

THE CITY OF POMONA

Public Works Department



July 17, 2017

TO: All Bidders

**RE: ADDENDUM NO. 1 FOR First Street Improvements - Corporate Yard Facility,
Project No. 575-93135**

Bid Opening: 11:00 am on August 16, 2017 (Wednesday)

The attached Addendum (50 pages) revises the Contract Documents:

First Street Improvements - Corporate Yard Facility, Project No. 575-93135

Please incorporate the revision in your bid document and return the acknowledgment of the Addendum 1 of the Proposal. Failure to acknowledge receipt of this Addendum may result in rejection of your bid.

Sincerely,



Timotheus Hampton, PE
Senior Water Resources Engineer

Attachments

cc: File

ADDENDUM NO. 1

**CITY OF POMONA
WATER RESOURCES DEPARTMENT**

First Street Improvements - Corporate Yard Facility, Project No. 575-93135

The following change shall be made part of the Contract Document for:

First Street Improvements - Corporate Yard Facility, Project No. 575-93135

The Bidder shall acknowledge the Confirmation of Receipt of Addendum No. 1 for the subject project.

CONTRACT SPECIFICATIONS:

1. Pages A-1 to A-3 of the Contract Documents are revised as attached.
2. Pages B-1 to B-4 of the Contract Documents are revised as attached.
3. Pages C-2 to C-4 of the Contract Documents are revised as attached.
4. SECTION 01010 of Technical Provision is revised as attached.
5. The Technical Provision is revised as attached by adding the follow Sections:
 - a. SECTION 01290 - Schedule of Values
 - b. SECTION 01310 - Progress Meetings
 - c. SECTION 01320 - Progress Schedule
 - d. SECTION 01330 - Submittal Procedures
 - e. SECTION 01740 - Cleaning
 - f. SECTION 05730 - Ornamental Iron Fence and Roll Gate

*****END ADDENDUM NO. 1 *****

**CITY OF POMONA
NOTICE INVITING SEALED BIDS
FOR
FIRST STREET SITE IMPROVEMENTS**

The City of Pomona (City) is requesting proposals from qualified general engineering contractor to construct the City of Pomona Temporary Water Resources Department Corporate Yard Facility improvements as indicated. The major items of work are as follows, but are not limited excavation, site grading, tree removals, gate installations, material bin construction, electrical improvements site lighting installation, detention basin construction, and AC paving within limits shown on contract documents.

RECEIPT OF PROPOSALS: Sealed proposals will be received at the City Clerk Office, City Hall, Pomona, California, until **11:00 AM on August 16, 2017** for the furnishing of all plant, labor, materials, equipment and incidentals for the: **"First Street Site Improvements"**. It is the bidder's sole responsibility to see that the proposal is received in proper time. Any proposal received after the scheduled closing time for receipt of proposals will be returned to the bidder unopened.

The words **"Bid: First Street Site Improvements"** to be opened on **11:00 AM, August 16, 2017** shall appear on the envelope of each sealed bid and each sealed envelope shall be addressed to the City Clerk, City Hall, Pomona, California. The proposals will be publicly opened and read in the office of the City Clerk, City Hall, Pomona, California at **11:00 AM** on the aforementioned date.

Submittal Instructions:

Proposals shall be submitted in sealed envelopes and marked **"First Street Site Improvements"**. One (1) original and three (3) copies of your proposal must be received in the City Clerk's office before the time of 11:00 a.m. on August 16, 2017. Mail or deliver bids to: City of Pomona City Clerk Department, P.O. Box 660, 505 South Garey Ave. Pomona, CA 91769. The above time and date are fixed and extensions will not be granted. The City of Pomona does not recognize the U.S. Postal Service, FedEx, UPS or any other carrier as its agent for purposes of receiving proposals. All proposals received after the deadline shown will be rejected.

DESCRIPTION OF WORK: The work to be done consists of furnishing all materials, equipment, tools, labor and incidentals as required in the specifications and contract documents, for the following project(s): **"First Street Site Improvements"**. The major items of work are as follows, but are not limited excavation, site grading, tree removals, gate installations, material bin construction, electrical improvements, site lighting installation, detention basin construction, and AC paving within limits shown on contract documents.

Engineer's Estimate: Base Bid Items: \$1,275,000; Additive Bid Items: \$315,000.

POTENTIAL BIDDER REGISTRATION: Potential bidders must register with the City by providing their contact information: Name of Firm potentially bidding, complete Address, Phone Number, Name of Contact person, and the Specific Project "First Street Site Improvements" they may wish to bid. This information shall be e-mailed to Dana_Diaz@ci.pomona.ca.us (include "Potential Bidder" in subject line) and call (909) 802.7422 to verify receipt of same.

COMPLETION OF WORK: All work to be done under this contract shall be completed within ninety (90) working days beginning on the date stipulated in the written "Final Notice to Proceed" issued by the

City Engineer. If the Additive Bid Items are included; an additional seventy-five (75) working days will be added.

OBTAINING CONTRACT DOCUMENTS: Specifications and all contract documents may be obtained online at <http://www.ci.pomona.ca.us/index.php/finance-home/purchasing/rfp-construction>”

PRE-BID INQUIRIES: Pre-Bid inquiries related to the Plans and Specifications must be submitted in writing to the City of Pomona, Water Resources Department to Timotheus Hampton, PE at Tim_Hampton@ci.pomona.ca.us.

The contractor shall carefully examine this Contract and Specifications and any addenda that may be posted on the City’s website www.ci.pomona.ca.us. The contractor shall seek clarification of any ambiguity, conflict, omission or other error in this document in writing. If the answer materially affects this document, the information will be incorporated into an addendum and distributed to all vendors via the City’s website. All addenda will be numbered in sequence, dated as of the date of issue, and posted. It shall be the contractor’s responsibility to check the City’s website to determine if any addenda have been posted prior to the bid opening.

To check for addenda:

- Visit the City’s website at www.ci.pomona.ca.us
- From the City Homepage, click on “Business”
- Click on “Current Bids & RFPs”, “Construction Bids”
- Download the RFP file or Addendum file, if applicable

If you encounter any technical problems, call the Public Works Dept., Engineering at - (909) 620-2261.

PROPOSAL GUARANTY: Each proposal must be accompanied by cash or by a cashier's or certified check or by a bid bond in the amount of **ten percent (10%)** of the amount of bid price payable to the City Clerk City of Pomona as a guarantee that the bidder, if his proposal is accepted, will promptly execute the contract, secure payment of workman's compensation insurance and furnish a satisfactory faithful performance bond in the amount of **one hundred percent (100%)** of the total bid price and a labor and material bond in the amount of **one hundred percent (100%)** of the total bid price.

WAGE RATES: Pursuant to applicable provisions of the Labor Code of the State of California, not less than the general prevailing rate of per diem wages including legal holidays, and overtime work for each craft or type of workman needed to execute the work contemplated under this agreement shall be paid to all workman employed on the work to be done according to this contract by the Contractor, or any Subcontractor and shall be deemed to include employer payments for health and welfare, pension, vacation and similar purposes. The City Engineer has on file the prevailing rate of per diem wages and will furnish same to be posted at the job site.

CONTRACTOR'S LICENSE: At the time of Bid Opening, the Prime Contractor **must** have a valid California State Contractor's License with a classification of "A".

AFFIRMATIVE ACTION: The City of Pomona hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority owned and woman owned business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of sex, race, color, or national origin in consideration for an award.

UTILIZATION OF LOCAL BUSINESS AND LABOR: The Contractor is encouraged to make a

City Council is to stimulate business within the City and to provide employment and training for local residents.

CITY'S RIGHTS RESERVED: The City of Pomona reserves the right to reject any and all proposals or bids or to waive any irregularities or informalities in any bids or in the bidding, should it deem this necessary for the public good, and further the city reserves the right to reject the bid any bidder who has been delinquent or unfaithful in any former contract with the City of Pomona. No bidder may withdraw his bid for a period of Ninety (90) calendar days after the opening of proposal thereof.

TRENCH AND PIPELINE SAFETY: If this project requires construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are five feet or deeper, the bids must contain, as a bid item, adequate sheeting, shoring, and bracing, or other methods to assure worker safety.

ENVIRONMENTALLY SENSITIVE MATERIALS:

- This Invitation for Bids **does not** specify locations of possible materials, such as a borrow pit or gravel bed, for use in the proposed construction project which would be subject to Section 1603 of the Fish and Game Code.
- This Invitation for Bids **does** specify locations of possible materials, such as a borrow pit or gravel bed, for use in the proposed construction project and is subject to the following conditions imposed pursuant to Section 1603 of the Fish and Game Code:

PRE-BID MEETING:

- A non-mandatory pre-bid meeting will be held at 11:00 am/pm on July 19, 2017 at 1730 E 1st Street Pomona, CA 91766.
- No pre-bid meeting is required.

Bond Requirements: The successful contractor will be required to file with the City at the time of execution of the contract, a Payment Bond (Labor and Materials Bond) in the amount of 100% of the bid amount and a Performance Security in the amount of 100% of the bid amount. Prior to acceptance of the work by the City, the contractor will be required to file a Bid Bond in the amount of 10% of the bid amount with the City. All bonds and securities must be on City provided forms.

Equivalent Securities: Pursuant to California Public Contract Code Section 22300, substitution of eligible and equivalent securities for any moneys withheld to ensure performance under the contract for the work to be performed will be permitted at the request and expense of the successful bidder.

CITY OF POMONA, CALIFORNIA

DATED: July 17, 2017

BY:  _____

Timotheus Hampton, P. E.
Senior Water Resources Engineer

INSTRUCTIONS TO BIDDERS

FORM OF PROPOSAL: All proposals under these specifications shall be submitted on the blank forms which may be obtained at the within this document or online at <http://www.ci.pomona.ca.us/index.php/finance-home/purchasing/rfp-construction>.

DELIVERY OF PROPOSALS: The proposal shall be delivered by the time and to the place stipulated in the "Notice Inviting Sealed Bids". It is the bidder's sole responsibility to see that his proposal is received in proper time. Any proposal received after the scheduled closing time for receipt of proposals will be returned to the bidder unopened. Bidders or their authorized agents are invited to be present.

MODIFICATIONS AND ALTERNATIVE PROPOSALS: Unauthorized conditions, limitations or provisos attached to a proposal will render it informal and may cause its rejection. The complete proposal forms shall be without interlineations, alterations or erasures, unless each such correction is suitably authenticated by affixing in the margin immediately opposite the correction the surname or surnames of the person or persons signing the bid. Alternative proposals will not be considered unless called for. No oral, telegraphic or telephonic proposals or modifications will be considered.

WITHDRAWAL OF PROPOSAL: The proposal may be withdrawn upon request by the bidder without prejudice to himself prior to, but not after the time fixed for opening of bids, provided that the request is in writing, has been executed by the bidder or his duly authorized representative and is filed with the City Clerk. **No proposal may be withdrawn during the period of ninety (90) days after the opening of proposals.**

PROPOSAL GUARANTY: Each proposal shall be accompanied by cash or a cashier's or certified check or by a bid bond in the amount of not less than ten percent (10%) of the amount named in the proposal. Said check or bond shall be made payable to the City Clerk of the City of Pomona and shall be given as a guarantee that the bidder, if awarded the work, will enter into a contract within fifteen (15) days after written notice of the award and will furnish the necessary bonds as hereinafter provided. In case of refusal or failure to enter into said contract, the check or bond, as the case may be, shall be forfeited to the City. No bidder's bond will be accepted unless it conforms substantially to the form furnished by the City, which is bound herein, and is properly filled out and executed.

DISCREPANCIES IN PROPOSALS: In case the amounts bid on individual items, (if called for), do not in fact add up to the total amount shown by the bidder, the correctly added total of the individual items shall prevail over the total figure shown by the bidder if there is a discrepancy between these figures. The estimated quantities and amount are for the purpose of comparison of bids only.

COMPETENCY OF BIDDERS: In selecting the lowest responsible bidder, consideration will be given not only to the financial standing but also to the general competency of the bidder for the performance of the work covered by the proposal. To this end, each proposal shall be supported by a statement of the bidder's experience on the form entitled "**Information Required of Bidder**" bound herein. No proposal for this work will be accepted from a Contractor who is not licensed in accordance with the laws of the State of California under applicable provisions of the Business and Professions Code. The Contractor will include the Contractor's license number, license classification, and license expiration date on the form furnished herein entitled "**Information Required of Bidders**". The licensing requirements for Contractors shall apply also to Subcontractors.

BIDDER'S EXAMINATION OF SITE: The repair sites are Citywide and specific sites have not been determined at this time. Work Orders will be issued in pre-determined amounts for repair sites within a general area. Each bidder shall review the contract documents herein and the City Standard Drawings for the character, quality and quantity of the materials to be furnished; and as to the requirements of the contract, specifications and Standard Drawing. The name of the individual who examined these documents and drawings and the date of such examination shall be stated in the form entitled "**Information Required of Bidder**" in the space provided therefor.

DISQUALIFICATION OF BIDDERS: More than one proposal from an individual, firm partnership, corporation or association under the same or different names will not be considered. Reasonable grounds for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is reason for believing that collusion exists among the bidders, all bids will be rejected and none of the participants in such collusion will be considered in future proposals.

RETURN OF PROPOSAL GUARANTIES: Within ten (10) days after award of the contract, the City will return the proposal guaranties accompanying each of the proposals as are not considered in making the award. All other proposal guaranties will be held until the contract has been finally executed. They will then be returned to the respective bidders whose proposals they accompany.

AWARD OF CONTRACT: Contractor bids received will be compared based upon the lowest Total Base Bid. The construction contract if awarded will, at the discretion of the City Council, include the Base bid, and may include Additive Bid Items or portion thereof as funds are available. Submittals not including all bid unit prices for all Additive Bid Items will be deemed non-responsive. The Contract, if awarded, will be awarded to the lowest responsible and responsive bidder whose proposal complies with the requirements of these specifications. The award, if made, will be made within ninety (90) calendar days after the opening of the proposals, provided that the award may be made after said period if the successful bidder shall not have given the City written notice of the withdrawal of his bid.

EXECUTION OF CONTRACT: The bidder to whom award is made shall execute a written contract within the City on the form agreement provided, and shall secure all insurance and bonds as herein provided within **fifteen (15) days** from the date of written notice of the award. Failure or refusal to enter into a contract as herein provided, or to conform to any of the stipulated requirements in connection therewith shall be just cause for the annulment of the award and the forfeiture of the proposal guaranty.

If the successful bidder refuses or fails to execute the contract, the City may award the contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the contract, the City may award the contract to the third lowest responsible bidder. On the failure or refusal of such second or third lowest bidder to execute the contract, such bidder's guaranty shall be likewise forfeited to the City. The work may then be re-advertised.

INSURANCE AND BONDS: The Contractor shall not commence work under this contract until he has secured all insurance and bonds required under this section nor shall he allow any Subcontractor to commence work on this contract until all similar insurance and bonds required of the Subcontractor have been obtained. All insurance issued in compliance with this section shall be issued in the form, and by an insurer or insurers, satisfactory to and first approved by the City in writing. Certificates of insurance in the amounts required shall be furnished by the Contractor to the City prior to the commencement of work.

The Contractor shall maintain adequate workman's compensation insurance under the laws of the State of California for all labor employed by him or by any Subcontractor under him who may come within the protection of such workman's compensation insurance laws. At the time of execution of the contract agreement, the Contractor shall provide the certificate regarding workman's compensation insurance as indicated in page I-1 of these specifications.

The Contractor shall maintain public liability insurance to protect said Contractor and the City against loss from liability imposed by law, for damages on account of bodily injury, including death resulting therefrom suffered or alleged to have been suffered by any person or persons, other than employees, resulting directly or indirectly from the performance or execution of this contract or any subcontract thereunder, and also to protect said Contractor and the City against loss from liability imposed by law, for damage to any property, caused directly or indirectly by the performance and execution of this contract or of any subcontract thereunder. Said public liability and property damage insurance shall be maintained by the Contractor in full force and effect during the entire period of performance under this contract, in the amount of not less than \$500,000 for one person injured in one accident, and not less than \$1,000,000 for more than one person injured in one accident, and in the amount of not less than \$500,000 with respect to any property damage aforesaid. The **City of Pomona** shall be named as an **"Additional Insured"** under public liability and property damage insurance.

The Contractor shall secure with a responsible corporate surety or corporate sureties, satisfactory bonds conditioned upon faithful performance by the Contractor of all requirements under the contract and upon the payment of claims of material, men and laborers thereunder. The **Faithful Performance Bond** shall be in the sum of not less than **one hundred percent (100%)** of the estimated aggregate amount of the payments to be made under the contract computed on the basis of the prices stated in the proposal. The **Labor and Material Bond** shall be in the sum of not less than **one hundred percent (100%)** of the estimated aggregate amount of the payments to be made under the contract computed on the basis of the prices stated in the proposal. At the time of submitting the Faithful Performance Bond and the Labor and Material bond the insurer shall submit to the City the following:

- (1) the original, or certified copy of the unrevoked appointment, power of attorney, bylaws, or other instrument entitling or authorizing the person who executed the bond; or
- (2) a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner; or
- (3) a certificate from the Los Angeles County Clerk stating that the certificate of authority of the insurer has not been surrendered, revoked, canceled, annulled, or suspended or, in the event that it has, that renewed authority has been granted; or copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

EVIDENCE OF RESPONSIBILITY: Upon the request of the City, a bidder whose bid is under consideration for the award of the contract shall submit promptly to the City satisfactory evidence showing the bidder's financial resources, his construction experience and his organization and plant facilities available for the performance of the contract.

LISTING OF SUBCONTRACTORS: Each bidder shall submit a list of the proposed Subcontractors on this project as required by the Subletting and Subcontracting Fair Practice Act (Government Code Section 4100 and following). Forms for this purpose are furnished herein entitled **"Information Required of Bidders"**.

EMPLOYMENT OF APPRENTICES: Attention is directed to the provisions in Sections 1777.5 and

1777.6 of the California Labor Code concerning employment of apprentices by the Contractor or any Subcontractor under him. The Contractor and any Subcontractor under him shall comply with the requirements of said sections in the employment of apprentices; however, the Contractor shall have full responsibility for compliance with said Labor Code sections for all apprenticeable occupations, regardless of any other contractual or employment relationships alleged to exist.

WAGE RATES: The Contractor and/or Subcontractor shall pay wages at rates not less than those indicated in the "**Notice Inviting Sealed Bids**" section of these specifications.

OTHER PERMITS, FEES AND LICENSES: The Contractor shall, prior to the start of construction, obtain a "**Construction Permit**" from the City of Pomona's Public Works Department. This will be a "**NO-FEE**" Permit.

In addition to the requirements above noted, the Contractor **shall possess a valid City of Pomona business license** at the time of application for the Construction Permit and for the duration of the contract. The fee for said business license shall be based upon the total amount bid for the contract in accordance with Chapter 14 of the Pomona City Code. Amount of fee may be obtained from the City Treasurer at (909) 620-2343.

**PROPOSAL
FOR
FIRST STREET SITE IMPROVEMENTS**

TO CITY OF POMONA

The undersigned hereby proposes and agrees to perform all the work and improvements therein described, and to construct the City of Pomona Temporary Water Resources Department Corporate Yard Facility improvements as indicated. The major items of work are as follows, but are not limited excavation, site grading, tree removals, gate installations, material bin construction, electrical improvements site lighting installation, detention basin construction, and AC paving within limits shown on contract documents.

Each line item bid shall contain all costs and expenses for the work described in the identified numbered bid item.

BASE BID SCHEDULE					
ITEM #	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	MOBILIZATION, DEMOBILIZATION, AND PERMITS	1	LS	\$	\$
2	AC PAVEMENT REMOVAL	1	LS	\$	\$
3	REMOVAL OF EXISTING FENCE AND GATES	1	LS	\$	\$
4	REMOVAL OF TREES	1	LS	\$	\$
5	SITE GRADING	1	LS	\$	\$
6	CONCRETE GUTTER CONSTRUCTION	442	LF	\$	\$
7	CONSTRUCT REINFORCED CONCRETE MATERIAL BIN	1	LS	\$	\$
8	CONSTRUCT REINFORCED CONCRETE BUILDING SLAB	1	LS	\$	\$
9	PROVIDE AND INSTALL ELECTRIC LIGHTINGS	11	EA	\$	\$

10	PROVIDE AND INSTALL ELECTRICAL SERVICE, AND CONDUITS	1	LS	\$	\$
11	CONSTRUCT REDWOOD HEADERS	926	LF		
12	CONSTRUCT AC PAVEMENT	64,104	SF	\$	\$
13	CONSTRUCT MOTOR OPERATED GATE	1	EA		
14	CONSTRUCT WROUGHT IRON FENCE W/ CURVED PRESSED PICKETS	965	LF	\$	\$
TOTAL BASE BID AMOUNT:					\$

TOTAL BASE BID AMOUNT IN WORDS:

ADDITIVE BID SCHEDULE

ITEM #	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
A-1	CONSTRUCT PRE-FABRICATED MATERIAL BIN CANOPY	1	LS	\$	\$
A-2	CONSTRUCT DETENTION BASIN	1	LS	\$	\$
TOTAL BID AMOUNT:					\$

TOTAL BID AMOUNT IN WORDS:

SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.1 GENERAL

- A. The Work to be performed under this Contract shall consist of furnishing all tools, equipment, materials, supplies, and manufactured articles and furnishing all labor, transportation and services, including, but not limited to, fuel, power, water, and essential communications, and performing all work, or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. The Work shall be complete, and all work, materials, and services not expressly indicated or called for in the Contract Documents which may be necessary for the complete and proper construction of the work in good faith shall be provided by the Contractor as though originally so indicated, at no increase in cost to the Owner.
- B. The work under this contract shall conform with the Standard Specifications for Public Works Construction, Latest Edition (Greenbook), including all Supplemental Amendments, as well as these project plans and specifications.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work Description: Provide all labor, material, equipment, and incidental work to construct the City of Pomona Temporary Water Resources Department Corporate Yard Facility improvements as indicated.
- B. Work includes all required site, structural, and electrical improvements per contract documents.
- C. The major items of work are as follows, but are not limited excavation, site grading, tree removals, gate installations, material bin construction, electrical improvements site lighting installation, detention basin construction, and AC paving within limits shown on contract documents.
- D. The Contractor's attention is directed to the Plans and Specifications for a detailed description of the project components.
- E. The Contractor shall keep the Owner and the Design Engineer fully advised as to his/her plans for carrying out the work and obtain their approval for all phases of his operations, as hereinafter specified.

1.3 BID ITEM DESCRIPTIONS

In addition to the bid items described in the Standard Specifications, the following bid item description shall apply to the Bid Schedules.

1.3.1 MOBILIZATION, DEMOBILIZATION, AND PERMITS (LUMP SUM)

Payment for mobilization, demobilization, and permits shall be made at the contract lump sum price, complete and in accordance with the Contract Documents, and as directed by the CITY. The Contract Price shall include, but is not limited to the following principal

items: obtaining and complying with all permits and insurance; preparation of an Emergency Spill Prevention Plan, mobilizing labor force, equipment and construction facilities; providing field offices and storage yard; securing construction water supply; providing all temporary construction fencing and safety barriers; providing on-site sanitary facilities; providing project signs; possess OSHA requirements and establishing safety programs; cleanup and site restoration; preparing the Submittals prior to the pre-construction scheduling conference; preconstruction videotape and photographs; project record documents, furnishing and installing construction project information signs, including removal and disposal upon project completion and performing all work and incidentals for the mobilization, demobilization, and permitting for construction of the project as described in the Contract Documents. The mobilization phase will be deemed complete when all items necessary to conduct field operations are on site and operable. The Contractor's construction facilities shall be of temporary nature. The Contractor shall be fully responsible for the security of job site and laydown area, and for all its plant, materials, equipment, and tools at all times. Demobilization shall be include but not limited to following principal items/events: removal of all construction equipment from the site; removal of all excess construction material and debris from the site; final project site clean-up; submit as-built red-line drawings to the City; attending final inspection walkthrough with the City's staff, Design Engineer and Project Inspection staff; completion of all items on final punch list; resolving any outstanding claims and agreeing with final pay quantities for project closeout; and removal of project signs. The amount for this bid item **shall be limited to 4 percent** of the total contract amount.

1.3.2 AC PAVEMENT REMOVAL (LUMP SUM)

Payment for AC pavement removal shall be made at the contract lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision for demolition, removal and disposal costs of pavement, base, subbase and stabilized subgrade materials to the depths necessary to accommodate new improvements. All items designated, or required, to be removed shall be disposed of off-site and shall be transported to a legal disposal site(s); it is the Contractor's responsibility to provide adequate and appropriate equipment to transport materials. Existing pavement to remain in place that is damaged by the Contractor shall be repaired or replaced by the Contractor, with no additional cost to the City.

1.3.3 REMOVAL OF EXISTING FENCE AND GATES (LUMP SUM)

Payment for removal of existing fence and gates shall be made at the contract lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision for all demolition, removal, and disposal costs of fence and gates, their concrete footings, and other miscellaneous items associated with fence. All items designated, or required, to be removed shall be disposed of off-site and shall be transported to a legal disposal site(s). it is the Contractor's responsibility to provide adequate and appropriate equipment to transport materials. All voids shall be filled with native soil and compacted to 90% relative density.

1.3.4 REMOVAL OF TREES (LUMP SUM)

Payment for removal of existing trees shall be made at the contract lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision for tree and stump removal in the area shown on drawings. All items designated, or required, to be removed shall be disposed of off-site and shall be transported to a legal disposal site(s). It is the Contractor's responsibility to provide adequate and appropriate equipment to transport materials. All voids shall be filled with native soil and compacted to 90% relative density.

1.3.5 SITE GRADING (LUMP SUM)

Payment for site grading shall be made at the contract lump sum price, which price and payment shall constitute full compensation for all equipment, dirt hauling, labor and supervision, complete in accordance with drawings, specifications, and Standard Specifications for Public Works Construction (the "Greenbook"), 2015 edition.

1.3.6 CONCRETE GUTTER CONSTRUCTION (LF)

Payment for construction of concrete gutter shall be made per linear feet of gutter, which price and payment shall constitute full compensation for all equipment, material, labor and supervision, complete in accordance with drawings, specifications, and Standard Specifications for Public Works Construction (the "Greenbook"), 2015 edition.

1.3.7 CONSTRUCT REINFORCED CONCRETE MATERIAL BIN (LUMP SUM)

Payment for construction of reinforced concrete material bin shall be made per lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision in accordance with drawings and specifications. Payment for this item includes but not limited to grading under the concrete slab and compaction to 95% relative density, concrete forming, rebar installations, concrete pour, and form removal.

1.3.7 CONSTRUCT REINFORCED CONCRETE BUILDING SLAB (LUMP SUM)

Payment for construction of reinforced concrete building slab shall be made per lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision in accordance with drawings and specifications. Payment for this item includes but not limited to grading under the concrete slab and compaction to 95% relative density, concrete forming, rebar installations, concrete pour, and form removal.

1.3.10 PROVIDE AND INSTALL ELECTRIC LIGHTINGS (EACH)

Payment for construction of furnishing and installation of electric lightings shall be made per each light which price and payment shall constitute full compensation for all equipment, material, labor and supervision for complete in place and operational lighting system including concrete foundation, pull box, wiring, etc. The size of foundation, anchor bolts, and rebar shall be per light pole manufacturer recommendations.

1.3.11 PROVIDE AND INSTALL ELECTRICAL SERVICE, AND CONDUITS (LUMP SUM)

Payment for furnishing and installation of electrical service and conduits shall be made per lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision for complete and in place electrical system in accordance with drawings and specifications.

1.3.13 CONSTRUCT REDWOOD HEADERS (LF)

Payment for construction of redwood headers shall be made per lineal foot, which price and payment shall constitute full compensation for all equipment, material, labor and supervision, complete in accordance with drawings, and specifications, and Standard Specifications for Public Works Construction (the “Greenbook”), 2015 edition.

1.3.14 CONSTRUCT AC PAVEMENT (SF)

Payment for construction of pavement shall be made per square foot, which price and payment shall constitute full compensation for all equipment, material, labor and supervision, complete in accordance with drawings, specifications, and Standard Specifications for Public Works Construction (the “Greenbook”), 2015 edition.

1.3.15 CONSTRUCT MOTOR OPERATED GATE (LUMP SUM)

Payment for construction of motor operated gate shall be made per lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision for complete, operational and in place motor operated gate in accordance with drawings, specifications and manufacturer recommendations. Payment for this item includes but not limited to construction of pillars, furnishing and installation of gate and gate openers, sensors, key pad with all required wiring and electrical connections.

1.3.16 CONSTRUCT WROUGHT IRON FENCE W/ CURVED PRESSED PICKETS AND TWO SWING GATES (LUMP SUM)

Payment for construction of Wrought Iron Fence and two swing gates shall be made per lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision in accordance with drawings, and specifications.

1.3.8 CONSTRUCT PRE-FABRICATED MATERIAL BIN CANOPY (LUMP SUM)

Payment for construction of pre-fabricated material bin canopy shall be made per lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision for complete and in place pre-fabricated canopy in accordance with drawings and specifications. The Contractor shall submit shop drawings, and structural calculations signed and sealed by an structural engineer registered in the State of California for the City’s approval prior to commencement of work.

1.3.8 CONSTRUCT DETENTION BASIN, RIPRAP, AND NORTHSIDE CURB (LUMP SUM)

Payment for construction of detention basin shall be made per lump sum price, which price and payment shall constitute full compensation for all equipment, material, labor and supervision for complete and in place detention basin including rip rap and curb at north side of basin in accordance with drawings, and Standard Specifications for Public Works Construction (the "Greenbook"), 2015 edition.

Payment for this item include but not limited to excavation, hauling the dirt, grading, and compaction of detention basin, construction of rip rap and curb along north side of basin as shown on drawings.

1.4 CONTRACTOR'S USE OF THE PROJECT SITE

- A. The Contractor's use of the project site shall be limited to his construction operations. On-site storage of materials and on-site fabrication facilities will be limited to areas approved by Owner.

1.5 PREVENTION OF SPILLS

- A. Contractor is solely responsible to develop construction methods and construction sequences as required to construct improvements per these contract documents while preventing chemical spill.
- B. Contractor will not be held financially-responsible for spills caused by circumstances, events or conditions that are outside the scope of his contractual authority and obligations to Owner.
- C. Contractor shall be responsible for reporting any spills to the City immediately after spill is encountered.

1.6 DEFINITIONS APPLICABLE TO TECHNICAL SPECIFICATIONS

- A. The following words have the meaning defined in the Technical Portions of the work:
1. Indicated: Is a word used to direct the Contractor to information contained on the drawings or in the specifications. Terms such as "shown," "noted," "scheduled," and "specified" also may be used to assist in locating information but no limitation of location is implied or intended.
 2. Furnish: Means to supply and deliver to the site, to unload and unpack ready for assembly, installation, testing, and start-up.
 3. Install: Defines operations at the site including assembly, erection, placing, anchoring, applying, shaping to dimension, finishing, curing, protecting, and cleaning, ready for the Owner's use.
 4. Provide: Is defined as furnish and install, ready for the intended use.
 5. Installer: A person or firm engaged by the Contractor or any subcontractor for the

performance of installation, erection, or application work at the site. Installers must be expert in the operations they are engaged to perform.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

*****END OF SECTION*****

SECTION 01290
SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This section describes the process whereby the Schedule of Values is developed and used to determine monthly progress payment amounts.
- B. Develop the Schedule of Values independent but simultaneous with the development of the CPM Schedule, construction activities and logic as specified herein. Cross-reference pay items to Progress Schedule items.
- C. No separate payments will be made for and the Schedule of Values shall not include items for the following:
 - 1. Reimbursement of any proposal preparation costs.
 - 2. General administration of construction by the DESIGN/BUILDER or any Subcontractor.
- D. The Schedule of Values shall be in sufficient detail to indicate separate amounts for (a) each Specification Section that includes materials, equipment or systems, including those in the Conceptual Documents.

1.02 PRELIMINARY SCHEDULE OF VALUES

- A. Prior to initiating any construction, submit a Preliminary Schedule of Values showing, at a minimum, the following:
 - 1. Separate pay item for Mobilization. Mobilization shall not exceed four percent of the Contract Price and shall be paid at the rate of 33 percent for each of the first three (3) payment applications following the initiation of Mobilization. Mobilization shall include bonds, insurance, preparation of initial Schedule of Values and CPM Construction Schedule, potholing for existing utilities, mobilization of DESIGN/BUILDER's equipment and personnel, and any demobilization and remobilization due to construction shutdown.
 - 2. Separate pay item for Demobilization. Demobilization shall be no less than one percent of the Contract Price and shall be included with a payment application following Substantial Completion.
 - 3. Preparation of and DESIGN/BUILDER and Subcontractor review of shop drawings and operation and maintenance manuals shall not exceed one percent of the Contract Price and shall be paid in equal monthly increments from the first month after Mobilization occurs until the anticipated month for Substantial Completion.

4. General Requirements for construction not included under other items shall not exceed 7.5 percent of the Contract Price and shall be paid in equal monthly increments from the month in which Mobilization occurs through Substantial Completion. General Requirements include construction video and photographs, public relations, temporary utilities, DESIGN/BUILDER's field offices, and other requirements of Contract Documents.
 5. Record Document preparation shall be paid upon OWNER's acceptance of the final Record Documents prepared by the DESIGN/BUILDER.
 6. The costs for Materials Testing (concrete, backfill, asphalt, subgrade compaction, etc.) shall be paid in equal monthly increments from the first month in which pertinent physical construction begins through Substantial Completion.
- B. Meet with the OWNER and jointly review the preliminary Schedule of Values and make any adjustments in value allocations if, in the opinion of the OWNER, these are necessary to establish fair and reasonable allocation of values for the work components.

1.03 DETAILED SCHEDULE OF VALUES

- A. Prepare and submit a detailed Schedule of Values to the OWNER based on the accepted preliminary Schedule of Values. The detailed Schedule of Values shall be used to determine monthly progress payment amounts. The OWNER shall be the sole judge of acceptable numbers, details and description of values established. If, in the opinion of the OWNER, a revision in the number of items contained in the Schedule of Values is necessary, add or delete items so identified.
- B. It is anticipated that instances will occur, due to the independent but simultaneous development of the Schedule of Values and the CPM Schedule activities, where interfacing these two documents will require changes to each document. Schedule activities may need to be added to accommodate the detail of the Schedule of Values. Schedule of Value items may need to be added to accommodate the detail of the CPM Schedule activities. Where such instances arise, changes to the Schedule of Values and to the CPM Schedule activities to satisfy the CPM Schedule requirements may be proposed by the DESIGN/BUILDER.
- C. Incorporate approved Change Orders into the Schedule of Values as a single unit identified by the Change Order Number.

1.04 PAYMENT WITHHOLDINGS

- A. If any submittal required by this Section is found to be incomplete or is submitted after the required submittal due date, the OWNER may withhold payments to the DESIGN/BUILDER in accordance with Section 13.03.B of the General Conditions.

PART 2 - MATERIALS (NOT USED)

PART 3 - EXECUTION (NOT USED)

+END OF SECTION+

SECTION 01310
PROGRESS MEETINGS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
1. Progress meetings will be held throughout the Project. DESIGN/BUILDER shall attend each progress meeting prepared to discuss in detail all items on the agenda.
 3. DESIGN/BUILDER will prepare and distribute agendas, at least five (5) working days before each meeting.
 3. DESIGN/BUILDER will preside at progress meetings and will prepare and distribute minutes of progress meetings to all meeting participants within three (3) working days of the meeting.
- B. Date and Time:
1. Regular Meetings: Every week on a day and time agreeable to OWNER, and DESIGN/BUILDER.
 2. Other Meetings: As required.
- C. Place: DESIGN/BUILDER’s field office at the Site or other location mutually agreed upon by OWNER and DESIGN/BUILDER.
- D. Handouts: DESIGN/BUILDER shall bring the following to each progress meeting:
1. List of Work accomplished since the previous progress meeting.
 2. Up-to-date Progress Schedule.
 3. Up-to-date Schedule of Submittals.
 4. Detailed “look-ahead” schedule of Work planned through the next three weeks, with specific starting and ending dates for each activity, including shutdowns, deliveries of important materials and equipment, Milestones (if any), and important activities affecting the OWNER, Project, and Site.
 5. When applicable, list of upcoming, planned time off (with dates) for personnel with significant roles on the Project, and the designated contact person in their absence.

1.2 REQUIRED ATTENDANCE

- A. Representatives present for each entity shall be authorized to act on that entity’s behalf.
- B. Required Attendees:
1. DESIGN/BUILDER:
 - a. Project manager.

- b. Design Leader
 - c. Site superintendent.
 - d. Safety representative.
 - e. When needed for the discussion of a particular agenda item, representatives of Subcontractors and Suppliers shall attend meetings.
2. OWNER:
 - a. Project manager or designated representative
 - b. Resident Project Representative.
 - c. Others as required by OWNER.
 3. OWNER's representative(s), as required.
 4. Testing and inspection agencies, as required.
 5. Others, as appropriate.

1.3 AGENDA

- A. Preliminary Agenda: All Agendas shall be by the DESIGN/BUILDER based on the items listed below. Progress meeting agenda may be modified by OWNER during the Project as required.
 1. Review, comment, and amendment (if required) of minutes of previous progress meeting.
 2. Review of progress since the previous progress meeting.
 3. Planned progress through next three weeks.
 4. Review of Progress Schedule
 - a. Contract Times, including Milestones (if any)
 - b. Critical path.
 - c. Schedules for fabrication and delivery of materials and equipment.
 - d. Corrective measures, if required.
 5. Submittals:
 - a. Review of status of critical submittals.
 - b. Review revisions to Schedule of Submittals.
 6. Contract Modifications
 - a. Requests for interpretation
 - b. Clarification notices
 - c. Field Orders
 - d. Proposal requests
 - e. Change Order proposals
 - f. Work Change Directives.
 - g. Change Orders.
 - h. Claims.
 7. Applications for progress payments.
 8. Problems, conflicts, and observations.
 9. Quality standards, testing, and inspections.
 10. Coordination between parties.
 11. Site management issues, including access, security, maintenance and protection of traffic, maintenance, cleaning, and other Site issues.
 12. Safety.
 13. Permits.

14. Construction photographic documentation.
15. Record documents status.
16. Punch list status, as applicable.
17. Other business.

1.4 PRE-CONSTRUCTION MEETING

- A. Preconstruction Meeting will be scheduled to be held within 10 working days after Owner has issued Notice to Proceed.
 1. Provide attendance by authorized representatives of DESIGN/BUILDER and major Subcontractors.
- B. Minimum agenda: Data will be distributed and discussed on at least the following items.
 1. Organizational arrangement of DESIGN/BUILDER 's forces and personnel, and those of Subcontractors, materials suppliers.
 2. Channels and procedures for communication.
 3. Construction schedule, including sequence of critical work.
 4. Contract Documents, including distribution of required copies of original Documents and revisions.
 5. Processing of Shop Drawings and other data submitted for review.
 6. Processing of RFI's, field decisions, and Change Orders.
 7. Rules and regulations governing performance of Work; and
 8. Procedures for safety and first aid, security, quality control, housekeeping, and related matters.
 9. Other applicable items as requested or suggested by DESIGN/BUILDER or Owner.

1.5 EMERGENCY CONTACT INFORMATION

- A. CONTRACTOR shall provide list of emergency contact information for 24-hour use throughout the Project. Emergency contact information shall be updated and kept current throughout the Project. If personnel or contact information change, provide updated emergency contact information list at the earliest.
- B. CONTRACTOR's list of emergency contact information shall include:
 1. CONTRACTOR's project manager's office, field office, cellular, and home telephone numbers.
 2. CONTRACTOR's Site superintendent's office, field office, cellular, and home telephone numbers.
 3. CONTRACTOR's foreman's field office, cellular (if available), and home telephone numbers.
 4. Major Subcontractors' and Suppliers' office, cellular, and home telephone numbers of project manager and foreman (when applicable).
- C. Additional Emergency Contact Information:
 1. OWNER's (Timotheus Hampton): office, cellular, and home telephone numbers.

2. OWNER's Stephen Paz: office, cellular, and home telephone numbers.
3. OWNER's central 24-hour emergency telephone number.
4. Resident Project Representative's office, field office, cellular, and home telephone numbers.
5. Utility companies' 24-hour contact telephone number(s), including gas, water, sewer, oil, telephone, cable television/telecommunications, and other companies or concerns having utilities in the vicinity of the Work.
6. Highway and street owners' 24-hour telephone number(s).
7. Emergency telephone numbers, including: "Emergency: Dial 911", and seven-digit telephone numbers for the hospital, ambulance, police, and fire department nearest to the Site. Provide names of each of these institution.
8. Other involved entities as applicable.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

++ END OF SECTION ++

SECTION 01320
PROGRESS SCHEDULE

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

1. DESIGN/BUILDER shall prepare and submit Progress Schedules and related documents in accordance with the General Conditions, as may be modified by the Supplementary Conditions, and this Section, unless otherwise accepted by OWNER.
2. Maintain and update Progress Schedules and related documents.
3. Progress Schedule shall be resource loaded CPM Progress Schedule.
4. OWNER's acceptance of the Progress Schedule or related documents, and comments or opinions concerning activities in the Progress Schedule and related documents shall not control DESIGN/BUILDER's independent judgment concerning means, methods, techniques, sequences and procedures of construction, unless the associated means, method, technique, sequence, or procedure is directed by the Contract Documents. DESIGN/BUILDER is solely responsible for complying with the Contract Times.

B. Use of Float:

1. Float belongs to the Project and may be used by OWNER or DESIGN/BUILDER to accommodate changes in the Work, or to mitigate the effect of events that delay performance or conformance with the Contract Times.
2. Changes or delays that influence Activities that have float and that do not extend the Critical Path are not justification for an extension of the Contract Times.

C. Factors Affecting the Progress Schedule:

1. In preparing the Progress Schedule, take into consideration submittal requirements and submittal review times, time for fabricating and delivering materials and equipment, Subcontractors' work, availability and abilities of workers, availability of construction equipment, weather conditions, restrictions in operations at the Site and coordination with OWNER's operations, and other factors that have the potential to affect completion of the Work within the Contract Times.
2. Comply with sequencing requirements indicated in the following:
 - a. Section 01 11 13, Summary of Work.
 - b. Section 01 14 16, Coordination with Owner's Operations.

1.2 DEFINITIONS

- A. The following terms are defined for this Section and supplement the terms defined in the General Conditions and Supplementary Conditions:
1. Activity: An element of the construction work that has the following specific characteristics: consumes time, consumes resources, has a definable start and finish, is assignable, and is measurable.
 2. Constraint: An imposed date on the Progress Schedule or an imposed tie between Activities. The Contract Times are Constraints.
 3. CPM Progress Schedule: Computerized Progress Schedule in Critical Path Method (CPM) format which accounts for the entire Work, defines the interrelationships between elements of the Work, reflects the uncompleted Work, and indicates the sequence with which the Work has been completed, indicates the sequence in which uncompleted Work will be completed, and indicates the duration of each Activity.
 4. Critical Path: The continuous chain of Activities with the longest duration for completion within the Contract Times.
 5. Early Start: The earliest possible date an Activity can start according to the assigned relationships among Activities.
 6. Early Finish: The earliest date an Activity can finish according to the assigned relationships among the Activities.
 7. Late Finish: The latest date an Activity can finish without extending the Contract Times.
 8. Late Start: The latest date an Activity can start without extending the Contract Times.
 9. Float: The time difference between the calculated duration of the Activity chain and the Critical Path.
 10. Total Float: The total number of days that an Activity (or chain of Activities) can be delayed without affecting the Contract Times.
 11. Network Diagram: A time-scaled logic diagram depicting the durations and relationships of the Activities.
 12. Work Areas, Area, or System: A logical breakdown of the Project elements or a group of Activities which, when collectively assembled, are readily identifiable on the Project (for example, yard piping, a structure or building, a treatment process, or other logical grouping).

1.3 QUALITY ASSURANCE

- A. Qualifications:
1. Progress Schedule Preparer:
 - a. DESIGN/BUILDER shall retain services of a scheduling consultant or shall self-prepare and maintain the Progress Schedule using qualified employee with experience in scheduling, and experienced with the scheduling software required for this Project, and experience serving as Progress Schedule preparer on construction projects of similar type, size, and scope to this Project.
 - b. Progress Schedule preparer shall have not less than five years experience using the schedule software required on construction

- projects of similar type, size, and scope as this Project.
- c. Prior to engaging a scheduling consultant or using a qualified employee, submit to OWNER the following:
 - 1) Name and address of proposed Progress Schedule preparer and the names of personnel who will be assigned to scheduling the Project.
 - 2) Information sufficient to demonstrate that proposed Progress Schedule preparer and scheduling personnel to be assigned to the Project possess qualifications complying with requirements of this Section. For each person assigned, submit list of similar type, size, contract value of projects, names and contact information of OWNER or architect and owner.
 - d. OWNER's Review of Qualifications:
 - 1) OWNER will respond to DESIGN/BUILDER whether proposed scheduling personnel are acceptable within five (5) days after OWNER's receipt of complete qualifications.
 - 2) If qualifications are not acceptable, submit qualifications of acceptable personnel within five (5) days of receipt of OWNER's non-acceptance.
 - 3) OWNER's acceptance or non-acceptance of qualifications does not release DESIGN/BUILDER from its obligations under the Contract Documents.

1.4 SUBMITTALS

- A. Quantity of each submittal required and timing of submittals are in this Section.
- B. Informational Submittals: Submit the following:
 1. Ninety-day Bar Chart:
 - a. Preliminary 90-day bar chart.
 - b. Acceptable 90-day bar chart.
 2. Initial Progress Schedules:
 - a. Preliminary Progress Schedule with associated Network Diagrams, narrative report.
 - b. Acceptable Progress Schedule with associated Network Diagrams, narrative report.
 - c. Preliminary resource-loaded Progress Schedule and associated reports.
 - d. Acceptable resource-loaded Progress Schedule and associated reports.
 - e. Submit each Progress Schedule submittal with letter of transmittal complying with requirements of Section 01 33 00, Submittal Procedures.
 3. Progress Schedule Updates.
 - a. Progress Schedule updates shall comply with requirements of this Section, and shall include updated Progress Schedule, narrative report, updated Network Diagram when relationships among Activities are changed.

- b. Submit updated Progress Schedule at each progress meeting. If a Progress Schedule remains unchanged from one progress meeting to the next, submit a written statement to that effect.
- 4. Look-Ahead Schedules
 - a. Submit three weeks look-ahead schedule at each progress meeting.
- 5. Time Impact Analyses: Submit in accordance with this Section.
- 6. Recovery Schedule: Submit in accordance with this Section.
- 7. Qualifications:
 - a. Progress Schedule preparer, and other personnel that will assist Progress Schedule preparer in preparing and maintaining the Progress Schedule.

1.5 INITIAL PROGRESS SCHEDULES

- A. Type and Organization of Progress Schedules:
 - 1. Prepare Progress Schedule using Microsoft Project 2016 software, unless other scheduling software is acceptable to OWNER.
 - 2. Sheet Size: 11" x 17", unless otherwise accepted by OWNER.
 - 3. Time Scale: Indicate first date of each work week.
 - 4. Activity Designations: Indicate title and related Specification Section number.
 - 5. Progress Schedules shall be CPM Progress Schedules.
 - 6. Organization:
 - a. Indicate on the separate Schedule of Submittals dates for submitting and reviewing Shop Drawings, Samples, and other submittals.
 - b. Group deliveries of materials and equipment into a separate sub-schedule that is part of the Progress Schedule.
 - c. Group construction into Work Area sub-schedules (that are part of the Progress Schedule) by Activity.
 - d. Clearly indicate the Critical Path on the Progress Schedule.
 - e. Organize each Work Area sub-schedule by Specification Section number.
 - 4. Within 10 days after the Effective Date of the Agreement, submit preliminary 90-day bar chart.
 - 5. At least 10 days before submission of the first Application for Payment a conference attended by DESIGN/BUILDER, Progress Schedule preparer, OWNER, and others as appropriate will be held to review for acceptability to OWNER as provided below the preliminary 90-day bar chart. DESIGN/BUILDER shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the acceptable 90-day bar chart. No progress payment will be made to DESIGN/BUILDER until acceptable 90-day bar chart is submitted to OWNER.
 - 6. Ninety-day bar chart will be acceptable to OWNER if it provides an orderly progression of the Work in the first 90 days of the Project and indicates compliance with Milestones, if any, in the first 90 days of the Project. Such acceptance will not impose on OWNER responsibility for the 90-day bar

chart or the Progress Schedule for sequencing, scheduling, or progress of the Work nor interfere with or relieve DESIGN/BUILDER from DESIGN/BUILDER's full responsibility therefor.

7. After 90-day bar chart is accepted by OWNER and prior to acceptance of the progress Schedule by OWNER, DESIGN/BUILDER may apply for progress payments for bonds and insurance, mobilization, and approved Shop Drawings (and acceptance of other submittals, as applicable) required for fabricating or purchasing materials and equipment to be incorporated into the Work.

B. Preliminary Progress Schedule:

1. Within 30 days after the Contract Times commence running, DESIGN/BUILDER shall submit to OWNER the preliminary Progress Schedule covering the entire Project, with associated Network Diagrams.
2. Submit 7 copies of preliminary Progress Schedule and associated reports and schedule-related documents to accompany the preliminary Progress Schedule, in accordance with the Submittals Article of this Section. Submit in accordance with Section 013300, Submittal Procedures.
3. OWNER will conduct a timely review of the preliminary Progress Schedule.
4. Preliminary Progress Schedule shall comply with the Contract Documents relative to Progress Schedules, but need not be resource-loaded.

C. Resource-Loaded Progress Schedule:

1. Within 10 days after OWNER's acceptance of the Progress Schedule, submit to OWNER resource-loaded Progress Schedule complying with resource-loading requirements in this Section.
2. Submit 7 copies each of the preliminary and the acceptable resource-loaded Progress Schedules and associated reports to accompany the initial submittals of resource-loaded Progress Schedules in accordance with the Submittals Article of this Section. Submit in accordance with Section 01 33 00, Submittal Procedures.
3. Resource-loaded Progress Schedules will be reviewed by OWNER within 7 days of OWNER's receipt, and OWNER's comments will be transmitted to DESIGN/BUILDER.
4. Make revisions required in accordance with OWNER's comments and resubmit to OWNER within 7 days of DESIGN/BUILDER's receipt of OWNER's comments.
5. Resource-loaded Progress Schedule accepted by OWNER shall be the basis for determining the amount of each DESIGN/BUILDER progress payment.

- D. If the Progress Schedule reflects completion date(s) different than the Contract Times, the Contract Times are not thereby voided, nullified, or affected. The Contract Times govern. Where the Progress Schedule reflects completion date(s) that are earlier than the Contract Times, OWNER may accept such Progress Schedule with DESIGN/BUILDER to specifically understand that no Claim for additional Contract Times or additions to the Contract Price shall be brought

against OWNER resulting from DESIGN/BUILDER's failure to complete the Work by the earlier date(s) indicated on the accepted Progress Schedule.

1.6 PROGRESS SCHEDULE UPDATES

A. Updates:

1. Update the Progress Schedule each month. If during progress of the Work events develop that necessitate changes in the initially accepted Progress Schedule (e.g., baseline Progress Schedule), identify updated Progress Schedules sequentially as Progress Schedule Revision 1, 2, 3, and continuing in sequence as required. Number the Progress Schedule submittals in accordance with Section 01 33 00, Submittal Procedures.
2. DESIGN/BUILDER's Progress Schedule update shall include a narrative report in accordance with this Section. Narrative report shall include description of current progress and status of each Area of the Project, a description of progress for the period, a description of the Critical Path, a discussion of current or potential delays, Change Orders (pending and approved in since the previous Progress Schedule update), and other problems associated with maintaining the Work on schedule.
3. The update to the Progress Schedule shall be based on retained logic. Progress override logic is not allowed.
4. Required scheduling software, and schedule organization, format, and content for updated Progress Schedules are identical to that required in this Section for initial Progress Schedules.
5. Submit to OWNER 7 hard copies of the updated Progress Schedule, Network Diagram, narrative report, and other schedule-related reports and documents required, and two compact discs (CD) each with a complete software backup copy of the Progress Schedule.
6. Submit updated Network Diagrams when revisions are proposed to the logic. Indicate in the narrative report delays that have occurred since the previous updated Progress Schedule. OWNER will not recommend payment by OWNER of progress payments until updated Progress Schedule is received, reviewed, and accepted by OWNER. Payment for out-of-sequence Work is not allowed.

B. Monthly Schedule Meeting:

1. During the month, utilizing the previous month's 30-day look-ahead schedule. DESIGN/BUILDER shall record the percent complete, start and finish dates of each scheduled Activity with the remaining duration for each Activity started but not completed, including Activities associated with procurement of materials and equipment.
2. On the same day each month, at least one week prior to a progress meeting, DESIGN/BUILDER, Progress Schedule preparer, OWNER, and others as appropriate shall meet at the Site and tour the Work to review and update the schedule and progress information gathered by DESIGN/BUILDER during the month. After acceptance of DESIGN/BUILDER's updated data,

Progress Schedule preparer shall use this information to update the Progress Schedule.

1.7 NARRATIVE REPORT

- A. Prepare and include with the preliminary Progress Schedule and each subsequent Progress Schedule submittal, written narrative report describing the schedule-related requirements of the Contract Documents and DESIGN/BUILDER's plan and schedule for complying with such requirements. Narrative report shall describe the methods of sequencing and operation, resources to be employed, time frames for the construction of each of the major Systems on the Project, and time frames for complying with the Contract Times and DESIGN/BUILDER's interim schedule milestones.

1.8 TIME IMPACT ANALYSIS

- A. Time Impact Analyses, General:
 - 1. Prepare and submit a time impact analysis when one or more of the following occurs: a Change Order proposal is prepared, a Work Change Directive is issued that will affect the Progress Schedule, or when delays are experienced. Time impact analysis shall illustrate the influence of each Change Order, Work Change Directive, or delay, as applicable, on the Contract Times and schedule milestones.
 - 2. Each time impact analysis shall include a sketch (fragnet) demonstrating how DESIGN/BUILDER proposes to incorporate the changes in the Work or, as applicable, delays into the Progress Schedule. Fragnet shall include all logic, resource and cost changes, and additions required as result of said Change Order, Work Change Directive, or delay.
 - 3. Fragnet shall show all CPM logic revisions for the Work associated with the Change Order, Work Change Directive, or delay and its relationship to other Activities in the Network Diagram.
 - 4. Time impact analysis shall demonstrate the time impact, based on date the Change Order or Work Change Directive was given to DESIGN/BUILDER, or as applicable the date the delay was implemented; the status of the Work at that point in time; and the Activity duration of affected Activities. Activity duration used in the time impact analysis shall be those included in the latest update of the Progress Schedule accepted by OWNER, closest to the time of the start of the delay or start of the Change Order or Work Change Directive, as adjusted by mutual, written agreement of the parties and OWNER.
 - 5. Timing of Time Impact Analysis:
 - a. Submit each time impact analysis within 10 days after the following, as applicable:
 - 1) Start of the delay.
 - 2) After the submittal of Change Order proposal.
 - 3) After DESIGN/BUILDER receipt of Work Change Directive.

- b. When DESIGN/BUILDER does not submit time impact analysis for a specific change or delay, within the specified period of time for such submittal, such non-submittal shall be construed that no extension of the Contract Times is required.

B. Evaluation by OWNER and Acceptance:

1. OWNER's evaluation of each time impact analysis comprised of complete information will be completed in timely manner after OWNER's receipt. Changes in the Contract Times will be made only by Change Order.
2. When mutual agreement is reached between the parties on effect of the change or delay in the Project, incorporate into the next Progress Schedule update the associated fragnets illustrating the influence of changes and delays.

1.12 RECOVERY SCHEDULES

A. Recovery Schedules, General:

1. When updated Progress Schedule indicates that the ability to comply with the Contract Times falls 10 or more days behind schedule, and there is no excusable delay, Change Order, or Work Change Directive to support an extension of the Contract Times, DESIGN/BUILDER shall prepare and submit a Progress Schedule demonstrating DESIGN/BUILDER's plan to accelerate the Work to achieve compliance with the Contract Times ("recovery schedule") for OWNER's acceptance.
2. Submit recovery schedule within 10 days after submittal of updated Progress Schedule where need for recovery schedule is indicated.

B. Implementation of Recovery Schedule:

1. At no additional cost to OWNER, do one or more of the following: furnish additional labor, provide additional construction equipment, provide suitable materials, employ additional work shifts, expedite procurement of materials and equipment to be incorporated into the Work, and other measures necessary to complete the Work within the Contract Times.
2. Upon acceptance of recovery schedule by OWNER, incorporate recovery schedule into the next Progress Schedule update.

C. Lack of Action:

1. DESIGN/BUILDER's refusal, failure, or neglect to take appropriate recovery action, or to submit a recovery schedule, shall constitute reasonable evidence that DESIGN/BUILDER is not prosecuting the Work or separable part thereof with the diligence that will ensure completion within the Contract Times. Such lack of action shall constitute sufficient basis for OWNER to exercise remedies available to OWNER under the Contract Documents.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

++ END OF SECTION ++

SECTION 01330
SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

1. DESIGN/BUILDER shall provide submittals in accordance with the General Conditions as modified by the Supplementary Conditions, and this Section.
2. Provide submittals well in advance of need for the material or equipment, or procedure (as applicable), in the Work and with ample time required for delivery of material or equipment and to implement procedures following OWNER's approval or acceptance of the associated submittal. Work covered by a submittal will not be included in progress payments until approval or acceptance of related submittals has been obtained in accordance with the Contract Documents.
3. CONTRACTOR is responsible for dimensions to be confirmed and corrected at the Site, for information pertaining solely to the fabrication processes and to techniques of construction, and for coordinating the work of all trades. DESIGN/BUILDER's signature of submittal's stamp and letter of transmittal shall be DESIGN/BUILDER's representation that DESIGN/BUILDER has met his obligations under the Contract Documents relative to that submittal.

B. Samples:

1. Conform submittal of Samples to the General Conditions as modified by the Supplementary Conditions, this Section, and the Specification Section in which the Sample is specified.
2. Furnish at the same time Samples and submittals that are related to the same unit of Work or Specification Section. Where specifically required in technical specifications, OWNER will not review submittals without associated Samples, and will not review Samples without associated submittals.
3. Samples shall clearly illustrate functional characteristics of product, all related parts and attachments, and full range of color, texture, pattern, and material.

1.2 TYPES OF SUBMITTALS

- A. Submittal types are classified as follows: 1) Action Submittals, 2) Informational Submittals, 3) Closeout Submittals, and 4) Maintenance Material submittals. Type of each required submittal is designated in the respective Specification Sections; when type of submittal is not specified in the associated Specification Section, submittal will be classified as follows:

1. Action Submittals include:

- a. Shop Drawings.
- b. Product data.
- c. Delegated design submittals, which include documents prepared, sealed, and signed by a design professional retained by DESIGN/BUILDER, Subcontractor, or Supplier for materials and equipment to be incorporated into the completed Work. Delegated design submittals do not include submittals related to temporary construction unless specified otherwise in the related Specification Section. Delegated design submittals include: design drawings, design data including calculations, specifications, certifications, and other submittals prepared by such design professional.
- d. Samples.
- e. Testing plans, procedures, and testing limitations.
- 2. Informational Submittals include:
 - a. Certificates.
 - b. Design data not sealed and signed by a design professional retained by DESIGN/BUILDER, Subcontractor, or Supplier.
 - c. Pre-construction test and evaluation reports, such as reports on pilot testing, subsurface investigations, potential Hazardous Environmental Condition, and similar reports.
 - d. Supplier instructions, including installation data, and instructions for handling, starting-up, and troubleshooting.
 - e. Source quality control submittals (other than testing plans, procedures, and testing limitations), including results of shop testing.
 - f. Field or Site quality control submittals (other than testing plans, procedures, and testing limitations), including results of operating and acceptability tests at the Site.
 - g. Supplier reports.
 - h. Sustainable design submittals (other than sustainable design closeout documentation).
 - i. Special procedure submittals, including health and safety plans and other procedural submittals.
 - j. Qualifications statements.
- 3. Closeout Submittals include:
 - a. Maintenance contracts.
 - b. Operations and maintenance data.
 - c. Bonds, such as maintenance bonds and bonds for a specific product or system.
 - d. Warranty documentation.
 - e. Record documentation.
 - f. Sustainable design closeout documentation.
 - g. Software.
- 4. Maintenance Material Submittals include:
 - a. Spare parts.
 - b. Extra stock materials.
 - c. Tools.
- 5. When type of submittal is not specified and is not included in the list above,

OWNER will determine the type of submittal.

- B. Not Included in this Section: Administrative and procedural requirements for following are covered elsewhere in the Contract Documents:
1. Requests for interpretations of the Contract Documents.
 2. Change Orders, Work Change Directives, and Field Orders.
 3. Applications for Payment
 4. Progress Schedules.
 5. Photographic documentation.
 6. Reports and documentation required in accordance with applicable permits
 7. Site survey data.

1.3 SUBMITTALS REQUIRED IN THIS SECTION

- A. Informational Submittals: Provide the following:
1. Schedule of Submittals:
 - a. Timing:
 - 1) Provide submittal within time frames specified in the Contract Documents.
 - 2) Provide updated Schedule of Submittals with each submittal of the updated Progress Schedule.
 - b. Content: In accordance with the General Conditions as modified by the Supplementary Conditions, and this Section. Requirements for content of preliminary Schedule of Submittals and subsequent submittals of the Schedule of Submittals are identical. Identify on Schedule of Submittals all submittals required in the Contract Documents. Updates of Schedule of Submittals shall show scheduled dates and actual dates for completed tasks. Indicate submittals that are on the Project's critical path. Indicate the following for each submittal:
 - 1) Date by which submittal will be provided to OWNER.
 - 2) Whether submittal will be for a substitution or "equal". Procedures for substitutions and "or equals" are specified in the General Conditions and the Division 01 Specifications
 - 3) Date by which OWNER's response is required. At least 10 days shall be allowed from OWNER's receipt of each submittal. Allow increased time for large or complex submittals.
 - 4) For submittals for materials or equipment, date by which material or equipment must be at the Site to avoid delaying the Work and to avoid delaying the work of other contractors.
 - c. Prepare Schedule of Submittals using same software, and in same format, specified for Progress Schedules.
 - d. Coordinate Schedule of Submittals with the Progress Schedule.
 - e. Schedule of Submittals that is not compatible with the Progress Schedule, or that does not indicate submittals on the Project's critical path, or that that places extraordinary demands on OWNER for time and resources, is unacceptable. Do not include submittals not required by the Contract Documents.

- f. In preparing Schedule of Submittals:
 - 1) Considering the nature and complexity of each submittal, allow sufficient time for review and revision.
 - 2) Reasonable time shall be allowed for: OWNER’s review and processing of submittals, for submittals to be revised and resubmitted, and for returning submittals to DESIGN/BUILDER.
 - 3) Identify and accordingly schedule submittals that are expected to have long anticipated review times.

1.4 PROCEDURE FOR SUBMITTALS

- A. Submittal Identification System: Use the following submittal identification system, consisting of submittal number and review cycle number.
 - 1. Submittal Number: Shall be separate and unique number correlating to each individual submittal required. DESIGN/BUILDER shall assign submittal number as follows:
 - a. First part of submittal number shall be the applicable Specification Section number, followed by a hyphen.
 - b. Second part of submittal number shall be a three-digit number (sequentially numbered from 001 through 999) assigned to each separate and unique submittal provided under the associated Specification Section.
 - 2. Review Cycle Number: Shall be a letter designation indicating the initial submittal or re-submittal associated with each submittal number:
 - a. “A” = Initial (first) submittal.
 - b. “B” = Second submittal (e.g., first re-submittal).
 - c. “C” = Third submittal (e.g., second re-submittal).
 - 3. Examples:

Example Description	Submittal Identification	
	Submittal No.	Review Cycle
Initial (first) review cycle of the third submittal provided under Section 40 05 19, Ductile Iron Process Pipe	40 05 19-003-	A
Second review cycle (first re-submittal) of third submittal provided under Section 40 05 19, Ductile Iron Process Pipe	40 05 19-003-	B

- B. Letter of Transmittal for Submittals:
 - 1. Provide separate letter of transmittal with each submittal. Each submittal shall be for one Specification Section.
 - 2. At beginning of each letter of transmittal, provide a reference heading indicating: DESIGN/BUILDER’s name, OWNER’s name, Project name, Contract name and number, transmittal number, and submittal number.
 - 3. For submittals with proposed deviations from requirements of the Contract Documents, letter of transmittal shall specifically describe each proposed variation.

- C. Design/Builder's Review and Stamp:
1. Design/Builder's Review: Before transmitting submittals to OWNER, review submittals to:
 - a. assure proper coordination of the Work;
 - b. determine that each submittal is in accordance with DESIGN/BUILDER's obligations;
 - c. verify that submittal contains sufficient information for OWNER to determine compliance with the Contract Documents.
 2. Incomplete or inadequate submittals will be returned without review.
 3. Design/Builder's Stamp and Signature:
 - a. Each submittal provided shall bear DESIGN/BUILDER's stamp of approval and signature, as evidence that submittal has been reviewed by DESIGN/BUILDER and verified as complete and in accordance with the Contract Documents.
 - b. Submittals without DESIGN/BUILDER's stamp and signature will be returned without review. Signatures that appear to be computer-generated will be regarded as unsigned and the associated submittal will be returned without review.
 - c. DESIGN/BUILDER's stamp shall contain the following:

"Project Name: _____

Design/Builder's Name: _____

Date: _____

----- *Reference* -----

Item/Submittal Title: _____

Specifications:

Section: _____

Page No.: _____

Paragraph No.: _____

Drawing No.: _____ of _____

Location of Work: _____

Submittal No. and Review Cycle: _____

_____ by _____ Design/Builder with Submittal Nos.:

I hereby certify that the Design/Builder has satisfied Design/Builder's obligations under the Contract Documents relative to Design/Builder's review and approval of this submittal.

Approved By (for Design/Builder): _____
 _____”

D. Submittal Marking and Organization:

1. Mark on each page of submittal and each individual component submitted with submittal number and applicable Specification paragraph.
2. Arrange submittal information in same order as requirements are written in the associated Specification Section.
3. Each Shop Drawing sheet shall have title block with complete identifying information satisfactory to OWNER.
4. Package together submittals for the same Specification Section. Do not provide required information piecemeal.

E. Format of Submittal and Recipients:

1. Action Submittals and Informational Submittals: Furnish in accordance with Table 01 33 00-A, except that submittals of Samples shall be as specified elsewhere in this Section:

**TABLE 01 33 00-A: SUBMITTAL CONTACTS
AND REQUIRED COPIES**

	Address for Deliveries	Contact Person	E-mail Address	No. of Hard-copies	Remarks
a.	OWNER: City of Pomona	Tim Hampton	Tim_Hampton@pomona.ci.us	Seven	
b.	Resident Project Representative: At the Site.	TBD	TBD	One	
c.	Other Prime Contractors (addresses TBD)	TBD	TBD	One each	

Notes:
TBD = To Be Determined

2. Samples:

- a. Securely label or tag Samples with submittal identification number. Label or tag shall include clear space at least three inches by three inches in size for affixing OWNER's review stamp. Label or tag shall not cover, conceal, or alter appearance or features of Sample. Label or tag shall not be separated from the Sample.
- b. Submit number of Samples required in Specifications. If number of Samples is not specified in the associated Specification Section, provide at least 3 identical Samples of each item required for OWNER's approval. Samples will not be returned to DESIGN/BUILDER. If DESIGN/BUILDER requires Sample(s) for DESIGN/BUILDER's use, notify OWNER in writing and provide

additional Sample(s). DESIGN/BUILDER is responsible for furnishing, shipping, and transporting additional Samples.

- c Deliver one Sample to OWNER's field office at the Site. Deliver balance of Samples to OWNER at address listed in Table 01 33 00-A, unless otherwise directed by OWNER.
 - 3. Maintenance Material Submittals: For spare parts, extra stock materials, and tools, submit quantity of items specified in associated Specification Section. Furnish in accordance with Section 01 78 43, Spare Parts and Extra Materials.
- F. Resubmittals: Refer to the General Conditions for requirements regarding resubmitting required submittals.

1.5 OWNER'S REVIEW

- A. Timing: OWNER's review will conform to timing accepted by OWNER in the accepted Schedule of Submittals.
- B. Submittals not required in the Contract Documents will not be reviewed by OWNER and will not be recorded in OWNER's submittal log. All hardcopies of such submittals will be returned to DESIGN/BUILDER.
- C. Action Submittals, Results of OWNER's Review: Each submittal will be given one of the following dispositions:
 - 1. Approved: Upon return of submittal marked "Approved", order, ship, or fabricate materials and equipment included in the submittal (pending OWNER's approval or acceptance, as applicable, of source quality control submittals) or otherwise proceed with the Work in accordance with the submittal and the Contract Documents.
 - 2. Approved as Corrected: Upon return of submittal marked "Approved as Corrected", order, ship, or fabricate materials and equipment included in the submittal (pending OWNER's approval or acceptance, as applicable, of source quality control submittals) or otherwise proceed with the Work in accordance with the submittal and the Contract Documents, provided it is in accordance with corrections indicated.
 - 3. Approved as Corrected – Resubmit: Upon return of submittal marked "Approved as Corrected – Resubmit", order, ship, or fabricate materials and equipment included in the submittal (pending OWNER's approval or acceptance, as applicable, of source quality control submittals) or otherwise proceed with the Work in accordance with the submittal and the Contract Documents, provided it is in accordance with corrections indicated. Provide to OWNER record re-submittal with all corrections made. Receipt of corrected re-submittal is required before materials or equipment covered in the submittal will be eligible for payment.
 - 4. Revise and Resubmit: Upon return of submittal marked "Revise and Resubmit", make the corrections indicated and re-submit to OWNER for approval.

5. Not Approved: This disposition indicates material or equipment that cannot be approved. Upon return of submittal marked “Not Approved”, repeat initial submittal procedure utilizing approvable material or equipment.
- D. Informational Submittals, Results of OWNER’s Review:
1. Each submittal will be given one of the following dispositions:
 - a. Accepted: Information included in submittal conforms to the applicable requirements of the Contract Documents, and is acceptable. No further action by DESIGN/BUILDER is required relative to this submittal, and the Work covered by the submittal may proceed, and products with submittals with this disposition may be shipped or operated, as applicable.
 - b. Not Accepted: Submittal does not conform to applicable requirements of the Contract Documents and is not acceptable. Revise submittal and re-submit to indicate acceptability and conformance with the Contract Documents.
 2. The following types of Informational Submittals, when acceptable to OWNER, will not receive a written response from OWNER. Disposition as “accepted” will be recorded in OWNER’s submittal log. When submittals of the following are not acceptable, OWNER will provide written response to DESIGN/BUILDER
 - a. Material safety data sheets (MSDS).
 - b. Compaction testing reports.
 - c. Concrete testing reports.
 - d. Manufacturer’s instructions.
- E. Closeout Submittals, Results of OWNER’s Review: Dispositions and meanings are the same as specified for Informational Submittals. When acceptable, Closeout Submittals will not receive a written response from OWNER. Disposition as “accepted” will be recorded in OWNER’s submittal log. When Closeout Submittal is not acceptable, OWNER will provide written response to DESIGN/BUILDER.
- F. Maintenance Material Submittals, Results of OWNER’s Review: Dispositions and meanings are the same as specified for Informational Submittals. When acceptable, Maintenance Material Submittals will not receive a written response from OWNER. Disposition as “accepted” will be recorded in OWNER’s submittal log. When Maintenance Material Submittal is not acceptable, OWNER will provide written response to DESIGN/BUILDER, and DESIGN/BUILDER is responsible for costs associated with transporting and handling of maintenance materials until compliance with the Contract Documents is achieved.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

++ END OF SECTION ++

SECTION 01740
CLEANING

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
1. CONTRACTOR shall execute cleaning during the Project, at completion of the Work, and as required by the General Conditions and this Section.
 2. Maintain in a clean manner the Site, the Work, and areas adjacent to or affected by the Work.

1.2 REFERENCES

- A. Standards referenced in this Section are:
1. NFPA 241, Safeguarding Construction, Alteration, and Demolition Operations.

1.3 PROGRESS CLEANING

- A. General: Clean the Site, work areas, and other areas occupied by CONTRACTOR at least weekly. Dispose of materials in accordance with the General Conditions and the following:
1. Comply with NFPA 241 for removing combustible waste materials and debris.
 2. Do not hold non-combustible materials at the Site more than three days if the temperature is expected to rise above 80 degrees F. When temperature is less than 80 degrees F, dispose of non-combustible materials within seven days of their generation.
 3. Provide suitable containers for storage of waste materials and debris.
 4. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately.
- B. Site:
1. Keep outdoor, dust-generating areas wetted down or otherwise control dust emissions.
 2. At least weekly, brush-sweep roadways and paved areas at the Site that are used by construction vehicles or otherwise affected by construction activities.
- C. Work Areas:
1. Clean areas where the Work is in progress to level of cleanliness necessary for proper execution of the Work.
 2. Remove liquid spills promptly and immediately report spills to OWNER, and authorities having jurisdiction.

3. Where dust would impair proper execution of the Work, broom-clean or vacuum entire work area, as appropriate.
 4. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- D. Installed Work: Keep installed Work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of material or equipment installed, using only cleaning agents and methods specifically recommended by material or equipment manufacturer. If manufacturer does not recommend specific cleaning agents or methods, use cleaning agents and methods that are not hazardous to health and property and that will not damage exposed surfaces.
- E. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration until Substantial Completion.
- F. Cutting and Patching:
1. Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.
 2. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.
- G. Waste Disposal:
1. Properly dispose of waste materials, surplus materials, debris, and rubbish off the Site.
 2. Do not burn or bury rubbish and waste materials at the Site.
 3. Do not discharge volatile or hazardous substances, such as mineral spirits, oil, or paint thinner, into storm sewers or sanitary sewers.
 4. Do not discharge wastes into surface waters or drainage routes.
 5. CONTRACTOR shall be solely responsible for complying with Laws and Regulations regarding storing, transporting, and disposing of waste.
- H. During handling and installation of materials and equipment, clean and protect construction in progress and adjoining materials and equipment already in place. Apply protective covering where required for protection from damage or deterioration, until Substantial Completion.
- I. Clean completed construction as frequently as necessary throughout the construction period.
- J. CONCRETE AND BITUMINOUS SURFACING REMOVAL
1. Break up and completely remove existing concrete surfacing, curbs, gutters, walks and bituminous surfacing to indicated limits. Cutting shall be performed to a neat and even line with proper tools or a concrete cutting saw. Minimum depth of cut shall be 1-1/2 inches, unless otherwise indicated. Remove concrete broken beyond the indicated limits to the nearest joint or score line and replace with new concrete to match existing.

1.4 CLOSEOUT CLEANING

- A. Complete the following prior to requesting inspection for Substantial Completion:
1. Clean and remove from the Site rubbish, waste material, debris, and other foreign substances.
 2. Sweep paved areas broom-clean. Remove petrochemical spills, stains, and other foreign deposits.
 3. Hose-clean sidewalks and loading areas.
 4. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 5. Leave surface waterways, drainage routes, storm sewers, and gutters open and clean.
 6. Repair pavement, roads, sod, and other areas affected by construction operations and restore to specified condition; if condition is not specified, restore to pre-construction condition.
 7. Clean exposed exterior and interior hard-surfaced finishes to dirt-free condition, free of spatter, grease, stains, fingerprints, films, and similar foreign substances.
 8. Remove debris and surface dust from limited-access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, and similar spaces.
 9. In unoccupied spaces, sweep concrete floors broom-clean.
 10. Clean transparent materials, including mirrors and glazing in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
 11. Remove non-permanent tags and labels.
 12. Touch up and otherwise repair and restore chipped, scratched, dented or otherwise marred surfaces to specified finish and match adjacent surfaces.
 - a. Do not paint over “UL” or similar labels, including mechanical and electrical nameplates.
 13. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint, and mortar droppings, and other foreign substances.
 14. Clean plumbing fixtures to sanitary condition, free of stains, including stains resulting from water exposure.
 15. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 16. Clean lighting fixtures, lamps, globes, and reflectors to function with full efficiency. Replace temporary lamps provided in permanent fixtures. Replace existing lighting fixture components that are burned out or noticeably dimmed from use during construction. Replace defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 17. Leave the Site clean, and in neat, orderly condition, satisfactory to OWNER and ENGINEER.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

++ END OF SECTION ++

**SECTION 05730
ORNAMENTAL IRON FENCE AND ROLL GATE**

PART 1 – GENERAL

1.01 WORK INCLUDED

- A. This specification covers ornamental iron fence materials including ornamental roll iron gates, posts, fence and hardware.

1.02 SYSTEM DESCRIPTION

- A. The manufacturer shall supply a complete ornamental fencing system including all components defined herein (fence panels, posts, gates and hardware).

1.04 QUALITY ASSURANCE

- A. The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified for the ornamental iron fencing and sliding gate.

1.05 REFERENCES

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM B117 - Practice for Operating Salt-Spray (Fog) Apparatus.
- C. ASTM D523 - Test Method for Specular Gloss.
- D. ASTM D714 - Test Method for Evaluating Degree of Blistering in Paint.
- E. ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
- F. ASTM D1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
- G. ASTM D2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
- H. ASTM D2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- I. ASTM D3359 - Test Method for Measuring Adhesion by Tape Test.
- J. ASTM F2408 – Ornamental Fences Employing Galvanized Steel Tubular Pickets.

1.06 SUBMITTALS

- A. Submit the manufacturer's shop drawings and literature prior to installation.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, handle, and protect materials in accordance with Manufacturer's Recommendations.
- B. Deliver to the job site materials in good condition and properly protected against damage to factory-finished surfaces. Store materials in a clean, dry location and in such a way as to avoid damage, especially from dust, chemicals and moisture in the air by covering with protective material. Secure materials from vandalism and theft. Handle materials carefully on the job site to protect factory finishes.

1.08 WARRANTY

- A. All structural fence components (i.e. rails, pickets, and posts) shall be warranted within specified limitations, by the manufacturer for a period of 10 years from date of original purchase. Warranty shall cover any defects in material finish, including cracking, peeling, chipping, blistering or corroding.
- B. Correct defective work within (1) one year period after date of Substantial Completion.
- C. Certificate that it manufactures the ornamental iron fencing and gates in accordance with specifications and/or shop drawings supplied by manufacturers assume the responsibility of providing products meeting manufacturer's prescribed specifications.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

- A. The fence system shall conform to Ameristar Aegis II, Heavy Industrial Design, Invincible Style, and 3-Rail frame configuration, manufactured by Ameristar Fence Products, Inc. in Tulsa, Oklahoma.
- B. The Steel Roll Gate System shall conform to Ameristar PassPort II, Industrial Ornamental Design, Invincible Style, and 3-Rail frame configuration, manufactured by Ameristar Fence Products, Inc. in Tulsa, Oklahoma or City-Approved equal, Contractor shall submit information for both the specified material/system and the proposed substitution for review.
- C. The Gate Operators shall be LiftMaster Elite SL3000UL or City-Approved equal.
- D. The keypad shall be a DoorKing Model 1503 or City-Approved equal.

2.02 MATERIALS

- A. Steel material for fence framework (i.e. tubular pickets, rails and posts), shall be galvanized prior to forming in accordance with the requirements of ASTM A653/A653M, with minimum yield strength of 45,000 psi (310 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft² (276 g/m²), Coating Designation G-90.

- B. Material for fence pickets shall be 1" square x 14 Ga. tubing. The cross-sectional shape of the rails shall conform to the manufacturer's ForeRunner™ double wall design with outside cross-section dimensions of 1.75" square and a minimum thickness of 14 Ga. Picket holes in the ForeRunner rail shall be spaced 4.715" o.c., except for Invincible style 6' long, which shall be, spaced 4.98" o.c. Picket retaining rods shall be 0.125" diameter galvanized steel. High quality PVC grommets shall be supplied to seal all picket-to-rail intersections. Fence posts and gateposts shall meet the minimum size requirements of Table 1.
- C. Steel material for the roll gate components (i.e. pickets, rails, diagonals and uprights), shall be commercial steel with a minimum yield strength of 45,000 psi (344 MPa).
- D. Ornamental picket material for the roll gate shall be 1" square x 14 Ga. Tubing. Picket spacing shall be 4-3/4". Material for top rails, uprights and diagonals rails shall be 2" square x 12 Ga. Material for the bottom rail shall be 2" x 4" x 11 Ga. Posts shall be a minimum of 4" square x 11 Ga.

2.03 FABRICATION

- A. Fence Pickets, rails and posts shall be precut to specified lengths. ForeRunner rails shall be prepunched to accept pickets. Pickets shall be predrilled to accept retaining rods.
- B. Grommets shall be inserted into the prepunched holes in the rails and pickets shall be inserted through the grommets so that predrilled picket holes align with the internal upper raceway of the ForeRunner rails (Note: This can best be accomplished by making an alignment jig). Retaining rods shall be inserted into each ForeRunner rail so that they pass through the predrilled holes in each picket. .
- C. The manufactured galvanized framework shall be subjected to the PermaCoat® thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including, as a minimum, a six-stage pretreatment/wash, an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils (0.0508mm). The topcoat shall be a "no-mar" TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color shall be (specify Black, Bronze, White, or Desert Sand). The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic shown in Table 2.
- D. Completed fence sections (i.e., panels) shall be capable of supporting a 600 lb. load applied at midspan without permanent deformation.
- E. Fence panels shall be biasable to a 25% change in grade.
- F. Pickets/pales, rails, uprights and posts for the roll gate shall be precut to specified lengths. Diagonals shall be precut to specified lengths and angles. Frame materials shall be joined by welding. Pickets/pales shall be face welded to roll gate frame, except for Invincible or Gauntlet style gates over 18' long. Invincible or Gauntlet style gates over 18' long shall have pickets face-welded to 2" x 2" angle iron to form panels equal in length to the gate frame bay width.

- G. The manufactured roll gate and bolt-on panels (if applicable) shall be subjected to the PermaCoat® thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including, as a minimum, a six-stage pre-treatment/wash (with zinc phosphate), an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils (0.0508mm). The topcoat shall be a “no-mar” TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color shall be (specify Black, Bronze, White, or Desert Sand). The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic per the manufacturer’s Specifications..
- H. Completed roll gate shall be capable of supporting a 200 lb. load applied at midspan without permanent deformation.
- I. Color: Full line of standard color, color to be selected by Owner's Designated Representative.
- J. Fence Height: 8 ft.

PART 3 - EXECUTION

3.01 PREPARATION

- A. The Contractor shall layout the new fence in accordance with the fence construction plans, shop drawings, and all applicable requirements and codes.
 - 1. The Contractor shall verify any grade changes or surface irregularities.
 - 2. Discrepancies between the approved shop drawings and field conditions must be approved by the Owner's Designated Representative prior to proceeding with the installation.

B. INSTALLATION

- 1. Fence posts shall be set plumb and level at spaces shown on the approved shop drawings.
- 2. Fence post shall be spaced according to the manufacturer’s specifications. For installations that must be raked to follow sloping grades, the post spacing dimension must be measured along the grade. Fence panels shall be attached to posts with brackets supplied by the manufacturer. Posts shall be set in concrete footers having a minimum depth of 36” (Note: In some cases, local restrictions of freezing weather conditions may require a greater depth). The “Earthwork” and “Concrete” sections of this specification shall govern material requirements for the concrete footer.
- 3. Gateposts shall be set in accordance with the spacing’s shown in the construction plans. The “Earthwork” and “Concrete” sections of this specification shall govern post base material requirements. 6” wheels shall be bolted to the gate (between the wheel plates welded near the ends of the gate bottom rail). The gate shall be set upright with the V-grooved wheels positioned over the pre-installed steel V-track that traverses the gate opening. Roller guides shall be affixed to the gateposts at a height even with the gate top rail to hold the gate in a vertical position. Gate stops shall be welded to the end of the gate or track so gate cannot pass rollers in either direction.

4. All field welds and any abrasions to factory coatings shall be thoroughly cleaned, re-primed and touched up by the Contractor with paint of the same quality, color and gloss of that used by the manufacturer.

C. CLEANING

1. The Contractor shall clean job site of excess materials.
2. Post hole excavations shall be scattered uniformly away from the posts or removed as directed.
3. Concrete splatter shall be cleaned from exposed posts.

END OF SECTION