing Tile Institute
FS	Federal Specification General Services Administration
GA	Gypsum Association
GANA	Glass Association of North America
GIS	Germany Institute for Standardization
HEI	Heat Exchange Institute
HI	Hydronics Institute
HI	Hydraulic Institute
HMA	Hardwood Manufacturers Association
HPVA	Hardwood Plywood and Veneer Association
HU.DU.S	Department of Housing and Urban Development
IAPMO	International Association of Plumbing and Mechanical Officials
IBD	Institute of Business Designers
ICEA	Insulated Cable Engineers Association
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IESN	Illuminating Engineering Society of North America
IFAI	Industrial Fabrics Association International
IGCC	Insulating Glass Certification Council

ILI	Indiana Limestone Institute of America
IMSA	International Municipal Signal Association
IRI	Industrial Risk Insurers
ISA	Instrument Society for Measurement and Control
ISO	International Standards Organization
KCMA	Kitchen Cabinet Manufacturers Association
LIA	Lead Industries Association, Inc.
LPI	Lightning Protection Institute
LSGA	Laminators Safety Glass Association
MBMA	Metal Building Manufacturers Association
MCAA	Mechanical Contractors Association of America
MFMA	Maple Flooring Manufacturers Association
MIA	Marble Institute of America
ML/SFA	Metal Lath/Steel Framing Association Division of NAAMM
MSSVFI	Manufacturers Standardization Society of the Valve and Fittings Industry
NAA	National Arborist Association
NAAMM	National Association of Architectural Metal Manufacturers
NAIMA	North American Insulation Manufacturers Association
NAPA	National Asphalt Pavement Association
NBFU	National Board of Fire Underwriters - See American Insurance Assn. (AIA)
NCAA	National Collegiate Athletic Association
NCMA	National Concrete Masonry Association
NCPI	National Clay Pipe Institute
NCRPM	National Council on Radiation Protection and Measurements
NCSPA	National Corrugated Steel Pipe Association
NECA	National Electrical Contractors Association
NEI	National Elevator Industry, Inc.
NEMA	National Electrical Manufacturers Association
NETA	International Electrical Testing Association
NHLA	National Hardwood Lumber Association
NIST	National Institute of Standards and Technology
NLGA	National Lumber Grades Authority
NOFMA	National Oak Flooring Manufacturers Association
NPA	National Particleboard Association
NPCA	National Paint and Coatings Association
NRCA	National Roofing Contractors Association
NRMCA	National Ready-Mix Concrete Association
NSF	National Sanitation Foundation
NSSEA	National School Supply and Equipment Association
NSWMA	National Sanitation and Waste Management Association
NTMA	National Terrazzo and Mosaic Association
NWWDA	National Wood Window and Door Association
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Development
PATMI	Power Actuated Tool Manufacturers' Institute, Inc.
PCA	Portland Cement Association
PCI	Precast Prestressed Concrete Institute
PDCA	Painting and Decorating Contractors of America
PDI	Plumbing and Drainage Institute
PEI	Porcelain Enamel Institute

PS	Product Standard of National Bureau of Standards
RFCI	Resilient Floor Covering Institute
RIS	Redwood Inspection Service
RMA	Rubber Manufacturers Association
SAMA	Scientific Apparatus Makers Association
SDI	Steel Deck Institute
SDI	Steel Door Institute
SIGMA	Sealed Insulating Glass Manufacturers Association
SFM	State Fire Marshal
SGCC	Safety Glazing Certification Council
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMA	Stucco Manufacturers Association
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SPR	Simplified Practice Recommendation
SPRI	Single-Ply Roofing Institute
SSPC	Steel Structures Painting Council
SSPMA	Sump and Sewage Pump Manufacturers Association
STI	Steel Tank Institute
SWI	Steel Window Institute
SWPA	Submersible Wastewater Pump Association
SWRI	Sealant, Waterproofing and Restoration Institute
TCA	Tile Council of America
TIMA	Thermal Insulation Manufacturers Association
TPI	Truss Plate Institute
UL	Underwriters' Laboratories, Inc.
UNI	Uni-Bel PVC Pipe Association
USGBCUS	Green Building Council
USP	United States Pharmacopeia Convention
USDA	United States Department of Agriculture
USTC&TBA	United States Tennis Court and Track Builders Association
VWDI	Vinyl Window and Door Institute
WA	Wallcoverings Association
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Window Covering Manufacturers Association
WCRSI	Western Concrete Reinforcing Steel Institute
WH	Warnock Hersey International, Inc.
WIC	Woodwork Institute of California
WLPDIA	Western Lath, Plaster, Drywall Industries Association
WRI	Wire Reinforcement Institute
WSC	Water Systems Council
WSFI	Wood and Synthetic Flooring Institute
WWPA	Western Wood Products Association
WWPA	Woven Wire Products Association

PART 3 EXECUTION  
Not Used.

END SECTION

**SECTION 01 45 00  
QUALITY CONTROL**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Quality assurance and control of installation.
- B. References.
- C. Field samples.
- D. Mock-up.
- E. Inspection and testing laboratory services.
- F. Manufacturers' field services and reports.

**1.02 RELATED SECTIONS**

- A. General Conditions
- B. Technical Specifications

**1.03 QUALITY ASSURANCE/CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- G. Contractors Line of Authority: Contractor shall provide one person who shall be both knowledgeable and responsible for all work to be performed on this project at all times during normal work hours. In Contractor's absence, Contractor's appointed representative shall be responsible for all directions given him and said directions shall be binding as if given to the Contractor. Contractor's representative shall be responsible to coordinate all work to be performed.
- H. Shop and fieldwork shall be performed by mechanics skilled and experienced in the

fabrication and installation of the work involved. All work on this project shall be done in accordance with the best practices of the various trades involved and in accordance with the drawings, approved shop drawings and these specifications.

- I. All work shall be erected and installed plumb, level, square and true and in proper alignment and relationship to the work of other trades. All finished work shall be free from defects. The Architect reserves the right to reject any materials and workmanship which are not considered to be up to the highest standards of the various trades involved. Such inferior material or workmanship shall be replaced at no additional cost to the Owner.
- J. All work shall be installed by a knowledgeable contractor and defined "certified to install" by the specified materials manufacturers. The specifications and recommendations of the manufacturer whose materials are used shall be strictly adhered to during the application or installation of materials.
- K. Any additional work beyond that specified or illustrated, or any modification thereto, that is necessary for the furnishing of guarantee shall be provided by the Contractor without additional cost to the District.

#### 1.04 REFERENCES

- A. Conform to reference standards by date of issue current on date of the Contract Documents.
- B. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.
- D. The Contractor shall be responsible for being current and knowledgeable of all building codes involved for all trades under his direction.
- E. Provide all work and materials in full accordance with the California Building Standards Code (CBC), the State Fire Marshal, Safety Orders of the Division of Industrial Safety, the National Electric Code, the Uniform Building Code, Uniform Mechanical Code, Uniform Plumbing Code, and any other applicable laws or regulations. Nothing in these plans or specifications is to be construed to permit work not conforming to these Codes.
- F. Furnish without extra charge any additional material and labor required to comply with these Rules and Regulations.

#### 1.05 FIELD SAMPLES

- A. Install field samples at the site as required by individual specifications Sections for review.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified in Individual Sections to be removed, clear area after field sample has been accepted by Architect.

1.06 MOCK-UP

- A. Assemble and erect specified items, with specified attachment and anchorage devices, flashings, seals, and finishes.
- B. Where mock-up is specified in Individual Sections to be removed, clear area after mock-up has been accepted by Architect.

1.07 INSPECTION AND TESTING LABORATORY SERVICES

- A. Inspection and Testing labs shall be DSA-Approved and directly employed by the District.

1.08 MANUFACTURERS FIELD SERVICES AND REPORTS

- A. Submit qualifications of observer to Architect 30 days in advance of required observations.
- B. When specified in individual specification Sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.
- C. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Submit report in duplicate within 30 days of observation to Architect for review.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

**SECTION 01 50 00**  
**TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

**1.01 WORK INCLUDED**

- A. Temporary Facilities and controls required for this Work include, but are not necessarily limited to:
1. Parking and storage areas.
  2. Site fencing and security.
  3. Sanitary facilities.
  4. Final and course of construction cleanup and removal of debris.

**1.02 TEMPORARY UTILITIES**

- A. Provide temporary tie-ins as necessary to maintain services disrupted by construction activities and to accommodate phase schedule.

**1.03 FIELD OFFICE/STORAGE CONTAINERS**

Not Used.

**1.04 PARKING OF VEHICLES**

- A. Each Contractor shall assume **all** responsibility for job site vehicle parking of his and his subcontractor's vehicles. Locations of parking shall be as directed by the Owner's Representative.

**1.05 STORAGE AND LAYDOWN AREAS**

- A. The Owner's Representative will coordinate use of available laydown areas among various contractors. Only areas designated by Owner's Representative can be used by Contractors. Each contractor is responsible for providing his own fenced storage facilities (trailers or cargo containers.)

**1.06 TEMPORARY SITE FENCING AND SECURITY**

- A. Contractor shall provide and maintain temporary fencing surrounding the areas under construction, stockpiles, and staging areas. Set-up/relocation of temporary fencing shall be included for each phase of work as shown on the Preliminary Construction Schedule. Contractor is responsible for the security of all equipment, material, and completed construction items. Contractor is also responsible for securing any breeches to existing security system/building caused by his Work. Temporary measures may include watchman, temporary doors, temporary alarm, etc.



## 1.07 SANITARY FACILITIES

- A. Each Contractor shall provide sanitary toilet facilities for use of all Workers employed on Project, in accordance with State and Local health departments. Use of District toilet facilities will not be allowed.

## 1.08 CLEANUP AND REMOVAL OF DEBRIS

- A. Each Contractor shall assume all responsibility for cleanup and removal of debris created by his Scope of Work on a daily basis. No community dumpsters will be provided. In the event unidentifiable job site clutter or debris becomes a problem, at Owner's Representatives request, each contractor shall provide sufficient labor to be directed by Owner's Representatives personnel in a group cleanup effort. If a Contractor's clean-up is found to be deficient, the District may backcharge the Contractor for clean-up and/or withhold progress payments as determined appropriate by the District in accordance with Section 12.06, Paragraph E, General Conditions Section 00700.

## 1.09 TEMPORARY CONSTRUCTION, EQUIPMENT AND PROTECTION

- A. Contractor shall provide, maintain and remove upon completion of Work, all temporary rigging, scaffolding, hoisting equipment, rubbish chutes, ladders, barricades, lights and all other protective structures or devices necessary for safety of Workers and public property as required to complete the Bid Package Scope of Work.
  - 1. Safety:  
The contractor is responsible for the complete safety of district personnel, students, and the general public at all times.
  - 2. Walkways and barricades:  
If Contractor's portion of Work interferes with pedestrian traffic, provide pedestrian walkway protection conforming to City standards and CAL OSHA requirements.
  - 3. Access:  
The contractor is responsible to maintain access to the buildings at all times. Temporary covered walkways and/or barricades may be required.
  - 4. Protection:  
Each Contractor must protect all Workers and equipment from power lines by maintaining safe distances and by providing protective devices where and as required by Industrial Safety Commission and CAL-OSHA.
  - 5. Temporary construction and equipment:  
All temporary construction and equipment shall conform to all regulations, ordinances, laws and other requirements of State and any other authorities having jurisdiction (including insurance companies), with regards to safety precautions, operations and fire hazards.

## 1.10 STORM WATER RUN-OFF PLAN:

Not Used.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

**SECTION 01 73 29  
CUTTING AND PATCHING**

**PART 1      GENERAL**

**1.01   SECTION INCLUDES**

- A.    Execute cutting, fitting or patching of Work, required to:
  - 1.    Make parts fit properly.
  - 2.    Uncover Work to provide for installation of ill-timed Work.
  - 3.    Remove and replace Work not conforming to requirements of Contract Documents.
  - 4.    Remove and replace defective Work.
  - 5.    Remove samples of installed Work as specified for testing.
  - 6.    Remove existing materials (demolition) required prior to installation of specified Work.
  - 7.    Uncover Work to provide for Architect's observation of covered Work.
  
- B.    Do not endanger structural integrity of any Work by cutting or altering any part of it.
  
- C.    The Contractors with structural responsibility within their scope of Work shall solely execute structural cutting and patching required for this Project, according to DSA Approved Drawings.
  
- D.    Minor cutting and patching of finishes and/or trim will be performed by the Contractor where required for the execution of his Work. Locations of all cutting and patching (core boring, etc.) shall be reviewed and approved by the Architect, Structural Engineer and DSA Representative prior to the start of Work.
  
- E.    Cutting, boring, sawcutting, notching or drilling through the new or existing structural elements to be done only when specifically detailed on drawings or approved by Architect, Structural Engineer and DSA Representative.
  
- F.    The Contractor shall make the field measurements necessary for his Work and be responsible for its accuracy. Also, should any structural difficulties prevent a Contractor from installing his material properly, the District's Representative and Architect shall be notified in writing within 24 hours. Cutting into the walls, ceilings and floors, if necessary, shall be carefully and neatly performed and then be repaired as specified in the Contract Documents. The Architect shall be consulted prior to the start of Work in all cases where cutting into a structural portion of the building is either desirable or necessary so that satisfactory reinforcement may be provided.
  
- G.    Patching of all exposed architectural finishes shall be performed under the supervision of the Inspector. Cutting and patching of existing architectural finishes shall be minimized to the extent possible through careful routing and placement of new Work. The Architect or Inspector shall have the authority to reject substandard or unacceptable patching.

- H. Patching of openings that are cut in any fire rated walls or membranes shall be sealed tightly using approved materials only. Verify that fire rating envelopes are maintained and inspections provided prior to concealing Work. Cutting and patching, if required by Agencies to verify adequacy of protection after concealment, shall be performed at no cost to the District.

## 1.02 RELATED SECTIONS

- A. General Conditions.
- B. Section 01 50 00 - Temporary Facilities and Controls.

## 1.03 SUBMITTALS

- A. Prior to cutting which affects structural safety of Project, submit written notice to Architect requesting consent to proceed with cutting. See items "C" and "F", Section 1.01.
- B. Should conditions of Work or schedule require change of materials or methods, submit written recommendation to Architect, within 48 hours, including:
  - 1. Conditions requiring change.
  - 2. Recommendations for alternative materials or methods.
  - 3. Submittals as required for substitutions.
  - 4. Quotations of charges or credits.
- C. Submit 48-hour advance written notice to Architect (with a copy to the District's Representative) designating the time Work will be uncovered.
- D. Submit all materials to be used in cutting and patching in accordance with Special Conditions..

## PART 2 PRODUCTS

### 2.02 MATERIALS

- A. Primary Products: Materials for replacement of Work removed are to comply with Technical Specifications and are required to match original installation.
- B. Product Substitution: For any proposed change in materials, submit request for substitution in accordance with Special Conditions.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Examine existing conditions prior to commencing Work, including elements subject to movement or damage during cutting and patching.
- B. After uncovering existing Work, examine conditions affecting installation of new products and performance of Work.

- C. Beginning of cutting or patching operations means acceptance of existing conditions.

### 3.02 PREPARATION

- A. Provide means of shoring, bracing and temporary supports as required to maintain structural integrity of the Work.
- B. Provide devices, enclosures and methods to protect adjacent surfaces and areas of the property from damage, dust or disruption.
- C. Provide protection from the elements for areas, which may be exposed during cutting or patching.
- D. Maintain excavations free of water.

### 3.03 CUTTING

- A. All concrete shall be saw cut to the closest existing control or expansion joint. No over cuts are allowed that damage the existing adjacent surfacing.
- B. All asphalt shall be re-saw cut after trenching backfilled and compacted to provide a uniform straight line for patching.
- C. Execute cutting, fitting and adjustment of products to permit finished installation to comply with specified tolerances and finishes.
- D. Perform cutting and demolition by methods, which will prevent damage to other Work, and will provide proper surfaces to receive installation of repairs and new Work.
- E. Uncover Work to install improperly sequenced Work.
- F. Remove and replace defective, rejected or non-conforming Work.
- G. Remove samples of installed Work for testing when requested.
- H. Provide openings in the Work for penetration of Mechanical and Electrical Work.
- I. Employ only experienced installers to perform cutting for weather exposed, moisture resistant and sight-exposed surfaces.
- J. Cut concrete, tile plaster and other rigid materials using masonry/concrete saws and core drills. Pneumatic tools are not allowed without prior approval.

### 3.04 PATCHING

- A. Execute patching to match adjacent Work.
- B. Fit products together to integrate seamlessly with adjacent Work.
- C. Execute patching by methods to avoid damage to adjacent Work, and which will provide appropriate surfaces to receive finishing Work.

- D. Employ only experienced installers to perform patching for weather exposed, moisture resistant and sight-exposed surfaces.
- E. Restore Work with new products in accordance with requirements of the Contract Documents.
- F. At penetrations of fire rated walls, partitions, ceiling or floor construction, completely seal voids with approved fire rated material in accordance with the manufacturer's installation instructions and applicable Codes.
- G. Fit Work to pipes, sleeves, ducts, conduits and other penetrations through affected surfaces neatly and leave in finished condition.
- H. All patched surfaces are to match adjacent finishes in all respects: Type, texture, thickness and color. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit or area.

END OF SECTION

**SECTION 01 74 23  
FINAL CLEANING**

**PART 1      GENERAL**

**1.01    SUMMARY**

- A.    The Contractor is responsible for daily cleanup and a final cleaning construction and stockpile areas prior to review for assessing completion. This section only addresses the final cleaning required prior to punch listing and occupancy.
  
- B.    Cleaning Program:
  - 1.    The cleaning program shall include all construction areas and surrounding areas affected by the construction including site, exteriors of buildings / structures, roofs and interior of buildings.
  - 2.    The areas to be cleaned shall be turned over to the District in a "move-in" condition.
  - 3.    All areas shall be free of all construction materials, dust, debris, markings and dirt.
  - 4.    All surfaces shall be washed, cleaned and cleared of markings.
  - 5.    All existing and new fixtures shall be cleaned, sanitized and ready for use.
  - 6.    All new and existing hard surface floors will be stripped and waxed.

**1.02    PROJECT CONDITIONS**

- A.    Comply fully with Federal and local environmental and antipollution regulations.
  - 1.    Do not dispose of volatile wastes, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains.
  - 2.    Burning or burying of debris, rubbish, or other waste material on the premises is not permitted.

**PART 2      PRODUCTS**

**1.01    MATERIALS AND METHODS**

- A.    Use cleaning materials and methods which will not create hazards to health or property or cause damage to products and which are recommended by manufacturers of products to be cleaned.

**PART 3      EXECUTION**

**1.01    FINAL CLEANING**

- A.    General: Provide final cleaning operations. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of Work to the condition expected

from a commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

- B. Complete the following cleaning operations before requesting inspection for certification of Completion of the Project.
1. Clean the Project Site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and foreign substances.
  2. Sweep paved areas broom clean. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
  3. Remove petrochemical spills, stains, and other foreign deposits.
  4. Remove tools, construction equipment, machinery, and surplus material from the site.
  5. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
  6. All walls not newly painted shall be washed to clean readily removable dirt, markings, dust, and grime.
  7. Remove debris and surface dust from limited access spaces, including roofs, attics and similar spaces.
  8. (Not Used)
  9. (Not Used)
  10. (Not Used)
  11. (Not Used)
  12. (Not Used)
  13. Remove labels that are not permanent labels.
  14. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
  15. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  16. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  17. Replace disposable air filters and clean permanent air filters. Clean all exposed surfaces diffusers, registers, and grilles.
  18. Clean ducts, blowers, and coils if units were operated without filters during construction.
  19. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned out bulbs; defective and noisy starters in fluorescent fixtures, and defective dimming switches.



- 20. Leave the Project clean and ready for occupancy.
  
- C. Removal of Protection: Remove temporary protection and facilities installed during construction to protect previously completed installations during the remainder of the construction period. Repair any damage from removal.
  
- D. Compliances: Comply with governing regulations and safety standards for cleaning operations. Remove waste materials from the site and dispose of lawfully.
  - 1. Where extra materials of value remain after completion of associated Work, they become the District's property. Dispose of these materials as directed by the District.

END OF SECTION

## **SECTION 31 21 00**

### **UTILITY TRENCHING AND BACKFILL**

#### **PART 1 - GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Excavation, bedding, and backfill for underground water piping, gas piping, and associated structures.
- B. Provide labor, material, equipment, and services necessary to complete the backfilling and compacting as necessary for this project. Section includes, but is not limited to:
  - 1. Select Backfill Material
  - 2. Aggregate Base
  - 3. Detectable Tape
  - 4. Trench Excavation
  - 5. Pipe Bedding
  - 6. Trench Backfill
  - 7. Trench Surfacing

##### **1.2 RELATED SECTIONS**

- A. Section 32 50 00 – Restoration of Surfaces
- B. Section 33 10 00 – Water System
- C. Section 33 52 16.23 – Natural Gas Piping

##### **1.3 RELATED DOCUMENTS**

- A. Geotechnical Investigation for New Kindergarten Building prepared by Cleary Consultants, Inc., dated November 22 2013.
- B. ASTM
  - 1. D1557, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.
  - 2. D2321, Standard Practice for Underground Installation of Thermoplastic Pipe for Sewer and Other Gravity-Flow Applications.
- C. California Administrative Code, Title 24, Part 2 - Basic Building Regulations, Chapter 24, Excavations, Foundations, and Retaining Walls.
- D. Caltrans Standard Specifications, 2015
  - 1. Section 19, Earthwork
  - 2. Section 26, Aggregate Bases
  - 3. Section 39, Asphalt Concrete

- 4. Section 68, Subsurface Drains
  - 5. Section 90, Portland Cement Concrete
  - 6. Section 96, Geosynthetics
- E. CAL/OSHA, Title 8

#### **1.4 DEFINITIONS**

- A. AC: Asphalt Concrete
- B. ASTM: American Society for Testing and Materials
- C. Base: The layer placed between the subgrade and surface pavement in a paving system.
- D. Bedding: Material from bottom of trench to bottom of pipe
- E. CDF: Controlled Density Fill
- F. Engineered Fill:
  - 1. Soil or soil-rock material approved by the Project Manager and transported to the site by the Contractor in order to raise grades or to backfill excavations.
  - 2. Contractor shall provide sufficient tests, and a written statement that all materials brought onto the project site comply with specification requirements.
- G. Excavation: Consists of the removal of material encountered to subgrade elevations
- H. Initial Backfill: Material from bottom of pipe to 12 inches above top of pipe
- I. PCC: Portland Cement Concrete
- J. RCP: Reinforced Concrete Pipe
- K. Relative Compaction: In-place dry density of soil expressed as percentage of maximum dry density of same materials, as determined by laboratory test procedure ASTM D1557.
- L. Springline of Pipe: Imaginary line on surface of pipe at a vertical distance of ½ the outside diameter measured from the top or bottom of the pipe.
- M. Subgrade: The uppermost surface of an excavation or the top surface of a fill or backfill immediately below base.
- N. Subsequent Backfill: Material from 12 inches above top of pipe to subgrade of surface material or subgrade of surface facility or to finish grade.
- O. Trench Excavation: Removal of material encountered above subgrade elevations and within horizontal trench dimensions.

1. Authorized Trench Over-Excavation: Excavation below trench subgrade elevations or beyond indicated horizontal trench dimensions as shown on plans or authorized by the Geotechnical Engineer.
2. Unauthorized Trench Over-Excavation: Excavation below trench subgrade elevations or beyond indicated horizontal trench dimensions without authorization by the Geotechnical Engineer. Unauthorized excavation shall be without additional compensation.

P. Utility Structures:

1. Water and Gas valve boxes, vaults, etc.

## 1.5 SUBMITTALS

- A. Follow submittal procedures outlined in General Conditions.
- B. Test Reports: Submit the following report for import material directly to the Project Manager from the Owner's testing services:
  1. Compaction test reports for aggregate base.
- C. Samples:
  1. Provide samples to the Geotechnical Engineer prior to importing on site. Provide 20-pound samples of all imported trench bedding and backfill material sealed in airtight containers, tagged with source locations and suppliers of each proposed material. Do not import materials to Project without written approval of the Geotechnical Engineer and the Project Manager.
  2. Provide materials from same source throughout work. Change of source requires approval of the Geotechnical Engineer and the Project Manager.

## 1.6 QUALITY ASSURANCE

- A. Conform all work and materials to the recommendations or requirements of the Geotechnical Report and meet the approval of the Geotechnical Engineer.
- B. Conform all work to the appropriate portion(s) of the Caltrans Standard Specifications, Section 19, Earthwork.
- C. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM D 1557.
- D. The Geotechnical Engineer will perform observations and tests required to enable him to form an opinion of the acceptability of the trench backfill. Correct the trench backfill that, in the opinion of the Geotechnical Engineer, does not meet the requirements of these Technical Specifications and the Geotechnical Report.

## 1.7 PROJECT CONDITIONS

- A. Promptly notify the Project Manager of surface or subsurface conditions differing from those disclosed in the Geotechnical Report. First notify the Project Manager verbally to permit verification and extent of condition and then in writing. No claim for conditions differing from those anticipated in the Contract Documents and disclosed in the Geotechnical Report will be allowed unless Contractor has notified the Project Manager in writing of differing conditions prior to contractor starting work on affected items.
- B. Barricade open excavations and post with warning lights.
  - 1. Operate warning lights and barricades as required.
  - 2. Protect structures, utilities, sidewalks, pavements, and other facilities immediately adjacent to excavations, from damages caused by settlement, lateral movement, undermining, washout, and other hazards.
  - 3. Protect open, trenches, and utility structure excavations with fences, covers and railings to maintain safe pedestrian and vehicular traffic passage.
- C. Stockpile on-site and imported backfill material temporarily in an orderly and safe manner. Stockpiles shall be fenced off.
- D. Environmental Requirements:
  - 1. Protect existing storm drainage system from silt and debris resulting from construction activities. If contamination occurs, remove contamination at no cost to the District.
  - 2. Protect existing streams, ditches and storm drain inlets during work on this project.
- E. Protection of Subgrade: Do not allow equipment to pump or rut subgrade, stripped areas, footing excavations, or other areas prepared for project.
- F. Transport all excess soils materials by legally approved methods to disposal areas.
  - 1. Off haul all demolition debris and excess construction materials including concrete and asphalt.
  - 2. Any additional fill requirements shall be the responsibility of the Contractor.

## 1.8 EXISTING UTILITIES

- A. Locate existing underground utilities in the areas of work. For utilities that are to remain in place, provide adequate means of protection during excavation operations.
  - 1. Locating of existing underground utilities shall include but not be limited to pot-holing prior to the start of construction.
- B. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult Project Manager and/or utility agency immediately for directions.
  - 1. Cooperate with the Project Manager and public and private utility companies in keeping their respective services and facilities in operation.
  - 2. Repair damaged utilities to the satisfaction of the Project Manager.

- C. Do not interrupt existing utilities serving facilities occupied and used by the Project Manager or others, except when permitted in writing by the Project Manager and then only after acceptable temporary utility services have been provided. Provide temporary connections as necessary to not disrupt existing services.

**PART 2 - PRODUCTS**

**2.1 GENERAL**

- A. Import materials will be subject to approval of the Geotechnical Engineer.
- B. For approval of imported fill material, notify the Project Manager at least 7 days in advance of intention to import material.

**2.2 PIPE BEDDING AND INITIAL BACKFILL**

- A. ASTM D2321, Class IA, IB or II.
  - 1. Clean and free of clay, silt or organic matter.
- B. Permeable Material: In accordance with Section 68-2.02F of Caltrans Standard Specifications, Class 1, Type A or Class 2.
- C. Class 2 Aggregate Base: In accordance with Section 26 of Caltrans Standard Specifications, ¾ inch maximum.
- D. Sand: In accordance with Section 19-3.02F of Caltrans Standard Specifications.

**2.3 SELECT BACKFILL**

- A. Select backfill material shall be gravel, free of clay or organic matter and shall conform to the following gradation:

Sieve Size	Percentage Passing
1 inch	100
¾ inch	90 – 100
No. 4	35 – 60
No. 200	2 - 9

- B. For gas piping, select backfill shall be clean, graded building sand conforming to the following gradation:

Sieve Size	Percentage Passing
No. 4	100
No. 200	0 -5

**2.4 WARNING TAPE**

- A. Polyethylene plastic, acid- and alkali-resistant, polyethylene plastic warning tape manufactured specifically for warning and identification of buried utility lines. Provide

tape on rolls, 3 inch minimum width, color coded as specified below for the intended utility with warning and identification imprinted in bold black letters continuously over the entire tape length. Warning and identification to read, "CAUTION, BURIED (intended service) LINE BELOW" or similar wording. Color and printing shall be permanent, unaffected by moisture or soil.

1. Warning Tape Color Codes
  - a. Red: Electric
  - b. Yellow: Gas, Oil; Dangerous Materials
  - c. Orange: Telephone and Other Communications
  - d. Blue: Water Systems
  - e. Green: Sewer Systems
2. Warning Tape: Acid and alkali-resistant polyethylene plastic tape conforming to the width, color, and printing requirements specified above. Minimum thickness of tape shall be 0.003 inch. Tape shall have a minimum strength of 1500 psi lengthwise, and 1250 psi crosswise, with a maximum 350 percent elongation.

## **2.5 TRACER WIRE FOR NON-METALLIC PIPING**

- A. Tracer wire shall be insulated single strand, solid copper with a minimum of 12 AWG.

## **2.6 SUBSEQUENT BACKFILL**

- A. General: On-site soils are considered suitable for use as fill provided the materials are placed in accordance with Geotechnical Recommendations. Highly expansive soils shall not be used as select structural fill, or used as backfill for trenches located within hardscape areas.
- B. Imported fill soils, if required, should be predominantly granular in nature, and should be free of organics, debris, or rocks over 3 inches in size, and shall be approved by the Geotechnical Engineer before importing to the site. Imported non-expansive soils shall have a Plasticity Index less than twelve (12) as determined by ASTM D424, an R-value of at least 25 as determined by the procedure set forth in California Test Method No. 301, and shall meet the following gradation requirements:
  1. Maximum particle size of 4 inches,
  2. Percent passing 1-1/2" screen 50-100%,
  3. Percent passing No. 4 screen 20-100%,
  4. Percent passing No. 200 screen 10-30%.
- C. Import fill shall be considered non-hazardous per Department of Toxic Substances Control guidelines (DTSC, 2017) and non-corrosive per Caltrans Corrosion Guidelines (Caltrans, 2015).

## **2.7 CONTROLLED DENSITY FILL (CDF) (IN TRENCHES)**

- A. Provide non-structural CDF, from bottom of trench to finish subgrade of subbase or base material, that can be excavated by hand and produce unconfined compressive

28-day strengths from 50-psi to a maximum of 150-psi. Provide aggregate no larger than 3/8 inch top size. The 3/8 inch aggregate shall not comprise more than 30% of the total aggregate content.

- B. Cement: Conform to the standards as set forth in ASTM C150, Type II Cement.
- C. Fly Ash: Conform to the standards as set forth in ASTM C618, for Class F pozzolan. Do not inhibit the entrainment of air with the fly ash.
- D. Air Entraining Agent: Conform to the standards as set forth in ASTM C260.
- E. Aggregates need not meet the standards as set forth in ASTM C33. Any aggregate, producing performances characteristics described herein will be accepted for consideration. The amount of material passing a #200 sieve shall not exceed 12% and no plastic fines shall be present.
- F. Provide CDF that is a mixture of cement, Class F pozzolan, aggregate, air entraining agent and water. CDF shall be batched by a ready mixed concrete plant and delivered to the job site by means of transit mixing trucks.
- G. The Contractor shall determine the actual mix proportions of the controlled density fill to meet job site conditions, minimum and maximum strengths, and unit weight. Entrained air content shall be a minimum of 4.0%. The actual entrained air content shall be established for each job with the materials and aggregates to be used to meet the placing and unit weight requirements. Entrained air content may be as high as 20% for fluidity requirements.
- H. Mix design shall meet the Geotechnical Engineer's approval.

## **2.8 GEOSYNTHETICS**

- A. Filter Fabric:
  - 1. Filter Fabric: Section 96-1.02 of Caltrans Standard Specifications.
  - 2. Mirafi 140N, Mirafi Inc., or approved equal.

## **PART 3 - EXECUTION**

### **3.1 GENERAL**

- A. Comply with the recommendations of the Geotechnical Engineer.
- B. Protect existing trees to remain. No grading is permitted under the drip line of protected trees.
- C. Excavations for appurtenant structures, such as, but not limited to, manholes, transition structures, junction structure, vaults, valve boxes, catch basins, thrust blocks, and boring pits, shall be deemed to be in the category of trench excavation.



- D. Unless otherwise indicated in the Plans, all excavation for pipelines shall be open cut.
- E. Prior to commencement of work, become thoroughly familiar with site conditions.
- F. In the event discrepancies are found, immediately notify the Project Manager in writing, indicating the nature and extent of differing conditions.
- G. Backfill excavations as promptly as work permits.
- H. Do not place engineered fill or backfill until rubbish and deleterious materials have been removed and areas have been approved by the Project Manager.
- I. Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below.
- J. In excavations, use satisfactory excavated or borrow material.
- K. Under grassed areas, use satisfactory excavated or borrow material.

### **3.2 SITE PREPARATION**

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, which are to remain, from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Protect existing storm drainage system from silt and debris resulting from construction activities. If contamination occurs, remove contamination at no cost to the Project Manager.

### **3.3 EXISTING UTILITIES**

- A. Identify the location of existing utilities.
  - 1. Prior to trenching, the Contractor shall excavate (pothole) where new lines cross other utilities of uncertain depth and determine the elevation of the utility in question to ensure that the new line will clear the potential obstruction.
  - 2. The Contractor shall procure the services of an underground locator service for assistance in locating existing utilities.
  - 3. If, after the excavation, a crossing utility does present an obstruction, then the line and grade of the new line will be adjusted as directed by the Project Manager to clear the utility.
- B. Protect all existing utilities to remain in operation.
- C. Movement of construction machinery and equipment over existing pipes and utilities during construction shall be at Contractor's risk.

- D. Excavation made with power-driven equipment is not permitted within 2 feet of any known utility or subsurface structure.
  - 1. Use hand or light equipment for excavating immediately adjacent to known utilities or for excavations exposing a utility or buried structure.
  - 2. Start hand or light equipment excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured.
  - 3. Support uncovered lines or other existing work affected by excavation until approval for backfill is obtained.
  - 4. Report damage of utility line or subsurface structures immediately to the Project Manager.
- E. Backfill trenches resulting from utility removal in lifts of 8 inches maximum (loose material).

### **3.4 TRENCH EXCAVATION**

- A. General
  - 1. Excavation shall include removal of all water and materials that interfere with construction. The Contractor shall remove any water which may be encountered in the trench by pumping or other methods during the pipe laying, bedding and backfill operations. Material shall be sufficiently dry to permit approved jointing.
  - 2. Excavation shall include the construction and maintenance of bridges required for vehicular and pedestrian traffic, support for adjoining utilities.
  - 3. The Contractor shall be responsible to safely direct vehicular and pedestrian traffic through or around his/her work area at all times.
  - 4. The Contractor shall relocate, reconstruct, replace or repair, at his/her own expense, all improvements which are in the line of construction or which may be damaged, removed, disrupted or otherwise disturbed by the Contractor.
- B. Existing Paving and Concrete:
  - 1. Existing pavement over trench shall be sawcut, removed, and hauled away from the job. Existing pavement shall be neatly sawcut in uniform straight line.
  - 2. Existing concrete over the trench shall be sawcut to a full depth in straight lines, at a minimum distance of 12 inches beyond the edge of the trench, either parallel to the curb or at right angles to the alignment of the sidewalk. Sawcut back to nearest control or expansion joint and do not overcut. Contractor to provide rebar reinforcement if present in existing concrete. Dowel new concrete into existing concrete per the detail in the project drawings.
  - 3. Boards or other suitable material shall be placed under equipment outrigging to prevent damage to paved surfaces.
- C. Trench Width:
  - 1. The maximum allowable trench widths at the top of the all pipe materials outside diameter of barrel pipe plus 18 inches. shall be as follows:
    - a. The maximum trench width shall be inclusive of all shoring.

- b. If the maximum trench width is exceeded, the State's representative may direct the Contractor to encase or cradle the pipe in concrete at no additional charge.
    2. For pipes 3 inch diameter and larger, the free working space on each side of the pipe barrel shall not be less than 6 inches.
- D. Excavation Width at Springline of Pipe:
  1. Up to a nominal pipe diameter of 24 inches: Minimum of twice the outside pipe diameter, or as otherwise allowed or required by the Geotechnical Engineer.
- E. Open Trench:
  1. The maximum length of open trench shall be 300 feet or the distance necessary to accommodate the amount of pipe installed in a single day, whichever is greater. No trench shall be left open at the end of the day.
  2. Provisions for trench crossings and free access shall be made at all street crossings, driveways, water gate valves.
  3. Excavate by hand or machine. For gravity systems begin excavation at the outlet end and proceed upstream. Excavate sides of the trench parallel and equal distant from the centerline of the pipe. Hand trim excavation. Remove loose matter.
  4. Excavation Depth for Bedding: Minimum of 6 inches below bottom of pipe or as otherwise allowed or required by the Geotechnical Engineer, except that bedding is not required for nominal pipe diameters of 2 inches or less.
  5. Over-Excavations: Backfill trenches that have been excavated below bedding design subgrade, with approved bedding material.
  6. Where forming is required, excavate only as much material as necessary to permit placing and removal of forms.
  7. Grade bottom of trench to provide uniform thickness of bedding material and to provide uniform bearing and support for pipe along entire length. Remove stones to avoid point bearing.
- F. Excavated Material:
  1. All excavated material not required for backfill shall be immediately removed and properly disposed of in a legal manner by the Contractor.
  2. Material excavated in streets and roadways shall be laid alongside the trench no closer than 2 feet from the trench edge and kept trimmed to minimize inconvenience to public traffic.
  3. Provisions shall be made whereby all storm and wastewater can flow uninterrupted in gutters or drainage channels.

### **3.5 CONTROL OF WATER AND DEWATERING**

- A. Be solely responsible for dewatering trenches and excavations and subsequent control of ground and surface water. Provide and maintain such pumps or other equipment as may be necessary to control ground water and seepage to the satisfaction of the Geotechnical Engineer and the Project Manager until backfilling is completed.

- B. Dewater during backfilling operation so that groundwater is maintained a least one foot below level of compaction effort.
- C. Obtain the Geotechnical Engineer's approval for proposed control of water and dewatering methods.
- D. Reroute surface water runoff away from open trenches and excavations. Do not allow water to accumulate in trenches and excavations.
- E. Maintain dewatering system in place until dewatering is no longer required.

### **3.6 BRACING AND SHORING**

- A. Conform to California and Federal OSHA requirements.
- B. Place and maintain such bracing and shoring as may be required to support the sides of the excavations for the proper protection of workmen; to facilitate the work; to prevent damage to the pipes and appurtenances being constructed; and to prevent damage to adjacent structures or facilities. Remove all bracing and shoring upon completion of the work.
- C. Be solely responsible for all bracing and shoring and, if requested by the Project Manager, submit details and calculations to the Project Manager. The Project Manager may forward the submittal to the Geotechnical Engineer, the Consulting Engineer and/or the California Division of Industrial Safety for their review. The Contractor's submittal shall include the basic design, assumed soils conditions and estimation of forces to be resisted, together with plans and specifications of the materials and methods to be used, and shall be prepared by a civil engineer or structural engineer registered in California. No excavations in trench section or around structures shall precede a response to the submittal by the Project Manager.
- D. Be solely responsible for installing and extracting the sheathing in a manner which will not disturb the line, grade, or backfill compaction or operation of the utility being installed or adjacent utilities and facilities.

### **3.7 PIPE BEDDING**

- A. Obtain approval of bedding material from the Geotechnical Engineer.
- B. Accurately shape bedding material to the line and grade called for on the Plans. Carefully place and compact bedding material to the elevation of the bottom of the pipe in layers not exceeding 8 inches in loose thickness. Compact bedding material at optimum water content to 90% relative compaction unless specified otherwise on the Plans or by the Geotechnical Engineer. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Engineer. Jetting or ponding of bedding material will not be permitted.

- C. Stabilization of Trench Bottom: When the trench bottom is unstable due to wet or spongy foundation, trench bottom shall be stabilized with gravel or crushed rock. The State's inspector will determine the suitability of the trench bottom and the amount of gravel or crushed rock needed to stabilize a soft foundation. Soft material shall be removed and replaced with gravel or crushed rock as necessary.
- D. Placement of Bedding Material: The trench bottom shall be cleaned to remove all loose native material prior to placing select backfill material. Sufficient select backfill material shall be placed in trench and tamped to bring trench bottom up to grade of the bottom of pipe. The relative compaction of tamped material shall be not less than 90 percent. It is the intention of these requirements to provide uniform bearing under the full length of pipe to a minimum width of 60 percent of the external diameter.

### **3.8 BACKFILLING**

- A. Initial Backfill:
  - 1. Obtain approval of backfill material from Geotechnical Engineer.
  - 2. Bring initial backfill up simultaneously on both sides of the pipe, so as to prevent any displacement of the pipe from its true alignment. Carefully place and compact initial backfill material to an elevation of 12 inches above the top of the pipe in layers not exceeding 8 inches in loose thickness. Compact bedding material at optimum water content to 90% relative compaction unless specified otherwise on the Plans or by the Geotechnical Engineer. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Engineer. Jetting or ponding of initial backfill material will not be permitted.
- B. Pipe Detection: In trenches containing pressurized plastic pipes, tracer wire shall be placed directly above the pipe and shall be connected to all valves, existing exposed tracer wires, and other appurtenances as appropriate.
- C. Installation of Tracer Wire:
  - 1. Install a continuous length of tracer wire for the full length of each run of nonmetallic pipe.
  - 2. Attach wire to top of pipe in such manner that it will not be displaced during construction operations.
  - 3. Form a mechanically and electrically continuous line throughout the pipeline, extending to the nearest valve or other pipeline appurtenance. Extend the wire up the outside of the valve box/riser and cut a hole that is 8 inches from the top, extend a 12 inch wire lead to the inside of the box. At other pipeline appurtenances, terminate the 12 inch wire lead inside the enclosure.
  - 4. Splice wire with a splicing device consisting of and electro-tin plated seamless copper sleeve conductor. Install as recommended by the manufacturer. Wrap splices and damaged insulation with electrician's tape.
- D. Installation of Warning Tape
  - 1. Install tape approximately 1 foot above and along the centerline of the pipe.
  - 2. Where tape is not continuous lap tape ends a minimum of 2 feet.

- E. Subsequent Backfill:
  - 1. Above the level of initial backfill, the trench shall be backfilled with non-expansive native material from trench excavation or with imported select backfill material (Contractor's option). Subsequent backfill shall be free of vegetable matter, stones or lumps exceeding 3 inches in greatest dimension, and other unsatisfactory material.
  - 2. Bring subsequent backfill to subgrade or finish grade as indicated. Carefully place and compact subsequent backfill material to the proper elevation in layers not exceeding 8 inches in loose thickness. Compact bedding material at optimum water content to 90% relative compaction, except that the upper 36 inches in areas subject to vehicular traffic shall be compacted to at least 95% relative compaction, unless specified otherwise on the Plans or by the Geotechnical Engineer. Compact by pneumatic tampers or other mechanical means approved by the Geotechnical Engineer. Jetting or ponding of subsequent backfill material will not be permitted.
- F. Do not use compaction equipment or methods that produce horizontal or vertical earth pressures that may cause excessive pipe displacement or damage the pipe. Jetting of trench backfill is not permitted.
- G. Utility backfill shall be inspected and tested by the Geotechnical Engineer during placement. Cooperate with the Geotechnical Engineer and provide working space for such tests in operations. Backfill not compacted in accordance with these specifications shall be re-compacted or removed as necessary and replaced to meet the specified requirements, to the satisfaction of the Geotechnical Engineer and the Project Manager prior to proceeding with the Project.
- H. Compaction testing shall be in accordance with California Test Method ASTM D1556 or D1557.

### **3.9 CLEANUP**

- A. Upon completion of utility earthwork all lines, manholes catch basins, inlets, water meter boxes and other structures shall be thoroughly cleaned of dirt, rubbish, debris and obstructions of any kind to the satisfaction of the Project Manager.

**END OF SECTION**

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## **SECTION 32 50 00**

### **RESTORATION OF SURFACES**

#### **PART 1 - GENERAL**

##### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.
- A. Geotechnical Report:
  - 1. Geotechnical Investigation for New Kindergarten Building prepared by Cleary Consultants, Inc., dated November 22 2013.

##### **1.2 SUMMARY**

- A. Section includes but is not limited to:
  - 1. General surface restoration.
  - 2. Asphalt concrete surface restoration.
  - 3. Concrete surface restoration.
  - 4. Pavement Marking
  - 5. Landscape/Planting restoration.
- B. Related Sections:
  - 1. Section 31 21 00 – Utility Trenching and Backfill

#### **PART 2 - PRODUCTS**

##### **2.1 MATERIALS**

- A. Refer to Section 31 21 00 – Utility Trenching and Backfill

#### **PART 3 - EXECUTION**

##### **3.1 GENERAL**

- A. Surface restoration shall be in kind or better.

##### **3.2 ASPHALT CONCRETE SURFACE RESTORATION**

- A. The base course for permanent asphalt concrete surface restoration shall be Class II Aggregate Base, equal in depth to the existing pavement structural section, but not less than 8 inches in depth.
- B. The wearing surface for permanent surface restoration shall be asphalt concrete equal in thickness to the existing pavement, but not less than 3 inches in depth. The asphalt



concrete shall be Type B Asphalt Concrete, in accordance with Section 39, Asphalt Concrete of the Caltrans Standard Specifications, 2015.

### **3.3 CONCRETE SURFACE RESTORATION**

- A. The base for permanent concrete surface restoration shall be Class II Aggregate base, equal in depth to the existing section, but not less than 6 inches in depth.
- B. The wearing surface for permanent concrete surface restoration shall be concrete equal in thickness to the existing concrete section, but not less than 4 inches in depth. The concrete shall be in accordance with Section 90, Portland Cement Concrete of the Caltrans Standard Specifications, 2015.

### **3.4 PAVER RESTORATION**

- A. The base for paver surface restoration shall be sand bedding to a depth to match existing and compacted using a vibratory compacter.
- B. The pavers shall be stockpiled and replaced to match the existing adjacent pavers.

### **3.5 PAVEMENT MARKING RESTORATION**

- A. Replace pavement marking disturbed by construction operations/activity to the satisfaction of the Project Manager in kind.

### **3.6 LANDSCAPE RESTORATION**

- A. Replace landscaping, planting, trees, shrubs, ground cover, irrigations systems disturbed by construction operations/activity to the satisfaction of the Project Manager in kind or better.
- B. Disturbed lawn areas shall be replaced with Sod in kind or better to the satisfaction of the Project Manager.

**END OF SECTION**

## **SECTION 33 10 00**

### **WATER SYSTEM**

#### **PART 1 - GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Site water distribution system for domestic services up to 5 feet of any on-site building being served.

##### **1.2 RELATED SECTIONS**

- A. Section 31 21 00 – Utility Trenching and Backfill
- B. Section 32 50 00 – Restoration of Surfaces

##### **1.3 RELATED DOCUMENTS**

- A. ASME
  - 1. ASME A112.1.2: Air Gaps in Plumbing Systems (for Plumbing Fixtures and Water Connect Receptors)
  - 2. ASME B1.20.1: Pipe Threads, General Purpose, Inch
  - 3. ASME B16.18: Cast Copper Alloy Solder Joint Pressure Fittings
  - 4. ASME B16.22: Wrought Copper and Copper Alloy Solder – Joint Pressure fittings
  - 5. ASME B16.26: Cast Copper Alloy Fittings for Flared Copper Tubes
- B. ASTM
  - 1. ASTM B61: Standard Specification for Steam or Valve Bronze Castings
  - 2. ASTM B62: Standard Specification for Composition Bronze or Ounce Metal Castings
  - 3. ASTM B88: Standard Specification for Seamless Copper Water Tube
  - 4. ASTM C94: Standard Specification for Ready-Mixed Concrete
- C. AWWA
  - 1. C509: Resilient-Seated Gate Valves for Water Supply Service
  - 2. C550: Protective Interior Coatings for Valves and Hydrants
  - 3. C651: Disinfecting Water Mains
  - 4. C800: Underground Service Line Valves and Fittings
  - 5. C901: Polyethylene (PE) Pressure Pipe and Tubing, ½ inch through 3 inch for Water Service
- D. National Sanitation Foundation (NSF)
  - 1. NSF 61: Drinking Water System Components-Health Effects

#### **1.4 DEFINITIONS**

- A. AASHTO: American Association of State Highway and Transportation Officials
- B. ASTM: American Society for Testing Materials
- C. AWWA: American Waterworks Association
- D. NSF: National Sanitation Foundation
- E. PCC: Portland cement concrete
- F. PE: Polyethylene

#### **1.5 SYSTEM PERFORMANCE REQUIREMENTS**

- A. Minimum Working Internal Pressures: As indicated on Plans. 20 PSI
- B. External Load: Earth load indicated by depth of cover plus AASHTO H20 live load unless indicated otherwise.

#### **1.6 SUBMITTALS**

- A. Follow submittal procedure outlined in General Conditions.
- B. Product Data: Manufacturer's literature and data, including, where applicable, sizes, pressure rating, rated capacity, listing/approval stamps, labels, or other marking on equipment made to the specified standards for materials, and settings of selected models, for the following:
  - 1. Piping materials and fittings
  - 2. Gaskets, couplings, sleeves, and assembly bolts and nuts
  - 3. Restrained pipe fittings
  - 4. Gate valves
  - 5. Valve boxes, meter boxes, frames and covers
  - 6. Thrust block concrete mix
  - 7. Identification materials and devices
- C. Field test reports: Indicate and interpret test results for compliance with the Project requirements.

#### **1.7 QUALITY ASSURANCE**

- A. Comply with requirements of utility supplying water. Do not operate existing valves or tap existing piping without written permission and/or presence of utility company representative.
- B. Comply with the following requirements and standards:
  - 1. NSF 61: "Drinking Water System Components-Health Effects" for materials for potable water.

- C. Provide listing/approval stamp, label, or other marking on piping and specialties made to a specified standard.

## **1.8 MATERIAL DELIVERY, STORAGE AND HANDLING**

- A. Preparation for Transport: Prepare valves, according to the following:
  - 1. Ensure that valves are dry and internally protected against rust and corrosion.
  - 2. Protect valves against damage to threaded ends and flange faces.
  - 3. Set valves in best position for handling. Set valves closed to prevent rattling.
- B. Deliver piping with factory-applied end-caps. Maintain end-caps through shipping, storage and handling to prevent pipe end damage and to prevent entrance of dirt, debris and moisture.
- C. During Storage: Use precautions for valves, according to the following.
  - 1. Do not remove end protectors, unless necessary for inspection, then reinstall for storage.
  - 2. Protection from Weather: Store indoors and maintain temperature higher than ambient dew-point temperature. Store indoors and maintain temperature higher than ambient dew point temperature. Support off the ground or pavement in watertight enclosures when outdoor storage is necessary.
- D. Do not store plastic pipe and fittings in direct sunlight.
- E. Protect pipe, fittings, flanges, seals and specialties from moisture, dirt and damage.
- F. Protect linings and coatings from damage.
- G. Handle precast boxes, vaults and other precast structures according to manufacturer's written instructions.
- H. Protect imported bedding and backfill material from contamination by other materials.

## **PART 2 - PRODUCTS**

### **2.1 COPPER PIPE: SIZES ¾ INCH THROUGH 2 INCH**

- A. Pipe and Fittings: Provide Type K soft or hard copper pipe, seamless water tube, annealed conforming to ASTM B88.
- B. Cast copper alloy solder-joint pressure fittings shall conform to ASME B16.18.
- C. Wrought copper solder-joint pressure fittings or wrought copper alloy unions shall conform to ASME B16.22
- D. Cast copper alloy flare fittings shall conform to ASME B16.26.
- E. Wrought copper alloy body, hexagonal stock, metal-to-metal seating surfaces, and solder-joint threaded ends shall conform to ASME B1.20.1.

- F. Compression connections shall be Mueller 110, Ford or approved equal.
- G. Joints: Restrain by couplings.

## **2.2 PE PLASTIC PIPE: SIZES ½ INCH THROUGH 3 INCH**

- A. Pipe and Fittings: Provide PE3408, Pressure Class 200, DR 9 conforming to AWWA C901. PPIPE, or approved equal.
- B. Cast Copper Fittings shall conform to ASME B16.18.
- C. Cast Copper Compression Fittings and connections shall be Mueller 110, Ford or approved equal.
- D. Joints: Restrain with clamps or heat-fusion.

## **2.3 GATE VALVES**

- A. Provide valves conforming to AWWA C500 or AWWA C509
- B. Valves shall be resilient-seated, with non-rising stem, gray or ductile-iron body and bonnet, with bronze or gray or ductile-iron gate, bronze stem and square stem operating nut unless noted otherwise.
- C. All bolts, nuts and washers, except operating nut, shall be stainless steel.
- D. Stem operating nut to be 2 inches square and open counter-clockwise.
- E. Stem extensions shall be installed to bring the stem operating nut to within 2 feet of finish grade where the depth from finish grade to the stem operating nut exceeds 4 feet.
- F. Provide protective epoxy interior and exterior coating according to AWWA C550 and manufacturer's recommendations.
- G. For the domestic water system, valves shall also conform to NSF 61.
- H. Service valve Valves and fittings, 2 inch and smaller shall be in accordance with AWWA C800
- I. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the project include, but are not limited to, the following:
  - 1. Mueller Company
  - 2. M&H Valve Company
  - 3. Crane Company, or approved equal

## **2.4 VALVE BOXES, METER BOXES, FRAMES AND COVERS**

- A. Water Valve Box: Provide pre-cast concrete valve box for each buried valve. Provide box with steel or cast iron traffic cover marked "WATER". Christy Model G5 with G5C cover or approved equal.
- B. Valve or Meter Boxes: Contractor shall verify box size required for water system appurtenances as shown in the Construction Documents. Provide a precast concrete utility box for each buried appurtenance. Provide a traffic-rated lid for H2O loading. A non-traffic rated lid may be used for boxes located in landscape areas. Christy, or approved equal.

## **2.5 THRUST BLOCKS**

- A. Use concrete conforming to ASTM C94 having a minimum compressive strength of 2,500 psi at 28 days; or use concrete of a mix not leaner than one part cement, 2 ½ parts sand, and 5 parts gravel, having the same minimum compressive strength.
- B. Provide thrust blocks or mechanical pipe restraints at all fittings and changes in angle, alignment or elevation.
- C. Where depth or location of existing structures prohibit the use of standard thrust blocks, gravity blocks may be used.

## **PART 3 - EXECUTION**

### **3.1 PIPE INSTALLATION**

- A. Install underground, water piping buried at least 36 inches below finished grade.
- B. Excavation, Bedding, Backfill, and Compaction: Section 31 21 00 – Utility Trenching and Backfill and Section 32 50 00 "Restoration of Surfaces".
- C. Handling: Carefully handle during loading, hauling, unloading and placing operations to avoid breakage or damage. Use strap type slings for lifting and placing; no chains or hooks will be permitted. Comply with manufacturer's recommendations.
- D. Pipe laying and jointing:
  - 1. Provide proper facilities for lowering sections of pipe into trenches.
  - 2. Do not drop or dump pipe, fittings, valves, or any other water line material into trenches.
  - 3. Cut pipe accurately to length established at the site and work into place without springing or forcing. Replace any pipe or fitting that does not allow sufficient space for proper installation of jointing material.
  - 4. Blocking or wedging between bells and spigots will not be permitted. Lay bell-and-spigot pipe with the bell end pointing in the direction of laying.
  - 5. Grade the pipeline in straight lines; avoid the formation of dips and low points.
  - 6. Support pipe at proper elevation and grade.

7. Provide secure firm, uniform support. Wood support blocking will not be permitted.
  8. Lay pipe so that the full length of each section of pipe and each fitting rests solidly on the pipe bedding; excavate recesses to accommodate bells, joints, and couplings.
  9. Provide anchors and supports where indicated and where necessary for fastening work into place.
  10. Make proper provision for expansion and contraction of pipelines.
  11. Keep trenches free of water until joints have been properly made.
  12. Do not lay pipe when conditions of trench or weather prevent proper installation.
  13. All fittings shall be blocked with appropriately sized thrust blocks as shown on the Plans.
- E. Installation of Tracer Wire:
1. Install a continuous length of tracer wire for the full length of each run of nonmetallic pipe.
  2. Attach wire to top of pipe in such manner that it will not be displaced during construction operations. See trenching details in the Civil drawings for more information about connecting to pipe.
  3. Form a mechanically and electrically continuous line throughout the pipeline, extending to the nearest valve or other pipeline appurtenance. Extend the wire up the outside of the valve box/riser and cut a hole that is 8 inches from the top, extend a 12 inch wire lead to the inside of the box. At other pipeline appurtenances, terminate the 12-inch wire lead inside the enclosure.
  4. Splice wire with a splicing device consisting of an electro-tin plated seamless copper sleeve conductor. Install as recommended by the manufacturer. Wrap splices and damaged insulation with electrician's tape.
- F. Installation of Warning Tape
1. Install tape approximately 1 foot above and along the centerline of the pipe.
  2. Where tape is not continuous, lap tape ends a minimum of 2 feet.
- G. Curved Alignment: When necessary to conform to the alignment specifically indicated, lay pipe on a curved alignment by means of asymmetrical closure of joints or bending of the pipe barrel. If necessary, use shorter than the standard lengths of pipe to achieve curvature specified. Do not exceed the recommendations of the pipe manufacture for deflections at the joints or pipe bending.
- H. Connections to Existing Lines:
1. Make connections to existing water lines after approval is obtained and with a minimum interruption of service on the existing line.
  2. Make connections to existing lines under pressure in accordance with the recommended procedures of a manufacturer of pipe of which the line being tapped is made.
- I. Closure: Close open ends of pipes and appurtenance openings at the end of each day's work or when work is not in progress.

### **3.2 INSTALLATION OF POLYETHYLENE PIPING**

- A. Install pipe, fittings, and appurtenances in accordance with manufacturer's recommendations.
  
- B. Jointing:
  - 1. Provide mechanical joints, compression fittings, or flanges as recommended by the manufacturer.
  - 2. Jointing shall be performed using proper equipment and machinery by trained and certified personnel.
  - 3. Joints, fittings and tools shall be clean and free of burrs, oil, and dirt.
  - 4. Butt fusion:
    - a. Pipe ends shall be faced to establish clean, parallel mating surfaces.
    - b. Align and securely fasten the components to be joined squarely between the jaws of the joining machine.
    - c. Heat the ends of the pipe to the pipe manufacturer's recommended temperature interface pressure and time duration. A pyrometer or other surface temperature-measuring device should be used to insure proper temperature of the heating tool. Temperature indicating crayons shall not be used on a surface which will come into contact with the pipe or fitting.
    - d. Prevent molten plastic from sticking to the heater faces. Molten plastic on the heater faces shall be removed immediately according to the tool manufacturer's instructions.
    - e. Bring the molten ends together with sufficient pressure to properly mix the pipe materials and form a homogeneous joint. Hold the molten joint under pressure until cooled adequately to develop strength. Refer to the manufacturer's recommendations for temperature, pressure, holding, and cooling times.
    - f. Remove the inside bead from the fusion process using Manufacturer's recommended procedure.

### **3.3 INSTALLATION OF VALVES**

- A. Gate Valves
  - 1. Install gate valves conforming to AWWA C500 and UL 262 in accordance with the requirements of AWWA C600 for valve-and-fitting installation and with the recommendations of the Appendix (Installation, operation, and Maintenance of Gate Valves) to AWWA C509.
  - 2. Install gate valves conforming to AWWA C509 in accordance with the requirements of AWWA C600 for valve-and-fitting installation and with the recommendations of the Appendix (Installation, Operation, and Maintenance of Gate Valves) to AWWA C509.
  - 3. Install gate valves on PVC water mains in addition in accordance with the recommendations for appurtenance installation in AWWA Manual M23.
  
- B. Joints:



1. Valves on PE Pipe: Mechanical joint valves for buried locations. Flanged-end valves for installation in vaults/pits.

### **3.4 INSTALLATION OF VALVE AND METER BOXES**

- A. Boxes shall be centered over the appurtenance so as not to transmit shock or stress. Covers shall be set flush with the surface of the finished pavement, or as shown on the Plans. Backfill shall be placed around the boxes and compacted to the specified level in a manner that will not damage or displace the box from proper alignment or grade. Misaligned boxes shall be excavated, plumbed, and backfilled at no additional cost to the Owner.

### **3.5 ANCHORAGE INSTALLATION**

- A. Mechanically Restrained Joints: Install where indicated for lengths indicated in accordance with manufacturer's instructions.
- B. PCC Thrust Blocks: Install where required and as indicated. Bearing area indicated is to be against undisturbed earth. Allow a minimum of 24 hours curing time before introducing water into the pipeline and allow a minimum of 7 days curing time before pressure testing.

### **3.6 CONNECTION TO EXISTING**

- A. Contractor shall submit a work plan delineating the work sequence and duration of each task.
- B. The Contractor to submit a contingency plan in case work extends beyond the allowable shutdown duration
- C. Contractor to notify Project Manager 48 hours prior to shutdown.
- D. Prior to shutdown the Contractor shall have the following:
  1. Approved submittals for the work to be done
  2. Approved work plan
  3. Approved contingency plan
  4. The material, tools and equipment necessary to do the work, including pumps, generator, lighting, etc.
- E. No work shall be done within two weeks from a wet weather event.
- F. Contractor to check the weather (NOAA website) and plan work during dry weather period.

### **3.7 HYDROSTATIC PRESSURE AND LEAKAGE TEST**

- A. General:
  1. Provide all necessary materials and equipment, including water.

2. Backfill all trenches sufficient to hold pipe firmly in position.
  3. Allow time for thrust blocks to cure prior to testing.
  4. Flush all pipes prior to testing to remove all foreign material.
  5. Perform pressure and leakage test concurrently.
  6. Apply test pressure by means of a pump connected to the pipe.
  7. Base test pressure on the elevation of the lowest point in the line.
  8. Fill each closed valve section or bulk-headed section slowly. Expel air from section being tested by means of permanent air vents installed at high points or by means of temporary corporation cocks installed at such points. Remove and plug the temporary corporation cocks at the conclusion of the test.
  9. Ensure the release of air from the line during filling, and prevent collapse due to vacuum when dewatering the line.
  10. The pressure test on mortar-lined pipe shall not begin until the pipe has been filled with water for at least 24 hours to allow for absorption in the cement mortar lining.
  11. Allow the system to stabilize at the test pressure before conducting the leakage test.
  12. Do not operate valves in either the opening or closing direction at differential pressures above the valves rated pressure.
  13. Maintain test pressure as specified for type of pipe being tested.
  14. Pressure Test: Examine any exposed pipe, fittings, valves, hydrants and joints during the test, if no leaks are observed the section of line has passed the pressure test. If leaks are observed, repair any damaged or defective pipe, fittings, valves, or hydrants, and repeat the pressure test.
  15. Leakage Test: Perform as specified hereafter for the type of pipe being installed.
- B. Preparation for Test
1. Vents shall be provided at the high points of the system and drains provided where means of venting or draining do not exist.
  2. Remove or block off, all relief valves, rupture discs, alarms, control instruments, etc. that shall not be subjected to the test pressure.
  3. All discs, balls, or pistons from check valves shall be removed if they interfere with filling of the system. Open all valves between inlet and outlet of the section to be tested.
  4. Connect pump and provide temporary closures for all of the external openings in the system. Use caution to insure that the closures are properly designed and strong enough to withstand the test pressure.
  5. A joint previously tested in accordance with this specification may be covered or insulated.
  6. Expansion joints shall be provided with temporary restraint for additional pressure under test or shall be isolated from the test.
  7. Flanged joints, where blanks are inserted to isolate equipment during the test, need not be tested.
- C. PE Pipe Leakage Test:

1. The pipe shall be subjected to a hydrostatic pressure of 50 percent above the normal operating pressure, or 150 psi, whichever is greater. In no case shall the pressure be allowed to exceed the design pressure for pipe, appurtenances, or thrust restraints.
2. Apply the test pressure and allow the pipe to stand, without makeup pressure, for sufficient time to allow for diametric expansion or pipe stretching to stabilize, approximately two to three hours.
3. After the above stabilization has occurred, return the section being tested to the test pressure. Hold the test pressure for four hours. If the pressure in the test section drops, and it is determined the drop may be the result of expansion resulting from increasing temperature, a limited amount of additional water may be added to bring the pressure back to the test pressure. Allowable amounts of make-up water, to compensate for expansion due to increasing temperature, are as shown in the following table. Make-up water is only allowed during this final test period and not during the initial stabilization described in the previous paragraph. If the additional water added is less than the allowable shown in the table and there are no visual leaks or significant pressure drops, the tested section passes the test.

Nominal Pipe Size (in.) Test	Allowance for Expansion (U.S. Gals./100 Feet of Pipe)		
	1-Hour Test	2-Hour Test	3-Hour Test
3	0.10	0.15	0.25
4	0.13	0.25	0.40
6	0.30	0.60	0.90
8	0.50	1.0	1.50
10	0.75	1.3	2.1
11	1.0	2.0	3.0
12	1.1	2.3	3.4
14	1.4	2.8	4.2
16	1.7	3.3	5.0
18	2.2	4.3	6.5
20	2.8	5.5	8.0
22	3.5	7.0	10.5
24	4.5	8.9	13.3
28	5.5	11.1	16.8
32	7.0	14.3	21.5
36	9.0	18.0	27.0
40	11.0	22.0	33.0
48	15.0	27.0	43.0

### 3.8 CLEANING

- A. At the conclusion of the work, thoroughly clean all pipelines by flushing with water or other means to remove all dirt, stones, pieces of wood, or other material, which may have entered the pipes during the construction period. Debris cleaned from the lines

shall be removed from the low end of the pipeline. If after this cleaning, obstructions remain, they shall be removed. After the pipelines are cleaned and if the groundwater level is above the pipe or following a heavy rain, the School District will examine the pipes for leaks. If any further defective pipes or joints are discovered, the Contractor shall repair them. Finished paving shall not be installed prior to completion of all cleaning and testing.

### **3.9 DISINFECTION OF PIPELINES**

- A. After completion of the hydrostatic test, the mains shall be thoroughly flushed with a minimum pipe velocity of 2.5 fps and chlorinated in accordance with the latest revision of AWWA 651, Standards of Disinfecting Water Mains. Any one of the methods therein described may be used, with the additional requirement of 50 ppm chlorination minimum initial application. At the end of the contact period, the mains shall again be flushed and bacteriological samples taken.
- B. If necessary, the Contractor shall provide, at his expense, outlets from which to take the samples. The location of the chlorination and sampling points will be determined by the Project Manager in the field. Taps for chlorination and sampling shall be installed. The Contractor shall uncover and backfill the taps as required.
- C. Disinfection of tie-ins shall be performed by the Contractor by swabbing with chlorine or by other approved methods. Following a tie-in, the area affected by the tie-in shall be thoroughly flushed and bacteriological samples will be taken as deemed necessary.
- D. All treated water flushed from the lines shall be dechlorinated and disposed of by discharging to the locations identified in the Plans, or by other approved means. No discharge of chlorinated water to any storm sewer or natural watercourse will be allowed, unless properly dechlorinated.
- E. The Contractor shall rechlorinate and retest any lines that do not meet the requirements of the above testing. The line shall not be placed in service until the requirements of the State Public Health Department are met.

### **3.10 BACTERIOLOGICAL TESTING**

- A. Samples shall be gathered and tests conducted at the expense of the Contractor by a laboratory approved by the Owner.
- B. Water samples are to be taken at representative points no less than one test per 500 feet of pipe, plus one test at each end of the pipe; or as required by the Owner.
- C. After the samples have passed the bacteriological testing, the Contractor will be notified and arrangements can be made to make tie-ins and connections to house services.

- D. Each water sample will have passed the bacteria tests if they show zero total coliform per 100 ml and not more than 50 non-sheen bacteria per 100 ml, and when the turbidity is no greater than the source water.
- E. Samples shall be taken no sooner than 24 hours after final flushing.
- F. Jumpers and/or plates shall be pulled within 14 days of the notification of a successful test, or new bacteria samples will have to be taken.
- G. Follow-up bacteriological testing shall take place after tie-ins have been made, and shall meet the same passing requirements as the initial tests.

**END OF SECTION**

## **SECTION 33 52 16.23**

### **NATURAL-GAS PIPING**

#### **PART 1 - GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Work includes installation of natural gas mains, natural gas services, regulators, valves, tracer wire, polyethylene valves and boxes, polyethylene fittings, modification of existing natural gas plumbing to accommodate relocation of all related equipment and fittings in accordance with the requirements of the Contract Documents.

##### **1.2 RELATED SECTIONS**

- A. Section 31 21 00, Utility Trenching and Backfill

##### **1.3 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.
- B. ASTM
  - 1. ASTM D2513 "Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing and Fittings"
  - 2. ASTM D3350 "Standard Specification for Polyethylene Plastics Pipe and Fittings Materials"

##### **1.4 PERFORMANCE REQUIREMENTS**

- A. Minimum Operating-Pressure Ratings:
  - 1. Piping and Valves: 100 psig minimum unless otherwise indicated.
  - 2. Service Regulators: 65 psig minimum unless otherwise indicated.

##### **1.5 DEFINITIONS**

- A. ASME: American Society of Mechanical Engineers
- B. ASTM: American Society for Testing Materials
- C. PE: Polyethylene
- D. Psig: Pounds per square inch in gauge
- E. NPS: Nominal Pipe Size

## **1.6 ACTION SUBMITTALS**

- A. Product Data: For each type of the following:
  - 1. Valves. Include pressure rating, capacity, settings, and electrical connection data of selected models.
  - 2. Pressure regulators. Indicate pressure ratings and capacities.

## **1.7 INFORMATIONAL SUBMITTALS**

- A. Field quality-control reports.

## **1.8 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data: For pressure regulators to include in emergency, operation, and maintenance manuals.

## **1.9 DELIVERY, STORAGE, AND HANDLING**

- A. Handling Flammable Liquids: Remove and dispose of liquids from existing natural-gas piping according to requirements of authorities having jurisdiction.
- B. Deliver pipes and tubes with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe end damage and to prevent entrance of dirt, debris, and moisture.
- C. Store and handle pipes and tubes having factory-applied protective coatings to avoid damaging coating, and protect from direct sunlight.
- D. Protect stored PE pipes and valves from direct sunlight.

## **PART 2 - PRODUCTS**

### **2.1 PIPES, TUBES, AND FITTINGS**

- A. PE Pipe: ASTM D 2513, SDR 11.
  - 1. All pipe shall be Medium Density Polyethylene (MDPE) 2708, uniformly yellow in color, conforming to the latest edition of ASTM D3350 "Standard Specification for Polyethylene Plastics Pipe and Fittings Materials", cell classification 234373E (Suggested product: JM Eagle: Medium-Density Polyethylene yellow gas pipe).
  - 2. Markings: Polyethylene gas valve markings shall be in compliance with the latest edition of ASTM F2897 "Standard Specification for Tracking and Traceability Encoding System of Natural Gas Distribution Components (Pipe, Tubing, Fittings, Valves, and Appurtenances)" and consist of a 16-digit alphanumeric code and scannable code-128 barcode, or QR code, with standardized encoding of pipe specifications as described in the referenced Standard.
  - 3. PE Fittings: ASTM D 3261, butt-fusion type with dimensions matching PE pipe.

4. PE Transition Fittings: Factory-fabricated fittings with PE pipe complying with ASTM D 2513, SDR 11; and steel pipe complying with ASTM A 53/A 53M, black steel, Schedule 40, Type E or S, Grade B.
5. Anodeless Service-Line Risers: Factory fabricated and leak tested.
  - a. Underground Portion: PE pipe complying with ASTM D 2513, SDR 11 inlet.
  - b. Casing: Steel pipe complying with ASTM A 53/A 53M, Schedule 40, Grade A, with corrosion-protective coating covering. Vent casing aboveground.
  - c. Aboveground Portion: PE transition fitting.
  - d. Outlet shall be threaded or flanged or suitable for welded connection.
  - e. Tracer wire connection.
  - f. Ultraviolet shield.
  - g. Stake supports with factory finish to match steel pipe casing or carrier pipe.
6. Steel Mechanical Couplings: Capable of joining plain-end PE pipe to PE pipe, steel pipe to PE pipe, or steel pipe to steel pipe.
  - a. Steel flanges and tube with epoxy finish.
  - b. Buna-nitrile seals.
  - c. Steel bolts, washers, and nuts.
  - d. Factory-installed anode for steel-body couplings installed underground.

## 2.2 MANUAL GAS SHUTOFF VALVES

- A. See "Underground Manual Gas Shutoff Valve Schedule" and "Aboveground Manual Gas Shutoff Valve Schedule" Articles for where each valve type is applied in various services.
- B. PE Gas Valves: Comply with ASME B16.40.
  1. The polyethylene portion of the gas valve shall be one piece molded medium density PE 2708 polyethylene conforming to the latest edition of ASTM D3350 "Standard Specification for Polyethylene Plastics Pipe and Fittings Materials", cell classification 234373E
  2. All polyethylene gas valves shall be full port, assembled to operate smoothly and provide a gas tight seal(s). Polyethylene gas valves shall utilize a 2" square operating nut with positive position indication and over-torque protection actuator. Each valve's stem shall be equipped with weather seal(s) protecting inner parts from ground water and foreign debris intrusion. All polyethylene valves shall be supplied with the butt end outlets Ball: PE.
- C. Shutoff Valves: Comply with all applicable parts of CFR Title 49, Part 192 and ASME/ANSI B16.33:
  1. Homestead Series 600 Lubricated Plug Valve to match the other valves onsite.
  2. Valve design shall conform to MSS-SP-78, Type IV, Class 125.
  3. Threaded valve connections shall conform to ASME/ANSI B1.20.1



4. Valves shall be furnished with a lubricating/sealing system to provide a means for delivering plug valve lubricant/sealant to the body-plug interface.
- D. Valve Boxes:
1. Cast-iron, two-section box.
  2. Top section with cover with "GAS" lettering.
  3. Bottom section with base to fit over valve and barrel a minimum of 5 inches in diameter.
  4. Adjustable cast-iron extensions of length required for depth of bury.
  5. Include tee-handle, steel operating wrench with socket end fitting valve nut or flat head, and with stem of length required to operate valve.

## **2.3 PRESSURE REGULATORS**

- A. General Requirements:
1. Single stage and suitable for natural gas.
  2. Steel jacket and corrosion-resistant components.
  3. Elevation compensator.
  4. End Connections: Threaded for regulators NPS 2 and smaller.
- B. Service Pressure Regulators: Comply with ANSI B109.4-1998.
1. Elster American Meter – 1800C Service Regulator to match existing onsite regulators.
  2. Body and Diaphragm Case: Cast iron or die-cast aluminum.
  3. Springs: Zinc-plated steel; interchangeable.
  4. Diaphragm Plate: Zinc-plated steel.
  5. Seat Disc: Nitrile rubber resistant to gas impurities, abrasion, and deformation at the valve port.
  6. Orifice: Aluminum; interchangeable.
  7. Seal Plug: Ultraviolet-stabilized, mineral-filled nylon.
  8. Single-port, self-contained regulator with orifice no larger than required at maximum pressure inlet, and no pressure sensing piping external to the regulator.
  9. Pressure regulator shall maintain discharge pressure setting downstream, and not exceed 150 percent of design discharge pressure at shutoff.
  10. Overpressure Protection Device: Factory mounted on pressure regulator.
  11. Atmospheric Vent: Factory- or field-installed, stainless-steel screen in opening if not connected to vent piping.
  12. Maximum Inlet Pressure: 100 psig.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine roughing-in for natural-gas piping system to verify actual locations of piping connections before equipment installation.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.2 PREPARATION**

- A. Close equipment shutoff valves before turning off natural gas to premises or piping section.
- B. Inspect natural-gas piping according to NFPA 54 to determine that natural-gas utilization devices are turned off in piping section affected.
- C. Comply with NFPA 54 requirements for prevention of accidental ignition.

### **3.3 OUTDOOR PIPING INSTALLATION**

- A. Comply with NFPA 54 for installation and purging of natural-gas piping.
- B. Install underground, natural-gas piping buried at least 30 inches below finished grade. Comply with requirements in Section 31 21 00 "Utility Trenching and Backfill" for excavating, trenching, and backfilling and Section 32 50 00 "Restoration of Surfaces".
  - 1. If natural-gas piping is installed less than 30 inches below finished grade, install it in containment conduit.
- C. Install underground, PE, natural-gas piping according to ASTM D 2774.
- D. Install fittings for changes in direction and branch connections.
- E. Installation of Tracer Wire:
  - 1. Install a continuous length of tracer wire for the full length of each run of nonmetallic pipe.
  - 2. Attach wire to top of pipe in such manner that it will not be displaced during construction operations. See trenching details in the Civil drawings for more information about connecting to pipe.
  - 3. Form a mechanically and electrically continuous line throughout the pipeline, extending to the nearest valve or other pipeline appurtenance. Extend the wire up the outside of the valve box/riser and cut a hole that is 8 inches from the top, extend a 12 inch wire lead to the inside of the box. At other pipeline appurtenances, terminate the 12-inch wire lead inside the enclosure.
  - 4. Splice wire with a splicing device consisting of and electro-tin plated seamless copper sleeve conductor. Install as recommended by the manufacturer. Wrap splices and damaged insulation with electrician's tape.
- F. Installation of Warning Tape
  - 1. Install tape approximately 1 foot above and along the centerline of the pipe.
  - 2. Where tape is not continuous, lap tape ends a minimum of 2 feet.

### **3.4 VALVE INSTALLATION**

- A. Install underground valves with valve boxes. Valves shall be installed at the marked locations. Valve supports are required for 2" valves only. Valves shall be installed with the operating nut on top, facing vertically up.

- B. Install regulators and overpressure protection devices with maintenance access space adequate for servicing and testing.
- C. Install aboveground shutoff valves before regulator at each building.

### **3.5 PIPING JOINT CONSTRUCTION**

- A. Ream ends of pipes and tubes and remove burrs.
- B. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- C. Threaded Joints:
  - 1. Thread pipe with tapered pipe threads complying with ASME B1.20.1.
  - 2. Cut threads full and clean using sharp dies.
  - 3. Ream threaded pipe ends to remove burrs and restore full inside diameter of pipe.
  - 4. Apply appropriate tape or thread compound to external pipe threads unless dryseal threading is specified.
  - 5. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
- D. PE Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.
  - 1. Plain-End Pipe and Fittings: Butt fusion shall be conducted in accordance with the manufacturer's recommended fusion procedure and in compliance with the most current version of ASTM F2620.
  - 2. Ambient temperature shall be between 55° F and 85° F prior to pipe fusion; otherwise pipe shall be protected from direct sunlight and cooled down until the ambient temperature falls within the above temperature range.

### **3.6 PAINTING**

- A. Paint exposed, exterior metal piping, valves, service regulators, except components, with factory-applied paint or protective coating.
  - 1. Alkyd System: MPI EXT 5.1D.
    - a. Prime Coat: Alkyd anticorrosive metal primer.
    - b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
    - c. Topcoat: Exterior alkyd enamel semigloss.
    - d. Color: Gray.
- B. Damage and Touchup: Repair marred and damaged factory-applied finishes with materials and by procedures to match original factory finish.

### **3.7 FIELD QUALITY CONTROL**

- A. Perform tests and inspections.

- B. Tests and Inspections:
  - 1. Test, inspect, and purge natural gas according to NFPA 54 and authorities having jurisdiction.
- C. Natural-gas piping will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

### **3.8 UNDERGROUND MANUAL GAS SHUTOFF VALVE SCHEDULE**

- A. Connections to Existing Gas Piping: Use valve and fitting assemblies made for tapping utility's gas mains and listed by an NRTL.
- B. Underground:
  - 1. PE valves.

### **3.9 ABOVEGROUND MANUAL GAS SHUTOFF VALVE SCHEDULE**

- A. Valves for pipe sizes NPS 2 and smaller at each building shall be one of the following:
  - 1. Valve design shall conform to MSS-SP-78, Type IV, Class 125.

**END OF SECTION**

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