CONTRACT DOCUMENTS

for the construction of

ENTRY GATE AT WQRRP

DISTRICT PROJECT NO. 20PS601

Approved for Construction

________________________________________
Michal Savannah
Infrastructure and Planning Department Manager

August 2020
CONTRACT DOCUMENTS
for the construction of
ENTRY GATE AT WQRRP

DISTRICT PROJECT NO. 20PS601

August 2020
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<th>TITLE</th>
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<td>NOTES AND KEY MAP</td>
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<tr>
<td>C-4</td>
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INVITATION TO BID

NOTICE IS HEREBY GIVEN THAT the Board of the West County Wastewater District, Richmond, California, invites and will receive sealed bids for furnishing all labor, equipment, materials and services specified for the construction of WCWD Project No. 20PS601, Entry Gate at the WQRRP, in conformance with the approved Contract Documents.

The work covered by this contract will be performed at the WCWD Water Quality and Resource Recovery Plant (WQRRP) at 2377 Garden Tract Road in unincorporated Contra Costa County. The work includes, but is not limited to, the following:

1. Provide a new, motorized, iron sliding gate with tracks and wheels.
2. Chain link fence (50 feet at 8 feet high with 2 strands of barbed wire) and 2 personnel gates.
3. Provide power for the gate and entry system.
4. A wireless receiver at the gate with pedestal, bollards and 50 transmitters.
5. Provide a camera feed to the operations room.
6. Provide an access card reader on the gate for manual operation.
7. All other work as shown and specified in the Contract Documents.

Bid opening date: the District will receive sealed bids at the West County Wastewater District reception area until 2:00 p.m., local time, Tuesday September 8, 2020 at 2910 Hilltop Drive, Richmond, California 94806. At that time, accepted bids will be publicly opened.

Contract Documents are on file and may be examined without charge at the District office, 2910 Hilltop Drive, Richmond, California 94806.

Inquiries regarding further information about the project may be directed to Ken Deibert at (510) 222-6700 (ext. 3616) or kdeibert@wcwd.org.

Copies of the Contract Documents may be obtained at the District Office. The Contract Documents may be obtained for a nonrefundable fee of $50.00 if picked up, or $60.00 if requested by mail. Payment must be made at the time that the documents are obtained. Make check and/or money order payable to West County Wastewater District (WCWD). Credit cards are also accepted.

In accordance with SB 854, all participating contractors and subcontractors must be registered with the Public Works Contractor Registration program established by the Department of Industrial Relations.

Attention is directed to the Disadvantaged Business Enterprise (DBE) requirements for bidders as detailed in Section 00 62 39. “Contractors are required to post subcontractor solicitations for a minimum of 30 calendar days before the bid opening date.”
Notice is hereby given that, pursuant to Part 7, Chapter 1, Article 2, and Section 1770 ET. seq. of the Labor Code of the State of California, the successful bidding contractor and its sub contractors shall pay their labor forces not less than the general prevailing rate of per diem wages as determined by the Director of Industrial Relations, and travel and subsistence pay as such are defined in applicable collective bargaining agreements filed in accordance with Sections 1773.1 and 1773.8 of said Labor Code, for work needed and performed on this Project. Said determinations, in effect at the time of publishing this notice, are on file at the above identified District Office and may be examined there, and copies of which are available to any interested party on request. It shall, pursuant to the provisions of Section 1773.2 of said Labor Code, be a requirement of the work for the successful bidding contractor to post and maintain a copy of said wages' determination at the project sited throughout the duration of the work.

Bids to receive consideration must be signed by the bonafide prime contractor who proposes to undertake the work and who is properly licensed in accordance with the Contractor's License Law as provided beginning at Section 7000 of the Business and Professions Code of the State of California. The valid license(s) required for the work are as follows: Class A or Class B. Each bid submitted must be on the forms furnished within the Project Contract and must be accompanied by a certified or cashier's check or bidder's bond for an amount not less than ten percent of the aggregate total bid.

The Contractor shall be allowed to substitute securities for any funds withheld to ensure performance under this Contract pursuant to Section 22300 of the California Public Contract Code.

The Contractor shall complete this project within 60 days of the notice to proceed. All bid protests must be received no later than five (5) calendar days following the bid opening date.

The District Board of Directors reserves the right to reject any or all bids for the work and waive any irregularity in bids received. Dated at Richmond, California, this August 21, 2020.

Michael Savannah, Infrastructure and Planning Department Manager
West County Wastewater District
County of Contra Costa, State of California

END OF SECTION 00 11 16
### SECTION 00 41 43
### SCHEDULE OF BID

Schedule of Prices for Construction of WCWD Project No. 20PS601
Entry Gate at the WQRRP

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit/LS Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mobilization and demobilization, as described and specified, for the lump sum (LS) price of ______________</td>
<td>LS</td>
<td>LS</td>
<td>_____________</td>
<td>__________</td>
</tr>
<tr>
<td>2.</td>
<td>Installation of 1 new motorized gate, 2 personnel gates, and 1 gate driver as shown and specified for the lump sum (LS) price of: ______________</td>
<td>LS</td>
<td>LS</td>
<td>_____________</td>
<td>__________</td>
</tr>
<tr>
<td>3.</td>
<td>Installation of chain link fence as shown for a (LF) price of ___________</td>
<td>50</td>
<td>LF</td>
<td>_____________</td>
<td>__________</td>
</tr>
<tr>
<td>4.</td>
<td>Installation of all conduit, electric and fiber/cable to the operations room for a (LF) price of ____________</td>
<td>1050</td>
<td>LF</td>
<td>_____________</td>
<td>__________</td>
</tr>
<tr>
<td>5.</td>
<td>Installation of wireless receiver, as described and specified, for the lump sum (LS) price of ______________</td>
<td>LS</td>
<td>LS</td>
<td>_____________</td>
<td>__________</td>
</tr>
<tr>
<td>6.</td>
<td>Installation of camera and video feed to operations room for the lump sum (LS) price of _________________</td>
<td>LS</td>
<td>LS</td>
<td>_____________</td>
<td>__________</td>
</tr>
<tr>
<td>7.</td>
<td>Installation access card reader as described and specified, for the lump sum (LS) price of ______________</td>
<td>LS</td>
<td>LS</td>
<td>_____________</td>
<td>__________</td>
</tr>
<tr>
<td>8.</td>
<td>All other work as required for the project, for the lump sum (LS) price of _________________</td>
<td>LS</td>
<td>LS</td>
<td>_____________</td>
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</table>
Total Base Bid (Items 1-8 and all work incidental thereto and connected therewith):

(Enter Bid Numerically) $ ________________________________

Total Base Bid in Words: ________________________________ dollars and ________ cents

In case of discrepancy between words and figures, the words shall prevail.

Signed: ________________________________

Bidder
GROUP 00 43 00
PROCUREMENT FORM SUPPLEMENTS

<table>
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<tr>
<th>Section</th>
<th>Description</th>
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<td>00 43 33</td>
<td>Bidder's Statement of Equipment/Material Suppliers</td>
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<tr>
<td>00 43 34</td>
<td>Major Equipment Manufacturer Substitutions</td>
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<tr>
<td>00 43 36</td>
<td>Bidder's Statement of Subcontractors</td>
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<td>Bid Submittal Checklist</td>
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</table>
SECTION 00 43 13

BID SECURITY FORM
(Bidder’s Bond)

We, ______________________________________ as Principal, _______________________
_________________________ and as Surety, are firmly held and bound unto the West County
Wastewater District, a municipal district organized and existing under the laws of the state of
California, sometimes referred to as the District, in the sum of $____________________________
(which is a sum not less than ten percent of the amount of the accompanying Proposal total) for the
payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns
jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, WHEREAS, the Principal has
submitted to the District the accompanying proposal under a public Notice to Contractors inviting
sealed bids for the District’s Project No. 20PS601, Entry Gate at the WQRRP, in Contra Costa County,
California.

NOW, THEREFORE, if the accompanying Proposal of the Principal is accepted and award be made by
the District to the Principal; and if the Principal withdraws said Proposal within the period specified in
said Proposal during which period said Proposal cannot be withdrawn, or if the Principal shall fail,
refuse, or neglect for any reason whatsoever within ten calendar days after receipt from the District of
Notice of Award of the Contract to enter into the Contract with the District in accordance with the
Principal's proposal and the Instructions to Bidders, Section 00 21 13, for said Project, and to give
bonds with good and sufficient surety, and to furnish the policies of insurance as stated in said proposal
and the Instructions to Bidders for said Project, then the sum guaranteed by this Bond is forfeited to the
West County Wastewater District.

It is agreed between Principal and Surety that such failure or neglect would result in substantial injury
to the District which is not easily reduced to monetary terms; and it is, therefore, agreed that the amount
of the Bidder's Proposal security is to be considered by Principal and Surety as liquidated damages for
such injury. In the event suit is brought upon this Bond by the District and judgment is recovered, the
Surety or Sureties shall pay all costs incurred by the District in such suit, including attorneys' fees to be
fixed by the court.

Dated ____________________.

____________________________________
Principal (Authorized Signature)
Business Address
In the presence of:

___________________________________

___________________________________

___________________________________

Business Address

SEAL

____________________________________

____________________________________

Surety (Authorized Signature)

____________________________________

Business Address
of Local Representative

In the presence of:

___________________________________

___________________________________

___________________________________

Business Address of Home Office
of Surety Company

SEAL
SECTION 00 43 33

BIDDER’S STATEMENT OF EQUIPMENT/MATERIAL SUPPLIERS

The Contractor shall indicate opposite each item of equipment or material listed below, the name of the manufacturer or supplier of the equipment or material proposed to be furnished under the Bid as listed below or for any items exceeding five thousand dollars in value. Failure to comply with this requirement may render the proposal non-responsive and cause its rejection. Awarding of a contract under this Bid Proposal will not imply approval by the District of the manufacturers or suppliers listed by the Contractor. The District retains the right to reject the equipment or material listed by the Contractor if, in its discretion, the equipment or material does not comply with the Specifications.

The Contractor will not be allowed to propose changes or substitutions in the equipment and materials to be supplied or the manufacturer or supplier of said materials after the opening of the Bid Proposal without first having received written approval of the District.

<table>
<thead>
<tr>
<th>Equipment and/or Material Description</th>
<th>Name of Supplier, Fabricator, or Manufacturer, Location of Corporate Headquarters</th>
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Signed ________________________________

Bidder
SECTION 00 43 34
MAJOR EQUIPMENT MANUFACTURER SUBSTITUTIONS

Any Manufacturer, including those not listed as an acceptable manufacturer, may be listed as a substitution.

The Bidder understands that after a contract is awarded, the Owner may, at his sole discretion, select items of any Manufacturer listed in the following substitute tabulation. If awarded the contract, the Bidder agrees to furnish and install any substitutions listed for the price indicated. The BASE BID will then be adjusted accordingly.

The Engineer may require detailed information to be submitted for preliminary evaluation of a substitute Manufacturer. This information could include equipment technical and performance details and other information deemed necessary by the Engineer and/or as described in the contract specification.

If a contract includes items of equipment of any Manufacturer which may require any modification or deviation from the plans, the undersigned agrees to prepare and submit detailed drawings to the Engineer showing all modifications in structures, piping, electrical and mechanical work, required to adapt the plans to the equipment selected. The Bidder further understands that the Engineer will review said detailed drawings of modifications and either approve them or indicate thereon changes necessary to comply with the project requirements. Detailed drawings which are not approved will be revised, then resubmitted to the Engineer for approval. If it is determined by the Engineer that the substitute equipment is not approved, then the original base bid equipment must be provided. The prices listed in the following tabulation are “installed” prices and take into consideration any changes that may be required.

<table>
<thead>
<tr>
<th>Equipment Item</th>
<th>Manufacturer</th>
<th>Add (Deduct) From Base Bid</th>
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</table>
SECTION 00 43 36
BIDDER'S STATEMENT OF SUBCONTRACTORS

In accordance with the requirements of Section 00 21 13, Subsection 8, Instructions to Bidders, the undersigned Bidder submits herewith a list of subcontractors whom it proposes to employ on the work, with the proper firm name and business address of each, and the portion of the work to be done by each with the understanding that failure to name such subcontractors shall be witness that it shall have agreed to perform such portion of the work itself and that it shall not subcontract said portion of the work, and that such subcontracted work listed herein will not be performed by others, without first obtaining written permission of the District Board of Directors pursuant to provisions of Section 4107 of the Public Contract Code.

<table>
<thead>
<tr>
<th>Subcontractor</th>
<th>CSLB License No.</th>
<th>Business Address</th>
<th>Description of Work to be Done</th>
<th>% of Project</th>
</tr>
</thead>
</table>

Signed: __________________________________________

Bidder
## SECTION 00 43 93
### BID SUBMITTAL CHECKLIST

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Item Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complete the Addenda Acknowledgement section listed on page 4 of the Instructions to Bidders Section, Section 00 21 13 <em>(leave the line blank if no addendum has been issued)</em></td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>Complete the CSLB, DIR and Bidder’s information sections listed on page 5 of the Instructions to Bidders Section, Section 00 21 13</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>Complete the schedule of prices section listed in the Schedule of Bid Section, Section 00 41 43</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>Complete the sections shown in the Bid Security Form (Bidder’s Bond) Section, Section 00 43 13 and provide the bid bond</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>Complete the section shown in the Bidder’s Statement of Equipment / Materials Suppliers Section, Section 00 43 33</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>Complete the section shown in the Major Equipment Manufacturer Substitutions Section, Section 00 43 34 <em>(leave the lines blank if no substitutions are being proposed)</em></td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>Complete the section shown in the Bidder’s Statement of Subcontractors Section, Section 00 43 36 <em>(leave the lines blank if no subcontractors will be utilized)</em></td>
<td>☐</td>
</tr>
<tr>
<td>8</td>
<td>Complete the section shown in the Bidder’s Statement of Qualifications Section, Section 00 45 13</td>
<td>☐</td>
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<tr>
<td>9</td>
<td>Complete the section shown in the Certificate Regarding Completion Time Section, Section 00 45 16</td>
<td>☐</td>
</tr>
<tr>
<td>10</td>
<td>Complete the section shown in the Contractor Safety Acknowledgment Section, Section 00 45 17</td>
<td>☐</td>
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<tr>
<td>11</td>
<td>Complete the section shown in the Certificate Regarding Inspection of Contract Documents and Site Section, Section 00 45 18</td>
<td>☐</td>
</tr>
<tr>
<td>12</td>
<td>Complete the section shown in the Noncollusion Declaration Section, Section 00 45 19</td>
<td>☐</td>
</tr>
<tr>
<td>13</td>
<td>Complete the section shown in the Workers’ Compensation Certification Section, Section 00 45 26</td>
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</table>
GROUP 00 45 00
REPRESENTATIONS AND CERTIFICATIONS

<table>
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<th>Section</th>
<th>Description</th>
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<td>Instructions to Awardees</td>
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<tr>
<td>00 45 13</td>
<td>Bidder’s Statement of Qualifications</td>
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<td>Escrow Agreement for Security Deposits in Lieu of Retention</td>
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</tr>
<tr>
<td>00 45 26</td>
<td>Workers' Compensation Certification</td>
</tr>
</tbody>
</table>
SECTION 00 45 10
INSTRUCTIONS TO THE AWARDEE

A. Award and Execution of Contract
The successful bidder will be notified in writing by the District of Award of Contract within Sixty (60) calendar days after opening of proposals. Accompanying the District’s Notice of Award will be the Contract, in duplicate, which the successful bidder will be required to sign and return together with the Performance Bond, Payment Bond, and the required number of copies of insurance certificates and endorsements to the District within fourteen (14) calendar days following receipt of such Notice of Award. The District will promptly determine whether such Contract, bonds, and insurance certificates and endorsements are as required by the Contract Documents, and upon such determination will forward a fully signed copy of the Contract to the successful bidder. The District may issue a Notice to Proceed at any time prior to forwarding the Contract. No work shall be performed at the site prior to the date set forth in the Notice to Proceed. The failure of any bidder to whom the District may award the Contract, as aforesaid to sign and return to the District, the Contract together with the required Performance Bond, Payment Bond, and insurance certificates and endorsements within the specified time period, shall entitle the District to declare a breach of Contract by such bidder, to award the Contract to another bidder in accordance with the provisions of the Contract Documents, and to declare a forfeiture of the bidder's proposal security accompanying its proposal.

B. Bonds and Insurance Policies
The Bidder to whom the contract award is made shall, at the time of execution of the Contract, furnish to the District a Performance Bond and a Payment Bond, executed as surety by a corporation acceptable to the District and authorized to issue such Surety Bonds in the state of California. Such bonds shall be substantially in the form included in Sections 00 61 13 and 00 61 14 respectively, of the Contract Documents. Such Performance Bond and Payment Bond shall be for one hundred percent of the Proposal total as set forth in the Schedule of Bid, Section 00 41 43. The entire cost of these bonds shall be borne by the successful Bidder.

If the Surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its right to do business is terminated, or it ceases to meet the requirements of the above paragraph, the Contractor shall, within five calendar days thereafter, notify the District and substitute another bond and surety, both of which must be acceptable to the District.

The successful Bidder shall at the time of execution of the Contract deliver to the District one copy of policies of insurance obtained in accordance with the requirements of the Contract Documents.

C. Workers' Compensation Statement
The Bidder to whom the Contract Award is made shall, at the time of execution of the Contract, furnish to the District a statement certifying compliance with the workers' compensation provision of the California Labor Code. Such certification shall be substantially in the form included in Section 00 45 26 of the Contract Documents.
SECTION 00 45 13
BIDDER'S STATEMENT OF QUALIFICATIONS

The undersigned Bidder submits, as a part of its Proposal, the following statements as to its experience qualifications. The Bidder certifies that all statements and information set forth below are true and accurate.

A. The Bidder has been engaged in the contracting business under its present business name for __________ years.

B. Experience in work of a nature similar in type and magnitude to that set forth in the Contract Documents extends over a period of __________ years.

C. The Bidder, as prime contractor, has satisfactorily completed all contracts awarded to it, except as follows: (Name any and all exceptions and reasons therefore. Bidder shall attach and designate additional pages if necessary.)

____________________________________________________________________

D. The undersigned Bidder submits herewith a statement of its financial responsibility and hereby authorizes the below named banks, companies, and institutions to release financial status information to the West County Wastewater District for the sole purpose of evaluating financial responsibility in conjunction with the proposal submitted for this Project.

<table>
<thead>
<tr>
<th>Bank, Surety Company, or Other Institution</th>
<th>Branch of Office</th>
<th>Address</th>
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____________________________________________________________________

E. The undersigned Bidder submits below a statement describing work similar in character to that anticipated in the proposed contract, which it has previously completed. Work described will be for jobs involving installation of wastewater basin repair and construction with contract amounts over $100,000. All experience listed shall have occurred in the last five years. Failure to complete this section, as required, may result in the bid being rejected as non-responsive. It is the intent of the District to evaluate the responsiveness of the Contractor's bid in part based on whether the proposal and information set forth below reflect substantial experience in successful completion of work of the nature and magnitude of this project.
### BIDDERS AND SUBCONTRACTOR’S QUALIFYING EXPERIENCE

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Contract Amount</th>
<th>Performed For</th>
<th>Year</th>
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<tr>
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<td>District</td>
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<td>Contact Name</td>
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<td>Telephone and E-mail Address</td>
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</tbody>
</table>

Signed: ____________________________

Bidder
SECTION 00 45 15

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between West County District whose address is 2910 Hilltop Drive, Richmond, California, hereinafter called "District," and

____________________________________________________________________________________

whose address is ______________________________________________________________________,

hereinafter called "Contractor," and _____________________________________________________

whose address is ______________________________________________________________________,

hereinafter called "Escrow Agent." For the consideration hereinafter set forth, the District, Contractor, and Escrow Agent agree as follows:

1. Pursuant to Section 22300 of the Public Contract Code of the State of California, the Contractor has the option to deposit securities with the Escrow Agent as a substitute for retention earnings required to be withheld by the District pursuant to the Construction Contract entered into between the District and the Contractor for Project No. 20PS601, Entry Gate at the WQRRP, in the amount of ($__________________) dated ______________ (hereinafter referred to as the "Contract"). When the Contractor deposits the securities as a substitute for the Contract earnings, the Escrow Agent shall notify the District within ten days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the District and the Contractor. Securities shall be held in the name of _________________________________ and shall designate the Contractor as the beneficial owner.

2. The District shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent hold securities in the form and amount specified above.

3. Alternatively, the District may make payments directly to the Escrow Agent in the amount of retention for the benefit of the District until such time as the escrow created hereunder is terminated.

4. The Contractor shall be responsible for paying all fees for the expenses incurred by the Escrow Agent in administering the escrow account. These expenses and payment terms shall be determined by the Contractor and the Escrow Agent.

5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of the Contractor and shall be subject to withdrawal by the Contractor at any time and from time to time without notice to the District.

6. The Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to the Escrow Agent accompanied by written authorization from the District to the Escrow Agent that the District consents to the withdrawal of the amount sought to be withdrawn by the Contractor.
7. The District shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days written notice to the Escrow Agent from the District of the default,

the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the District.

8. Upon receipt of written notification from the District certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, the Escrow Agent shall release to the Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.

9. The Escrow Agent shall rely on the written notifications from the District and the Contractor pursuant to Sections 4 and 6, inclusive, of this Agreement and the District and the Contractor shall hold the Escrow Agent harmless from the Escrow Agent's release and disbursement of the securities and interest as set forth above.

10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the District and on behalf of the Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:
On behalf of the District:

Title
Name
Signature
Address

On behalf of the Contractor:

Title
Name
Signature
Address

On behalf of the Escrow Agent:

Title
Name
Signature
Address

At the time the Escrow Agent Account is opened, the District and the Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

District: Contractor:

Title
Name
Signature

Title
Name
Signature
SECTION 00 45 16

CERTIFICATE REGARDING COMPLETION TIME

I, ___________________________________________, am the duly authorized representative of _____________________________________________________ , Contractor, which is submitting a Proposal to which this Certificate is attached for Project No. 20PS601, Entry Gate at the WQRRP.

I have the authority to bind ____________________________________, Contractor, as to all matters regarding the proposal to which this Certificate is attached.

I hereby certify that I, or Contractor's duly authorized representative have evaluated the required construction completion within Forty-five (45) calendar days from the start date listed on the Notice to Proceed, and that the Contractor's bid contained in this proposal document reflects completing the work within this time frame. The Contract time for this work shall be deemed to start five (5) calendar days from the date of the Notice to Proceed.

I am also aware that in order for my bid to be considered responsive, the District requires a detailed construction phasing schedule at the time of Bid. Notice to Proceed will not be given until a reasonable construction schedule is submitted to the District.

By: _____________________________________

Contractor

Dated: _____________________________
SECTION 00 45 17

CONTRACTOR SAFETY ACKNOWLEDGMENT

PROJECT NO. 20PS601

PROJECT NAME: Entry Gate at the WQRRP

The Contractor shall be fully responsible for all safety requirements in accordance with State of California Construction Safety Orders (CAL OSHA), and all other safety laws, regulations, specifications, and guidelines required by any other local or federal District.

I have read the above and the CAL OSHA's Construction Safety Orders and understand the safety considerations applicable to this project.

ACKNOWLEDGED BY: Contractor's Name

Date: ____________________  Signature: ____________________
SECTION 00 45 18

CERTIFICATE REGARDING INSPECTION OF CONTRACT DOCUMENTS AND SITE

I, _________________________________________, am the duly authorized representative of _________________________________________, Contractor, which is submitting a Proposal to which this Certificate is attached for Project No. 20PS601, Entry Gate at the WQRRP.

I have the authority to bind _________________________________________, Contractor, as to all matters regarding the Proposal to which this Certificate is attached.

1. I hereby certify that I, or Contractor's duly authorized representative, have examined the Contract Documents pertinent to Project No. 20PS601, including the Instructions to Bidders, General Conditions, Supplementary Conditions, and Technical Specifications.

2. I further certify that I, or Contractor's authorized representative, have examined the site pertinent to Project No. 20PS601, and have examined existing and expected conditions and matters which could affect any work or performance of any work in any way, especially the cost of performing any work.

__________________________________________
Contractor

By: _______________________________________

Dated: ________________________________
SECTION 00 45 26
WORKERS’ COMPENSATION CERTIFICATION

(AS REQUIRED BY SECTION 1861 OF THE CALIFORNIA LABOR CODE)

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Contractor: ________________________________

By:  ________________________________

Title: ________________________________

Date: ________________________________
SECTION 00 45 19  
NONCOLLUSION DECLARATION

State of California )
 ) ss.
County of _________________ )

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

Acknowledged By:

___________________________________
Company Name

___________________________________
Signature

___________________________________
Title

___________________________________
Date

END OF GROUP 00 45 00
GROUP 00 52 00
CONTRACT FORMS

Section

00 52 10  Instructions to Awardees
00 52 13  Contract
SECTION 00 52 10
INSTRUCTIONS TO THE Awardee

Award and Execution of Contract
The successful bidder will be notified in writing by the District of Award of Contract within Sixty (60) calendar days after opening of proposals. Accompanying the District’s Notice of Award will be the Contract, in duplicate, which the successful bidder will be required to sign and return together with the Performance Bond, Payment Bond, and the required number of copies of insurance certificates and endorsements to the District within fourteen (14) calendar days following receipt of such Notice of Award. The District will promptly determine whether such Contract, bonds, and insurance certificates and endorsements are as required by the Contract Documents, and upon such determination will forward a fully signed copy of the Contract to the successful bidder. The District may issue a Notice to Proceed at any time prior to forwarding the Contract. No work shall be performed at the site prior to the date set forth in the Notice to Proceed. The failure of any bidder to whom the District may award the Contract, as aforesaid to sign and return to the District, the Contract together with the required Performance Bond, Payment Bond, and insurance certificates and endorsements within the specified time period, shall entitle the District to declare a breach of Contract by such bidder, to award the Contract to another bidder in accordance with the provisions of the Contract Documents, and to declare a forfeiture of the bidder's proposal security accompanying its proposal.

Bonds and Insurance Policies
The Bidder to whom the contract award is made shall, at the time of execution of the Contract, furnish to the District a Performance Bond and a Payment Bond, executed as surety by a corporation acceptable to the District and authorized to issue such Surety Bonds in the state of California. Such bonds shall be substantially in the form included in Sections 00 61 13 and 00 61 14 respectively, of the Contract Documents. Such Performance Bond and Payment Bond shall be for one hundred percent of the Proposal total as set forth in the Schedule of Bid, Section 00 41 43. The entire cost of these bonds shall be borne by the successful Bidder.

If the Surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its right to do business is terminated, or it ceases to meet the requirements of the above paragraph, the Contractor shall, within five calendar days thereafter, notify the District and substitute another bond and surety, both of which must be acceptable to the District.

The successful Bidder shall at the time of execution of the Contract deliver to the District one copy of policies of insurance obtained in accordance with the requirements of the Contract Documents.

Workers' Compensation Statement
The Bidder to whom the Contract Award is made shall, at the time of execution of the Contract, furnish to the District a statement certifying compliance with the workers' compensation provision of the California Labor Code. Such certification shall be substantially in the form included in Section 00 45 26 of the Contract Documents.
SECTION 00 52 13

CONTRACT

This Contract is entered into as of this (______) day of (______________________), 2020, by and between West County Wastewater District, a public entity, organized, and existing under the laws of the state of California, sometimes referred to as the District, and ________________________________
______________________, sometimes referred to as the Contractor.

The parties agree as follows:

A. The Contractor, for and in consideration of the payment to be made to the Contractor as hereinafter provided, shall furnish all plant labor, technical and professional services, supervision, materials, and equipment other than such materials and equipment as may be specified to be furnished by the District, and perform all operations necessary and required to construct Project No. 20PS601, Entry Gate at the WQRRP in Contra Costa County, California, in strict conformity with the terms and conditions of this Contract, which includes the following:

1. The Contractor's proposal dated ____________________, in response to District’s Notice to Contractors advertised on ________________________, relating to District's Contract Documents for Project No. 20PS601, as such Proposal is on file at the office of the West County Wastewater District, 2910 Hilltop Drive, Richmond, California.

2. Sections 00 01 10 through 32 31 13 of the Specifications, inclusive of District's Contract Documents for Project No. 20PS601 and Addenda No.__________, thereto, and the Notice of Award from the District to the Contractor dated ______________________ all as filed in said office of the West County Wastewater District.

Such Proposal, Contract Documents: Sections 00 01 10 through 32 31 13 and all Addenda, and said Notice of Award are by this reference incorporated herein and made a part of the Contract, provided, that if any conflict exists between such Proposal and the other provisions of the Contract, the other provisions of the Contract shall govern unless otherwise mutually agreed in writing by the parties hereto. All Contract Documents shall be construed in accordance with the laws of the State of California.

B. Time of Performance: Time is of the essence in the performance of this Contract. The Contractor shall begin work as provided in the General and Special Conditions of the Project Manual and once work is started, it shall be diligently prosecuted to completion on or before the expiration of the time hereinafter stated:
Bid Item  

Completion Required Within:  

ALL  :  The Contract time for this work shall be deemed to start five (5) calendar days from the date of the Notice to Proceed. The Contractor shall complete the work in sixty (60) Calendar Days.

It is further agreed by the parties to the Contract that in case all work called for under the Contract, in all parts and requirements, is not finished or completed on or before the expiration dates or intermediate milestones herein set forth, the Contractor may be assessed liquidated damages specified under Section 00 72 42, Liquidated Damages of the Contract Documents.

C.  The District, in consideration of the Contractor's performance in accordance with the Contract, will pay to Contractor compensation based upon the prices set forth in the Contractor's Proposal and computed and paid for in accordance with the measurement and payment provisions of Section 00 72 39, Measurement and Payment of the Contract Documents.

D.  No oral agreement or conversation with any representative or employee of the District, either before or after the execution of the Contract, shall affect or modify any of the terms or obligations herein contained. This Contract constitutes the entire agreement between the parties hereto and no changes, alterations, or modifications hereof shall be effective unless in writing and signed by the parties hereto.

E.  Contractors are required by law to be licensed and regulated by the Contractor's State License Board. Any questions concerning a contractor may be referred to the Registrar, Contractor's State License Board, 9835 Goethe Road, PO Box 26000 Sacramento, CA 95826.

F.  The District shall pay the Contractor for completion of the work in accordance with the Contract Documents, the Contract price of ___________ Dollars ($__________) in accordance with the amounts set forth in Section 00 41 43, Schedule of Bid, and based on the total bid price named in the aforementioned Schedule of Bid.

G.  Reference is hereby made to the provisions for payment of minimum per diem wages contained in Section 00 11 16, Invitation to Bid. In accordance with said provisions, the Contractor and each subcontractor engaged in the work shall pay each respective employee thereof an amount not less than the per diem wages established by the Department of Industrial Relations. Copies of the prevailing rate of per diem wages are on file at the District office and shall be made available to any interested party on request.

H.  Bidders shall promptly notify the District, in writing, of all the classifications of labor not listed in the prevailing wage determinations but necessary for the performance of the Work, before bids are submitted.
Dated: ________________

CONTRACTOR: ____________________________________________

Company Name

By: _________________________________

Title: _________________________________

WEST COUNTY

WASTEWATER DISTRICT: By: _________________________________

Title: General Manager _________________________________

ATTEST: ____________________________________________

Vice-President of the Board

I hereby approve the form of the foregoing Contract this ________________ day of
_______________________________, 2020.

__________________________________________

Board Attorney
GROUP 00 61 00
BOND FORMS

Section

00 61 13 Performance Bond
00 61 14 Payment Bond
SECTION 00 61 13
PERFORMANCE BOND

We, ____________________________________________, as Principal, and, ____________________________________________, as Surety, are jointly and severally held and bound unto the West County Wastewater District, organized and existing under the laws of the state of California, sometimes referred to as District, in the sum of ______________________ dollars ( $_______ ) for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators and assigns, and successors and assigns, firmly by these presents.

THE CONDITIONS OF THIS BOND ARE SUCH THAT, WHEREAS, on the ______day of ______________________, the said ______________________, Principal herein, executed a certain Contract with the District, by the terms, conditions, and provisions of which Contract the said ______________________, Principal herein agrees to construct the Entry Gate at the WQRRP in Contra Costa County, California, all as set forth in said Contract, which Contract as so executed is attached hereto, and by reference is incorporated herein and made a part hereof as fully for all purposes as if here set forth at length.

NOW, THEREFORE, if the Principal herein shall faithfully and truly observe and comply with the terms, conditions, and provisions of said Contract in all respects, and shall well and truly and fully do and perform all matters and things undertaken to be performed under said Contract, upon the terms set forth therein, and within the time prescribed therein, and shall indemnify the District against any direct or indirect damages that shall be claimed for injuries to persons or property during the course of any work performed by or on behalf of Principal under said Contract, and until all work under said Contract is accepted and for an additional period of one year after completion and acceptance of said work by the District and shall pay all laborers, mechanics, subcontractors, material, men, and all persons who shall supply such Contractor or subcontractor with services or supplies for carrying on such work, and shall perform said Contract according to laws, and shall complete in a satisfactory manner all repairs or replacements resulting from or caused by defective materials and/or faulty workmanship in the prosecution of the work during the one-year warranty period, then this obligation shall be void, otherwise it shall remain in full force and effect. No prepayment or delay in payment and no change, extension, addition, or alteration of any provision of said Contract agreed to between the Principal and the District, and no forbearance on the part of the District, shall operate to relieve any surety from liability on this Bond, and consent to make such changes, extension, additions, and alterations without further notice to or consent by any Surety is hereby given.
In the event suit is brought upon this bond by the District and judgment is entered in its favor, the Surety or Sureties shall pay all costs incurred by the District in such suit, including attorneys' fees to be fixed by the court.

Date________________________

Company Name

____________________________
Principal (Authorized Signature)

____________________________
Business Address

City State

SEE NEXT PAGE FOR ACKNOWLEDGMENT OF PRINCIPAL'S SIGNATURE

[THE REMAINDER OF THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK]
ACKNOWLEDGMENT OF PRINCIPAL'S SIGNATURE:

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

State of California  
County of ____________________________

On __________________ before me ________________________________________, a Notary (Date) (Printed Name of Notary Public)

Public, personally appeared ________________________________ Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Signature _____________________________ Signature of Notary Public

Place Notary Seal Above

This Section is OPTIONAL completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document

Description of Attached Document

Title or Type of Document: ________________________________
Document Date ___________________
Number of Pages ___________________
Signer(s) other than named within ________________________________
Capacity(ies) Claimed by Signer(s):

☐ CORPORATE OFFICER

☐ PARTNER

☐ Limited ☐ General

☐ INDIVIDUAL

☐ ATTORNEY-IN-FACT

☐ TRUSTEE

☐ GUARDIAN / CONSERVATOR

☐ OTHER

Describe ________________

SIGNER IS REPRESENTING:

Name of Person(s) or Entity(ies) ________________________________
Date________________________  

Company Name

______________________________
Surety (Authorized Signature)

______________________________
Business Address

______________________________
City       State

SEE NEXT PAGE FOR ACKNOWLEDGMENT OF SURETY'S SIGNATURE

[THE REMAINDER OF THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK]
ACKNOWLEDGMENT OF SURETY’S SIGNATURE:

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

State of California )
County of __________________________ )

On ___________ before me ________________________________, a Notary (Date) (Printed Name of Notary Public)

Public, personally appeared ____
Name(s) of Signer(s)
____

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

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

WITNESS my hand and official seal.

Signature __________________________
Place Notary Seal Above Signature of Notary Public

This Section is OPTIONAL completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document

Description of Attached Document
Title or Type of Document: ____________________________________________
Document
Date ________________
Number of Pages _____________
Signer(s) other than named within ___________________________
Capacity(ies) Claimed by Signer(s):
Signer’s Name: ____________________________
☐ CORPORATE OFFICER
☐ PARTNER
☐ Limited ☐ General
☐ INDIVIDUAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE
☐ GUARDIAN / CONSERVATOR
☐ OTHER
Describe _______
SIGNER IS REPRESENTING:

Name of Person(s) or Entity(ies)
______
______
______
SECTION 00 61 14
PAYMENT BOND

We, ________________________________________________________, as Principal, and ________________________________________________________, as Surety, are jointly and severally bound unto the West County Wastewater District, organized and existing under the laws of the State of California, sometimes referred to as District, in the sum of _______________________________ dollars (__________________ ) for the payment of which we jointly and severally bind ourselves, our heirs, executors, administrators and assigns, and successors and assigns, firmly by these presents.

THE CONDITION OF THIS BOND IS SUCH THAT, WHEREAS, on the ________________ day of _____________________________, 20__, the said _______________________________________, Principal herein, executed a certain Contract with the District, by the terms, conditions, and provisions of which Contract the said_________________________________________, Principal herein agrees to construct the Entry Gate at the WQRRP, in Contra Costa County, California, all as set forth in said Contract, which Contract as so executed is attached hereto, and by reference is incorporated herein and made a part hereof as fully for all purposes as if here set forth at length.

AND WHEREAS, said Contractor is required by the provisions of Chapter 7, Title 15, Sections 3247 though 3252, California Civil Code, to furnish a bond in connection with said Contract, as hereinafter set forth.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that if said Contractor, its heirs, executors, administrators, successors, or assigns, or subcontractors, shall fail to pay any of the persons named in Sections 3110, 3111, and 3112 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or for any amount required to be deducted, withheld, and paid over to the California Franchise Tax Board from the wages and employees of the Contractor and its subcontractors pursuant to Section 18806 of the California Revenue and Taxation Code, with respect to such Contract and warranty work and labor that the surety or sureties will pay for the same, in an amount not exceeding the sum specified in this Bond, and also, in case suit is brought upon the bond, a reasonable attorney's fee, to be fixed by the court.
This Bond shall inure to the benefit of any and all of the persons name in Sections 3110, 3111, and 3112 of the *California Civil Code* as to give a right of action to such persons or their assigns in any suit brought upon this Bond in accordance with said Sections 3247 though 3252 of the *California Civil Code*.

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

No prepayment or delay in payment and no change, extension, addition, or alternation of any provision of said Contract agreed to between the Contractor and the District, and no forbearance on the part of the District, shall operate to relieve any Surety from liability of this Bond, and consent to make such changes, extensions, additions, and alternations without further notice to or consent by such Surety is hereby given.

Date________________________

______________________________
Company Name

______________________________
Principal (Authorized Signature)

______________________________
Business Address

______________________________
City       State

SEE NEXT PAGE FOR ACKNOWLEDGMENT OF PRINCIPAL'S SIGNATURE

[THE REMAINDER OF THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK]
ACKNOWLEDGMENT OF PRINCIPAL'S SIGNATURE:

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<th>State of California</th>
<th>County of ____________________</th>
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<td>On __________________ before me ____________________________________, a</td>
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<tr>
<td>Notary</td>
<td>(Date) (Printed Name of Notary Public)</td>
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<tr>
<td>Public, personally appeared _________________________ Name(s) of Signer(s)</td>
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who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature __________________ Signature of Notary Public

**This Section is OPTIONAL completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document**

**Description of Attached Document**

Title or Type of Document: ____________________________

Document Date __________________

Number of Pages _________________

Signer(s) other than named within ____________________________

Capacity(ies) Claimed by Signer(s):

☐ CORPORATE OFFICER

☐ PARTNER

☐ Limited ☐ General

☐ INDIVIDUAL

☐ ATTORNEY-IN-FACT

☐ TRUSTEE

☐ GUARDIAN / CONSERVATOR

☐ OTHER

Describe ____________________________

SIGNER IS REPRESENTING:

Name of Person(s) or Entity(ies) ____________________________

________________________

________________________
Date____________________

____________________
Company Name

____________________
Surety (Authorized Signature)

____________________
Business Address

____________________
City          State

SEE NEXT PAGE FOR ACKNOWLEDGMENT OF SURETY'S SIGNATURE

[THE REMAINDER OF THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK]
ACKNOWLEDGMENT OF SURETY'S SIGNATURE:

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

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<td>On _________________ before me ____________________________, a</td>
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who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature ____________________________

Signature of Notary Public

This Section is OPTIONAL completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document

Description of Attached Document
Title or Type of Document: ____________________________
Document Date: ____________________________
Number of Pages: ____________________________
Signer(s) other than named within: ____________________________
Capacity(ies) Claimed by Signer(s):
○ CORPORATE OFFICER
○ PARTNER
○ Limited ○ General
○ INDIVIDUAL
○ ATTORNEY-IN-FACT
○ TRUSTEE
○ GUARDIAN / CONSERVATOR
○ OTHER

Describe ____________________________

SIGNER IS REPRESENTING:
Name of Person(s) or Entity(ies) ____________________________
__________________________
__________________________

END OF GROUP 00 61 00
SECTION 00 72 00
GENERAL CONDITIONS

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<td>(Not Used)</td>
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A. Authority of the Engineer

1. The "District" is the West County Wastewater District. The "Engineer" is the Engineering Services Manager of the West County Wastewater District or the Engineer's duly authorized representative during the life of the Contract. The engineer will observe the work in progress on behalf of the District. All questions and requests of the Contractor as to compensation (including additional compensation), interpretation of the Contract, instructions, or extensions of time, otherwise shall be submitted in writing to the Engineer for determination.

2. The Engineer is authorized to determine the amount, quality, acceptability, and fitness of all work, materials, and equipment required by the Contract.

3. The Engineer will decide all questions which may arise as to the quality or acceptability of materials furnished and work performed and as to the manner of performance and rate of progress of the work, and the Engineer's decision will be final.

4. The Engineer will decide all questions which may arise as to the coordination and interpretation of the plans and specifications, and the Engineer's decision will be final.

5. The Engineer will decide all questions as to the acceptable fulfillment of the Contract on the part of the Contractor, and the Engineer's decision will be final.

6. The Engineer will decide all questions as to measurement and payment, and the Engineer's decision will be final.

7. The Engineer will have the authority to reject defective work and materials whenever such rejection may be necessary to assure execution of the Contract in accordance with the intent of the Contract Documents.

8. The Engineer will determine all amounts owing to the Contractor.

9. The Engineer will prepare/issue contract change orders for all authorized changes or approved extra work in the Contract.

10. The Engineer will have the authority to monitor project schedules and to enforce project schedule requirements, and to take such measures as may be necessary to maintain overall project schedules.

11. The Engineer will have the authority to enforce and to make effective such decisions and orders which the Contractor fails to carry out promptly.

12. All determinations and instructions of the Engineer whether in response to a question or otherwise will be final unless the Contractor shall file a written protest with the Engineer as set forth in this Section.

B. Contractor's Responsibilities and Appeal Procedure

1. The Contractor shall be solely responsible for requesting instructions or interpretations as required by the Contract, and any costs and expenses, including attorneys' fees, arising from its failure to do so shall be borne by the Contractor.

2. The Contractor shall proceed without delay to perform the work as directed, instructed, determined, or decided by the Engineer and shall comply promptly with such directions, instructions, determinations, or decisions. If the Contractor has any objection thereto, the Contractor may, within ten (10) calendar days
of having received any such directions, instructions, determinations, or decisions, require that any such
direction, instruction, determination, or decision be put in writing. Within ten (10) calendar days after
receipt of any such written determination, the Contractor may file a written protest with the Engineer
stating clearly and in detail the Contractor's objections, the reasons therefor, and the nature and amount of
additional compensation or extension of time, if any, to which the Contractor contends it will be entitled
thereby. The Contractor shall proceed to perform the work that the Contractor may contend as being
outside the scope of the Contract while the Contractor's protest is being considered. The Contractor is
cautions, however, that unless the Contractor has been ordered by the District pursuant to Section 00 72
12.E., Request for Additional Compensation, to perform changes or extra work additional compensation
will not be considered. The Contractor shall prepare daily cost records and obtain an acknowledgment by
the Engineer in accordance with 00 72 12C, Cost Plus Change Orders.

3. The Engineer will issue a decision upon each protest. If the Engineer determines that the facts support the
protest, the Contract will be modified accordingly, in writing. If the Engineer determines that the facts do
not support the protest, such request will be denied. The Engineer's finding of fact of either determination
will be given to the Contractor and such findings shall be final and conclusive. At all times, the
Contractor shall proceed with the work in accordance with the direction, instruction, determination, or
decision of the Engineer. Unless the Contractor follows the requirements of this Section 00 72 01, the
Contractor shall be deemed to have waived all grounds for protest of direction, instruction, determination,
or decision and all claims for additional compensation, extensions of time, or damages occasioned
thereby for which protest could have been made under this Section 00 72 01, and shall further be deemed
to have accepted such direction, instruction, determination, or decision as being fair, reasonable, and
determinative of the Contractor's obligations and rights under the Contract.

4. If the Contractor has outstanding claim issues upon acceptance of the contract work by the District, the
Contractor shall, within thirty (30) calendar days from the date of said acceptance, submit to the Engineer
a written statement of all claims it maintains exist arising under or by virtue of the Contract. No claim
will be considered that is not clearly identified in said written statement of claims and no claim will be
recognized for which a notice or protest is not prosecuted as required under the provisions contained in
Sections 00 72 11, Differing Site Conditions; 00 72 12, Changes and Extra Work; 00 72 42, Liquidated
Damages; and 00 72 53, Utility and Other Existing Facilities.

a. Claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the
bases and respective amounts of said claims. The Engineer will review and consider the
Contractor's claims; however, the Contractor shall be responsible for furnishing, within a
reasonable time, such further information and details as may be requested by the Engineer to
ascertain the facts or contentions involved in the Contractor's claims. Failure of the Contractor to
submit such requested information and details shall be sufficient cause for the District to deny
such claims.

b. Upon final determination of the claims, the Engineer will prepare and issue a final payment in the
entire sum found due thereon.

00 72 02  INTENT OF THE CONTRACT

A. It is the intent that all obligations of the District and the Contractor are fully set forth and described in the
Contract. All parts of the Contract are intended to be correlative and complementary, and any work required by
one part and not mentioned in another part shall be performed to the same extent and purpose as though required
by all parts.

B. The organization of the Contract Documents into sections, parts, and subsections and the arrangement of the
contract plans shall not necessarily control the Contractor in dividing any work among any of its subcontractors
or in establishing the extent of work to be performed by any trade or craft. The headings or titles of any article,
section, subsection, paragraph, provision, or part of the Contract shall not be deemed to limit or restrict the
content, meaning, or effect of such article, section, subsection, paragraph, provision, or part. Titles assigned to
the various sections and subsections do not necessarily limit the scope of topic, but are assigned solely to
designate a central theme which may be further addressed by either volumes, parts, sections, or subsections for
particular applications. Absence of reference in any one to other such sections, parts, or subsections shall not in
any way serve to waive the requirements otherwise applicable to the work in its entirety. All sections of the
Specifications and Project Drawings are interdependent and applicable to the Project as a whole.
C. Where the words "as shown," "as detailed," "as indicated," or words of like import are used in the Contract, reference is to the Project Drawings unless the context clearly indicates a different meaning. Where the words "required," "approved," "determined," "acceptable," "favorably reviewed," "reviewed," "selected," "directed," "equivalent," "equal," "satisfactory," or words of like import are used in the Contract, action by the Engineer or District is indicated unless the context indicates otherwise, and all work shall be in accordance therewith. Such action, or failure to act, shall not relieve the Contractor of its contractual responsibilities for performance of the Contract.

D. The Contractor shall perform the work in accordance with the terms of the Contract. The Specifications and all notes on the Project Drawings are directed to the Contractor and all work shall be performed by it even though phrases such as "the Contractor shall" or "shall be done by the Contractor" are omitted. Where portions of the work are described in general terms, but not in complete detail, the Contractor shall perform the work utilizing skilled trade persons and high quality material. Unless otherwise specified such as deep excavation/shoring, traffic control, or detail design where a registered professional engineer shall be required, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals and do all the work involved in executing the Contract in a timely, satisfactory, and workmanlike manner.

E. The misplacement, addition, or omission of a word or character shall not change the intent of any part of the Contract from that set forth by the Contract as a whole.

F. For the sake of convenience, the masculine/feminine pronoun may be used to designate who performs the work and for other purposes and, in all cases, applies equally to all persons. Moreover, the word "Contractor" as used in the Contract, applies to the General Contractor. If the Contractor is a partnership or joint venture then for the purpose of the Contract, the members of the partnership or joint venture shall be jointly and severally liable notwithstanding any agreement as between themselves to the contrary.

00 72 03 DISCOVERY OF ERRORS, OMISSIONS, OR DISCREPANCIES IN THE CONTRACT

A. By execution of the Contract, the Contractor agrees that no request for additional compensation, and/or claim under Government Code Section 900 et seq. will be made against the District for any damages in excess of the aggregate sum of $50,000 or five percent (5%) of the construction costs (whichever is greater) for alleged damage that it or its subcontractors may suffer due to the inadequacy of the Contractor's bid on account of any alleged errors, omissions, or other deficiencies in the Contract Documents supplied to it by the District. This limitation shall not apply to compensation for extra work authorized by the District as provided for in Section 00 72 12, Changes and Extra Work, and Section 00 72 11, Differing Site Conditions.

B. If the Contractor discovers any errors, omissions, discrepancies, or conflicts in the Contract, it shall immediately so inform the Engineer in writing. The Engineer will promptly clarify such matters by issuing addenda or change orders. Failure or delay to act on the part of the Engineer shall not constitute a waiver of any right afforded the District or the Engineer in the Contract Documents or constitute an implied approval. Any work affected by such discoveries which is performed by the Contractor prior to authorization by the District shall be at the Contractor's risk.

00 72 04 SUBCONTRACTS, SUBCONTRACTORS, AND RECORDS ACCESS

A. By an appropriate written agreement, if legally required for validity, the Contractor shall require each subcontractor, to the extent of the work to be performed by the subcontractor, to be bound to the Contractor by the terms of the Contract, and to assume toward the Contractor all of the obligations and responsibilities which the Contractor, by this contract, assumes toward the District. Said agreements shall preserve and protect the rights of the District under the Contract with respect to the work to be performed by the subcontractors so that the subcontractors thereof will not prejudice such rights. Where appropriate, the Contractor shall require such subcontractor to enter into similar agreements with its subcontractors, and for each tier thereafter. The Contractor shall make available to each proposed subcontractor, prior to execution of the subcontract, copies of the Contract Documents for which the subcontractor will be bound by this paragraph of this subsection and identify to the subcontractor any terms and conditions of the proposed subcontract which may be at variance with the Contract.

1. Each subcontractor shall make copies of these Contract Documents, including, but not limited to, the above specific provisions, available to its sub-subcontractors and for each tier thereafter.
2. The Contractor shall give its personal attention to the fulfillment of the Contract and shall keep the work under its control in accordance with the Contract.

B. No subcontract shall be entered into and the Contractor shall not substitute any person as subcontractor in place of a subcontractor listed in its bid without the District's prior written consent. The District, at its discretion, may consent to a subcontract substitution as provided for by law. No subcontract shall relieve the Contractor of any of its liabilities or obligations under the Contract; the Contractor shall be fully responsible to the District for the acts and omissions of its subcontractors at any tier and of persons either directly or indirectly employed by subcontractors in the performance of the Contract. The Contractor shall assure that each subcontractor at any tier fully complies with the provisions of the applicable Workers' Compensation Act or any similar law having application to subcontractor's employees.

C. Unless otherwise provided in the Contract, the Contractor shall, at its expense, upon request of the Engineer, furnish the Engineer with one (1) copy of all of its purchase orders and subcontracts, all applicable drawings and specifications, bills of lading, and data, at all tiers, provided that only the prices thereon may be deleted. The Contractor shall ensure that all subcontracts at all tiers shall contain a provision for furnishing the Contractor with copies of the subcontracts and purchase orders, with the prices thereon deleted. The Contractor shall include Section 00 52 13, Contract, in all subcontracts at all tiers. Failure of the Contractor or any of its subcontractors at any tier to comply with this provision will be considered as grounds for termination of the Contract at the Contractor's expense in accordance with Section 00 72 36, Termination of Right To Proceed.

D. Nothing contained in the Contract shall create any contractual relationship between any subcontractor and the District.

E. The Contractor shall at all times be responsible for the safety of its subcontractors' employees at any tier and for its subcontractors' plant and equipment at any tier; and the method of prosecuting the work and shall ensure the compliance, by all subcontractors' employees at any tier, with all local, state, and federal safety regulations and the District Safety Requirements as may be applicable to the performance of the work.

F. The Contractor shall at all times be responsible for the adequacy, efficiency, and sufficiency of its subcontractor at any tier or persons employed by the subcontractors. All workers shall have sufficient knowledge, skill and experience to properly perform the work assigned to them.

G. When a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the District, the Contractor shall cause such subcontractor forces to be removed immediately upon the request of the Engineer and such subcontractor forces shall not again be employed on the work.

00 72 05  ASSIGNMENT

A. No assignment of any performance of work under this Contract shall be made by the Contractor, its heirs, executors, administrators, or successors without prior written consent of the District. Consent for any proposed assignment will not be considered which would, by any instrument, relieve the original Contractor or its Surety of the responsibilities under the Contract.

B. The Contractor may assign monies due or to become due it under the Contract, to the extent permitted by law, and such assignment will be recognized by the District, if written notice thereof is given to the Engineer at least ten (10) calendar days before a payment is due. Any assignment of monies shall, however, be subject to all proper set-offs in favor of the District and to all deductions provided for in the Contract. All monies withheld, whether assigned or not, shall be subject to being used by the District for the completion of the work in the event that the Contractor should be in default therein or for the payment of claims or liens against the work from any source.

00 72 06  WAIVER OF CONTRACT PROVISIONS

A. None of the provisions of the Contract shall be considered waived by the District unless such waiver is expressly given in writing by the Engineer. No such waiver shall be a waiver of any past or future default, breach, or modification of any of the terms, provisions, conditions, or covenants of the Contract unless expressly set forth in such waiver.
00 72 07 DELIVERY OF NOTICE

A. Any written notice to be given to the Contractor by the Engineer or the District may be delivered in person to the Contractor's authorized representative or mailed to the address last given in writing by the Contractor.

B. Any written notice to be given to the District by the Contractor shall be mailed or delivered to the District's authorized representative on this Contract. This authorized representative will be identified in the District's award letter.

00 72 08 INDEMNITY

A. The Contractor shall indemnify, defend, and hold harmless the District, its officers, directors, employees, representatives, and agents and each of them, from and against any and all suits, actions, legal or administrative proceedings, claims, demands, damages, consequential damages, liabilities, interest, attorneys' fees and costs, and expenses of whatsoever kind or nature whether arising before or after Final Acceptance and in any manner, whether or not well founded in fact or in law and, directly or indirectly caused, occasioned, or contributed to in whole or in part, or claimed to be caused, occasioned, or contributed to in whole or in part, by reason of any act, omission, fault, or negligence whether active or passive of the Contractor or of anyone acting under the Contractor's direction, control, or on the Contractor's behalf in connection with or incident to performance of the Contract; without limiting the generality of the foregoing, the same shall include injury to or death of any person or persons and damage to any property, regardless of where located, including without limitation the property of the District, the Contractor's employees, and all other persons. The Contractor's aforesaid indemnity and hold-harmless agreement shall not be applicable to any liability caused by the active negligence or willful misconduct of the District, its officers, directors, employees, representatives, or agents.

B. The Contractor shall include in each agreement with each of its Subcontractors at all tiers, a provision requiring that the Subcontractor indemnify and hold harmless the District, its officers, directors, employees, representatives, and agents and each of them, from and against claims, damages, losses, and expenses including, but not limited to, attorneys' fees arising out of or resulting from the performance of the Subcontractor's work under the Contract, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of property, including loss of use resulting therefrom, to the extent such loss or injury is caused in whole or in part by the negligent acts or omissions of the Subcontractor, anyone directly or indirectly employed by the Subcontractor, or anyone for whose acts the Subcontractor may be liable. The Subcontractor's aforesaid indemnity and hold-harmless agreement shall not be applicable to any liability caused by the active negligence or willful misconduct of the District, its officers, directors, employees, or agents.

00 72 09 PATENT INDEMNITY

A. The Contractor shall pay all licenses, copyrights, fees, and royalties and assume all costs incident to the use and performance of the work, or the incorporation in the work, of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. The Contractor shall indemnify, defend, and save harmless the District, its officers, directors, employees, representatives, and agents, and each of them, from and against all claims, losses, costs, damages, consequential damages, and expenses, including attorneys' fees, incurred by the District, its officers, directors, employees, representatives, and agents as a result of or in connection with any claims or actions based upon infringement or alleged infringement of any patent and/or copyright and arising out of the use of the materials, equipment, and/or products furnished under the Contract by the Contractor, or out of the processes or actions employed by, or on behalf of, the Contractor in connection with the performance of the Contract. The Contractor shall, at its expense, promptly defend against any such claim or action whether or not well founded in fact or in law, provided that the District shall have notified the Contractor upon becoming aware of such claims or actions, and provided further that the Contractor's aforementioned obligations shall not apply to equipment, materials, and/or products furnished or specified by the District. The Contractor shall have the right, in order to avoid such claims or actions, to substitute at its expense non-infringing equipment, materials, and/or products, or to modify at its expense such infringing equipment, materials, and/or products so they become non-infringing, provided that such substituted and modified equipment, materials, and/or products shall meet all the requirements and be subject to all the provisions of the Contract.
WARRANTY

A. The Contractor represents that the work performed pursuant to the Contract shall be of the quality specified or of the highest quality if no quality is specified, and shall conform to the Specifications, Drawings, samples, and other descriptions set forth in the Contract. The Contractor warrants all equipment, material, products, and workmanship furnished and all work performed under the Contract against defects for a period of one (1) year after final acceptance regardless of whether the same were furnished or performed by the Contractor or by any of its subcontractors or suppliers of any tier.

B. The Contractor shall make, at its own expense, all repairs and/or replacements necessitated by defects in the equipment, materials, and/or products and in the workmanship provided by the Contractor or any of its subcontractors that become evident within the warranty period.

C. Upon receipt of written notice from the District of any breach of warranty during the applicable warranty period, the affected item shall be redesigned, repaired, or replaced by the Contractor and the Contractor shall perform such tests as the District may require to verify that such redesign, repair, and replacement comply with the requirements of the Contract. The District shall have the right to operate and use such equipment, materials, and/or products until they can, without damage to the District, be taken out of service for correction or replacement by the Contractor. As to the redesigned, repaired, or replaced work, the Contractor warrants such redesigned, repaired, or replaced work against defective design, equipment, materials, products, and workmanship for a period of one (1) year from and after the date of satisfactory completion of such redesigned, repaired, or replaced work. The District reserves the right to require that the Contractor performs such repair or replacement work.

D. The District also reserves the right to make such repairs or replacements, if, within seven (7) calendar days after the mailing of a notice in writing to the Contractor and Surety, the Contractor shall neglect to make or undertake with due diligence the aforesaid repairs or replacements and that Surety within seven (7) calendar days after mailing of a notice in writing of such negligence of the Contractor shall neglect to make or undertake with due diligence the aforesaid repairs or replacements itself, provided, however, that in the case of an emergency where in the opinion of the District delay would cause hazard to health or serious loss or damage, repair may be made without notice being sent to the Contractor or Surety, and the Contractor shall pay the cost thereof.

E. All costs including workforce and materials incidental to such redesign, repair, replacement, and testing, including the removal, replacement, and reinstallation of equipment necessary to gain access and all other costs incurred as the result of a breach of warranty shall be borne by the Contractor whether performed by the District or the Contractor.

F. Nothing in this section shall be construed to limit, relieve, or release the Contractor, subcontractor's, and equipment, materials, and/or products suppliers, and other service providers' liability to the District for damages sustained as the result of latent defects in the workmanship, equipment, materials, and/or products done and/or furnished by the Contractor, its subcontractors, suppliers and/or other service providers.

G. The Performance Bond shall extend for a period of one (1) year after acceptance of the Contract by the District and shall cover the Contractor's obligations resulting from the warranty requirements herein specified.

DIFFERING SITE CONDITIONS

A. The Contractor shall promptly, and before the following conditions are disturbed, notify the Engineer in writing of any:

1. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

2. Subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents.

3. Unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.
B. Actions by the Contractor to disturb or cover the above conditions before the Engineer is notified or before the Engineer has had the opportunity to investigate the conditions shall be deemed a waiver by the Contractor of any and all rights which the Contractor may have for additional compensation for increases in the Contractor's cost of, or the time required for, performance of any part of the work.

C. If these materially differing conditions potentially will give rise to a request for additional compensation, the Contractor must follow the requirements of Section 00 72 12, Changes and Extra Work, Subsection E.

D. The Engineer will promptly investigate the conditions, and if the Engineer finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work, the Engineer will issue a change order in accordance with provisions of Section 00 72 12, Changes and Extra Work.

E. In the event that a dispute arises between the District and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

00 72 12  CHANGES AND EXTRA WORK

A. General

1. The Engineer may, at any time, without invalidating the Contract and without notice to the Contractor's sureties, order changes in the work or extra work and/or furnish materials which may be required for the proper completion of the work or construction of the whole of the Project. The Contractor shall perform the work when so ordered. Any such change or request will be authorized in writing by the Engineer, provided that in the event of an emergency, which the Engineer determines endangers life or property, any work required by reason of such an emergency shall be performed in accordance with oral orders from the Engineer, which will be confirmed in writing as soon as practicable. Any such authorization, whether written or oral, may be accompanied by drawings and data as are necessary to show the extent of such change or extra work.

2. In the event of ordered emergency work, the Contractor shall keep accurate records of actual cost in accordance with Subsection 00 72 12.C, Cost Plus Change Orders, until such time as agreement on compensation is reached. Keeping of such records shall not be construed as an indication that this method of compensation is necessarily acceptable for such emergency work, and shall not preclude the possibility of agreement to pay for such emergency work on a unit price or lump sum basis. Upon determination of the compensation due to the Contractor for performing any emergency work, the Contract will be amended in writing by a Contract Change Order.

3. The Contractor shall commence and perform such change or extra work so as to meet all requirements set forth in the Contractor's current Construction Schedule, provided that if the Engineer determines that the performance of any such changes or extra work causes any material change in said schedule, the said schedule shall be revised to reflect such change. A copy of the revised schedule shall be submitted to the Engineer.

4. If any such change causes an increase or decrease in the Contractor's cost of, or any increase in the time required for, performance under the Contract, the Contract will be equitably adjusted through a Contract Change Order. If agreement is reached on the basis of compensation as described in Subsection 00 72 12.B, Agreed Price Change Order, a Contract Change Order will be issued. If agreement is not reached on the basis of compensation, the Contractor shall proceed with the work in accordance with the provisions of Subsection 00 72 12.C, Cost Plus Change Orders, upon receipt of written direction of the Engineer.

5. The District reserves the right to engage another contractor to perform the work if such engagement is in the District's best interest.
6. Should the Contractor, prior to opening of the bids, fail to notify the District of patent ambiguities in the Contract Documents, the Contractor shall not be eligible for an adjustment of the contract price or time extension on the basis of such ambiguities.

B. Agreed Price Change Orders

1. Unless otherwise required, the Contractor shall, within five (5) calendar days following receipt of such written authorization, submit in writing to the Engineer a proposal for accomplishing such change or extra work. If the Contractor does not submit a proposal within the specified five (5) calendar days, the delay in submitting the proposal will be taken into consideration in the evaluation of extensions of time which are requested, if any. The proposal shall set forth any increase or decrease in cost to the District in comparison to such cost had such change or extra work not been authorized. The proposal shall state the basis of compensation for all work in connection with any such change or extra work.

2. Sufficient detail shall be given in said proposal to permit thorough analysis of the proposal by the Engineer. The basis of compensation proposed by the Contractor shall be one of the following, which are listed in order of preference:
   a. Contract unit or lump sum prices, if applicable.
   b. New unit or lump sum prices.
   c. Cost plus with a price ceiling.

C. Cost Plus Change Orders

1. If the Contractor does not propose the method of compensation for such work or any part thereof, or if any proposed method is not acceptable, or if a method of compensation cannot be agreed upon, the Contractor shall proceed with such work and compensation therefore will be made on a cost plus basis as set forth below. If, at any time after the Contractor commences such work, a method of compensation other than cost plus therefore or any part thereof has been agreed upon, such compensation will be made in accordance with such agreement.

2. The Contractor shall keep accurate records of the actual cost to the Contractor for such work. Such records shall be kept in accordance with the provisions contained in the following subsections.

3. The Contractor will be paid the direct costs for labor, materials, and equipment used in performing the work as provided in paragraphs 12.C.6a, 12.C.6b, and 12.C.6c.

4. To the total of the direct costs computed as provided in paragraphs 12.C.6a, 12.C.6b, and 12.C.6c, there will be added certain markups as specified herein. A markup of thirty-three (33) percent to the cost of labor, fifteen (15) percent to the cost of materials, and fifteen (15) percent to the equipment rental.

   a. When extra work is performed by a subcontractor, an additional markup of 5 percent will be added to the total cost of said extra work including all markups specified in this Section. Said additional 5 percent markup shall reimburse the Contractor for additional administrative costs, and no other additional payment will be made by reason of performance of the extra work by a subcontractor.

5. The markups identified above shall constitute full compensation for all profit and overhead costs which shall be deemed to include all items of expense not specifically designated below in C.6. as cost or equipment rental.

   a. Markups include, but are not limited to, compensation for field overhead, home office overhead, profit, builder's risk insurance, general and auto liability insurance, and performance and payment bond premiums.

      i. Home office overhead includes, but is not limited to:
01. Office rent, utilities, clerical staff, bidding and estimating, officer's salary, advertising, professional association dues, supplies, telephone, office equipment, transportation, staff consultants, and miscellaneous business expenses related to the project.

ii. Field overhead includes, but is not limited to:

01. Job site utility expenses (including telephone), superintendent, project engineer, office engineer, secretary and other field office staff, field office, field office equipment and supplies, portable toilet, fencing, transportation for field office staff, general project cleanup.

b. The total payment made as provided above shall be deemed to be the actual costs of such work and shall constitute full compensation therefore.

6. Costs for labor, materials, and equipment, which are eligible for consideration in cost plus work, are described below:

a. Labor - The Contractor will be paid the cost of labor for the workers (including foremen when authorized by Engineer) used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor or subcontractor will be the sum of the following:

i. Actual Wages - The actual wages paid shall include basic pay, overtime and shift premiums, any employer payments to or on behalf of the workers for health and welfare, pension, vacation, holidays and other miscellaneous payments (e.g. administration, occupational, health and research, annuity trust fund, supplemental unemployment benefits).

ii. Labor Surcharge - To the actual wages as defined above, will be added a labor surcharge. The allowable markup rate shall be as set forth in the California Business and Transportation Agency's Department of Transportation publication entitled, Labor Surcharge and Equipment Rental Rates, which is in effect on the date upon which the work is accomplished and which is made a part of the Contract. Said labor surcharge shall constitute full compensation for all other payments made to, or on behalf of, the workers including workers' compensation insurance with a waiver of subrogation, social security, State unemployment insurance, and Federal unemployment insurance and excluding actual wages as defined above and subsistence and travel allowance as specified below.

iii. Subsistence and Travel Allowance - The actual subsistence and travel allowance paid to such workers.

b. Materials - Charges for the cost of materials furnished by the Contractor for use in performing any change or extra work shall be made, provided such furnishing and use was as specifically authorized, and the actual use was verified by the Engineer. Charges shall be the net cost to the Contractor delivered at the job. The District reserves the right to furnish such materials as it deems advisable, and the Contractor shall not be compensated for costs and markup on such materials.

i. All materials for extra work shall be substantiated by copies of vendor's invoices. Such invoices shall be submitted with the related Daily Extra Work reports or, if not available for submittal with the Daily Extra Work reports, they shall be properly identified and promptly transmitted to the Engineer. Said vendor's invoices shall be submitted within sixty (60) calendar days after the date of delivery of the material or within fifteen (15) calendar days after the acceptance of the Contract in accordance with Section 00 72 41, Final Payment and Release, or the District will establish the cost of such materials at the lowest wholesale prices at which said materials are available in the quantities concerned, F.O.B. at the required locations of work, less any cash or trade discounts provided.

ii. Equipment Rental - The Contractor will be paid for the use of the equipment at the rental rates listed for such equipment in the State of California Department of Transportation publication entitled, Labor Surcharge and Equipment Rental Rates which is in effect on the date upon which the work is accomplished and which is a part of the Contract, regardless of ownership and any
rental or other agreement for the use of such equipment entered into by the Contractor. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, a suitable rental rate for such equipment will be established by the Engineer. The Contractor may furnish any cost data which might assist the Engineer in the establishment of such rental rate.

i. The rental rates paid as above provided shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

ii. Individual pieces of equipment or tools not listed in said publication which have a replacement value of five hundred dollars ($500) or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.

iii. Rental time will not be allowed while equipment is inoperative due to breakdowns.

iv. Equipment on the Work - The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed and, in addition, shall include the time required to move the equipment to the location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work. The following shall be used in computing the rental time of equipment on the work:

01. When hourly rates are listed, less than thirty (30) minutes of operation shall be considered to be one-half (½) hour of operation.

02. When daily rates are listed, less than four (4) hours of operation shall be considered one-half (½) day of operation.

v. Equipment not on the Work - For the use of equipment moved in on the work and used exclusively for extra work, the Contractor will be paid the rental rates listed in the State of California Department of Transportation publication entitled Labor Surcharge and Equipment Rental Rates which is in effect on the date upon which the work is accomplished and which is a part of the Contract, or determined as provided in this subsection, and for the cost of transporting the equipment to the location of the work and its return to its original location, all in accordance with the following provisions:

01. The original location of the equipment to be hauled to the location of the work shall be agreed to by the Engineer in advance.

02. The District will pay the costs of loading and unloading such equipment.

03. The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission.

04. The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays, and District-observed holidays and days of temporary suspension of the work unless the equipment is used to perform the extra work on such days, and shall terminate at the end of the day on which the Engineer directs the Contractor to discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:
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<th>Hours Equipment is in Operation</th>
<th>Hours to be Paid</th>
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- The hours to be paid for equipment which is operated less than eight (8) hours due to breakdowns, shall not exceed eight (8) less the number of hours the equipment is inoperative due to breakdowns.
- When hourly rates are listed, less than thirty (30) minutes of operation shall be considered one-half (½) hour of operation.
- When daily rates are listed, payment for one-half (½) day will be made if the equipment is not used. If the equipment is used, payment will be made for one day.
- The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than eight (8) hours or if on a daily basis shall not be less than one day.
- Should the Contractor desire the return of the equipment to a location other than its original location, the District will pay the cost of transportation in accordance with the above provisions, providing such payment shall not exceed the cost of moving the equipment to the work.
- Payment for transporting, loading, and unloading equipment, as above provided, will not be made if the equipment is used on the work in any other way than upon extra work.

vi. If the Contractor elects to move equipment in on the work before the equipment is used or elects to delay the return of the equipment to its original location, the District will not compensate the Contractor for the time the equipment is idle before and after it has been used on the extra work.

d. Bonds - The markups referred to in this subsection shall include full compensation for all additional bonding costs the Contractor may incur as a result of the extra work. No additional percentage increase will be allowed to these markups for bonding costs.

e. Defective work performed under cost plus procedures shall be removed, repaired, or reconstructed to the satisfaction of the Engineer at no additional cost to the District.

7. The Contractor shall maintain its cost records and records of its subcontractors and special forces in such a manner as to provide a clear distinction between the costs of other operations and the direct costs of
extra work paid for in accordance with this Section 00 72 12, Changes and Extra Work. Extra work which is performed shall be documented on a daily basis in accordance with the following:

a. From the above records, the Contractor shall furnish the Engineer with completed daily extra work reports, on forms furnished by the District, for each day's work to be considered payable on an extra work basis. The daily extra work reports shall itemize the materials used, the direct cost of applicable labor, and the charges for equipment used, whether furnished by the Contractor, subcontractor, or other forces. The daily extra work report itemizations for labor shall provide names or identifications and classifications of all workers, the hourly rate of pay, and hours worked on extra work. Itemized equipment records shall provide the size, type, and identification number of equipment and hours operated for extra work.

b. All daily extra work reports shall be signed by the Contractor or its authorized representative.

c. The Engineer will compare its records with the completed daily extra work reports furnished by the Contractor and make any necessary adjustments. When these daily extra work reports are agreed upon and signed by both parties, said reports shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit which may be performed by the District.

D. The quantities set forth in Section 00 41 43, Schedule of Bid, are approximations only. If there is a variation in the estimated quantity by more than one hundred fifty (150) percent or less than fifty (50) percent of the bid quantity, either the District or the Contractor may notify the other party of their desire to renegotiate the contract unit price with respect to those quantities outside of the permitted range of fifty (50) percent below to one hundred fifty (150) percent above the bid quantity.

1. Any estimated quantity from a maximum of one hundred fifty (150) percent of the bid quantity to a minimum of fifty (50) percent of the bid quantity will be paid for at the contract unit price. Such quantities will be determined by the Engineer at the Engineer’s discretion in accordance with the applicable measurement provision of the Contract using such methods as the Engineer considers appropriate for the class of work to be measured, including, but not limited to, the method of average end area computed from cross sections grid system or topographic contours. If considered advisable, prismoidal corrections, or corrections for curvature in alignment, will be employed. The planimeter shall be considered an instrument of accuracy adapted to measurement of areas. The dividing limits, lines, or planes between adjacent items or classes or excavation, concrete, or other types of work, where not definitely set forth in the Contract, will be as determined by the Engineer.

E. Requests for Additional Compensation

1. Unless the Contractor has been ordered by the District pursuant to Section 00 72 12, Changes and Extra Work, to perform changes or extra work, additional compensation will not be considered unless the Contractor follows the procedures set forth in this subsection. For the purposes of the Contract, a request for additional compensation shall mean any request for compensation in excess of the contract amount (as amended by addenda and/or change orders) arising out of the conduct of the work and shall include, but not be limited to, requests for compensation arising out of changed site conditions, delays occasioned by the owner or third parties, and such other compensation arising out of interference with the work which is not the responsibility of the Contractor.

2. Immediately upon learning of a condition, occurrence, or circumstance that potentially will give rise to a request for additional compensation the Contractor must notify the Engineer of that condition, occurrence or circumstance. If the initial notification is oral, it shall be confirmed in writing within five (5) calendar days of the oral notification. The Contractor shall not proceed with the work involving the potential request for additional compensation without notifying the Engineer of the subject conditions, occurrence or circumstance unless an emergency exists or unless it is impossible to notify the Engineer without creating an unreasonable delay in the work.

3. Within fourteen (14) calendar days of learning of such condition, occurrence or circumstance, the Contractor shall submit to the Engineer a detailed written statement setting forth the causes of extra costs, potential and/or actual incurred costs as well as engineering and technical data supporting the request for additional compensation. The Contractor shall submit sufficient data to reasonably enable the Engineer to make a thorough analysis and investigation regarding the request for additional compensation. If this
detailed statement cannot reasonably be provided by the Contractor within fourteen (14) calendar days, then such data as can be reasonably provided shall be so provided. The Contractor shall request, before the expiration of the five (5) calendar day period, from the Engineer an extension for a specific period of time in which to file said documentation supporting the request for additional compensation.

4. Without modifying or waiving any of the obligations of the Contractor which are set forth in paragraph 3 above, the Contractor must submit to the Engineer a detailed written statement setting forth the final costs and any supplemental engineering and technical data related to any requests for additional compensation by a date no later than sixty (60) days after the date of substantial completion of the work. If extraordinary circumstances exist, in the opinion of the Contractor, an extension of the date for submission of final costs and technical backup may be extended by written agreement at the discretion of the District. This statement of final costs and supplemental reporting data shall be sufficiently detailed to enable the Engineer to thoroughly analyze and make a reasonable determination regarding the request for additional compensation. Failure of the Contractor to immediately notify the Engineer of a condition, occurrence or circumstance that potentially will give rise to a request for additional compensation or to make reasonable efforts to provide an adequate initial submittal within the fourteen (14) calendar day period, or within any extension of that period agreed to by the Engineer as set forth in paragraph 3 above, and/or failure of the Contractor to provide such statement of final costs and technical submittals within sixty (60) days of the date of substantial completion, or by such date as that period may be extended shall be deemed a waiver by the Contractor of any and all rights to additional compensation for such conditions, occurrences, or circumstances for which costs and other required data has not been timely submitted. The waiver by the Contractor of its rights to compensation due to failure to comply with the requirements of this General Condition shall operate as a forfeiture of all rights of the Contractor under the Contract, at law, and in equity to receive additional compensation whether through the Government Code claims process or otherwise.

00 72 13 INDEPENDENT CONTRACTOR, SUPERINTENDENT, AND EMPLOYEES

A. The Contractor shall act as an independent Contractor performing work under the Contract, maintaining complete control over its employees and all of its subcontractors. The Contractor shall perform all work in an orderly, timely, and workmanlike manner, enforce strict discipline and order among its employees, and assure strict discipline and order by its subcontractors in complying with the Contract Documents.

B. Before starting work, the Contractor shall designate in writing its authorized representative who shall have the authority to represent and act for the Contractor. The Contractor shall provide a clear written definition of the scope of the authorized representative and assistant's authority to act for the Contractor, and shall specify any and all limitations of such authority. Such representative shall be present or be duly represented at the site of work at all times when work is actually in progress and, during periods when work in suspended, arrangements acceptable to the Engineer shall be made for any emergency work which may be required. The Contractor's authorized representative shall be supported by competent assistants, as necessary, and the authorized representative and its assistants shall be satisfactory to the Engineer. The District reserves the right to have the authorized representative removed from the project and replaced with another person who is acceptable to the Engineer. All requirements, instructions, and other communications given to the authorized representative by the Engineer shall be as binding as if given to the Contractor. Before starting work, the Contractor shall give the District a written list of the addresses and telephone numbers where the Contractor's project manager, project superintendent, and foremen can be reached during hours when the work is not in progress.

1. Said authorized representative shall be present or be duly represented at the site of the work at all times while work is actually in progress. When work is not in progress and during periods when work is suspended, arrangements acceptable to the engineer shall be made for one or more persons to be contacted for any emergency work which may be required.

2. The Contractor shall employ only competent and skilled workers to perform any work in numbers sufficient to carry the work to satisfactory completion within the time limits specified or required to meet approved construction schedules. The Contractor shall be responsible for maintaining satisfactory conduct of its employees at the jobsites.

3. Each machine or unit of equipment shall be operated by an operator competent in handling the particular make of machine or unit or equipment in use, at a speed or rate of production not to exceed that recommended by the manufacturer.
C. If any subcontractor or person employed by the Contractor shall appear to the Engineer to be incompetent, or be under the influence of alcohol or illegal drugs, or to act in an unsafe, disorderly, or improper manner, the Engineer shall have sufficient cause to require that such person not again be employed on the work. However, nothing contained in this paragraph shall be used to shift the responsibility for supervision of persons employed by the Contractor from the Contractor or to require the Engineer to take any action with regard to an employee of the Contractor or subcontractor who is subject to discipline.

D. The Contractor shall maintain labor relations in such manner and by such methods as will provide for harmony among workers. The Contractor shall assure that its subcontractors of all tiers comply with the provisions set forth in this Section. Failure of the Contractor or any of its subcontractors at any tier to comply with this provision shall be considered as grounds for termination of the Contract in accordance with Section 00 72 36, Termination of Right to Proceed.

00 72 14 CONTRACTOR'S PLANT, CONSTRUCTION EQUIPMENT, AND FACILITIES

A. The Contractor shall provide and ensure the use of, on any work, only such construction plant and equipment capable of producing the quality and quantity of work and materials required by the Contract and within the time or times specified. Before proceeding with any contract work or with erection of any facilities including but not limited to temporary structures, machinery, equipment, offices, warehouses, and camps, the Contractor shall, at its expense, furnish the Engineer with such information and drawings relative to such equipment, plant, and facilities as the Engineer may request. Upon written order of the Engineer, the Contractor shall promptly remove unsatisfactory equipment and facilities from the site and shall discontinue operation of unsatisfactory plant.

B. The Contractor shall furnish and maintain such potable water supplies and proper sanitation facilities as it determines necessary for its forces at the jobsite and shall be responsible for the policing of same.

C. The Contractor shall maintain all portions of the jobsite in a neat, clean, and sanitary condition at all times. Toilets shall be furnished by the Contractor where needed for use of its employees and their use shall be strictly enforced.

1. The Contractor shall not make use of the District's existing sanitary facilities.

00 72 15 EQUIPMENT, MATERIALS, AND/OR PRODUCTS, SUBSTITUTION OF SPECIFIC ITEMS AND TRADE NAMES, WORKERS' SKILLS

A. The work, unless otherwise permitted or approved by the Engineer, shall be completed with the incorporated use of equipment, materials, and/or products where such are specified. Substitutions and equal alternatives will be permitted as provided in this Section; however, neither the request for substitution nor the offer of alternatives shall in any way by their submittal obligate the District to assent to any request or offer. Failure of the Contractor awarded the work to either submit requests for substitutions or to offer alternatives within the required times provided in this General Condition will be considered as evidence that the work shall be accomplished with trade-named equipment, materials, and/or products as identified in the Technical Specifications and/or the Project Drawings.

1. Unless otherwise provided elsewhere in the Contract, all equipment, materials, and/or products incorporated into the work shall be new and, where not specified, shall be of the highest quality of the respective kinds for the intended use, and all workmanship shall meet or exceed applicable construction industry standards and practices. If equipment, materials, and/or products are designated by listing named manufacturers of particular equipment, materials, and/or products followed by the words "or equal," then the Contractor may furnish the named equipment, materials, and/or products or any equal equipment, materials, and/or products. The first-named manufacturer of particular equipment, materials, and/or products is the basis for the design shown on the Project Drawings. A subsequently named manufacturer or particular equipment, materials, and/or products has been determined to be an acceptable substitution but may require modifications in the Project's design and its ultimate construction to accommodate its use. If such subsequently named items are selected by the Contractor for incorporation into the work, the Contractor shall assume all costs required for modifications to the equipment, materials, and/or products, and Project design and construction as may be required for said items' use. Substitutions for an unnamed "equal" item of material shall be permitted upon compliance of the procedures set forth in Paragraph B of this Section. If a Contractor makes use of an unnamed "equal" product as a substitute for a specifically named material or product, the Contractor shall assume all costs required to make the necessary revisions or modifications to accommodate the use of said unnamed product.
2. Before beginning the work and within thirty-five (35) calendar days after award of the Contract, the Contractor shall submit a List of Materials to the Engineer for review. The List shall include all items of equipment, materials, and/or products to be incorporated into the work and the names of suppliers with whom purchase orders have been placed. The names on the List shall be arranged in the same order as in the specifications, and shall contain sufficient data to identify precisely the items of equipment, materials, and/or products the Contractor proposes to furnish. The List shall include specification or Project Drawing references. Once the submission is determined to be acceptable to the Engineer, it shall be returned to the Contractor.

3. If the Contractor is required to furnish sample specimens of materials, the Contractor shall comply with the provisions of 00 72 28, Inspection and Sample Specimens.

B. Substitution for those equipment, materials, and/or products specified shall only be permitted when the proposed unnamed “equal” product or material to be furnished is both equal in quality and utility and after the Contractor has complied with the following provisions: (1) All substitutions shall be reviewed by the Engineer. (2) The Engineer must approve such substitution in writing prior to its incorporation into the work. (3) Unless otherwise authorized in writing by the District, the Contractor shall, within thirty-five (35) calendar days of award and prior to placing any purchase orders, but at least thirty (30) calendar days before it requires approval of any such alternative item, submit to the District sufficient data, drawings, samples, literature, or other detailed information as will demonstrate to the Engineer that the proposed substitute is equal in quality and utility to the equipment, materials and/or products specified. A side by side comparison of the proposed equipment specification to the contract specification shall be submitted by the Contractor for consideration

1. Within thirty (30) calendar days following receipt of all requested information from the Contractor, the Engineer will determine whether the proposed alternative is equal in quality and utility and meets the requirements of the Contract and will inform the Contractor in writing of such determination. The burden of substantiating the quality and utility of alternatives shall be upon the Contractor, and the Contractor shall furnish all necessary information requested and required by the Engineer. The Engineer will be the sole judge as to the quality and utility of alternative equipment, materials, and/or products, and the Engineer's decision shall be final. An acceptance by the Engineer of a substitution shall not relieve the Contractor from complying with the requirements of the Project Drawings and Specifications. Acceptance by the Engineer shall not relieve the Contractor from full responsibility for the efficiency, sufficiency, and quality and performance of the substitute equipment, materials, and/or products, in the same manner and degree as the equipment, materials, and/or products specified by name.

2. Failure of the Contractor to submit proposed substitutions for review in the manner described above and within the time prescribed shall be sufficient cause for rejection by the District of any other proposed substitutions.

3. In determining whether a proposed product is equal in quality and utility, the Engineer is not restricted to such basic issues as performance and durability, but may consider any other issues that the Engineer, in the discretion of the Engineer, deems appropriate. Said issues may, but are not required to include, nor are they limited to, such additional factors as comparable performance, reliability, efficiency of operation, ease of operation, adaptability, ease of maintenance, capital costs, life-cycle costs, operational characteristics, costs of training personnel, maintenance history, warranties, problems created by the resulting overall warranty system, availability of qualified service, availability of parts, the history of any supplier and compatibility with existing facilities.

4. No one factor or group of factors, including such issues as savings on capital costs, shall be determinative of whether the proposed product or material is equal in quality and utility. The decision of the Engineer shall be based on those factors deemed by the Engineer to be relevant and any data, drawings, samples, literature, or other detailed information furnished by the Contractor with respect to the proposed substitution.

5. Each decision as to whether a product or material is equal in quality and utility shall be made by the Engineer on a case-by-case basis.

6. The Contractor shall be responsible for any and all costs, including consultant costs, incurred by the District with respect to the proposed substitution that exceed the costs inherent in the normal and reasonable review of drawings and other standard data, information, and documents concerning any
proposed substitution. The Contractor shall be responsible for this cost, regardless of whether or not the substitution is approved by the Engineer.

C. Unless otherwise provided in the Contract, the title and interest in the right to the use of all water, and the title to all soil, stone, gravel, sand, minerals, timber, and all other materials developed or obtained within the Project limits from operations by the Contractor or any of its subcontractors, of any of their representatives or employees, and the right to use or dispose of the same are hereby expressly reserved in the District; and neither the Contractor nor any of its subcontractors, nor any of their representatives or employees, shall have any right, title, or interest in or to any part thereof.

1. All material used under the Contract after it has been attached or affixed to the work or soil and after partial payment has been made therefore shall become the property of the District.

2. In the event that any Indian relics or items possessing archaeological or historical value are discovered by the Contractor or any of its subcontractors or any of their representatives or employees, the Contractor shall immediately notify the Engineer and await the Engineer's decision before proceeding with any work. The Contractor shall have no property right in such relics and items.

3. The Contractor shall satisfy himself as to the quantity of acceptable materials or products which may be produced or obtained at local sources, and the District will not assume any responsibility as to the quantities or quality of acceptable materials or products available.

4. The Contractor, with the permission of the Engineer, may use in the proposed construction such stone, gravel, sand, or other material suitable in the opinion of the Engineer as may be found in excavation.

5. Existing equipment, materials, and/or products to be salvaged shall remain the property of the District. Salvage to be reinstalled in the work shall be refurbished as required before reinstallation. Other work to be salvaged shall be carefully removed and handled in such a manner as to avoid damage and shall be delivered to storage at a location designated by the Engineer.

00 72 16  CONTRACTOR-FURNISHED DRAWINGS AND DATA

A. Within thirty (30) calendar days after receiving Notice to Proceed (NTP), the Contractor shall submit at its own expense Shop Drawings and details of all structural and reinforcing steel, equipment, electrical controls, structural fabrications, pipe, pipe joints, special pipe sections, and other appurtenances. The Engineer's favorable review shall be obtained before any such items are manufactured or used in the work. The favorable review of Drawings by the Engineer shall apply in general design only and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein. Favorable review by the Engineer shall not relieve the Contractor of its obligation to meet safety requirements and all other requirements of law. The Engineer will start reviewing the Contractor's submittals only after the NTP is issued by the District with the exception of some unusual long lead items which may require submittals prior to issuing the NTP.

B. Shop-drawing submittal and coordination are the responsibility of the prime contractor; this responsibility shall not be delegated in whole or in part to subcontractors or suppliers. Any designation of work "by others," shown on Shop Drawings, shall mean that the work will be the responsibility of the Contractor rather than the subcontractor or supplier who has prepared the Shop Drawings.

C. Submittals shall be prepared in such form that data can be identified with the applicable Specification paragraph. The data shall demonstrate clearly compliance with the Project Drawings and Specifications and shall relate to the specific equipment to be furnished. Where manufacturer's standard drawings are employed, they shall be marked clearly to show what portions of the data are applicable to this Project.

D. Review of shop-drawing submittals by the Engineer has as its primary objective the completion for the District of a Project in full conformance with the Project Drawings and Specifications, unmarred by field corrections, and within the time provided. In addition to this primary objective, shop-drawing review as a secondary objective will assist the Contractor in its procurement of equipment that will meet all requirements of the Project Drawings and Specifications, will fit the structures detailed on the Project Drawings, will be complete with respect to piping, electrical, and control connections, will have the proper functional characteristics, and will become an integral part of a complete operating facility. Acceptance of Shop Drawings and submittals does not constitute a change order to the Contract requirements.
E. Where the Contractor is required by these Specifications to make submittals, they shall be submitted to the Engineer with a letter of transmittal and in sufficient number of copies to allow a distribution of at least one (1) copy to all parties needing a copy to carry out the provisions of the Specifications, including three (3) copies to be retained by the Engineer. The Engineer shall determine the appropriate number of such copies required at the time of the preconstruction conference.

F. Within twenty one (21) calendar days of receipt by the Engineer of each of the Contractor's submissions and all appurtenant data required for their review, the appropriate number of copies will be returned to the Contractor with one of the following notations:

1. Resubmittal not required; correction, if any, noted.

2. Correct and resubmit corrections noted.

G. Returned copies of Drawings marked with Notation "1" authorize the Contractor to proceed with the operations covered by such returned copies, provided that such operations be subject to the comments, if any, shown on such returned copies.

H. Returned copies of Drawings marked with Notation "2" shall be corrected, as necessary and required, and shall be submitted in the same manner as before.

I. When submittals are favorably reviewed, the Engineer will retain three (3) copies and will return all other copies to the Contractor. When submittals are not favorably reviewed, the Engineer will retain only two (2) copies and will return all others to the Contractor. It is considered reasonable that the Contractor shall make a complete and acceptable submission to the Engineer at least by the second submission of data. The District reserves the right to deduct monies from payments due the Contractor to cover additional costs of the Engineer's review beyond the second submission.

J. Favorable review by the Engineer will not constitute acceptance by the Engineer of any responsibility for the accuracy, coordination, and completeness of the Shop Drawings or the items of equipment represented on the Drawings. Accuracy, coordination, and completeness of Shop Drawings shall be the sole responsibility of the Contractor, including responsibility to back check comments, corrections, and modifications from the Engineer's review before fabrication.

K. Supplemental, specific requirements for Shop Drawings and details are contained in the applicable technical sections of these Specifications.

L. Copies of schedules and Shop Drawings submitted to the Engineer for review shall be such as to provide three (3) copies for the Engineer's files, and such additional copies as the Contractor may desire for its own office files and/or for distribution by it to subcontractors or vendors. Exceptions will be noted in specific sections of the Technical Specifications.

M. All Shop Drawings and supporting data, catalogs, and schedules shall be submitted as the instruments of the Contractor, who shall be responsible for their accuracy and completeness. These submittals may be prepared by the Contractor, subcontractors, or suppliers, but the Contractor shall ascertain that submittals meet all of the requirements of the Contract, while conforming to structural, space, and access conditions at the point of installation. The Contractor shall check all submittals before submitting them to the Engineer.

N. The Engineer shall check and review schedules, drawings, etc., submitted by the Contractor only for general design conformance with the concept of the Project and compliance with the Contract.

O. Shop Drawings shall not be used to order products' fabrication or delivery for construction or installation unless submitted to and favorably reviewed by the Engineer.

P. Acceptance by the Engineer of any drawings, method of work, or any information regarding materials and equipment the Contractor proposes to furnish shall not relieve the Contractor of its responsibility for any errors therein and shall not be regarded as an assumption of risks or liability by the Design Engineer or the District, or any officer or employee thereof, and the Contractor shall have no recourse against the District under the Contract on account of the failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Such acceptance shall be considered to mean merely that the
Engineer has no objection to the Contractor using, upon its own full responsibility, the plan or method of work proposed or furnishing the materials and equipment proposed.

**STANDARDS AND CODES**

A. All work shall be constructed by the Contractor in full accordance with the requirements of local building codes, the National Board of Fire Underwriters, the Pacific Fire Rating Bureau, the State Fire Marshall, the Safety Orders issued by the Division of Industrial Safety of the State of California, and all other prevailing codes and regulations having jurisdiction over construction included in the Contract Documents.

B. Where references are made in the Contract to the respective standards and codes in accordance with which work is to be performed or tested, the edition or revision of such standards and codes in effect on the date of the Notice to Contractors shall apply, unless otherwise specified in the Technical Specifications; references to such standards and codes is solely for technical information. Nothing in these specifications is to be construed to permit work not conforming to governing codes. In case of conflict between referenced standards and codes or between standard(s) or code(s), and the requirements of the Contract, the Engineer will determine which shall govern. For purposes of bidding, it is assumed that the more restrictive one is required.

**SAFETY**

A. The Contractor shall be solely and completely responsible for conditions on the jobsite, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. The Contractor shall promptly and fully comply with and carry out safety requirements as prescribed by federal, state, or local laws or regulations and industry standards.

B. The services of the Engineer in conducting review and inspection of the Contractor's performance is not intended to include review of the adequacy of the Contractor's work methods, equipment, bracing or scaffolding, or safety measures, in, on, or near the construction site.

C. The Contractor shall take such measures as may be necessary or required to assure that the safety and health of the employees and of the public may be safeguarded.

D. THE CONTRACTOR IS HEREBY INFORMED THAT WORK ON THIS PROJECT COULD BE PHYSICALLY DANGEROUS TO WORKERS. THE CONTRACTOR SHALL CAREFULLY INSTRUCT ALL PERSONNEL WORKING ON THIS PROJECT AS TO POTENTIAL DANGERS, WHICH COULD BE POTENTIALLY HAZARDOUS TO WORKERS' HEALTH, AND SHALL PROVIDE SUCH NECESSARY SAFETY EQUIPMENT AND INSTRUCTIONS AS ARE NECESSARY TO PREVENT INJURY TO PERSONNEL AND DAMAGE TO PROPERTY. SPECIAL CARE SHALL BE EXERCISED RELATIVE TO WORK UNDERGROUND.

E. The conveyance and treatment of raw sewage and its by-products can introduce pathogenic organisms which may cause diseases such as salmonellosis, typhoid fever, paratyphoid fever, bacillary dysentery, cholera, infectious hepatitis, polio, amoebic dysentery, and others.

F. The Contractor shall be responsible for the direction and control of the work assigned and for assuring that all workers on the project understand the hazards of the work involved and the safe work procedures required for each job. The Contractor shall assure that its subcontractors of all tiers shall, without expense to the District, comply with this safety responsibility. No work shall proceed until each worker and subcontractor understands the scope of the work and all safety rules and work procedures to be followed. The Contractor shall not allow a new employee or new subcontractor to begin work on District projects without a full and proper safety orientation.

G. Use of alcoholic beverages and/or nonprescription drugs are strictly prohibited. Workers who use prescription drugs that interfere with workers ability to work safely are prohibited from the work site.

H. The Contractor is advised that, in certain locations and under certain conditions, the work may take longer and may require special equipment in order to properly conform to safety regulations. In such cases, no additional compensation will be allowed the Contractor therefor.
I. The Contractor’s personnel shall wear hard hats at all times while on the project work site, except in offices or vehicles.

J. Before starting work, the Contractor shall submit a written safety program for the District's review. The objective of the safety program shall be accident prevention. Such program shall include, but not be limited to, the following:

1. An organization chart and accompanying narrative which describes the responsibility for employee and public safety of those individuals who control each phase of operations and set forth in writing the policies and procedures to be followed by all personnel. The chart shall also show the Contractor's internal lines of communication (including subcontractors) for the program.

2. The designation of a competent person.

3. A specific program for communication between the Contractor and District on safety matters. The Contractor shall also designate one person with whom official contact can be made by the District on safety matters.

4. Evidence that the Contractor has become thoroughly familiar with the potential hazards of the work and applicable federal and state regulations. Such evidence shall be in the form of a signed affidavit per Section 00 45 17 titled Contractor Safety Acknowledgment.

5. Specific safety procedures and guidelines for conduct of the work.

K. The District's review, comment upon, and/or acceptance of the Contractor's safety program and/or plan does not in any way negate the responsibilities of the Contractor for safety or place any responsibility upon the District for such safety. Such review comment and/or acceptance shall not be construed as limiting in any manner the Contractor's obligation to undertake any action which may be necessary or required to establish and maintain safe working conditions at the site.

L. The Contractor shall promptly comply with any directive from the District in connection with safety. The District reserves the right to stop work if the District reasonably believes that there is an imminent danger to safety. The District also reserves the right to require the Contractor to revise the Contractor's safety program and/or plan to eliminate future occurrences of the imminent danger. Even though the District reserves such rights, the exercise of such rights is in the District's sole discretion, and such reservations will not be construed as obligations of the District to monitor or enforce the Contractor's safety program, plan, and/or method of operation. The District's exercise of these rights shall not provide a basis for any request by the Contractor for delay damages, extra compensation, and/or additional compensation to complete the work.

M. It is the intent of the District that the Contractor provide a safe working environment under normal conditions. HOWEVER, BECAUSE OF POTENTIALLY HAZARDOUS CONDITIONS SUCH AS CONFINED SPACES, POTENTIALLY EXPLOSIVE ATMOSPHERES, HANDLING OF CERTAIN CHEMICALS, POSSIBLE EXPOSURE TO PATHOGENS, ETC., SPECIALIZED EQUIPMENT MAY BE NECESSARY AND STRICT CONFORMANCE WITH SAFETY REGULATIONS WILL BE REQUIRED.

N. The Contractor shall keep adequate first aid facilities and supplies available and instruction in first aid shall be given.

O. The Contractor shall assure that its subcontractors of all tiers shall, without expense to the District, comply with this Section and the provisions of Section 00 72 14, Contractor’s Plant, Construction Equipment, and Facilities.

00 72 19 PUBLIC ACCESS AND SAFETY; PROTECTION OF PROPERTY

A. The design of the facilities included in this Project, has been based on the concept that the structures are not accessible to and usable by the handicapped and the general public. Consequently, stairs, landings, platforms, railings, ladders, exits, and the like, for treatment facilities were designed to conform only to the requirements for industrial use by authorized persons.

B. The Contractor shall have complete responsibility for the work and protection thereof, and for preventing injuries to persons and damage to the work and property and utilities on or about the work, until completion and
C. The Contractor shall provide and maintain all necessary safety equipment such as fences, barriers, signs, lights, walkways, guards, and fire-prevention and fire-fighting equipment and shall take such other action as is required to fulfill its obligations under this Section.

D. The Contractor shall so conduct its operations as not to close or obstruct any portion of any railroad, highway, road, or other property until permits therefor have been obtained from the governmental or other authorities having jurisdiction thereof. If any of the above are required to be kept open and shall be damaged or rendered unsafe by the Contractor's operations, the Contractor shall, at its expense, make such repairs and provide such temporary guards, bridges, lights, and other signals as necessary or required for public safety and as will be acceptable to the governmental or other authorities having jurisdiction thereof. Fences which interfere with any work may, upon prior written approval of the District, be removed by the Contractor but must then be restored to their original condition prior to final acceptance. Such removing and restoring shall be by and at the expense of the Contractor.

E. Unless otherwise specifically provided in the Contract, the Contractor shall not do any work that would affect any pipeline, telephone, telegraphic, or electric transmission line, irrigation ditch, or other structure, nor enter upon the rights-of-way or lands appurtenant thereto, until notified by the owners that the District has obtained proper authority therefor from the owners thereof. Thereafter and before it begins such work, the Contractor shall give said owners convenient access and reasonable cooperation in their removing, shoring, supporting, or otherwise protecting such lines, ditches, and structures and for replacing same.

1. Care shall be exercised by the Contractor to prevent damage to adjacent walks, streets, culverts, and gutters; where equipment will pass over these obstructions, suitable planking shall be placed.

2. The Contractor shall not be entitled to any extension of time or any extra compensation on account of any postponement, interference, or delay caused by any such line, ditch, or structure being on or adjacent to the site of work except as provided in Section 00 72 11, Differing Site Conditions.

3. The Contractor shall preserve and protect all cultivated and planted areas, and vegetation such as trees, plants, shrubs, and grass on or adjacent to the premises, which, as determined by the Engineer, do not reasonably interfere with the performance of work. The Contractor will be held responsible for damage to any such areas and vegetation and for unauthorized cutting of trees and vegetation, including without limitation, damage arising from the performance of its work through operation of equipment or stockpiling of materials. All costs in connection with any repairs or restoration necessary or required by reason of any such damage or unauthorized cutting shall be borne by the Contractor.

00 72 20 LAWS AND REGULATIONS

A. The Contractor shall keep itself fully informed of, and shall observe and comply with, all laws, ordinances, and regulations which in any manner affect those engaged or employed on any work, or the materials and equipment used in any work or, which in any way affect the performance of any work, and of all orders and decrees of agencies having any jurisdiction or authority over work performed under the Contract.

B. If any discrepancy or inconsistency should be discovered between the Contract and any such law, ordinance, regulation, order, or decree, the Contractor shall immediately report the same in writing to the District. The Contractor shall be responsible for the compliance by subcontractors of all tiers with the provisions of this Section.

1. Special attention is directed to Part 7, Chapter 1, Section 2, Sections 1770 et seq. of the Labor Code of the State of California. Reference is hereby made to the provisions for minimum per diem wages contained in Section 00 21 13, Invitation to Bid.

C. The Contractor and each subcontractor engaged in the work shall pay each respective employee thereof an amount not less than the general prevailing rate of per diem wages established in compliance with Section 1770 et seq. of the Labor Code of the State of California and as determined by the Director of Industrial Relations to be effective and applicable for the various crafts, trades or type of worker needed or required to execute the
contracts. In accordance with Section 1770 of said Labor Code, nothing otherwise provided under Article 2 of said Code shall prohibit the payment of wage rates to any worker in excess of such prevailing rates of wages as determined by the Director of the Department of Industrial Relations. However, should the Contractor or a subcontractor have a contractual relationship with workers whereby per diem rates of wages are paid in excess of such determined prevailing rates of wages, the Contractor or subcontractor shall identify and submit a certified listing of such workers and the amounts payable prior to beginning construction operations applicable thereto in accordance with this General Condition.

1. Failure of the Contractor or any subcontractor to certify and list workers and actual wages in excess of those effective as determined by the Director of Industrial Relations shall be deemed an express statement by the Contractor or such subcontractor that actual wages shall be as determined by the Director of Industrial Relations and such will be paid all workers and be applicable to all work required and ordered under the Contract.

2. The possibility of labor cost increases within the periods of time established and specified for completion of the Project is one of the elements to be considered by bidding Contractors and their subcontractors. The District will not, at any instance of increase thereof, whether initiated by contractors, subcontractors, particular bargaining agreements, Director of Industrial Relations determinations, or otherwise, consider such as the basis of a request for additional compensation to the District for work bid as specified and shown.
   a. It is stipulated that the provisions of Article 2, Chapter 1, Part 7, Division 2 (commencing with Section 1770), of the Labor Code, and in particular, Section 1775, shall be complied with. In accordance with said Section 1775, the Contractor shall forfeit to the District or the Division of Labor Standards, as a penalty, up to fifty dollars ($50) per each calendar day or portion thereof, for each worker paid less than the prevailing rates for such work or craft in which such worker is employed for any work done under the Contract by him/her or by any subcontractor under the Contractor in violation of the provisions of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. The amount of the daily penalty shall be as determined by the Labor Commissioner in accordance with Section 1775. In addition to said penalty and pursuant to said Section 1775, the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor.
   b. Where prevailing wage determinations have been predetermined to change during the Contract (beyond expiration dates as indicated on the forms), the Contractor shall obtain such changes from the Prevailing Wage Unit, Division of Labor Statistics and Research, Department of Industrial Relations, 525 Golden Gate Avenue, San Francisco, California 94102, telephone (415) 557-0561, and deliver copy of such to the Engineer.
   c. If a Contractor intends to use a craft or classification not shown on the general prevailing wage determinations, the Contractor may be required to pay the wage rate of the craft or classification most closely related to it as shown in the general determinations effective at the time of bid opening.

3. The Contractor stipulates and agrees that pursuant to the provisions of Labor Code, Sections 1810 and 1813, eight (8) hours labor shall constitute a legal day's work, and no worker shall be required or permitted to work more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one (1) calendar week, except as provided below. Nothing in this provision shall be construed to relate to wage determination or in any way affect contractual provisions related to compensation.
   a. As penalty, the Contractor shall forfeit to the District or the Division of Labor Standards twenty-five dollars ($25) for each worker employed in the execution of the Contract by it or by any subcontractor, for each calendar day during which any worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of the Labor Code of the State of California and in particular, Section 1810 to Section 1815 thereof, inclusive, except that work performed by employees of Contractors in excess of eight (8) hours per day and forty (40) hours during any one week shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay, as provided in said Labor Code, Section 1815.
4. **Payroll Records:** The Contractor and subcontractor's attention is directed to the provisions of Section 1776 of the Labor Code of the State of California and to the requirements therein pertaining to the keeping, availability, and filing of accurate payroll records of all journeymen, apprentices, and other workers performing work under this Contract. The Contractor agrees to comply with the requirements of said section.

   a. Prior to each monthly progress payment, the Contractor shall deliver to the Engineer copies of certified payrolls of its and all subcontractors' forces performing work at the jobsite (or sites established primarily for the work), for labor compliance purposes, and Extra/Force Account considerations. Such records shall be kept current on an effective day or period basis and in form acceptable to the Engineer. At a minimum, the form shall include the following information:

   i. Employee identification by name.

   ii. Employee's address and social security number.

   iii. Employee's craft and classification (in accordance with Director of Industrial Relations' wage determinations).

   iv. Employee's actual per diem wages (in compliance with Section 00 11 16, Invitation to Bid, and this Section 00 72 20, Laws and Regulations).

   v. Employee's subsistence and travel allowance (as applicable).

   vi. Employee's straight time and overtime hours worked each day and week.

   vii. Itemized deductions made from employee's wages.

   viii. Apprentices and ratio of apprentices to journeymen.

   ix. Contractor's or subcontractor's firm or company name, date or period for which applicable wage rates and allowances are effective, and the employer's signature.

   b. The certified payroll records shall be kept on forms provided by the Division of Labor Standards Enforcement, or shall contain the same information as the forms provided by the Division in addition to the above-listed information.

   c. The Contractor shall inform the District of the location of the above payroll records, including the street address, city and county, and shall, within five (5) working days, provide a notice of change of location and address.

   d. The Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with the provisions of California Code of Labor Section 1776. In the event that the Contractor fails to comply within the ten-day period, the Contractor shall, as a penalty to the state or to the District, forfeit twenty-five dollars ($25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

   e. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number.

   f. Compliance with the above provisions of 00 72 20 and California Code of Labor Section 1776 shall be the responsibility of the Contractor.

5. **Apprentices:** The Contractor shall comply with the provisions of Section 1777.5 and 1777.6 of the California Labor Code in regard to employment of apprentices.
6. **Labor Discrimination:** Attention is directed to Section 1735 of the *Labor Code*, which reads as follows:

   a. No discrimination shall be made in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this Section is subject to all the penalties imposed for violation of this Chapter.

7. As required by Section 1773.8 of the *California Labor Code*, the Contractor shall pay travel and subsistence payments to each workman needed to execute the work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this section.

8. The Contractor shall comply with all applicable federal, state, and local laws, ordinances, rules, and regulations, and lawful orders of all authorities having jurisdiction for the safety of persons and protection of property, more particularly described under Sections 00 72 18, Safety, Sanitary, and Medical Requirements, and 00 72 19, Public Access and Safety; Protection of Property of this document.

9. **Lateral and Subjacent Support:** Attention is directed to Section 832 of the *Civil Code of the State of California* relating to lateral and subjacent supports, and wherever structures or improvements adjacent to the excavation may be damaged by such excavation, the Contractor shall comply with this law. As provided in *Labor Code*, Section 6707, a separate bid item is provided for costs of shoring and bracing of excavations five feet or more in depth.

10. The Contractor shall comply with Sections 12101 through 12901 of Title 22, *California Administrative Code*. The Contractor shall warn all persons at the work site of their exposure to chemicals known to the State to cause cancer or birth defects or other reproductive harm. The Contractor shall be responsible for compliance by its subcontractors with this Section.

11. The Contractor shall comply with Bay Area Air Quality Management District Regulation 11, Rule 2, as it applies to the demolition, renovation, or removal or any building elements and to the disposal of any asbestos-containing waste material.

   a. No regulated asbestos-containing material (RACM) shall be stripped or removed unless Contractor has provided at least one on-site representative and certified that said representative is familiar with the provisions of Regulation 11, Rule 2, as it pertains to demolition and renovation and the means of compliance therewith. Said representative shall be present during all removal and/or stripping of RACM. Contractor shall provide evidence as required under 11-2-303.9 of the Regulation that the required training of the representative has been completed.

   b. The Contractor shall comply with all state laws and regulations regarding asbestos and asbestos-related work, including, but not limited to, the provisions of Labor Code Sections 6501.5 through 6511.

   c. The Contractor shall so perform its work as not to discharge into the atmosphere from any source whatsoever smoke, dust, or other air contaminants in violation of the laws, rules, and regulations of the governmental entities having jurisdiction.

D. **Agreement to Assign (Contractors and Subcontractors)**

1. The Contractor's and subcontractors' attention is directed to the provisions of *Government Code*, Section 4551, which requires that, in entering into a public works contract or subcontract, contractors and subcontractors agree to assign to the purchasing body all rights arising from violations of antitrust regulations. In pertinent part, *Government Code*, Section 4551, reads as follows:

2. In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of action it may have under Section 4 of the *Clayton Act* (15 U.S.C. Section 15) or under the *Cartwright Act* (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the *Business and Professional Code*) arising from purchases of goods, services, or
materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor without further acknowledgment by the party.

E. The Contractor's attention is directed to the provisions of Health and Safety Code, Section 7050.5, relating to the discovery of human remains. Upon any such discovery, there shall be no further excavation or disturbance of the site. The Contractor shall immediately notify the District and the Contra Costa County Sheriff-Coroner's Office of any such find and shall comply with all other applicable laws and regulations.

F. The Contractor's attention is directed to the provisions of Health and Safety Code, Section 7050.5 and Public Resources Code, Sections 5098.5, 5097.94, 5097.98, and 5097.99, and the California Environmental Quality Act (CEQA), Appendix K, relating to the excavation, removal, destruction, injury, and defacement of historic or prehistoric ruins, burial grounds, archeological or vertebrate paleontological sites, or any other archeological, paleontological or historical feature. The Contractor shall immediately stop work in the area of the archeological discovery and notify the District and comply with all other laws and regulations upon discovery of any such remains in the construction site. Compensation to the Contractor, if any, for lost time or changes in construction to avoid the find shall be determined in accordance with changed conditions or change order provisions of the Contract.

G. Claims and Actions Against Public Entities and Employees

1. The Contractor's and subcontractors' attention is directed to Government Code Section 900 et seq., dealing with claims and actions against public entities and employees. Nothing contained in these Contract, including but not limited to Section 00 72 12, Changes and Extra Work, Subsection E, is intended to modify or remove the requirements set forth in these sections.

2. If the Contractor intends to file a claim with the District for compensation in excess of the Contract amount or return of liquidated damages, the claim shall be in writing and include the documents necessary to substantiate the claim. Said documents may include invoices, cost breakdowns, and other documentation explaining the details of how the Contractor arrives at the amount calculated. Such claim must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for relating to requests for extra compensation or extensions of time.

3. For claims of less than fifty thousand dollars ($50,000), the District shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the District may have against the Contractor.

a. If additional information is thereafter required by the District, it shall be requested and provided by the Contractor pursuant to this subdivision within 20 days of the request from the District or as otherwise mutually agreed upon by the District and the Contractor.

b. The District's written response to the claim, as further documented, shall be submitted to the Contractor within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

4. For claims of over fifty thousand dollars ($50,000) and less than or equal to three hundred seventy-five thousand dollars ($375,000), the District shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the District may have against the Contractor.

a. If additional information is, thereafter, required, it shall be requested and provided pursuant to this subdivision within 30 days of the request by the District or otherwise mutually agreed upon by the District and the Contractor.

b. The District's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days after receipt of the further documentation, or within a period of time no
greater than that taken by the Contractor in producing the additional information or requested
documentation, whichever is greater.

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

6. If following the meet and confer conference the claim or any portion remains in dispute, the Contractor
may file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with
Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those
provisions, the running of the period of time within which a claim must be filed shall be tolled from the
time the Contractor submits its written claim pursuant to paragraph 2 above until the time the said claim
is denied pursuant to the procedures set forth herein, including any period of time utilized by the meet
and confer conference.

00 72 21 PERMITS

A. District Acquired Permits, Easements, and Agreements

1. Attention is directed to the Project Drawings and to any parcel numbers appearing thereon which relate to
an easement, permit, or agreement acquired by the District for rights-of-way and land use to perform the
work and which is contained in the easements, permits, and agreements on file at the District offices,
identified in Section 00 11 16, Invitation to Bid of the Contract Documents.

2. All work within the various private and public properties shown containing a parcel number shall be
accomplished in conformance with any specific conditions, instructions, and/or requirements or the
respective easement, permit, or agreement.

3. Where the conditions and/or requirements of such easements, permits, or agreements are greater than the
conditions and/or requirements of the District's Standard Specifications or supplementary conditions
and/or requirements prescribed in other portions of the Contract, the conditions and/or requirements of
such easements, permits, or agreements shall govern.

4. The District will, at its expense, provide the appropriate easements for the work under the Contract.
District provided easements will be shown in the Contract Documents. The District may provide
additional land for working space, haul roads, and for storage of materials and equipment. If the District
provides additional land, said additional land will be shown in the Project Drawings or Specifications.
The Contractor, without cost to itself, may use portions of such easements and land as approved, for
working space, haul roads, and for storage of materials and equipment. Should the Contractor find it
necessary or advantageous to use any additional land for any purpose whatever, the Contractor shall, at
its expense, provide for the use of such land.

B. Construction Permits and Licenses

1. The Contractor shall obtain and pay for all construction permits and licenses necessary for the
performance of the Contract and shall give all public notices necessary for the lawful performance of the
Contract.

2. Where the District has secured Project right-of-way by obtaining the required permits, easements, or
agreements as stated in 00 72 21A, and said permit, easement, or agreement requires a subsequent
contingent construction permit, inspection, or other related requirements, the Contractor shall meet these
additional requirements. The inspection fees charged by regulatory agencies shall be paid for by the
District. However, if the inspection fee is due to noncompliance of the permit requirements, such
inspection fee shall be paid for by the Contractor.
C. **Taxes**

1. The Contractor shall pay all taxes, levies, duties, and assessments of every nature due and payable by the Contractor in connection with any work under the Contract, shall make any and all payroll deductions required by law, and shall indemnify and hold harmless the District from any liability on account of any and all such taxes, levies, duties, assessments, and deductions.

00 72 22 **RECORDS AND ACCOUNTS**

A. The Contractor shall, at its expense, keep and maintain such records and accounts in connection with the performance of the Contract and will furnish to the District, upon request, an accurate written allocation of the total amount of the price paid for performance of work under the Contract to the various elements of the work, as may be required by the District for accounting purposes and for public record. Such records and accounts shall remain accessible to the District for a period of not less than three (3) years beyond the date of formal acceptance as provided under Section 00 72 41, Final Payment and Release.

00 72 23 **TESTING**

A. Testing of materials or work shall be as specified herein or by testing organizations approved by the District.

1. **General.** Where the Specifications require work to be specially tested or approved, it shall be tested only in the presence of the Engineer after timely notice of its readiness for inspection and test, and the work after testing shall be covered up only upon the consent thereto of the Engineer.

   a. The results of any tests made are for the information of the Engineer. Regardless of any test results, the Contractor is solely responsible for the quality of workmanship and materials and for compliance with the requirements of the Project Drawings and Specifications.

   b. Except as specifically required under detailed materials specifications for shop testing and inspection, all tests of materials furnished by the Contractor where tests will be made by the Engineer will be done in accordance with commonly recognized standards of national organizations. The Contractor shall furnish such samples of all materials as required by the Engineer without charge. No material shall be used unless it has been favorably reviewed by the Engineer.

   c. Where such inspection and testing is to be conducted by an independent laboratory or agency, the sample(s) of materials to be tested shall be selected by such laboratory or agency, or the Engineer, and not by the Contractor.

   d. Water for curing concrete shall be from a source approved by the Engineer and shall be furnished and disposed of by the Contractor.

   e. All piping shall be pneumatically or hydraulically tested for tightness.

   f. Where water testing of piping is required, the Contractor shall furnish and dispose of the water which is required for testing of piping for tightness and dispose of it in accordance with applicable regulations.

2. **Costs of Testing**

   a. The Contractor shall be responsible for, and shall pay for, all off-site tests of materials required. The Engineer, unless specified otherwise in Technical Specifications shall have the right to witness all off-site tests and the Contractor shall furnish adequate notice of when tests will be made.

   b. The Contractor shall be responsible for, and shall pay for, all on-site tests, except those tests specifically noted to be performed and paid for by the District. The Engineer shall have the right to witness all on-site tests performed by the Contractor, and the Contractor shall furnish adequate notice of when tests will be made.
c. When, in the opinion of the Engineer, additional tests or inspections are required because of the manner in which the Contractor executes its work, such tests and inspections will be paid for by the District, but will be deducted from the Contract price. Examples of such additional tests and inspections are: tests of materials substituted for previously accepted materials or substituted for specified materials or retests made necessary by failure of material to comply with the requirements of the Specifications.

00 72 24 PUBLICATIONS

A. No publications or advertisements concerning the subject matter of the Contract shall at any time be made by or on behalf of the Contractor, its subcontractors, or suppliers, unless prior written authorization therefor is obtained from the District.

B. No advertising signs shall be erected at the site of the work.

00 72 25 (NOT USED)

00 72 26 ACCESS TO WORK AREAS

A. The District and its officers, agents, employees, and any other duly authorized representatives and employees, and all duly authorized representatives of governmental agencies having jurisdiction over work areas or any part thereof shall at all reasonable times, for the purpose of determining compliance with Contract requirements, have access to such areas and the premises used by the Contractor. The Contractor shall also arrange for the District, and its officers, agents, employees, and any other duly authorized representatives and employees, to have access at all reasonable times to all places where equipment or materials are being manufactured, produced, or fabricated for use under the Contract.

B. The Contractor's attention is drawn to the fact that during the course of the work of this Contract, existing sewerage facilities will be used and maintained by District's personnel. The Contractor shall coordinate its work in such a way as to interfere as little as possible with the routine work of existing facility operation consistent with the necessity for making the connections as specified and as shown on the Project Drawings. The intent of this item is also that the Contractor's work force shall be excluded from access to and use of existing facilities except in direct pursuit of the work of this Contract unless approved by the Engineer. The Contractor shall provide safe access at all times to all existing facilities for operating personnel and equipment.

00 72 27 ILLUMINATION

A. Should any work be performed at night as provided under Section 00 72 43, Night and Weekend Work, or where daylight is shut off or obscured, the Contractor shall, at its expense, provide artificial light sufficient to permit work to be carried on efficiently, satisfactorily, and safely, and to permit thorough inspection. The access to the place of work shall also be clearly illuminated. All wiring for electric light and power shall be installed and maintained in accordance with all applicable standards, securely fastened in place at all points, and shall be kept as far as possible from other electrical wires, telephone wires, signal wires, and wires used for firing blasts.

00 72 28 INSPECTION AND SAMPLE SPECIMENS

A. Unless otherwise provided in the Contract, all equipment, materials, and work shall be subject to inspection and testing by the Engineer. The Engineer shall have the right to reject equipment, materials, and work not in accordance with the Contract. Rejected work shall be satisfactorily corrected; rejected equipment shall be satisfactorily repaired or replaced with satisfactory equipment; and rejected material shall be satisfactorily replaced with satisfactory material, all in accordance with the Contract. The Contractor shall promptly segregate and remove rejected materials and equipment from the premises. All such correcting, repairing, replacing, and removing shall be by and at the expense of the Contractor.

B. The Engineer will perform inspections in such manner as not to delay the work unreasonably, and the Contractor shall perform its work in such manner as not to delay inspection unreasonably. The Contractor shall give the Engineer reasonable advance notice of operations requiring special inspections or tests, and it may request inspection of a portion of any work at any time by reasonable advance notice to the Engineer. The Contractor shall, at its expense, furnish promptly all facilities, labor, and materials necessary and required for such inspection and tests.
C. The Contractor shall bear any additional inspection costs resulting from its failure to have a portion of work ready for inspection at the time requested by it for inspection, or from inspection of any previously rejected portion of work where the defects requiring such rejection were due to the Contractor's fault or negligence. Such costs may be deducted, in whole or in part, from any monies due or that may become due to the Contractor under the Contract.

D. The Contractor shall furnish the Engineer all reasonable facilities for the Engineer's safety and convenience in inspecting work, at all times and at all places where inspection may take place. If the Engineer finds that conditions are unsafe for inspection at a particular location, he may, upon notice to the Contractor, refuse to inspect in that location until such conditions are corrected. The Contractor shall bear any additional costs resulting from such action, including any costs incurred to permit subsequent inspection of any portion of work covered or completed at the location before correction of the conditions, whether or not such portion of work is found to meet Contract requirements.

E. Inspection of materials and finished articles to be incorporated into any work may be made by the Engineer at the place of production, manufacture, or shipment. When such inspection is to be performed, no such materials or finished articles shall be shipped from such place of inspection or incorporated in any work prior to inspection or without the written approval of the Engineer. Equipment, materials, and work not in conformity with the Contract shall be corrected or replaced with satisfactory equipment and materials by and at the expense of the Contractor so as to conform to the Contract as determined by the Engineer.

F. No acceptance of equipment, materials, or work shall be construed to result from such inspections by the Engineer. Any inspections or tests or waivers thereof shall not relieve the Contractor of its responsibility for meeting the requirements of the Contract.

G. Where so required in the Contract, or whenever requested by the Engineer, the Contractor shall, at its expense, promptly furnish to the Engineer sample specimens of materials to be incorporated into any work. Samples shall be submitted in an orderly sequence so that dependent materials or equipment can be assembled and reviewed without causing delays in the work. Samples of material from natural sources shall be taken in the presence of the Engineer; otherwise, the sample will not be considered for testing. Samples shall be tagged or labeled securely and fully identified as to manufacturer, type, size or capacity, lot, and date, all as applicable and by reference to the applicable section and paragraph of the Contract. Materials for which samples are required shall not be used in any work until approved in writing by the Engineer. Materials incorporated in any work shall conform to such samples as the Engineer, in his discretion, determines meet the requirements of the Contract. Samples will be returned to the Contractor only at the discretion of the Engineer.

00 72 29 PROGRESS

A. The construction plant and equipment provided by the Contractor, its labor force, and its methods and organization for handling work, shall be such as will achieve the necessary quality of work and rate of progress required by the Contract.

B. If at any time during the progress of work, the Contractor's actual progress, as determined by the Engineer, is inadequate to meet the requirements of the Contract, the Engineer may notify the Contractor of such imminent or actual noncompliance with the Contract. The Contractor shall thereupon take such steps as may be necessary to improve its progress including, but not limited to, an increase in the labor force, the number of shifts, and/or overtime operations, days of work and/or the amount of construction equipment all without additional cost to the District. Neither such notice by the Engineer nor the Engineer's failure to issue such notice shall relieve the Contractor from its obligations to achieve the quality of work and rate or progress required by the Contract.

C. Failure of the Contractor to comply with the instructions of the Engineer under these provisions may be grounds for determination by the Engineer that the Contractor is not prosecuting work with such diligence as will assure completion within the times specified. Upon such determination, the District may terminate the Contractor's right to proceed with the performance of the Contract, or any separable part thereof, in accordance with Section 00 72 36, Termination of Right to Proceed, herein. Said termination shall be without prejudice to any other remedies available to the District.

D. In the event of a dispute between the parties as to performance of the work, the interpretation of this Contract, or payment or nonpayment of work performed, the parties shall attempt to resolve the dispute. If the dispute is not resolved and the District has not terminated the Contract in accordance with Section 00 72 36, Termination of Right to Proceed, then the Contractor agrees to continue the work diligently to completion and will neither
rescind this Contract nor stop the progress of the work. In the event any litigation is commenced with respect to this Contract, such litigation shall not serve to suspend Contractor's obligation to continue performance of the work hereunder.

00 72 30 (NOT USED)

00 72 31 RESPONSIBILITY FOR WORK; PRECAUTIONS; SECURITY

A. The Contractor shall assume responsibility for all material and skilled application of all work furnished and performed under this Contract including any Amendments thereto. At the completion of this Contract, the construction shall constitute a complete and operable facility. In the event an error or omission is discovered in the Contract during the course of the work, the Engineer shall be promptly notified in writing. If the Engineer determines that remedial measures are necessary requiring extra work clearly outside the scope of the Contract work, a Change Order will be negotiated in accordance with Section 00 72 12, Changes and Extra Work.

1. The Contractor shall be responsible for, and shall bear any and all risk of loss of, or damage to, any work and all materials and equipment until final acceptance under the Contract, unless such loss or damage results from the active negligence of the District or any act of God as defined herein.

B. As provided in Sections 4150 and 4151 of the California Government Code, the Contractor shall not be responsible for the cost of repairing or restoring damage to the work which damage is determined to have been proximately caused by an act of God, in excess of five (5) percent of the contracted amount, provided that the work damaged was built in accordance with accepted and applicable building standards and the Project Drawings and Specifications of the District. For purposes of this section, the term "acts of God" shall include only the following occurrences or conditions and effects: earthquakes in excess of a magnitude of 3.5 on the Richter Scale and tidal waves. The Contractor shall promptly take all necessary precautions against any conditions created during the performance of the Contract which involve a risk of bodily harm to others or a risk of damage to work or to property, including the property of the District. The Contractor shall inspect all work, materials, and equipment to discover any such conditions.

C. Existing fences may enclose some or all portions of the project site. The fences are for the protection and security of existing facilities. While it may be necessary for the Contractor to remove some of the fences for installation of new structures, fences, and pipelines, the Contractor's operations shall not reduce the present protection and security. If the present fences are removed, an equivalent temporary continuous perimeter protection shall be provided, and new fence shall be installed in the locations shown, prior to completion of the work.

D. No fence or other existing enclosure about existing facilities shall be assumed by the Contractor to provide appropriate security for either equipment, plant, or materials intended to be employed or incorporated in the work.

E. The Contractor assumes all liability for its failure to comply with the foregoing regardless of any right the Engineer may have to inspect the Contractor's work.

00 72 32 STORAGE OF MATERIALS AND EQUIPMENT

A. The Contractor shall, at its expense, store all materials and equipment as specified in the Contract or, where not specified, in such a manner as to assure the preservation of their quality and fitness, and so as to facilitate prompt inspection by the Engineer.

00 72 33 USE OF COMPLETED PORTIONS OF THE WORK

A. Partial Beneficial Use. "Partial beneficial use" shall be defined as use of a portion of the Contract work by the District before that portion of work is to be put in service and before acceptance of the Contract by the District. The portion of the contract work is usually a system or facility which can be operated or used independently from other systems or facilities included in the Contract and is not required for the proper operation of other systems or facilities.

1. The District may, at any time, in a written order to the Contractor (1) declare that the District intends to use a specified part of the work, which in the District's opinion is sufficiently complete to permit use of
said work, (2) enclose a tentative list of items remaining to be completed or corrected within the area
designated for partial beneficial use, and (3) fix the date of commencement of partial beneficial use.

2. The warranty period for the part of the work which is specified for partial beneficial use shall start on the
date which is fixed for commencement of partial beneficial use.

3. If, as a result of the Contractor's failure to comply with the provisions of the Contract, such partial
beneficial use proves to be unsatisfactory to the District, the District shall have the right to continue such
use until such portion of work can, without adversely affecting the District, be taken out of service for
correction of defects, errors, omissions, or replacement of unsatisfactory materials or equipment, as
necessary for such work to comply with the Contract. The time for completion of corrections or
replacements shall not exceed six (6) months from the date of acceptance of the Contract, unless
otherwise mutually agreed upon in writing between the parties.

4. The Contractor shall not use any portions of the work which have been accepted for partial beneficial use
or any facilities which existed prior to the date when the Contractor commenced work on the project
unless such use is approved by the District in writing. Where the Contractor's written request is granted
for the use of portions of the work of facilities declared as being subject to partial beneficial use, the
Contractor shall properly use and maintain, and upon completion of the Contractor's use, and at the
Contractor's expense, recondition said portions of the work or facilities to the satisfaction of the District.

B. Substantial Completion. "Substantial completion" shall be defined as construction sufficiently completed in
accordance with the Contract so that the District can occupy or utilize all portions and all systems of the work
for all of the uses for which said work was intended, including seven (7) continuous days of successful operation
of the entire system.

1. When the Contractor considers that the work is substantially completed, the Contractor shall prepare and
submit to the District a list of items to be completed or corrected and request an inspection for substantial
completion. A failure to include any items on such list does not alter the responsibility of the Contractor
to complete all work in accordance with the Contract. When the District determines on the basis of the
inspection that all portions and all systems of the work are substantially complete, the District will then
prepare a certificate of substantial completion which will establish the date of substantial completion of
the work; shall state the responsibilities of the District and the Contractor for security, maintenance,
operation, and insurance; and shall fix the time within which the Contractor shall complete the items
listed therein. The Certificate of Substantial Completion shall be submitted to the Contractor.

2. Approval of a Certificate of Substantial Completion will not constitute acceptance of the work nor start
the warranty period. Approval of a Certificate of Substantial Completion will fix the date for lowering the
amount of liquidated damages to the value specified in the Contract for the period after substantial
completion.

00 72 34 CLEANING UP

A. The Contractor shall, at all times, keep the premises, occupied by it in relation to this Contract, in a neat, clean,
and safe condition and at all times provide reasonable access thereto. The Contractor shall, as a minimum,
conduct daily inspections to verify that requirements of this Section are being met.

B. During the progress of the work, the Contractor shall:

1. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or
traffic, and providing the required protection of material.

2. Provide adequate storage of all items awaiting removal from the jobsite, observing all requirements for
fire protection and protection of the environment.

3. Remove any accumulation of scrap, debris, waste material, and other items not required for construction
of this work.

4. Dispose of existing materials and equipment to be demolished and removed and all trash such as broken
concrete, wood blocking, shipping containers, etc., resulting from the contract work off the premises.
occupied by the Contractor, including District property, at the Contractor's expense. District-leased dumpsters and other disposal containers on District's property, unless specifically provided by the Contractor, shall not be used by the Contractor.

5. Maintain all excavation, embankments, haul roads, permanent access roads, Plant site, waste disposal areas, borrow areas, and all other work areas within contract work limits free from dust, as determined by the Engineer. Industry-accepted methods of dust control suitable for the area involved, such as sprinkling, chemical treatment, light bituminous treatment, or similar methods, will be permitted. No separate payment will be made to the Contractor for dust control.

C. If the Contractor fails to comply with any of the foregoing, the District will transmit written notification of noncompliance. If, within five (5) calendar days of the written notification, the Contractor fails to comply, cleanup may be undertaken by the District at the expense of the Contractor.

D. Upon completion of any portion of any work, the Contractor shall promptly remove all of its equipment, temporary structures, and surplus construction and other materials not to be used at or near the same location during later stages of work. Upon completion of any work and before final inspection is made, the Contractor shall unless otherwise specifically directed by the Engineer:
   1. Remove from the job site all plant, buildings, tools, surplus materials, equipment, forms, rubbish, scrap, debris, and waste.
   2. Hose down all paved areas on the site. Completely remove all resultant debris.
   3. Visually inspect all interior surfaces, and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only approved cleaning materials and equipment.
   4. Restore any improved area used for the Contractor's work or material storage to its condition at the time the Contractor moved onto the site or to the satisfaction of the Engineer.
   5. Schedule final cleaning and improvement restoration to enable the District to accept a completely clean and restored project.

00 72 35  PROGRESS, COMPLETION, DELAYS, AND EXTENSIONS OF TIME

A. The time limits stated in the Contract are of the essence to the Contract. By executing the Contract, the Contractor confirms that the time limits set forth in the Contract including interim or milestone dates, are reasonable periods for the performance of the work. The Contractor shall not be entitled to extensions of time limits at any time in the progress of the work unless the delay is occasioned by an act or neglect of the District or unless the delay in the completion of the work arises from unforeseeable causes beyond the control and without fault or negligence of both the Contractor and subcontractors or suppliers. Such unforeseeable causes may include: acts of God; acts of a public enemy; acts of a governmental entity not occasioned by the Contractor's, subcontractor's or supplier's conduct; acts of another contractor in performance of a contract with the District; fires; floods; epidemics; quarantine restrictions; freight embargoes; unusually severe weather; or other delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and such subcontractors or suppliers.

B. If the Contractor seeks an extension of time for the completion of any phase of the work, the Contractor shall file with the Engineer a written request for an extension of time for the portion of the work so delayed within ten (10) calendar days of the onset of such delay and such request shall fully state the reasons for such delay. When such a request is received, the Engineer will ascertain the reasons for and the extent of such delay. If the Engineer determines that the facts justify an extension of time, the Contract will be modified accordingly, in writing. If the Engineer determines that the facts do not justify an extension of time, such request will be denied. The Engineer's finding of fact of either determination will be given to the Contractor and such findings shall be final unless the Contractor files a protest under Section 00 72 1, Authority of the Engineer and Contractor's Appeal Procedure. No extension will be granted for any portion of any delay unless the required written request is made by the Contractor as specified herein and the Engineer finds justification for the request.
C. Owner may make changes to the work, or suspend the work, and no matter how many changes, such changes or suspension are within the contemplation of the parties and will not be a basis for a compensable delay

D. No time extensions will be granted until a delay occurs which:

1. impacts the projects critical path,

2. consumes all available float, slack time, or schedule contingency within the construction schedule (the time between the Contractor's scheduled early completion date and the Contract completion date), and

3. extends work beyond the Contract completion date.

E. Float, slack time, or schedule contingency within the construction schedule is not for the exclusive use nor benefit of the District or the Contractor but is a resource available to both parties as needed.

00 72 36 TERMINATION OF RIGHT TO PROCEED

A. If the Contractor should refuse or fail, except in cases for which extension of time is provided, to supply enough properly skilled workers, proper equipment and proper appliances or proper materials, or if it should fail to make prompt payments to subcontractors or for material or labor, or disregard laws, ordinances, or the instructions of the Engineer, or otherwise be guilty of a substantial violation of any provision of this contract, then the District, upon certification of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, serve written notice upon the Contractor and Surety of its intention to terminate the performance of the Contractor, such notices to contain the reasons for such terminations, and unless within seven (7) calendar days after the serving of such notice upon the Contractor and Surety, such cause shall cease and satisfactory arrangement for correction shall be made, the performance of the Contractor shall cease and terminate. In the event of any such termination, or should the Contractor be adjudged as bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, the District shall serve notice thereof upon the Surety and Contractor, and the Surety shall have the right to perform the Contract; provided, however, that if the Surety does not commence performance thereof within seven (7) calendar days from the date of service of notice of termination upon the Surety, the District may take possession of the premises and of all materials, tools, equipment, and appliances thereon and finish the work by whatever method the District may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor and Surety shall pay the difference to the District. The expense incurred by the District as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Engineer. Service of any notices hereunder shall be deemed complete upon the deposit in the United States mail, postage prepaid, addressed to the address of the Contractor and Surety as shown on records on file with the District.

B. Said termination shall be without prejudice to any other remedies available to the District.

C. Upon receipt of any such written notice of termination of right to proceed, the Contractor shall, at its expense, for that work affected by any such termination:

1. Assist the District in making an inventory of all materials and equipment in storage at the site, en route to the site, and on order from suppliers.

2. Assign to the District subcontracts, supply contracts, and equipment rental agreements all as designated by the District.

3. Remove from the site all construction materials, equipment, and plant listed in said inventory other than such construction materials, equipment, and plant which are designated in writing by the District to be used by the District in completing such work.
OPTIONAL TERMINATION

A. Including, but not limited to, provisions for termination in the event of national emergency under Section 4410 et. seq. of the Government Code of the State of California, the District may, at its option, cancel and terminate the Contract in whole or in part at any time by written notice thereof to the Contractor, whether or not the Contractor is in default.

B. Upon any such cancellation and termination, the Contractor shall waive any claims for damages, including loss of anticipated profits, on account thereof, but as the sole right and remedy of the Contractor and the District, the District shall pay the Contractor in accordance with subparagraph B, below, provided, however, that the provisions of the Contract, which by their very nature survive final acceptance under the Contract, shall remain in full force and effect after such cancellation and termination to the extent provided in such provisions.

1. Upon receipt of any such notice, the Contractor shall, unless the notice requires otherwise:
   a. Immediately discontinue work on the date and to the extent specified in the notice.
   b. Place no further orders or subcontracts for materials, services, or facilities, other than as may be necessary or required for completion of such portion of work under the Contract that is not terminated.
   c. Promptly make every reasonable effort to obtain cancellation upon terms satisfactory to the District of all orders and subcontracts to the extent they relate to the performance of work terminated.
   d. Assist the District as specifically requested, in writing, in the maintenance, protection, and disposition of property acquired by the District under the Contract.

2. Upon any such termination, the District will pay to the Contractor an amount determined in accordance with the following (without duplication of any item):
   a. All amounts due and not previously paid to the Contractor for work completed in accordance with the Contract prior to such notice, and for work thereafter completed as specified in such notice.
   b. The cost of settling and paying claims arising out of the termination of work under subcontracts or orders as provided in subparagraph B.1.c, above.
   c. The reasonable costs incurred pursuant to subparagraph B.1.d, above.
   d. Any other reasonable costs incidental to such termination of work.
   e. The foregoing amounts shall include a reasonable sum, under all of the circumstances, as profit for any work performed by the Contractor.

SUSPENSION

A. The District may, at its sole option, by notice in writing to the Contractor, suspend at any time the performance of all or any portion of work to be performed under the Contract. Upon such notice of suspension of work, the Contractor shall permit the District to designate the amount and type of plant, labor, and equipment to be committed to the Project. During the period of suspension, the Contractor shall use its best efforts to utilize its plant, labor, and equipment in such a manner as to minimize costs associated with suspension.

1. Upon receipt of any notice, the Contractor shall, unless the notice requires otherwise:
   a. Immediately discontinue work on the date and to the extent specified in the notice.
   b. Place no further orders or subcontracts for material, services, or facilities with respect to suspended work other than to the extent required in the notice.
c. Promptly make every reasonable effort to obtain suspension upon terms satisfactory to the District of all orders, subcontracts, and rental agreements to the extent they relate to performance of work suspended.

d. Unless otherwise specifically stated in the notice, the Contractor shall continue to protect and maintain the Project including those portions on which work has been suspended.

2. As full compensation, the Contractor will be reimbursed for the following costs, reasonably incurred, without duplication of any item, to the extent that such costs directly result from such suspension of work:

   a. A standby charge to be paid to the Contractor during the period of suspension of work which standby charge shall be sufficient to compensate the Contractor for keeping, to the extent required in the notice, its organization and equipment committed to the Project in a standby status.

   b. All reasonable costs associated with mobilization and demobilization of the Contractor's plant, forces, and equipment.

   c. An equitable amount to reimburse the Contractor for the cost of maintaining and protecting that portion of the Project upon which work has been suspended.

   d. If, as a result of any such suspension of work, the cost to the Contractor for subsequently performing work is increased or decreased, an equitable adjustment will be made in the cost of performing the remaining portion of the work.

B. Upon receipt of notice to resume suspended work, the Contractor shall immediately resume work on the suspended work to the extent required in the notice. Any request on the part of the Contractor for time or compensation shall be made within ten (10) calendar days after receipt of notice to resume work and the Contractor shall submit for review a revised construction schedule.

**00 72 39 MEASUREMENT AND PAYMENT**

A. Unless otherwise provided in the Contract, the Engineer will decide the method to be used in determining the weight of the parts and items, such as the use of shipping weights, scale weights, manufacturers' weights, catalog weights, or computed weights. Payment will only be made on the basis of net weight which will exclude the weight of all tare, packing, blocking, shop welds, and the weight of materials which are required to be placed or applied at the site of construction, such as grout, wedges, and caulking materials. The Contractor shall, if required by the Engineer, and at its expense, furnish scales and provide assistance for weighing and measuring such materials without additional charge.

B. Wherever the measurement and payment provisions of the Contract provide that payment for the item(s) listed therein will be made at the Contract-unit price or Contract lump-sum price therefor, whichever is set forth in Section 00 41 43, Schedule of Bid, such payment shall be full compensation to the Contractor for all work referred to in such provision, including but not limited to the following: all labor, supervision, tools, materials, equipment, the performance of all operations, all other direct expenses and items of overhead, general and administrative expense, and profit for the applicable Contract item.

C. Wherever in the Contract it is provided that the Contractor shall perform certain work "at its expense" or "without charge," or that certain work "will not be paid for separately," such quoted words mean that the Contractor shall not be entitled to any additional compensation from the District for such work, and the cost thereof shall, unless otherwise specified, be considered as inherently included in the payment for other items of work identified in Section 00 41 43, Schedule of Bid.

**00 72 40 PROGRESS PAYMENTS**

A. Unless otherwise provided in the Specifications, monthly progress payments will be made as the work proceeds. Such payments will be made in accordance with estimates of the amount and value of work satisfactorily performed by the Contractor up to the time of each estimate.
1. Prior to preparation of the first estimate for a progress payment, the Contractor shall submit for review by the Engineer a detailed cost breakdown of the work under each bid item awarded. Bond and insurance costs shall not be considered a separate item of cost for this purpose but shall be included in mobilization/demobilization.

2. Partial payments for mobilization/demobilization costs shall be as follows:
   a. Thirty-five percent (35%) of the amount bid for mobilization/demobilization or 1.75 percent of the original contract amount, whichever is less, shall be paid in each of the first two progress payments.
   b. The balance of the amount bid for mobilization/demobilization shall be paid upon completion of all work on the project.

B. Generally, the Contractor will not be compensated for materials and equipment delivered to the site until after they are incorporated in the work. If the Engineer determines that the progress of the work will benefit by the delivery to the site of certain materials and equipment in advance of their actual requirement, and if such materials and equipment are delivered in accordance with the following conditions, a portion of the cost of the materials and equipment may be included in progress payments. The conditions for such partial payments are as follows:

1. At least four (4) weeks prior to the delivery of such materials and equipment, the Contractor shall submit a list of such materials and equipment for review on the acceptability for partial payments.

2. Shop drawings and technical data for such materials and equipment must be reviewed and accepted prior to delivery.

3. Upon delivery, the Contractor shall submit written evidence, satisfactory to the Engineer, that the Contractor is the unconditional owner of such materials, free from all claims, liens, and security interest, and a bill of sale or other equivalent document with warranty of title to such materials and equipment.

4. Title to the delivered material shall be vested in the District at the time of delivery to the site. The Contractor shall, however, notwithstanding such transfer of title to the District be absolutely responsible to the District for such materials and equipment until the same shall have been completely installed, tested, and accepted.

5. Such equipment and materials shall be properly stored or stockpiled to the satisfaction of the Engineer. The Contractor shall at its own cost replace any materials and equipment damaged or lost.

6. Stored or stockpiled materials shall be available for inspection by the Engineer.

7. After delivery of material, if any defects are discovered, whether caused by defective manufacture or damage occurring during delivery or storage (including storage at the District or the construction site), the materials shall be removed and replaced with suitable material at the Contractor's expense.

8. The Contractor's insurance shall include coverage for such material against theft, fire, vandalism and malicious mischief.

9. The maximum portion of cost to be included in progress payments for materials and/or equipment qualifying under this section will be 75 percent of the total cost of the delivered materials and/or equipment eligible for such partial payment. The payment will in no case exceed the bid price or assigned value for the item of work for which the material and/or equipment is furnished and the accumulated total payment for all material delivered but not yet incorporated into the work will in no case exceed ten (10) percent of the total value of the Contract.

10. In estimating progress payments, the Engineer may use the unit prices bid by the Contractor. In the event that there are no unit bid prices, or the bid unit prices do not, in the opinion of the Engineer, represent the actual value of the equipment and materials furnished, the Engineer may estimate progress payments based on prices reflecting such actual value.
11. Nothing in the above conditions shall relieve the Contractor of its responsibility for incorporating the materials in the work in conformity with the Contract.

C. In the event the initial detailed cost breakdown is not accepted by the Engineer, additional cost breakdowns shall be submitted by the Contractor until the Engineer determines that the cost breakdown is acceptable. The breakdown will then become the basis for partial payment determination. Progress payment estimates shall be made by the Contractor and submitted to the Engineer for review and concurrence. Once the District has agreed to the items of cost, the Contractor shall prepare a progress payment request on a form furnished by the District and submit the request for payment. The burden of requesting payment is on the Contractor. The District has no obligation to pay for a separate item of cost unless that item of cost is included in a progress payment request by the Contractor.

D. In making progress payments, the District shall retain five (5) percent of the cumulative estimated amount until final acceptance of all work under the Contract set forth under Section 00 72 41, Final Payment and Release. The Contractor shall be allowed to substitute securities for any monies withheld to ensure performance under this Contract pursuant to Section 22300 of the California Public Contract Code. The Contractor shall execute the Escrow Agreement for Security Deposits in Lieu of Retentions in the form contained in Section 00 45 15, of the Contract Documents, if applicable. Any payments otherwise payable under the Contract may be withheld, in whole or in part, by the District as may be necessary to protect the District from loss because of:

1. Defective work which is not remedied; or
2. Third party claims filed or reasonable evidence indicating probable filing of such claims; or
3. Failure of the Contractor to make payments properly to subcontractors or for labor, materials, or equipment; or
4. Reasonable evidence that the work cannot be completed for the unpaid balance of the contract sum; or
5. Failure of the Contractor to submit an acceptable construction schedule or failure to update the schedule.
6. Damage to the District or another contractor; or
7. Reasonable evidence that the work will not be completed within the time provided for in the Contract; or
8. Contractor's failure or inability to obtain or maintain insurance coverage and bonds as required by the Contract throughout the course of the job; or
9. Persistent failure to carry out the work in accordance with the Contract.
10. Failure to deliver copies of certified payrolls, as specified in this Section, General Conditions, Section 00 72 20, Laws and Regulations.

11. In addition, the District may deduct from any such payments due the Contractor any amounts the District may be currently or in the future authorized to retain pursuant to federal, state, or local laws or regulations, any amounts due the District from the Contractor, and any other amounts which the District is otherwise authorized to retain as specified in Section 00 73 00, Supplementary Conditions.

E. The District will retain an amount from any payment due the Contractor in an amount not to exceed twice the value of repairs, corrections, or replacements as provided herein to assure that the Contractor completes such repairs, corrections, or replacements. The Contractor shall receive payments of such retained amounts as the repair, correction, or replacement work is completed.

F. The Contractor may prevent withholding of the Progress Payment by, (1) correcting such defects in workmanship or materials as may exist, (2) curing any default existing in any of the conditions of the Contract, or (3) paying, satisfying, or discharging any claim of the District or any other person against the Contractor arising out of or in any way connected with the work to be performed under the Contract. The determination as to whether conditions exist as set forth above to justify withholding payment(s), in whole or in part, and/or whether the Contractor has properly remedied such claims, defects, or failures shall be at the discretion of the Engineer.
G. If the Contractor's obligation to meet and make such claims and payments as set forth above are not promptly met after receipt by the Contractor of a written notice from the Engineer, the District may discharge such obligations and deduct all costs in connection with such discharge of Contractor's obligations from payments(s) to the Contractor. If the amount which may be withheld from payment(s) is insufficient to meet such costs, or if any claim or charge against the Contractor shall be discharged by the District after the final contract payment is made, Contractor and its Sureties shall promptly pay the District all costs incurred thereby, regardless of when such claim arose or whether such claim imposed a lien upon the Project or the real property upon which the Project is situated.

H. Said Contractor's progress payment requests shall be made in writing on or about the twenty-fifth (25th) day of each calendar month, and payment will be made within twenty-one (21) calendar days after the Engineer verifies that the request has been properly filed and submitted. Progress estimates will not be required to be made by strict measurement, but may be made by measurement or by estimation or partly by one method and partly by another.

I. In accordance with Section 980 of the Government Code, the District will pay interest on progress payments held over sixty (60) calendar days from the date of submission, as long as the request for payment by the Contractor is deemed properly filed and submitted. A request for payment by the Contractor will not be deemed properly filed or submitted until such time as the Record Drawings are reviewed and found to be current. The date of submission is the date the District's representative signs the progress payment request form in the space provided for the resident engineer. This signature will verify that the request has been properly filed and submitted.

J. Any submission of any invoice without the proper, required accompanying submittals, or with incorrect calculations, or in a format not acceptable to the District will be deemed by the District to be a disputed request for payment and not a properly submitted request for payment. Such invoice will be returned to the Contractor for resubmittal.

K. No progress estimate or payment need be made when, in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than five thousand dollars ($5,000).

L. All equipment, materials, and work covered by progress payments will, upon such payment, become the property of the District, but this provision shall neither be construed as constituting acceptance of any work or as relieving the Contractor from the sole responsibility for all equipment, materials, and work upon which payments have been made, including the restoration of any damaged work until final acceptance thereof, other than as provided in Section 00 72 33, Use of Completed Portions of the Work, nor as a waiver of the right of the District to require fulfillment of all of the terms of the Contract.

00 72 41  FINAL PAYMENT AND RELEASE

A. Whenever the Contractor deems that its obligations under the Contract have been fulfilled, the Contractor shall, in writing, notify the Engineer. Upon receipt of such notice, the Engineer will, in company with the Contractor, inspect the work which has been performed. If the Engineer determines that all work which, by the terms and conditions of the Contract, is to be performed, has been satisfactorily performed, the Engineer will recommend acceptance of the work. After acceptance of the work by the District, the District will cause to be filed in the office of the Engineer and the office of the County Recorder of Contra Costa County, in accordance with Section 4005 of the Government Code of the State of California, a notice of completion of all work under the Contract. Upon expiration of the statutory period for filing of liens and stop notices and provided no liens or stop notices have been filed, the District will pay to the Contractor the amount remaining due after deducting from such amount all such amounts as will have been previously paid to the Contractor under the Contract, and also any amounts which, by the terms of the Contract, the District is or may be authorized or required to reserve or retain. All prior progress payments, being estimates, will be subject to adjustment in the final payment.

B. The District requires a release of all claims arising out of work related to undisputed contract amounts. Final payment shall be subject to the Contractor executing a release in favor of the District, its directors, officers, representatives, agents, and employees as to all claims of and liability to the Contractor or any third party for anything done or furnished for, or in relation to, any work related to undisputed contract amounts; and for any act or omission of the District, its directors, officers, representatives, agents and employees, respectively, or of any person relating to or affecting any work related to such final payment.
C. Claims by the Contractor for additional compensation or damages remaining in dispute as set forth in the final payment release shall be excluded from the terms of the release. The District may withhold from the final payment up to one hundred fifty percent (150%) of the estimated value of claims by the District or third parties against the Contractor, including but not limited to claims regarding amounts previously paid to the Contractor by the District.

D. The release signed by the Contractor as part of the final payment shall be in substantially the following form:

E. Final Payment and Release

Project Name _________________________________________________________

District Project Number_________________________________________________

The acceptance by Contractor of the final contract payment in the sum of $___________ covering undisputed contract amounts shall operate as, and shall be a release to the West County Wastewater District (District), the District's directors, officers, representatives, agents, and employees, respectively, from all claims of and liability to the Contractor (except as set forth below), including claims of the Contractor as the successor in interest by assignment or otherwise, to claims of laborers, mechanics, subcontractors, consultants, and material men and including claims by laborers, mechanics, subcontractors, consultants, and material men as successors in interest by assignment, or otherwise, arising out of the work performed under the Contract which are related to said undisputed Contract amounts. This Release shall be effective as to all claims of the Contractor arising out of or in connection with the performance of the work under this Contract with respect to said undisputed Contract amounts. The acceptance by Contractor of the final contract payment described above shall operate as a waiver of all claims described herein and of any entitlement to additional payment arising out of the Contract, except as to those claims by the Contractor and their respective estimated dollar amounts listed herein below. It is understood that the amounts set forth below are good faith estimates and may be subject to some reasonable modification. It is intended that this Release be construed in accordance with the limitations set forth in California Public Contract Code, Section §7100.

<table>
<thead>
<tr>
<th>DESCRIPTION OF DISPUTED CLAIM</th>
<th>ESTIMATED AMOUNT OF DISPUTED CLAIM</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>$ _______</td>
</tr>
</tbody>
</table>

Signed: ________________________

By: ____________________________

(typed or printed)

Title __________________________

Company Name: _________________ Dated: _________________

F. The District, at its option, may elect to issue final payments directly to certain of the subcontractors, or to issue joint check payments, payable to the Contractor and subcontractor involved. Contractor agrees to verify the correctness of any final payments to be made to subcontractors by the District and acknowledge the same in writing to the District within five (5) days of written request from the District. If the Contractor disputes the correctness of any final payment to be made to a subcontractor, the Contractor shall so notify the District, in writing, of the matters in dispute and the amounts thereof. The notice shall be in writing delivered to the District within five (5) days of the above-written request from the District. Said payments shall be made in accordance with estimates made by the Contractor and/or subcontractor and approved by the Engineer of the amount and value of work satisfactorily performed by the subcontractor. Amounts so paid to the subcontractor shall be deducted from any amounts due the Contractor under the terms of the Contract and any change or extra work orders. However, to the extent that the Contractor disputes any portion or all of the estimated payment due a subcontractor, an amount not to exceed 150 percent (150%) of the disputed amount will be withheld from the
payment to the subcontractor. If the entire amount due the subcontractor is disputed by the Contractor, then up to 150 percent (150%) of this entire amount may be deducted from payments to Contractor until the dispute is resolved.

G. If, as stated above, the District elects to issue final payments to a subcontractor or subcontractors or to issue joint check payments, the District may request, as part of its payment to the subcontractor or subcontractors involved, that said subcontractor or subcontractors sign a Conditional Waiver and Release Upon Final Payment to the subcontractor which shall be in substantially the following form:

Conditional Waiver and Release Upon Final Payment to Subcontractor

Upon receipt by the undersigned of a check from West County Wastewater District (District) in the sum of $____ payable to ________________, and when the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to release any mechanic's lien, stop notice, or bond right the undersigned has on the this Contract. This release covers the final payment of the undersigned for all labor, services, equipment, or material furnished on the job, except for disputed claims for additional work described in the attached sheet, if any, in the amount of $____.

Before any recipient of this document relies on it, said party should verify evidence of payment to the undersigned.

Dated: ________________________________

By:____________________________________

Title:______________________________

00 72 42 LIQUIDATED DAMAGES

A. If the Contractor fails to complete the work in a manner satisfactory to the District or before the dates of completion agreed upon and fixed herein or as duly extended as here-in-before provided, the Contractor, pursuant to the provisions of this Contract and California Government Code Section 53069.85, shall forfeit and pay to the District the sum set forth under Section 00 73 21, Amount of Liquidated Damages, for each calendar day of such delay. Contractor and District mutually agree that this daily Amount of Liquidated Damages is a reasonable estimate of future damages as of the date of this Contract, and mutually agree that the sum so specified as liquidated damages is not manifestly unreasonable under the circumstances existing at the time the Contract was made. The District may deduct said sums from the payments due the Contractor each month. If the payments due the contractor are less than the amount of such liquidated damages, said damages shall be deducted from any other monies due or to be due the Contractor. The Contractor or its Surety shall pay the balance to the District.

B. This liquidated damages provision is intended to apply only to the normal administrative, construction, engineering, supervision, design, redesign, operation, and other analogous costs associated with delays in projects similar to the project involved herein. This liquidated damages provision shall not apply to other damages, including consequential damages other than as specified above nor shall preclude the District from seeking said other damages not covered by the liquidated damages provision. Specifically, this liquidated damages provision shall not apply to or include consequential damages resulting from the delay itself, as opposed to the direct-cost-type damages described above, incurred as a result of typical day-to-day project costs normally associated with on-going work. These excluded consequential and other damages shall include, but not be limited to, first- and third-party claims for torts, claims of inverse condemnation, environmental costs and claims, and/or regulatory fees or fines imposed in whole or in part due to Contractor's failure to complete the work in the manner, including time, as set forth in the Contract.

00 72 43 NIGHT AND WEEKEND WORK

A. The Contractor may be required to prosecute the work at night if, at any time, the Engineer shall deem it necessary for the progress of the work, or if emergencies arise, and the Contractor shall promptly comply with any such requirements made in writing by the Engineer. The Contractor will also be permitted to work at night if
it shall satisfy the Engineer of the need therefor, in order to maintain the required progress or protect the work from the elements. When required, ordered, or permitted to work at night, the Contractor shall provide sufficient and satisfactory lighting and other facilities therefor. For night work, if any be performed, the Contractor shall employ a crew organized and prepared for regular and continuous night work, however and whenever so employed in the work the Contractor shall receive no extra payment, but compensation shall be considered as having been included in the price stipulated for the work.

B. No work shall be done on weekends except:

1. usual protective work, such as pumping;
2. work done in case of emergency threatening injury to persons or property; or
3. when in the sole judgment of the Engineer, the work will be of advantage to the District.

C. When night and weekend work is undertaken the Contractor shall first obtain all necessary permits from all entities having jurisdiction (for example noise ordinances) prior to starting such work.

00 72 44 INTOXICATING LIQUORS AND DRUGS

A. The Contractor shall not sell and shall neither permit nor suffer the introduction or use of intoxicating liquors or no prescribed illegal narcotics or drugs upon or about the work.

00 72 45 MEETINGS

A. A preconstruction meeting will be held after the award of the Contract to review the Contractor's preconstruction submittals as required by the Contract, to execute the District construction permit (at no cost to the Contractor), and to discuss various administrative items. At this meeting, the Contractor may be requested to furnish the District with certified payroll forms containing the classifications of workers who will be employed on the project and the wage each classification will be paid. The Contractor shall also be prepared to discuss the construction schedule and methods of implementing the various work items.

B. The Engineer will conduct progress meetings for the purpose of discussing and resolving matters concerning the various elements of the work.

C. The District may notice other meetings at which attendance by the Contractor and subcontractors may be required.

D. Time and place for the above meetings and the names or titles of persons and subcontractors required to be present shall be as directed by the Engineer. The Contractor shall comply with these attendance requirements and shall also require, if needed, its subcontractors to comply.

00 72 46 LIENS AND STOP NOTICE

A. If at any time any notices of lien are filed for labor performed or materials or equipment manufactured, furnished, or delivered to or for the work, the Contractor shall at its own cost and expense, promptly discharge, remove, or otherwise dispose of the same, and until such discharge, removal, or disposition, the Engineer shall have the right to retain from any monies payable to the Contractor an amount which, in the Engineer's sole judgment, the Engineer deems necessary to satisfy such liens and pay the costs and expenses, including attorneys' fees, of defending any actions brought to enforce the same, or incurred in connection therewith or by reason thereof.

B. If, at any time prior to the expiration of the period for service of a Stop Notice, there is served upon the District a Stop Notice as provided in Sections 3179 through 3210 of the Civil Code of the State of California, the District shall, until the discharge thereof, withhold from the monies under its control so much of said monies due or to become due the Contractor under this Contract as shall be sufficient to answer the claim stated in such Stop Notice and to provide for the reasonable cost of any litigation thereunder; provided, that if the Engineer shall, in the Engineer's discretion, permit Contractor to file with the District the bond referred to in Section 3196 of the Civil Code of the State of California, said monies shall not thereafter be withheld on account of such Stop Notice. The monies which the District withholds shall be a minimum of one hundred twenty-five percent (125%) of the face value of the Stop Notice.
A. Neither the inspection by the Engineer, nor any order, measurement, approval, determination, decision, or certificate by the Engineer, nor any order by the District for the payment of money, nor any payment for or use, occupancy, possession, or acceptance of the whole or any part of the work by the District, nor any extension of time, nor any other act or omission of the District or of the Engineer shall constitute, or be deemed to be an acceptance of any defective or improper work, materials, or equipment nor operate as a waiver of any requirement or provision of the Contract, nor of any remedy, power, or right herein reserved to the District nor of any right to damages for breach of Contract. Any and all rights and/or remedies provided for in the Contract are intended and shall be construed to be cumulative; and, in addition to each and every other right and remedy provided for herein or by law, the District shall be entitled, as a right, to a writ of injunction against any breach or threatened breach of the Contract by the Contractor, by its subcontractors, or by any other person or persons.

A. The Contractor shall furnish all equipment, materials, and/or products required to complete the work, except equipment, materials, and/or products that are designated in the Contract Documents to be furnished by the District.

1. Only equipment, materials, and/or products meeting the requirements of the Contract Documents shall be incorporated in the work. The equipment, materials, and/or products furnished and used shall be new and shall be manufactured, handled, and installed in a workmanlike manner to ensure a completed project in accordance with the Contract Documents. Manufacturers’ warranties, guarantees, instruction sheets, and parts lists which are furnished with certain equipment, materials, and/or products incorporated in the work shall be delivered to the Engineer before the Contract will be accepted.

2. If no detailed specifications are set forth, the Contractor shall furnish equipment, materials, and/or products in conformance with the latest standards, specifications, manuals or codes of an acceptable technical society, organization or association, or to the laws or regulations of any applicable governmental authority, whether such reference be specific or by implication, in effect at the time of opening of bids. In general, the work performed shall be in full conformity and harmony with the intent prescribed under Section 00 72 02, Intent of the Contract.

B. The Engineer has the authority to disapprove or reject work, whether in place or not, which the Engineer believes to be defective, or that the Engineer believes will not produce a completed project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed project as a functioning whole as indicated by the Contract Documents. Such equipment, materials, and/or products shall be removed immediately from the work site, unless otherwise permitted by the Engineer. No rejected equipment, materials, and/or products, the defects of which have been subsequently corrected, shall be used in the work, unless approval in writing has been given by the Engineer. Upon failure of the Contractor to comply promptly with any order of the Engineer made under the provisions in this Article, the Engineer may cause the removal and replacement of rejected work included equipment, materials, and/or products. The Engineer may deduct the costs incurred due to the failure of the Contractor to remove and replace rejected work from any monies due or to become due the Contractor.

1. The fact that the Engineer has not disapproved or rejected any part of the work or any of the equipment, materials, and/or products supplied in connection therewith shall not be deemed or construed to mean an automatic acceptance of any such part of the work or any such equipment, materials, products, and/or workmanship.

A. Unless otherwise provided in the Contract, the title and interest in the right to the use of all water, and the title to all soil, stone, gravel, sand, minerals, timber, and all other materials developed or obtained within the Project limits from operations by the Contractor or any of its subcontractors, of any of their representatives or employees, and the right to use or dispose of the same are hereby expressly reserved to the District; and neither the Contractor nor any of its subcontractors, nor any of their representatives or employees, shall have any right, title, or interest in or to any part thereof.

1. All material used under the Contract after it has been attached or affixed to the work or soil and after partial payment has been made therefor shall become the property of the District.
B. The Contractor shall satisfy itself as to the quantity of materials that meet the specifications which may be produced or obtained at local sources, and the District will not assume any responsibility as to the quantities or quality of materials available.

1. The Contractor, with the written permission of the Engineer, may use in the proposed construction such stone, gravel, sand, or other material suitable in the opinion of the Engineer as may be found at the project site.

2. Existing items to be salvaged shall remain the property of the District. Items to be reinstalled in the work shall be refurbished as required before reinstallation. Items to be salvaged shall be carefully removed and handled in such a manner as to avoid damage and shall be delivered to storage at a location designated by the Engineer.

A. Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though they were included herein. If through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.

A. Unless otherwise noted below, conflicts or inconsistencies between parts of the Contract will be resolved by the Engineer with a change order or an addendum, if required. Addenda and change orders bearing the most recent date shall prevail over addenda or change orders bearing earlier dates. Any reference to addenda-changed specifications or drawings shall be considered to have been changed accordingly.

B. In resolving conflicts, errors, or discrepancies, the order of precedence shall be as follows:

1. Change Orders/Addenda (most recent in time takes precedence)
2. Contract and Bond Forms
3. Technical Specifications (Division 20 and above if required)
4. Technical Specifications (Division 1 through 16 as required)
5. Special Conditions
6. Project Drawings
7. General Conditions
8. Instructions to Bidders
9. Bid Forms
10. Notice to Contractors
C. Reference specifications shall have the same order of precedence as the document in which it is referenced. For example, a reference to the District’s Standard Specifications contained in the Technical Specifications will have the same order of precedence as that Technical Specification. A reference to an Appendix contained in the Technical Specifications will have the same order of precedence as that Technical Specification. If a reference specification is mentioned in more than one part of the Contract, the part with the highest order of precedence shall govern.

D. With reference to the Project Drawings:
   1. Figures govern over scaled dimensions.
   2. Project-specific drawings govern over general and typical drawings.
   3. Addenda/Change Order drawings govern over Project Drawings.
   4. Project Drawings govern over standard drawings.

E. It shall be the Contractor's responsibility to resolve any conflicts between the requirements contained on permits from other agencies and the Contract to the satisfaction of the Engineer. When there is a conflict between the requirement(s) as specified in the Contract and as required by other agencies, the more restrictive requirement(s) shall prevail.

00 72 53 UTILITY AND OTHER EXISTING FACILITIES

A. The location of known existing utilities and pipelines are shown on the Project Drawings in their approximate locations. Some of the locations include multiple conduits. The Contractor shall exercise care in avoiding damage to those facilities which are to remain in service subsequent to the construction of the particular new facility involved, and it will be held responsible for their repair if damaged. The Contractor shall also exercise care in maintaining those pipes and facilities required for continuing operation of the existing facilities until such time as they can be abandoned. There is no guarantee that all utilities or obstructions are shown or that the locations indicated are accurate.

B. The Contractor shall be responsible for discovery of all existing underground installations in advance of excavating or trenching, by contacting all local utilities 48 hours in advance, and by prospecting. Contractor shall notify Underground Service Alert 48 hours prior to any excavation work.

C. When the excavation work approaches the approximate location of underground utilities, the exact location shall be determined by careful probing or hand digging. When uncovered, adequate protection shall be provided for the existing installation.

D. The Contractor shall exercise extreme caution in working in the area adjacent to existing sewerage facilities. It is essential that all the existing facilities be maintained in service until the new work is ready for full time operation, and the new work is placed in service. Construction of the connections between the existing facilities and the new facilities shall be at times and during periods acceptable to the District. The Contractor shall advise the Engineer in writing of its proposed construction schedule for these connections at least five (5) calendar days in advance.

E. The Contractor shall uncover and completely expose all piping where crossings, interferences, or connections are shown on the Project Drawings, prior to trenching or excavating for any pipe or structures, to determine actual elevations. New pipelines shall be laid to such grade as to clear all existing facilities which are to remain in service for any period subsequent to the construction of the run of pipe involved. If the Contractor does not expose all required utilities, it shall not be entitled to additional compensation for work necessary to avoid interferences or for repair to damaged utilities. Excavations around underground electrical ducts and conduits shall be performed using extreme caution to prevent injury to workers or damage to the electrical ducts or conduits.
F. Notwithstanding any other provision of this Contract between the District and the Contractor:

1. In accordance with the provisions of Section 4215 of the California Government Code, in any contract to which the District is a party, the District shall assume the responsibility between the parties to the contract for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the site of any construction project and that are a subject of the Contract if such utilities are not identified by the District in the Project Drawings and Specifications and made a part of the Notice to Contractors; provided, however, that nothing herein shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the construction project can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes on or adjacent to the site of construction. The District will compensate the Contractor for the costs of locating and repairing damage and removing or relocating such utility facilities which are not indicated in the Project Drawings and Specifications provided that the Contractor exercises due reasonable care.

2. The owner of the utility shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

3. The Contractor shall not be assessed liquidated damages for delay in completion of the Project when such delay was caused by the failure of the District to show existing utilities or other existing facilities, excluding service laterals.

G. If interferences between existing utilities and proposed work occurs at locations other than those shown on the Project Drawings, the Contractor shall notify the Engineer, and a method for correcting said interference will be supplied by the Engineer. Payment for correction of interferences not shown on the Project Drawings will be in accordance with the provisions of Section 00 72 11, Differing Site Conditions.

H. Planned utility service shutdowns to any portion of the treatment plant or collection system shall be accomplished during periods of minimum use. In some cases this may require night or weekend work. The Contractor shall program its work so that service will be restored in the minimum possible time, and shall cooperate with the District in reducing shutdowns of utility systems to a minimum. No utility interruption will be permitted without the prior approval of the Engineer and the specific utility.

00 72 54 SURVEYS, LINES, AND GRADES

A. All work under the Contract shall be done to the lines and grades shown on the Project Drawings, unless directed otherwise by the Engineer.

1. The Contractor shall use three (3) consecutive points on the same slope in order to detect any variation from a straight grade. If any discrepancy occurs, the Contractor shall immediately notify the Engineer. If this discrepancy is not reported at the time of discovery to the Engineer, the Contractor shall be responsible for correcting any error in the finished work at no cost to the District.

2. The District may make any survey to accurately measure quantities for payment to the Contractor.

3. The District will have the right at any time to interrupt the Contractor's work schedule in order to have lines or grades checked on any work in progress; and no time extension will be granted for such interruptions, provided that the interruptions do not exceed a reasonable amount of time under the specific circumstances involved.

00 72 55 CONTRACT DOCUMENTS AND RECORD DRAWINGS

A. The Contractor to whom award is made may obtain from the District, at no extra cost, up to four (4) copies of the Contract Documents as specified in Subsection 19 of Section 00 21 13. The Contract Documents include Section 00 01 10, Table of Contents; Section 00 01 15, List of Drawings; Section 00 11 16, Invitation to Bid; Section 00 21 13, Instructions to Bidders; Section 00 41 43 Bid Forms; Section 00 43 00, Procurement Form Supplements; Section 00 45 00, Representations and Certifications; Section 00 52 00, Contract Forms; Section 00 61 00, Bond Forms; Section 00 72 00, General Conditions; Section 00 73 00, Supplementary Conditions; Technical Specifications; Project Drawings; and any addenda thereto.
B. The Contractor shall keep on the work site a copy of the Contract Documents and shall at all times give the
Engineer access thereto. Any drawings included in the detailed Specifications shall be regarded as part thereto
and of the Contract. Anything mentioned in these Specifications and not shown on the Project Drawings, or
shown on the Project Drawings and not mentioned in these Specifications, shall be of like effect as though
shown or mentioned in both. The Engineer will furnish from time to time such detail drawings, plans, profiles,
and information as he may consider necessary for the Contractor's guidance. It shall be the duty of the
Contractor to see that the provisions of the Contract Documents are complied with in detail irrespective of the
inspection given the work during its progress by the Engineer. Any failure on the part of the Contractor to
observe the requirements contained in the Contract Documents will be sufficient cause for the rejection of the
work at any time before its acceptance.

C. The Contractor shall maintain, at the jobsite, one record set of Project Drawings in good order and clearly
marked to show any deviations which have been made from the Project Drawings, including concealed
construction and utility features which are revealed during the course of construction. Marked prints shall be
updated at least once each week and shall be available to the Engineer for review as to currency prior to
developing partial payment estimates. Upon completion of the work, the marked set of prints shall be delivered
to the Engineer.

D. In the case of those drawings which depict the detail requirement for equipment to be assembled and wired in
the factory, such as motor control centers and the like, the Record Drawings shall be updated by indicating those
portions which are superseded by change order drawings or final shop drawings, and by including appropriate
reference information describing the change orders by number and the shop drawings by manufacturer, drawing,
and revision numbers.

E. Requests for partial payments will not be approved if the updated set of Drawings is not in good order or is not
kept current. Request for final payment will not be approved until the complete and correct Record Drawings are
delivered to the Engineer.

00 72 56 CONTAMINATED SOIL/MATERIALS

A. Contaminated soils and materials shall include, but not be limited to, pollutants and/or materials defined as
hazardous substances or hazardous wastes under the Resource Conservation and Recovery Act (RCRA), the
Comprehensive Environmental Response Compensation and Liability Act (CERCLA), the Hazardous
Substances Control Act (Health and Safety Code Section 25300 and following), the Hazardous Waste Control
Act (Health and Safety Code Section 25100 and following), or as defined as pollutants or contaminants under
any other applicable state and federal laws and regulations. Said materials shall include, but not be limited to,
friable asbestos, PCBs, petroleum products and its byproducts, and waste oil, among other substances.

B. Contractor shall notify the District by person or by telephone within two hours of discovery as to any
contaminated soil or materials on or beneath the jobsite, including in buildings and related structures which
could be impacted by the construction project so discovered by the Contractor, its personnel, agents,
representatives, consultants, or any other persons working under the direction and control of the Contractor. In
addition, written notice shall be delivered to the District by the Contractor within 24 hours of discovery.
Contractor shall require that like provisions be inserted in all contracts with its subcontractors and tiers of
subcontractors. This shall not relieve the Contractor from the obligation and responsibility to ensure that the
provisions of this general condition are complied with.

C. The Contractor and its subcontractors shall immediately cease any and all work at the location of the discovery
of the contaminated soil or materials until further notice from the District or the Engineer.

D. However, if the Contract Documents specifically direct the Contractor to conduct appropriate cleanup operations
with respect to the contaminants discovered, the Contractor shall proceed with these operations. In addition, the
Contractor shall notify the District of the discovery of said contaminants in the manner set forth above. Further,
if the contaminants substantially vary from the description in the Contract Documents as to type of material,
quality of materials, level of concentration or toxicity, location, as to the materials' affect on groundwater, or
vary in any other substantial manner from the description as set forth in the Contract Documents, the Contractor
shall immediately cease operations and notify the District in the manner set forth above.

E. All work done by the Contractor with respect to cleanup, removal, and remedial actions concerning the
contaminated soils or materials shall be done according to law. All required notices shall be given by the
Contractor to the County Environmental Health Hazard Materials Section and other appropriate governmental
agencies, including the State Department of Toxic Substances Control and the Regional Water Quality Control Board-San Francisco Bay Region, among others. The Contractor or any subcontractor doing such work on behalf of the Contractor shall have the appropriate certification, licenses, and permits prior to commencing any such cleanup, removal, and/or remedial work. The District shall not be responsible for the negligence of or violation of any laws, rules, regulations, or ordinances by the Contractor or any of the Contractor's subcontractors, agents, consultants, employees, or representatives in doing such cleanup, removal, and remedial work.

F. If any of the cleanup, removal, containment, and remediation work substantially impacts upon the community, including, but not limited to, traffic, odor, and health issues, the District reserves the right to direct that the manner of operations by the Contractor be revised accordingly to reduce or eliminate the adverse effects.

A. General

1. Prevention - The Contractor shall prevent the pollution of storm drain systems and creeks on or near the construction project site(s) resulting from the construction operation. The Contractor shall keep pollution out of storm drains by reducing the possibility of accidental discharge of materials and wastes, by reducing erosion and sedimentation, and by any action as required. The Contractor shall train all employees and subcontractors on the storm water pollution prevention requirements contained in these Specifications and ensure that all employees and subcontractors are aware of the consequences as described in subsection A.3. below. The Contractor shall include appropriate subcontract provisions to ensure that these requirements are met by all subcontractors.

2. Notification - If the Contractor causes or permits the spillage or overflow of any sewage, oil, or petroleum product, hazardous substance, contaminant, or waste that may result in the fluid or substance being discharged directly or indirectly into any storm drains, creeks, wetlands, or other manmade or natural waterways the Contractor shall notify the District as soon as possible to the extent notification can be provided without substantially impeding cleanup or other emergency measures. In no event shall such notification be later than one hour after knowledge of the occurrence.

3. Cleanup - Immediately upon gaining knowledge of such spillage, overflow, or discharge, the Contractor shall eliminate the cause of the spillage, overflow, or discharge and take action to minimize any damages. The Contractor shall also immediately implement a cleanup program. The cleanup, including sampling and testing required by regulatory agencies to determine the nature and level of contamination shall be performed and completed to the satisfaction of the various regulatory agencies involved and the District, at the expense of the Contractor. Any fines, penalties, and/or subsequent actions imposed upon the District and/or the Contractor by regulatory agencies related to the spillage, overflow, or discharge and any subsequent monitoring, testing, and reporting, as required by regulatory agencies, shall also be at the expense of the Contractor. The Contractor shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on site. The quantity of cleanup materials shall be appropriate in consideration of the risk of an occurrence of a spill, overflow or discharge.

B. Management of Nonhazardous Material and/or Waste

1. Designated Area - The Contractor shall propose designated areas of the project site, for approval by the Engineer, suitable for material delivery, storage, and waste collection that to the maximum extent practicable are near construction entrances and away from catch basins, gutters, drainage courses, and creeks.

2. Backfill or Excavated Material - The Contractor shall not allow backfill or excavated material to enter the storm drains or creeks. When rain is forecast within 24 hours or during wet weather, the Contractor may be required to cover such material with a tarpaulin and to surround the material with sand bags.
3. Street Sweeping - At least once per week or more frequently as directed by the Engineer, the Contractor shall clean and sweep roadways and on-site paved areas of all materials attributed to or involved in the work. The Contractor shall not use water to flush down streets in place of street sweeping.

4. Disposal - At the end of each working day, the Contractor shall collect all scrap, debris, and waste material, and dispose of such materials properly. The materials may be stored in the Contractor’s yard in stockpiles or placed in dumpsters. The Contractor shall inspect dumpsters for leaks and replace or repair dumpsters that leak. The Contractor shall not discharge water from cleaning dumpsters on site. The Contractor shall arrange for regular waste collection before dumpsters overflow.

C. Management of Hazardous Material and/or Waste

1. Storage - The Contractor shall label and store all hazardous materials, such as pesticides, paints, thinners, solvents, and fuels, and all hazardous wastes, such as waste oil and antifreeze in accordance with all applicable state and federal regulations. The Contractor shall store all hazardous materials and all hazardous wastes in accordance with secondary containment regulations. All such materials and wastes shall be covered, as needed, to avoid rainwater becoming polluted with hazardous constituents which could result in potential management of collected rain water as a hazardous waste. The Contractor shall keep an accurate, up-to-date inventory, including Material Safety Data Sheets (MSDSs), of hazardous materials and hazardous wastes stored on site.

2. Usage - When rain is forecast within 24 hours or during wet weather, the Contractor shall refrain from applying chemicals in outside areas. The Contractor shall follow material manufacturer's instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals. The Contractor shall post warning signs in areas treated with chemicals.

3. Disposal - The Contractor shall arrange for regular hazardous waste collection to comply with time limits on storage of hazardous wastes. The Contractor shall dispose of hazardous waste in accordance with Section 00 72 56, Contaminated Soil/Materials. The Contractor shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials. The Contractor shall report any hazardous materials spill to the District in accordance with Section A.2 above.

D. Vehicle/Equipment Cleaning, Maintenance, and Fueling

1. General - The Contractor shall inspect vehicles and equipment arriving on site for leaking fluids and shall promptly repair leaking vehicles and equipment. Drip pans shall be used to catch leaks until repairs are made.

   a. The Contractor shall comply with federal, state, and city requirements for aboveground storage tanks.

2. Cleaning - The Contractor shall perform vehicle or equipment cleaning with water only in a designated, bermed area that will not allow rinse water to run off site into streets, gutters, storm drains, or creeks. Soaps, solvents, degreasers, steam-cleaning equipment, or equivalent methods shall not be allowed.

3. Maintenance and Fueling - The Contractor shall perform maintenance and fueling of vehicles or equipment in areas that will not allow run-on of storm water or runoff of spills to storm drains and provide for confined clean-up. Examples are working in bermed areas or utilizing drip pans. The Contractor shall not contaminate the soils or groundwater with such maintenance and fueling activities.

   a. The Contractor shall use secondary containment, such as a drip pan, to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured, and shall clean up leaks and spills of vehicle or equipment fluids immediately and dispose of the waste and cleanup materials as hazardous waste, as described in Section C.3 above.

E. Dewatering Operations

1. Sediment Control - The Contractor shall route water through a control measure, such as a sediment trap, sediment basin, or Baker tank, to remove settleable solids prior to discharge to the storm drain system. Straw bales shall be placed in front of storm drain inlets as required. Filtration of the water following the
control measure may be required on a case-by-case basis. Approval of the control measure shall be obtained in advance from the Engineer. If the Engineer determines that the dewatering operation would not generate an appreciable amount of settleable solids, the control measure requirement above may be waived.

2. Contaminated Groundwater - If the project is within an area of known groundwater contamination or if contamination is found, water from dewatering operations shall be tested prior to discharge. If the water quality meets Regional Water Quality Control Board (RWQCB) standards, it may be discharged to a storm drain or creek. Otherwise, the water shall be hauled off site for proper disposal.

F. Paving or Oiling Operations

1. When rain is forecast within 24 hours or during wet weather, the Engineer may prevent the Contractor from paving or oiling the street. The Engineer may direct the Contractor to protect drainage courses by using control measures, such as earth dike, straw bale, and sand bag, to divert runoff or trap and filter sediment.

2. The Contractor shall prevent saw-cut slurry from entering catch basins and storm drains by limiting the area over which the slurry may spread.

3. The Contractor shall cover catch basins and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.

4. The Contractor shall not sweep or wash down excess sand (placed as part of a sand seal or to absorb excess oil) into gutters, storm drains, or creeks. The Contractor shall either collect the sand and return it to the stockpile or dispose of it in a trash container.

G. Concrete, Grout, and Mortar Waste Management

1. Concrete Truck/Equipment Washout - The Contractor shall not wash out concrete trucks or equipment into streets, gutters, storm drains, or creeks. The Contractor shall perform washout of concrete trucks or equipment off site or in a designated area on site where the water will flow onto dirt or into a temporary pit in a dirt area. The Contractor shall let the water percolate into the soil and dispose of the hardened concrete in a trash container. If a suitable dirt area is not available, the Contractor shall collect the wash water and remove it off site.

2. Exposed Aggregate Concrete Wash Water - The Contractor shall avoid creating runoff by draining water from washing of exposed aggregate concrete to a dirt area. If a suitable dirt area is not available, the Contractor shall filter the wash water through straw bales or equivalent material before discharging to a storm drain. The Contractor shall collect sweepings from exposed aggregate concrete for disposal.

H. Paint Disposal and Clean-up

1. Disposal of Unused Paint - The Contractor shall carefully use, store and dispose of paint, solvents, chemicals, and waste materials in compliance with all applicable state and federal regulations. The Contractor shall not dispose of paint to sanitary sewer systems or storm drains. The Contractor shall utilize other recycling and disposal services as follows:

   a. “Recycling Centers” and “Waste Disposals” as may be listed in the yellow pages.

   b. Local household hazardous waste facility if appropriate.

      i. The Contractor may dispose of small amounts of leftover latex (water-based) paint by applying the paint to the surface of an item to be discarded and allowing it to dry thoroughly, then disposing of it in a dumpster.

      ii. The Contractor shall store these materials and conduct cleaning of painting equipment and tools in a designated area that will not allow run-on of storm water or runoff of spills. The Contractor shall not allow wash water from cleaning of painting equipment and tools into streets, gutters, storm drains, or creeks.
2. Disposal of Paint Clean-up Waste - The Contractor shall remove as much excess paint as possible from brushes, rollers, and equipment before starting cleanup.

   a. The Contractor shall not discharge cleaning wastes from oil-based paints, buckets, brushes or tools to the sanitary sewer system. The Contractor shall retain a certified waste hauler to recycle or to dispose of cleaning wastes from oil-based paints at the Contractor’s expense.

   b. The Contractor may discharge very small amounts of cleaning wastes from brushes, rollers, buckets, and tools contaminated with latex (water-based) paints to the sanitary sewer system provided they do not contain additives with pollutants of concern (e.g., mercury, tributyltin). Brushes, rollers, and tools containing latex paints may be washed over a sink with plenty of water. Buckets containing latex paints shall first be emptied into the original can or discarded as specified in paragraph 1 above. Should excessive amounts of paint or solvent be found in the wastewater discharged, the Contractor may be subject to enforcement action by the District in accordance with the District Codes.

   c. The Contractor shall not discharge any of these paint clean-up wastes to storm drains, streets, gutters, or creeks.

   d. Waste Disposal - The Contractor shall dispose of waste thinner, solvent, and sludge from cleaning of equipment and tools as hazardous waste, as described in Section C.3 above. The Contractor shall dispose of excess thinners, solvents, and oil- and water-based paint as hazardous waste.

I. Contaminated Soil - If the project is within an area of known soil contamination or evidence of soil contamination is found, the Contractor shall comply with the requirements of Section 00 72 56, Contaminated Soil/Materials.
SECTION 00 73 00
SUPPLEMENTARY CONDITIONS

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00 73 01 INSURANCE COVERAGE REQUIREMENTS

A. Insurance: On or before beginning the Project, the Contractor, at its own cost and expense, shall carry, maintain for the duration of the Project, and provide proof thereof in a form that is acceptable to the District the insurance specified in subsections (1) through (5) below with insurers and under forms of insurance satisfactory in all respects to the District. The Contractor shall not allow any subcontractor, professional or otherwise, to commence work on any subcontract until all insurance required of the Contractor has also been obtained for said subcontractor, or until the District has approved the insurance status of the Contractor's subcontractor.

1. Commercial General Liability: Insurance Services Office Form CG 00 01, including products and completed operations, with limits of no less than five million dollars ($5,000,000) per occurrence for bodily injury, personal injury, and property damage. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit. The Contractor, at the Contractor's own cost and expense, shall maintain Commercial General Liability Insurance for the period covered by this Contract for risks associated with the Project.

2. Automobile Liability: Insurance Services Office Form Number CA 0001 covering Code 1 (any vehicle), with limits no less than five million dollars ($5,000,000) per accident. Such coverage shall include but shall not be limited to, protection against claims arising from bodily and personal injury, including death resulting therefrom, and damage to property resulting from activities contemplated under this Contract, including the use of owned and non-owned automobiles.

3. Workers' Compensation: Worker's Compensation Insurance as required by the State of California, with statutory limits, and Employer's Liability Insurance with limits of not less than one million dollars ($1,000,000) per accident for bodily injury or disease for any and all persons employed directly or indirectly by the Contractor. In the alternative, the Contractor may rely on a self-insurance program to meet these requirements as long as the program of self-insurance complies fully with the provisions of the California Labor Code. In such case, excess Worker's Compensation Insurance with limits of not less than five million dollar ($5,000,000) shall be maintained. The insurer, if insurance is provided, and the Contractor, if a program of self-insurance is provided, shall waive all rights of subrogation against the District for loss arising from worker injuries sustained under this Contract. The worker’s compensation policy shall be endorsed with a waiver of subrogation in favor of the district for all work performed by the Contractor, its employees, agents and subcontractors.

4. Builder’s Risk: (Course of Construction) insurance covering all risks of loss less policy exclusions, with limits equal to the completed value of the project and no coinsurance penalty provisions.
5. **Professional Liability.** If applicable (for design/build), the Contractor, at the Contractor's own cost and expense, shall maintain for the period covered by this Contract professional liability insurance for licensed professionals performing the work in an amount not less than one million dollars ($1,000,000) and a $2,000,000 policy aggregate covering the licensed professionals' errors and omissions, as follows:

   a. Any deductible shall not exceed $5,000 per claim.

   b. Notice of cancellation or non-renewal must be received by the District at least thirty days prior to such change.

   c. The following provisions shall apply if the professional liability coverages are written on a claims made form:

      i. The retroactive date of the policy must be shown and must be before the date for the commencement of the Project.

      ii. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the Project if reasonably available.

      iii. If coverage is canceled or not renewed and it is not replaced with another claims made policy form with a retroactive date as provided under 00 73 2 A.(5) (c) (i) above, the Contractor must provide extended reporting coverage on the expiring policy for a minimum of five years after completion of the Project.

      iv. A copy of the claim reporting requirements, including any extended reporting period provisions, must be submitted to the District prior to the commencement of the Project.

      v. If the services involve lead based paint or asbestos identification/remediation, the Contractors Pollution Liability.

6. **Contractor’s Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors and Omissions (if project involves environmental hazards) with limits no less than $1,000,000 per occurrence or claim, and $2,000,000 policy aggregate.**

7. Each of the following shall be included in the insurance coverage or added as an endorsement to the policy:

   a. The West County Wastewater District, its subsidiary districts, its officers, employees, agents and volunteers shall be covered as additional insureds as regards each of the following:

      i. Liability arising out of automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor.
ii. Liability arising out of work or operations performed by or on behalf of the Contractor, including materials, parts, or equipment furnished in connection with such work or operations and the insured’s general supervision of or by the Contractor.

iii. Liability arising out of premises owned, occupied or used by the Contractor.

b. General liability coverage can be provided in the form of an endorsement to the Contractor’s insurance (at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used.).

c. The coverage shall contain no special limitations on the scope of protection afforded to the West County Wastewater District, its subsidiary districts, its officers, employees, agents and volunteers.

d. The insurance policy form shall provide coverage on an occurrence basis, and not on the basis of claims made.

e. The insurance must cover complete contractual liability. This may be provided by amending the definition of "incidental contract" to include any written agreement.

f. Any explosion, collapse, and underground property damage exclusion must be deleted.

g. An endorsement must state that coverage is primary insurance and that no other insurance or self-insured retention carried by the District will be called upon to contribute to a loss under the coverage.

h. The policy must contain a cross liability or severability of interests clause.

i. Any failure of the Contractor to comply with reporting provisions of the policy shall not affect coverage provided to the West County Wastewater District and its subsidiary districts, its officers, employees, agents and volunteers.

j. Broad form property damage liability must be afforded. A deductible that does not exceed $250,000 may be provided.

k. Insurance is to be placed with California-admitted insurers, and carrier(s) must be rated "A: VII" or above in the Best's Rating Guide unless otherwise acceptable to the District.

l. Notice of cancellation or non-renewal must be received by the District at least thirty days prior to such change.

8. Deductibles and Self-Insured Retentions. During the period covered by this Contract, upon express written authorization of the District, the Contractor may increase such
deductibles or self-insured retentions with respect to the District, its subsidiary districts, its officers, employees, agents and volunteers. The District may condition approval of an increase in deductible or self-insured retention levels upon a requirement that the Contractor procure a bond guaranteeing payment of losses and related investigations, claim administration, and defense expenses that is satisfactory in all respects to each of them.

9. Notice of Reduction in Coverage. If any coverage required under 00 73 2. A. (1), (2), (3), (4), (5) or (6) of this Contract is reduced, limited, or materially affected in any other manner, at any time during the period that insurance coverage is required under this Contract, the Contractor shall provide written notice to the District at the Contractor's earliest possible opportunity and in no case later than five days after the Contractor is notified of the change in coverage.

10. Verification of Insurance. The Contractor shall submit acceptable proof of insurance, along with all endorsements that implement the insurance coverage required by the District. Proof of insurance may be provided by an accurate Certificate of Insurance that identifies all insurance coverage actually in force, although it may exceed the amounts or coverages required by the District. The original Certificate of Insurance, and signed endorsements shall be provided to the District prior to performance of the work.

11. Builder’s Risk (Course of Construction) Insurance. The Contractor may submit evidence of Builder’s Risk insurance in the form of Course of Construction coverage. Such coverage shall name the District as a loss payee as their interest may appear. If the project does not involve new or major reconstruction, at the option of the District, an Installation Floater may be acceptable. For such projects, a Property Installation Floater shall provide property damage coverage for any building, structure, machinery or equipment damaged, impaired, broken, or destroyed during the performance of the Work, including during transit, installation, and testing at the project site.

12. Any exceptions to the above requirements, limits or conditions are to be made in the sole and exclusive discretion of the District, by and through the District's General Manager.

13. Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein.

14. Verification of Coverage. Contractor shall furnish the District with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the District before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor’s obligation to provide them. The District reserves the right to require complete, certified
copies of all required insurance policies, including endorsements, required by these specifications at any time.

15. Special Risks or Circumstances. The District reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

B. Indemnification

1. The Contractor and its sureties shall indemnify and hold harmless the District, the Board, each member of the Board, and the District’s officers, agents and employees from all liability and claims of any kind, subject to the limitations set forth by law, including attorney’s fees, arising out of or in connection with the work to be performed, including but not limited to:

   a. Liability or claims resulting directly or indirectly from the negligence or carelessness of the Contractor or its agents in the performance of the work, or in guarding or maintaining the same, or from any improper materials, implements, or appliances used in its construction, or by or on account of any act or omission of the Contractor or its agents.

   b. Liability or claims arising directly or indirectly from or based on the violation of any law, ordinance, regulation, order, or decree, whether by the Contractor or its agents.

   c. Liability or claims arising directly or indirectly from the use or manufacture by the Contractor, its agents, or the District in the performance of the work of any copyrighted or non-copyrighted composition, secret process, patented or unpatented invention, article or appliance, unless otherwise specifically stipulated in the Contract.

   d. Liability or claims arising directly or indirectly from the breach of any warranties, whether express or implied, made to the District or any other parties by the Contractor or its agents.

   e. Liability or claims arising directly or indirectly from the willful misconduct of the Contractor or its agents.

   f. Liabilities or claims arising directly or indirectly from any breach or default of the obligations assumed herein by the Contractor.

   g. Liabilities or claims arising directly or indirectly from injuries, sickness, disease or death of employees of Contractor or his subcontractors, suppliers, or vendors in connection with or incident to their Contract or the work to be performed hereunder.
2. Said duty to indemnify shall not be affected or in any way diminished by the fact that
the District, the Board, any member of the Board, or the District’s officers, agents or
employees may have jointly caused or contributed to the liability or claim by their acts,
omissions, conduct, or negligence. The indemnification obligation under this Article
shall not be limited in any way by any limitation of the amount or type of damages,
compensation, or benefits payable by or for the Contractor or any such subcontractor
or other person or organization under the Worker’s Compensation Act, Disability
Benefit Act, or other employee benefit act.

3. The duty of the Contractor and its sureties to defend, indemnify and hold harmless as
set forth above, shall include but not be limited to the duty to defend as set forth in
Section 2778 of the California Civil Code, provided, however, that nothing herein shall
be construed to require the Contractor to indemnify the District, its subsidiary Districts,
its officers, employees, agents and volunteers against any responsibility for liability in
contravention of Section 2782 of the California Civil Code. The duty to defend shall
include but not be limited to any costs and expenses for attorney's fees, consultants,
expert witnesses, court costs and all incidental and consequential damages or costs
from claims or litigation.

4. The Contractor and its sureties expressly and specifically agree to waive any and all
subrogation rights they may have against the District, its subsidiary districts, officers,
employees, agents and volunteers which any insurer of Contractor may acquire by
virtue of the payment of any loss. Contractor agrees to obtain any endorsement that
may be necessary to affect this waiver of subrogation. Indemnification and waiver of
subrogation contained in this section shall remain operative and in full force and effect
regardless of any termination of this Contract.

00 73 02 PRECONSTRUCTION CONFERENCE

A. The purpose of the preconstruction conference shall be to review the Contractor's
preconstruction submittals, as required by the Contract, and to execute the District
construction permit and discuss various administrative items.

B. At the time and place established for the preconstruction conference, the Contractor shall:

1. Execute and secure a District construction permit for the work under Contract.
   This permit is for record purposes only, and no fee, therefore, will be charged to
   the Contractor.
2. File with the District's written Payroll Listing of labor costs in accordance with
   Section 00 73 26, Certification of Labor Charges.
3. Present the construction schedule and methods of implementing the work.
A. The Engineer will furnish only a basic reference line, a beginning point on this line, and a
bench mark from which the Contractor shall establish such other control and reference
point as he may need and as will be required to properly lay out the work. Monuments for
principal control points shall be set by the Contractor and shall be protected by the
Contractor from disturbance. If the monuments are disturbed, any work that is governed by
these monuments shall be held in abeyance until the monuments are reestablished by the
Contractor. Contractor shall engage a registered civil engineer or licensed land surveyor
subject to approval of the Engineer for this work. The accuracy of all the Contractor's
stakes, alignments, and grades is the responsibility of the Contractor. However, the Engineer
has the discretionary right to check the Contractor's stakes, alignments, and grades at any
time. Where such discretion is to be exercised by the Engineer, he will notify the Contractor
of his intention, stating the time at which the checking will commence. Any part of the work
in progress, the results of which are predicated directly upon the Contractor's stakes,
alignments, or grades to be checked, shall be held in abeyance until the Engineer has notified
the Contractor that the checking has been completed.

A. The following are the official 2020 holidays of the West County Wastewater District and work
shall not be scheduled for these days:
  January 1, "New Year's Day"
  January 20, "Martin Luther King Day"
  February 17, "President's Day"
  May 27, "Memorial Day"
  July 4, "Independence Day"
  September 7, "Labor Day"
  November 11, "Veteran's Day"
  November 26, "Thanksgiving Day"
  November 27, "Day After Thanksgiving"
  December 25, "Christmas Day"

The Contractor shall assume responsibility for all new material and skilled application of all work
furnished and performed under this Contract including any Amendments thereto. At the
completion of this Contract, the construction shall constitute a complete and operable facility. In
the event an error or omission is discovered in the Drawings or Specifications during the course
of the work, the Engineer shall be promptly notified in writing. If the Engineer determines that
remedial measures are necessary requiring extra work clearly outside the scope of the Contract
work, a Change Order will be negotiated in accordance with Section 00 72 12, Changes and Extra
Work.
00 73 06 CONFLICTS, ERRORS, DISCREPANCIES

In the case of conflicts, errors, or discrepancies in any of the Contract Documents, the order of precedence shall be as follows:

1. Change Orders/Addenda (most recent in time takes precedence)
2. Contract and Bond Forms
3. Technical Specifications (Division 20 and above if required)
4. Technical Specifications (Division 1 through 16 as required)
5. Supplementary Conditions
6. Project Drawings
7. General Conditions
8. Instructions to Bidders
9. Bid Forms
10. Notice to Contractors

00 73 07 CLEAN UP AND RESTORATION

A. Upon completion of the work, remove from the site the equipment, all debris, unused materials, temporary construction buildings, and other miscellaneous items resulting from or used in the operations. Replace or repair any facility which has been damaged during the construction work. Restore the site as nearly as possible to its original condition.
   1. Throughout the construction period, maintain the Contract working area neat and clean as described in this section.
   2. Make final cleanup and restore landscaping for acceptance.
   3. In addition to requirements of this section, comply with all requirements for cleaning up as described in various other sections of this Specification.

B. Quality Assurance
   1. Inspection: As a minimum, conduct weekly inspections to verify that requirements of this section are being met.
C. **Cleaning Materials and Equipment:** Provide all required personnel, equipment, and materials needed to maintain the work area neat and clean.

D. **Progress Cleaning- General**

1. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of material.

2. Provide adequate storage for all items awaiting removal from the jobsite, observing all requirements for fire protection and protection of the environment.

3. Remove any accumulation of scrap, debris, waste material, and other items not required for construction of this work.

4. Mechanically clean all roadways affected by the work daily.

**00 73 08 COMMENCEMENT, PROSECUTION, AND COMPLETION**

The Contractor shall commence work within five calendar days from the date on the Notice to Proceed. Once work is started, it shall be diligently prosecuted to completion on or before the expiration of the time hereinafter stated.

**Bid Item**  **Completion Required Within:**

All Items The Contract time for this project shall be deemed to start five calendar days from the date on the Notice to Proceed. The Contractor shall complete the work in **Forty-five (45) calendar days.**

The Contractor shall coordinate the work to incorporate the project scope, as specified in Section 01 11 00, *Work Covered by Contract Documents.*

The Contractor shall furnish sufficient forces, construction plant, and equipment, and shall work such hours, including extra shifts and overtime operations, and shall furnish such other necessaries so as to assure the prosecution of the work.

At least two working days in advance of the actual date of commencement of initial operations at the jobsite, the Contractor shall give the District written notice of its intent to commence the work under this Contract.
At least two working days in advance of any excavation work for this Project, the Contractor shall give telephone notice of its intent to occupy the jobsite and its schedule of anticipated operations to prosecute the work to:

Underground Service Alert (USA)
Phone: (800) 642-2444

Prior to commencing any excavation work required under this Contract and, pursuant to Section 6705 of the Labor Code of the State of California, the Contractor shall submit, for District approval, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during such excavations.

The Contractor shall furnish the District with a copy of all construction permits and auxiliary agreements as may be required and as may be secured by the Contractor regarding methods and appliances specially approved by jurisdictional agencies or private parties. Such copies of Contractor-secured permits and agreements shall be delivered to the Project Manager (Armondo Hodge: ahodge@wcwd.org) at least 14 calendar days prior to prosecution of any work covered thereunder. Failure to provide copies of permits within the required time period shall result in forfeiture of permit fee reimbursement by the District.

Pursuant to provisions under Section 00 72 35, Progress, Completion, Delays, and Extensions of Time, the Contractor shall notify the Engineer in writing of any causes which lead to an unavoidable delay in the commencement of the work within ten calendar days after any occurrence of such delays.

At the time and place established for the preconstruction conference, the Contractor shall file with the District the written certifications prescribed under Section 00 73 26, Certification of Labor Charges to verify charges for any extra work which may be ordered and documented in a Daily Extra Work Report in accordance with Section 00 72 12, Changes and Extra Work.

00 73 09  EXISTING UTILITIES AND SEWERAGE FACILITIES

A. Notwithstanding any other provision of this Contract between the District and the Contractor:

1. In accordance with the provisions of Section 4215 of the California Government Code, in any contract to which the District is a party, the District shall assume the responsibility between the parties to the contract for the timely removal, relocation, or protection of existing utility facilities except for service laterals, and appurtenances located on the site of any construction project that are a subject of the Contract if such utilities are not identified by the District in the Plans and Specifications and made a part of the Invitation to Bid. The District will compensate the Contractor for the costs of
locating and repairing damage not due to the failure of the Contractor to exercise reasonable care, and removing or relocating such utility facilities which are not indicated in the Plans and Specifications with reasonable accuracy.

2. The Contractor shall not be assessed liquidated damages for delay in completion of the Project when such delay was caused by the failure of the District or the owner of the utility to provide for removal or relocation of such utility facilities except for service laterals, and appurtenances which are not identified by the District in the Plans.

3. Nothing herein shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the construction project can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes on or adjacent to the site of the construction; provided, however, nothing herein shall relieve the District from identifying utility relocations in the Plans and Specifications except for service laterals, and appurtenances.

4. The owner of the utility shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

5. The Contractor is hereby notified that existing water, gas, electrical, CATV, and telephone service laterals are not shown on the project drawings. The Contractor shall include in his bid, an allowance to locate, cross, and protect these services. Full compensation for this work along with the cost of locating, crossing and protecting main or trunk lines shall be included in the prices bid for the various contract bid items of work and no additional and no additional compensation will be allowed therefor.

B. The location of known existing utilities and pipelines are shown on the Contract Drawings in their approximate locations. Some of the locations include multiple conduits. The Contractor shall exercise care in avoiding damage to those facilities which are to remain in service subsequent to the construction of the particular new facility involved, and it will be held responsible for their repair if damaged. The Contractor shall also exercise care in maintaining those pipes and facilities required for the continuing operation of the existing facilities until such time as they can be abandoned. There is no guarantee that all utilities or obstructions are shown or that the locations indicated are accurate.

1. The Contractor shall be responsible for discovery of all existing underground installations in advance of excavating of trenching, by contacting all local utilities 48 hours in advance, and by prospecting. Contractor shall notify Underground Service Alert 48 hours prior to any excavation work.
2. When the excavation work approaches the approximate location of underground utilities, the exact location shall be determined by careful probing or hand digging. When uncovered, adequate protection shall be provided for the existing installation.

3. The Contractor shall exercise extreme caution in working in the area adjacent to existing sewerage facilities. It is essential that all the existing facilities be maintained in service until the new work is ready for full time operation, and the new work is placed in service. Construction of the connections between the existing facilities and the new facilities shall be at times and during periods acceptable to the District. The Contractor shall advise the Engineer in writing of its proposed construction schedule for these connections at least five calendar days in advance.

4. The Contractor shall uncover and completely expose all piping where crossings, interferences, or connections are shown on the Drawings, prior to trenching or excavating for any pipe or structures, to determine actual elevations. New pipelines shall be laid to such grade as to clear all existing facilities which are to remain in service for any period subsequent to the construction of the run of pipe involved. If the Contractor does not expose all required utilities, it shall not be entitled to additional compensation for work necessary to avoid interferences or for repair to damaged utilities. Excavations around underground electrical ducts and conduits shall be performed using extreme caution to prevent injury to workers or damage to the electrical ducts or conduits.

5. If interferences occur at locations other than those shown on the Drawings, the Contractor shall notify the Engineer, and method for correcting said interference will be supplied by the Engineer. Payment for correction of interferences not shown on the Drawings will be in accordance with the provisions of section 00 72 11, Differing Site Conditions.

C. Perpendicular Crossings of Existing Utilities under Pressure: The work under this Contract includes excavations which may be perpendicular to existing high pressure utilities. The Contractor shall comply with the following provisions to protect the existing utilities:

1. The Contract shall contact the owner of the utility pipeline and request that the approximate location be marked in the field.

2. After the location is marked, the Contractor shall hold a safety meeting with the representative of the pipeline company and the Contractor's field personnel. The approximate location of the pipeline and the procedure to be used in exposing the pipeline shall be reviewed.

3. The Contractor shall arrange for a pipeline company representative to be present when the excavation is started and while exposing the pipeline.
4. The Contractor shall perform the exploratory excavations at least five working days in advance of the time the new sewer will be installed in the area of the utility pipeline.

5. The Contractor shall not commence excavation if the field location marks are absent or if the pipeline representative is not present.

6. The Contractor shall exercise caution while excavating in the area which has been marked:
   a. The Contractor shall thoroughly probe the area before beginning excavation with machines and during the continuance of the excavation.
   b. When the pipeline is found by probing, the pipeline shall be completely exposed by hand throughout the limits of required excavations before excavation by machine continues.

7. The Contractor shall arrange with the owner of the utility pipeline to repair any damage done to the pipeline at no cost to the District.

D. Parallel Excavations Near Utilities under Pressure: The work under this Contract includes excavations which may be parallel to and near existing high pressure utilities. The Contractor shall comply with the following provisions to protect the existing utilities:

1. The Contractor shall contact the owner of the utility pipeline and request that the approximate location be marked in the field.

2. After the location is marked, the Contractor shall hold a safety meeting with the representative of the pipeline company and the Contractor's field personnel. The approximate location of the pipeline, the procedures to be used in exposing the pipeline, and the schedule for exposing the pipeline shall be reviewed.

3. The Contractor shall arrange for a pipeline company representative to be present when the excavation is started and while exposing the pipeline.

4. The Contractor shall not commence excavation if the field location marks are absent or if the pipeline representative is not present.

5. The Contractor shall exercise caution while excavating in the area which has been marked.

6. The existing pipeline shall be exposed every 50 to 100 feet by the Contractor at locations where the catch point of a sloped trench would be within five feet of the centerline of the existing pipeline.
7. The Contractor shall perform the exploratory excavations at least fourteen working days in advance of the time that the new sewer will be installed in the area of the utility pipeline.

8. If the location of the existing pipeline is found by exploratory excavations to be consistently outside of the future excavation and the soil is stable, the Contractor may proceed with machine excavations:
   a. The Contractor shall be cognizant in that the existing utility pipeline is near the excavation.
   b. The Contractor shall take due caution while performing excavation operations.
   c. If the utility pipeline is exposed during excavation operations, the Contractor shall contact the Engineer.
   d. The Contractor shall stop excavating and contact the Engineer if the soil becomes unstable.

9. If through exploratory excavations, the Contractor finds the location of the existing pipeline is within the future excavation, the Contractor shall contact the Engineer.

10. The Contractor shall arrange with the owner of the utility pipeline to repair any damage done to the pipeline at no cost to the District.

00 73 10 INSPECTION BY OTHERS

Work may be inspected at any time by appropriate federal, state, and local agencies having jurisdiction.

00 73 11 SALVAGED MATERIAL

Existing materials and equipment to be salvaged shall remain the property of the District. Salvaged materials to be reinstalled in the work (if any) shall be refurbished as specified before reinstallation. Other material to be salvaged shall be carefully removed and handled in such a manner as to avoid damage and shall be delivered to the District at a location within the Water Pollution Control Plant as designated by the Engineer.

00 73 12 DISPOSAL OF MATERIAL

Existing materials and equipment to be demolished, removed, and disposed of, as noted in the Drawings, and all trash such as broken concrete, wood blocking, shipping containers, etc., resulting from the Contract work shall be disposed of at the Contractor's expense.
00 73 13 POTENTIAL HAZARDS AND SAFETY

The conveyance and treatment of raw sewage and its by-products can introduce pathogenic organisms which may cause diseases such as salmonellosis, typhoid fever, paratyphoid fever, bacillary dysentery, cholera, infectious hepatitis, polio, amoebic dysentery, and others.

The Contractor is advised that, in certain locations and under certain conditions, the work may take longer and may require special equipment in order to properly conform to safety regulations. In such cases, no additional compensation will be allowed the Contractor therefor.

The Contractor's personnel shall wear hard hats at all times while on the project area.

Work under this Contract may be in areas where approved protective respiratory equipment is required pursuant to Cal/OSHA General Industrial Safety Order, Section 5144.

The Contractor shall prepare and submit its safety program for the Project work to the Engineer for the Engineer's review as required in Section 00 72 18, Safety.

The Contractor's authorized representative shall have a working knowledge of, and be responsible for, all state and federal safety regulations applicable to the Project.

00 73 14 EXPLOSIVE

The use of explosives on the work is prohibited except certain approved types of cartridge-actuated fastening tools.

00 73 15 DUST CONTROL

The Contractor, for the duration of the Contract, shall maintain all excavation, embankments, haul roads, permanent access roads, project site, waste disposal areas, borrow areas, and all other work areas within Contract work limits free from dust, as determined by the Engineer. Industry-accepted methods of dust control suitable for the area involved, such as sprinkling, chemical treatment, light bituminous treatment, or similar methods, will be permitted. No separate payment will be made to the Contractor for dust control.

00 73 16 FIRE PREVENTION

The Contractor shall not permit unauthorized fires either within or adjacent to the limits of the Project, and it shall be liable for all damage from fire due directly or indirectly to its own activities or to those of its employees or of its subcontractors or their employees. The Contractor, at its expense, shall conform to all federal, state, and local laws and regulations pertaining to burning, fire prevention and control within or adjacent to the Project. A copy of each required permit shall be furnished to the District.
The Contractor's forces or equipment may be required to fight fires in the vicinity, regardless of cause. The District will not assume any responsibility for payment for fighting fire when such is ordered by government authority.

Burning or welding operations near any combustible material will require the presence of a firewatch observer equipped with a portable fire extinguisher.

00 73 17  **AIR POLLUTION**

The Contractor shall so perform its work as not to discharge into the atmosphere from any source whatever smoke, dust, or other air contaminants in violation of the laws, rules, and regulations of the governmental entities having jurisdiction.

00 73 18  **TITLE TO MATERIALS FOUND**

Unless otherwise provided in the Contract, the title and interest in the right to the use of all water, and the title to all soil, stone, gravel, sand, minerals, timber, and all other materials developed or obtained in the excavation or other operations by the Contractor or any of its subcontractors, or any of their representatives or employees, and the right to use or dispose of the same are hereby expressly reserved by the District and neither the Contractor nor any of its subcontractors, nor any of their representatives or employees, shall have any right, title, or interest in or to any part thereof; neither shall they, nor any of them, assert or make any claim thereto. The Contractor shall as determined by the District, be permitted to use in its work, without charge, any such materials which meet the requirements of the Contract and as to which the District will have the right to use and consume without payment to a third party.

In the event that any Indian relics or items with archeological or historical value are discovered by the Contractor or any of its subcontractors or any of their representatives or employees, the Contractor shall immediately notify the Engineer. The Contractor shall have no property rights to such relics and items.

00 73 19  **FINAL ACCEPTANCE**

Whenever, as determined by the Engineer in accordance with Section 00 72  41, Final Payment and Release, the Contractor has fulfilled its obligations under the contract, the Engineer will recommend acceptance of the work. After acceptance of the work by the District, the District will file the Notice of Completion in accordance with Section 4005 of the Government Code. Such notice will constitute "Final Acceptance."

00 73 20  **ATTORNEY'S FEES**

In case any litigation is commenced with respect to this Contract, the prevailing party shall be entitled to recover from the other party, in addition to amounts found due and owing, costs of suit and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the prevailing party in such litigation, all to be taxed as costs and included in any judgment rendered.
00 73 21  AMOUNT OF LIQUIDATED DAMAGES

The amount of liquidated damages for inexcusable delays to be assessed under Section 00 72 42, Liquidated Damages, shall be $500 for each calendar day of delay beyond each of the required completion dates listed in the Contract.

00 73 22  PERCENTAGE OF PROGRESS PAYMENTS TO BE RETAINED

The percentage of estimated value to be retained under Section 00 72 40, Progress Payments, shall be five percent.

The Contractor shall be allowed to substitute securities for any monies withheld to ensure performance under this Contract pursuant to Section 22300 of the California Public Contract Code. The Contractor shall execute the Escrow Agreement for Security Deposits in Lieu of Retentions in the form contained in Section 00 45 15 of the contract Documents, if applicable.

00 73 23  AMOUNT OF MINIMUM PROGRESS PAYMENT

No progress payment will be made when, in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than $5,000 as set forth in Section 00 72 40, Progress Payments.

00 73 24  RETENTION FOR REPAIRS

The District will retain an amount from any payment due the Contractor equal to twice the value of repairs, corrections, or replacements as provided herein to assure that the Contractor completes such repairs, corrections, or replacements. The Contractor shall receive payments of such retained amounts as the repair, correction, or replacement work is completed.

00 73 25  CONNECTIONS TO EXISTING FACILITIES

The Contractor is required to connect to certain existing facilities as indicated on the Drawings; however, the Contractor must give five calendar days advance notice and receive prior approval of the Engineer for all such connections, whether such connections are "live" or "inactive."

The Contractor shall at all times conduct its operation so as to interfere as little as possible with existing works.

All work of connecting with, cutting into, and reconstructing existing pipes or structures shall be planned to interfere with the operation of the existing facilities for the shortest possible time when the demands on the facilities best permit such interference, even though it may be necessary to work outside of normal working hours to meet these requirements. Before starting work which will interfere with the operation of existing facilities, the Contractor shall do all possible preparatory work and shall see that all tools, materials, and equipment are made ready and at hand. No connections shall be made without the District's prior approval as specified herein.
The Contractor shall make such minor modifications in the work relating to existing structures as may be necessary, without additional compensation.

The Contractor shall have no claim for additional compensation by reason of delay or inconvenience in adapting its operations to meet the above requirements.

All materials and equipment associated with or to be incorporated into the work as herein specified shall be preassembled, prefabricated, precut, or otherwise prepared to the maximum practical degree. It shall be the Contractor's responsibility to fulfill all requirements of the work within the allotted shutdown periods.

00 73 26 CERTIFICATION OF LABOR CHARGES

A. At the time and place established for the preconstruction conference in accordance with 00 73 02 Preconstruction Conference, the Contractor shall file with the Engineer the following written certifications prescribed hereunder either by state law or for District use to verify charges for any Extra and/or Force Account work which may be ordered and documented in a Daily Work Report.

1. Certificate showing the amount(s) of Workers' Compensation Insurance applicable to forces under its supervision and, in accordance with Section 1861 of the Labor Code of the State of California, endorsed thereon as follows:

   a. "I am aware of the provisions of Section 3700 of the Labor Code of the State of California which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with such provisions before commencing the performance of the work of this Contract."

   b. Contract title, date, and signature of Contractor.

B. The Contractor and subcontractor's attention is directed to the provisions of Section 1776 of the Labor Code of the State of California and to the requirements thereon pertaining to the keeping, availability, and filing of accurate payroll records of all journeymen, apprentices, and other workers performing work under this Contract.

C. Prior to each monthly progress payment, the Contractor shall deliver to the Engineer copies of certified payrolls of its and all subcontractors' forces performing work at the jobsite (or Plant sites established primarily for the work), for labor compliance purposes, and Extra/Force Account considerations. Such records shall be kept current on an effective day or period basis and in form acceptable to the Engineer. At a minimum, the form shall include the following information:

1. Employee identification by name.
2. Employee's address and social security number.
3. Employee's craft and classification (in accordance with Director of Industrial Relations' wage determinations).

4. Employee's actual per diem wages (in compliance with Section 00 11 16 Invitation to Bid, and Section 00 72 20, Laws and Regulations).

5. Employee's subsistence and travel allowance (as applicable).

6. Contractor's or subcontractor's firm or company name, date or period for which applicable wage rates and allowances are effective, and the employer's signature.

00 73 27   SOLE SOURCE ITEMS

Some products or manufacturers may be specified as the only items allowed. Such items may have been chosen for reasons of durability or appearance. As provided in Section 00 72 15, Equipment, Materials, and/or Products, Substitution of Specific Items and Trade Names, Worker's Skills, no substitutions for these items will be reviewed by the Engineer.

00 73 28   PARTIAL PAYMENT FOR MATERIALS AND EQUIPMENT DELIVERED

Generally, the Contractor will not be compensated for materials and equipment delivered to the site until after they are incorporated in the work. If the Engineer determines that the progress of the work will benefit by the delivery to the site of certain materials and equipment in advance of their actual requirement, and if such materials and equipment are delivered in accordance with the following conditions, a portion of the cost of the materials and equipment may be included in progress payments, as specified under Section 00 72 40, Progress Payments. The conditions for such partial payments are as follows:

At least four weeks prior to the delivery of such materials and equipment, the Contractor shall submit a list of such materials and equipment for review on the acceptability for partial payments. Shop drawings and technical data for such materials and equipment must be reviewed and accepted prior to delivery. Upon delivery, the Contractor shall submit written evidence, satisfactory to the Engineer, that the Contractor is the unconditional owner of such materials, free from all claims, liens, and security interest, and a bill of sale or other equivalent document with warranty of title to such materials and equipment.

Title to the delivered material shall be vested in the District at the time of delivery to the site. The Contractor shall, however, not withstanding such transfer of title to the District be absolutely responsible to the District for such materials and equipment until the same shall have been completely installed, tested, and accepted. Such equipment and materials shall be properly stored or stockpiled to the satisfaction of the Engineer. The Contractor shall at its own cost replace any materials and equipment damaged or lost. Stored or stockpiled materials shall be available for inspection by the Engineer or other authorized agent of the District.

After delivery of material, if any defects are discovered, whether caused by defective manufacture or damage occurring during delivery or storage (including storage at the District or the construction site), the materials shall be removed and replaced with suitable material at the
Contractor’s expense. The Contractor’s insurance shall include coverage for such material against theft, fire, vandalism, and malicious mischief.

The maximum portion of cost to be included in progress payments for materials and/or equipment qualifying under this section will be seventy five percent of the total cost of the delivered materials and/or equipment eligible for such partial payment. The payment will in no case exceed the bid price or assigned value for the item of work for which the material and/or equipment are furnished and the accumulated total payment for all material delivered but not yet incorporated into the work will in no case exceed ten percent of the total value of the Contract.

For sewer pipe the payment for material delivered but not yet installed in the work shall be limited to a maximum of 1,500 linear feet or the amount of footage which the Contractor has proved capable of laying in five working days, whichever is less. In estimating progress payments, the Engineer may use the unit prices bid by the Contractor in his proposal. In the event that there are no unit bid prices, or the bid unit process do not, in the opinion of the Engineer, represent the actual value of the equipment and materials furnished, the Engineer may estimate progressive payments based on prices reflecting such actual value.

Nothing in the above conditions shall relieve the Contractor of its responsibility for incorporating the materials in the work in conformity with the Contract Documents.

00 73 29 MAINTAINING EXISTING UTILITIES

The Contractor shall provide standby power if the power supply is disconnected during business hours. Flow in the District's existing sewers shall not be restricted or dammed for any period of time without the approval of the District. Any rerouting and/or bypass pumping of existing flows shall be made at the Contractor's expense. The Contractor shall submit to the Engineer for approval plans for rerouting, bypassing and/or handling of existing sewage flows during construction at least fourteen days prior to such work.

00 73 30 PERMITS, EASEMENTS, AND AGREEMENTS

Attention is directed to Section 00 72 21, Permits. The Contractor will obtain Encroachment Permits if necessary. The District will reimburse the Contractor for the necessary permit and inspection fees. The contractor must pay re-inspection of the same item and any citation/fine/fees resulting from contractor’s negligence or lack of completion.

00 73 31 PARKING AND EMPLOYEE IDENTIFICATION

Contractor vehicles shall not park in such a way as to impede traffic. Contractor vehicles shall not park in employee-designated parking spots. Contractor vehicles are permitted to park in public parking spots at District properties and in designated locations as agreed upon.
00 73 32 WORKING DURING DISPUTES AND LITIGATION

In the event of a dispute between the parties as to performance of the work, the interpretation of this Contract, or payment or nonpayment of work performed, parties shall attempt to resolve the dispute. If the dispute is not resolved, Contractor agrees to continue the work diligently to completion and will neither rescind this Contract nor stop the progress of the work, but will submit such controversy to determination in accordance with the terms of the Contract Documents. In the event any litigation is commenced with respect to this Contract, such litigation shall not serve to suspend Contractor's obligation to continue performance of the work.

00 73 33 SUBMITTALS

A. Where the Contractor is required by these Contract Specifications to make submittals, they shall be made to the Engineer with a letter of transmittal and in sufficient number of copies to allow a distribution of at least one copy to all parties needing a copy to carry out the provisions of the Specifications, allowing for two copies to be retained by the Engineer.

B. When submittals are favorably reviewed, the Engineer will retain two copies and will return all other copies to the Contractor. When submittals are not favorably reviewed, the Engineer will retain only two copies and will return all others to the Contractor.

C. In addition to those specifically required, the Contractor shall submit drawings and information describing materials and equipment in sufficient detail to determine whether the materials and equipment conform to the specifications.

D. Submittals shall comply with Section 00 72 16, Contractor Furnished Drawings and Data.

E. The Contractor shall verify that the material and equipment described in each submittal conform to the requirements of the specifications and drawings.

F. The Contractor may authorize a material or equipment supplier to deal directly with the Engineer with regard to a submittal only after it has been officially submitted by the Contractor. In all cases, however, the Contractor retains full responsibility for the accuracy and completeness of information contained in the submittals and its proper processing.

G. Key submittal schedules shall be shown on the Construction Project Schedule. Contractor shall provide adequate time for processing and reviewing, and should anticipate the potential for re-submittals where such is likely. The date a submittal is required to maintain project schedule shall be shown on the transmittal. Unreasonable dates and dates inconsistent with the schedule will not be accepted or honored. No allowances will be made for delays occasioned by the Contractor's failure to follow submittal requirements. In no case will there be compensation for any delay due to submittals.

H. Transmittal Form: The submittals shall be accompanied by a transmittal form. At a minimum, the transmittal form shall include the following information:
a. Name and address of Contractor.
b. Date and submittal/transmittal number.
c. Project name, project number and name of Engineer to review.
d. Item number, item description, and name of supplier.
e. Identification of any deviations from the specified requirements.
f. Signature of Contractor.
g. A signature line for the Engineer to indicate approval.

00 73 34  EXTENSIONS OF TIME FOR DELAY DUE TO INCLEMENT WEATHER

Inclement weather is any weather condition or conditions resulting immediately therefrom, causing the Contractor to suspend construction operations or preventing the Contractor from proceeding with at least 75 percent of the normal labor and equipment force engaged on the work, for all project sites combined.

Should the Contractor prepare to begin work at the regular starting time at the beginning of any regular work shift on any day on which inclement weather, or the conditions resulting from the weather, or the condition of the work prevents work from beginning at the usual starting time, and the crew is dismissed as a result thereof, the Contract will not be charged for a working day whether or not conditions change thereafter during the day, and the major portion of the day could be considered to be suitable for such construction operations.

00 73 35  EROSION CONTROL

Non-paved areas disturbed during construction shall be revegetated by hydroseeding upon completion of construction to prevent soil erosion. Vegetation shall be established prior to final completion. Attention is directed to Section 00 72 59 Storm Water Pollution Prevention.

00 73 36  STANDARD DETAILS

Standard Details shall mean the West County Wastewater District Standard Details, which are available at no cost from the District.

00 73 37  DRAWINGS AND PROJECT MANUAL

A. The Contractor may obtain from the District, free of charge, four copies of the Drawings and Project Contact Documents. Additional sets may be procured at cost of $75 each.

B. The Contact Documents shall include the bidding conditions and requirements, Contract forms, conditions, Specifications, Supplements, Addenda, and clarifications thereto.

C. The Contractor shall keep on the work site a copy of the Contract Documents and Drawings and shall at all times give the Engineer access thereto. Any drawings included in the detailed Specifications shall be regarded as part thereto and of the Contract. Anything
mentioned in these Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in these Specifications, shall be of like effect as though shown or mentioned in both. The Engineer will furnish from time to time such detail drawings, plans, profiles, and information as he may consider necessary for the Contractor's guidance, unless otherwise provided in the Proposal or detail Specifications. It shall be the duty of the Contractor to see that the provisions of these Specifications are complied with in detail irrespective of the inspection given the work during its progress by the authorized official or his representatives. Any failure on the part of the Contractor to observe the Specifications will be sufficient cause for the rejection of the work at any time before its acceptance. Only "favorably reviewed" Shop Drawings shall be used for construction.

D. Wherever Military Specifications (MIL), ANSI, ASTM, AASHTO, AISC, AWS, AWWA, Federal Specifications (FS), Manufacturer's Standardization Society (MSS), or other specifications are referred to in these Specifications without designation of year, the reference is to the current or revised specification effective at the time of receiving proposals.

E. In all cases where reference is made to the requirements of such organizations as American Society for Testing and Materials, copies of the requirements referred to are on file with the Design Engineer and may be seen at his office.

F. Wherever the following terms are used, the intent and meanings shall be as follows:

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<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
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<tr>
<td>ACI</td>
<td>American Concrete Institute</td>
</tr>
<tr>
<td>ABMA</td>
<td>American Boiler Manufacturers Association</td>
</tr>
<tr>
<td>ADC</td>
<td>Air Diffusion Council</td>
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<tr>
<td>AGA</td>
<td>American Gas Association</td>
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<tr>
<td>AGMA</td>
<td>American Gear Manufacturers Association</td>
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<tr>
<td>AISC</td>
<td>American Institute of Steel Construction</td>
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<td>AISI</td>
<td>American Iron and Steel Institute</td>
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<tr>
<td>AITC</td>
<td>American Institute of Timber Construction</td>
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<tr>
<td>AMCA</td>
<td>Air Moving and Conditioning Association</td>
</tr>
<tr>
<td>ANSI</td>
<td>American National Standard Institute (formerly United States of American Standards Institute)</td>
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<tr>
<td>APA</td>
<td>American Plywood Association</td>
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<tr>
<td>API</td>
<td>American Petroleum Institute</td>
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<tr>
<td>AREA</td>
<td>American Railway Engineering Association</td>
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<td>ASCE</td>
<td>American Society of Civil Engineers</td>
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<tr>
<td>ASME</td>
<td>American Society of Mechanical Engineers</td>
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<tr>
<td>ASTM</td>
<td>American Society of Testing and Materials</td>
</tr>
<tr>
<td>AWPA</td>
<td>American Wood Preservers Association</td>
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During the construction of this Project, use of the newly constructed facilities prior to overall acceptance may be necessary to ensure that the entire facility can be constructed. Initial lubrication of all equipment, and all lubrication and maintenance and such staff as required for test operation shall be provided by the Contractor until the District assumes operation. After assuming operation, the District will supply operating personnel and will pay for electricity, chemicals and lubricants. The Contractor shall train the District’s operating personnel in the proper operation and control of the new facilities as specified herein. The Contractor shall also furnish all such
mechanical and electrical workers as required to make adjustments and maintain the operating equipment until acceptance. Maintenance of operating equipment shall include adjustments, replacements and modifications as required. The Contractor shall initially lubricate all equipment and furnish the District with a lubricant schedule indicating the type of lubricant needed, amounts and frequency of application. Use of facilities will in no way constitute acceptance of the facilities being used. The Contractor shall notify the District at least thirty calendar days before any District-furnished lubricants, fuel, chemicals, gas or power will be required for the initial operating periods.

The cost of all labor, material and equipment required to be furnished by the Contractor as part of the initial start-up operation shall be included in the lump-sum bid amounts.

00 73 39 RESPONSIBILITY FOR SPARE PARTS AND SPECIAL TOOLS

The Contractor and Vendor shall provide all spare parts required for the first year’s operation. The Contractor and Vendor shall provide all special tools required to assemble, disassemble and maintain all equipment provided under this contract.

00 73 40 MANUALS, OPERATING INSTRUCTIONS AND AFFIDAVITS

A. Manuals and Instructions. The Contractor shall deliver to the Engineer six (6) sets of acceptable manufacturer’s operation and maintenance instructions covering each item of mechanical, electrical and instrumentation equipment or equipment assembly provided under this Contract. All information shall be submitted, reviewed and approved as received and prior to installation of the equipment. Submittal and review of the above information shall be handled in a manner similar to shop drawings as specified in Section 00 72 15, Contractor-Furnished Drawings and Data.

B. Operation and maintenance instructions shall include, as a minimum, the following data for each item of mechanical, electrical and instrumentation equipment:
1. An itemized list of all data provided.
2. Name and location of the manufacturer, the manufacturer’s local representative, the nearest suppliers and spare parts warehouse.
3. Recommended installation, adjustment, start up, calibration and troubleshooting procedures.
4. Recommended lubrication, lubrication intervals and an estimate of yearly quantity needed.
5. Recommended step-by-step procedures for all modes of operation.
6. Complete internal and connection wiring diagrams.
7. Recommended preventative maintenance procedures and schedule.
8. Complete parts lists, by generic title and identification number, with exploded views of each assembly.
9. Recommended spare parts and special tools.
10. Disassembly, overhaul and reassembly instructions.
C. Following completion of an item, instructions and procedures shall be modified by the Contractor to reflect field changes.

D. Before final acceptance of the Project, the Contractor shall bind all six (6) sets of operation and maintenance instructions in appropriately labeled, expanding post-type binders. Each completed binder shall only contain material which can be held with the posts in the non-expanding position. A complete table of contents listing all items and their location in the set shall be included in each binder. For ready reference, the Contractor shall compile a complete list of manufacturer’s local representatives for each item provided.

E. **Affidavits.** The Contractor shall provide field service by equipment manufacturers as a part of this Project, as required in the Technical Specifications. Equipment shall not be considered ready for operation until after the authorized factory-trained and qualified manufacturer’s representative for the specific equipment has checked and adjusted the equipment and certified by written affidavit that the equipment has been properly installed, tested, adjusted, lubricated and calibrated and is ready for full time operation. Acceptable affidavits shall be submitted prior to completion of work. Affidavits shall contain the following specific wording:

> “the (Name of the Equipment) has been properly installed, tested, adjusted, lubricated and is ready for full time operation. The installation has been inspected and has been found to be in conformance with our (the manufacturer’s) standards and requirements.”

00 73 41 RECORD PLANS

The Contractor shall maintain, at the jobsite, one record set of contract drawings in good order and clearly marked to show any deviations which have been made from the Contract Drawings, including concealed construction and utility features which are revealed during the course of construction. Marked prints shall be updated at least once each week and shall be available to the Engineer for review as to currency prior to developing partial payment estimates. Upon completion of the work, the marked set of prints shall be delivered to the Engineer.

Requests for partial payments will not be approved if the record set of drawings is not in good order or is not kept current. Request for final payment will not be approved until the complete and correct "as-built" record drawings are delivered to the Engineer.

00 73 42 JOINT SURVEY TO ESTABLISH PRECONSTRUCTION CONDITIONS

A. The District intends to engage to perform preconstruction examinations and make an overall evaluation of the condition of structures, roads, and road crossings in the vicinity
of the work, as applicable, which might be damaged during construction. Participation by the Contractor in the examination is required.

B. The examination of existing buildings, structures, roads, and other improvements located in the zone of influence of the construction operations, will be performed jointly by the District, and the Contractor, and the property owners under supervision of the District. The scope of each examination shall include road damage, cracks in structures, settlement, leakage, and other visible signs of damage.

C. Records of all observations will be prepared by the District, including survey measurements, sketches, notes, photographs, and video tapes when deemed necessary.

D. The above records, photographs and video tapes are intended for use as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the Contractor and the District. They will be a means of determining whether and to what extent damage resulting from the Contractor's operations occurred during the contract work.

E. The Contractor shall take adequate precautions to prevent damage to existing buildings, structures, detour roads, road crossings, and other improvements during the prosecution of the work.

F. The District-funded joint survey does not relieve the responsibility of the Contractor to conduct any additional preconstruction surveys or any periodic or continuous monitoring of structures or improvements during construction activities which may be required because of the Contractor's construction techniques or work sequence. The Contractor shall conduct the additional preconstruction survey or construction monitoring as identified by the Contractor without additional compensation from the District.

00 73 43 CONSTRUCTION CONSTRAINTS

The project area is located at 2377 Garden Tract Road in Contra Costa County. It is the Contractor's responsibility to protect existing improvements, provide for safe and smooth traffic flow, minimize disruptions and noise, and ensure that the work is done with as little inconvenience to the District and to the public as possible. The Contractor shall, at its own expense, restore any and all existing improvements equal to its preconstruction condition or better.

00 73 44 TRAFFIC CONTROL

Contractor shall coordinate with the agency having jurisdiction over the right of way. Contractor’s construction vehicles shall not block or impede public access.

If the Contractor needs any traffic rerouting or restriction to facilitate its work, it shall acquire a written permit. No traffic restriction or rerouting shall be initiated prior to the Engineer’s receipt
of such permit and all conditions prescribed therefore. In accordance with Section 00 73 30 Permits, Easements and Agreements, the District will Reimburse the Contractor for the necessary permit and fees. The Contractor must pay re-inspection of the same, and any fines as part of Contractor’s negligence.

If required, the Contractor shall submit a detailed traffic plan for rerouting and/or restricting traffic for approval before any work can be started under the Contract. The traffic plan shall show locations of flagmen, signs and barriers relative to the working area. As a minimum, the traffic plan and lane closures shall be in accordance with the State Department of Transportation (Caltrans) current standards. The Contractor shall provide three copies of the County approved traffic plans to the District prior to the start of work.

00 73 45 WORK HOURS

Early morning, Night time and weekend work will require approval from the District.

00 73 46 FEDERAL, STATE AND LOCAL REQUIREMENTS

The Contractor shall keep fully informed of laws, ordinances, and requirements of the Federal, State of California, City of Richmond and the West County Wastewater District which, in any manner, affect the performance of the work or those persons engaged therein, and of all orders and decrees of governmental bodies or officials having any authority or jurisdiction over the same. The Contractor shall observe and comply with and shall cause all its agents, employees and subcontractors to observe and comply with all such ordinances, regulations, laws, orders, and decrees.

All construction and materials, and the like, shall be furnished, installed, or constructed as the case may be, by the Contractor in full accordance with the requirements of local building codes, the National Board of Fire Underwriters, the Pacific Fire Rating Bureau, the State Fire Marshall, the Safety Orders issued by the Division of Industrial Safety of the State of California, and all other prevailing codes and regulations having jurisdiction over construction of the structure.

The Contractor's authorized representative shall have a working knowledge of, and be responsible for, all state and federal safety regulations applicable to the Project.

00 73 47 APPRENTICES

The Contractor shall comply with the provisions of Section 1777.5 and 1777.6 of the California Labor Code in regard to employment of apprentices.
00 73 48 LABOR, WAGES, AND WAGE DETERMINATIONS

Pursuant to section 1770 et seq. of the Labor Code of the State of California, the Director of Industrial Relations has ascertained the general prevailing rate of per diem wages and the rates for overtime and holiday work in the locality in which the work is to be performed for each craft, classification or type of worker needed to execute the contract which will be awarded to the successful bidder. Copies are on file with and available upon request from the Engineer and may also be obtained the website of the Division of Labor Statistics and Research, California Department of Industrial Relations located at www.dir.ca.gov. The successful bidder shall post a copy thereof at each job site. The requirement to pay these wage rates is further detailed in Part IV, Section E (2) of General Conditions. It shall be mandatory upon the bidder to whom the Contract is awarded, and upon any subcontractor under him to comply with all Labor Code provisions, which include, but are not limited to the payment of not less than the said specified rates to all workers employed by them in the execution of the Contract, employment of apprentices, hours of labor and debarment of contractors and subcontractors. The Federal minimum wage rates (Davis-Bacon) for this project as predetermined by the United States Secretary of Labor are set forth at the federal government website as called out below. The Federal minimum wage rates may also be examined at the offices described above where project plans, special provisions, and proposal forms may be seen. Addenda to modify the Federal minimum wage rates, if necessary, will be issued to holders of these Contract Documents. Future effective general prevailing wage rates, which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates. Attention is directed to the Federal minimum wage rate requirements included with these specifications in the supplemental conditions and also available at the federal web site Wage Determination Online (http://www.wdol.gov) go to the California, Contra Costa County file references. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The Department will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate, which most closely approximates the duties of the employees in question.

00 73 49 DISADVANTAGED BUSINESS REQUIREMENTS

Not Used

00 73 50 AMERICAN IRON AND STEEL (AIS) REQUIREMENTS

Not Used
00 73 51  PROJECT SIGNAGE REQUIREMENTS

Not Used

END OF GROUP 00 73 00
DIVISION 01:
GENERAL REQUIREMENTS

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<td>01 89 13</td>
<td>SITE PREPARATION</td>
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SECTION 01 11 00
WORK COVERED BY CONTRACT DOCUMENTS

A. Furnish all labor, materials, equipment, services, temporary controls, construction facilities, temporary facilities and all general conditions, general requirements and incidentals required to complete the Work in its entirely as described in the Contract Documents.

B. The Work covered by the contract comprises the construction of the Entry Gate at the WQRRP, including all associated civil, mechanical, structural, electrical, and controls work as indicated on the Drawings and as specified. The Work includes, but is not limited to:

1. Provide all materials, supplies, equipment and personnel to complete the project.
2. Provide a new motorized gate, 2 personnel gates, and 150 feet of chain link fence.
3. Provide a camera feed to the operations room and remote opening capability.
4. Provide an access card reader on the gate for manual operation.
5. Provide power for the gate and card system.
6. Perform daily work site cleanup, including debris removal and storing away materials, supplies and equipment in an organized manner.
7. All other work as shown and specified in the Contract Documents.

SECTION 01 51 10
TEMPORARY FACILITIES

The Contractor shall provide all temporary facilities required for the completion of the work.

SECTION 01 51 11
WATER SUPPLY AND ELECTRIC POWER

The Contractor shall arrange for its own services for water and electricity for the completion of the work.

SECTION 01 51 12
COMPRESSED AIR

The Contractor shall provide its own source of compressed air as may be required.

SECTION 01 51 13
CONTRACTOR’S FIELD OFFICE

The Contractor shall submit to the District for approval, a site plan showing the proposed location for any contractor field office location and acquire any necessary permits. The Contractor shall make its own arrangements for phone service.
SECTION 01 51 14
PORTABLE SANITARY FACILITIES

Employees of the Contractor shall be allowed to use District Sanitary facilities at the WQRR Plant.

SECTION 01 51 15
STAGING AREA

A. The Contractor shall locate the staging area as shown on the Overall Site Plan of the Contract Drawings. The staging area shall be used for storage of construction spoils, materials, equipment and portable sanitary facilities. This area shall be maintained, secured and kept clean at all times.

B. A security fence shall be constructed around the staging area. At completion of the work, remove fence from the site and restore the area to equal or better condition.

C. Contractor shall not dump waste oil, rubbish, or other similar materials on the ground. Equipment leaking oil or other objectionable materials must be repaired or removed.

SECTION 01 71 13
MOBILIZATION

A. Contractor shall Provide all materials and equipment required to accomplish the work as specified.

B. Contractor shall Deliver all equipment and materials to project site.

C. Contractor shall Provide any additional staging area, as required, and field office as approved by the Engineer.

SECTION 01 89 13
SITE PREPARATION

1.01 DESCRIPTION

A. Perform all Site Preparation activities, as shown or specified, including but not limited to the following:
   1. Clearing and grubbing.
   2. Stripping topsoil.
   3. Disposing of waste material.
   4. Stockpiling reusable material.
1.02 EXISTING CONDITIONS

A. The Drawings indicate the physical dimensions, existing levels and general topography of the site, with subsurface obstructions, existing underground utilities and similar items being indicated where known.

B. Locations of existing underground utilities and subsurface obstructions are shown using the best information available but with no representation that the indicated locations are accurate or that lines other than shown may not be present. Refer to the heading "PROTECTION" for details of requirements of identification and locations of these utilities.

C. All information relative to existing conditions is offered to assist the Contractor in evaluation of the Work, but with no specific representation, either expressed or implied, as to completeness or accuracy. The Contractor shall be responsible for any deductions or conclusions made on the basis of this information and that of any additional site inspections, if made.

1.03 PROTECTION

A. Maintain in service and protect from damage all existing utilities as specified in Section 00 73 09, Existing Utilities and Sewerage Facilities and as noted on the Drawings.

B. Before commencing any site preparation or demolition activity, contact all municipal service departments, service companies and other utilities affected, and arrange to have the lines that are within the construction area accurately located and identified with appropriate surface marks as specified in Section 00 73 09.

C. Conduct site preparation operations to insure safety of all persons and to prevent damage to existing structures and utilities, trees, and other vegetation to be left in place, construction in progress and other property.

D. Conduct demolition operations and remove debris off-site to suitable disposal areas in a manner to ensure maximum safety and minimum interference with operations of others, private and public. This includes, but is not limited to, the removal of existing curbs and gutters and asphalt concrete paving.

E. Do not close or obstruct streets, walks, and other facilities occupied and used by the District or the public, without prior written permission by the City as appropriate.

F. Repair all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials. At the Contractor's expense, make satisfactory and acceptable arrangements with the owner of
or the agency having jurisdiction over the damaged property concerning its repair or replacement or payment of costs incurred in connection with the damage.

1.04 SEQUENCING AND SCHEDULING

A. Do not place fill material over subgrade that is covered with ice or water. Stop all operations when inclement weather could saturate the soil.

B. Perform all demolition operations and remove all debris in areas scheduled for earthwork operations under the Contract prior to the start of such earthwork operations.

C. Remove and dispose of off-site the following items: existing sewer pipe; fittings; excess soil; pavement; and concrete curb. Do not stockpile waste materials on-site.
DIVISION 26:
ELECTRICAL
SECTION 26 05 19
Low Voltage Wire and Cable

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. Drawings and specific provisions of this Contract, including the General and Supplementary
      Conditions and Requirements, apply to the work specified in this section.

1.2 RELATED WORK NOT IN THIS SECTION
   A. General and specific provisions apply to the work specified in this Section.

1.3 DESCRIPTION OF WORK
   A. All labor, materials, appliances, tools, equipment, facilities, transportation, and services
      necessary for, or incidental to, performing all operations of the work of this Section,
      complete, as shown on the Drawings or specified herein. Work includes, but is not limited to,
      the following:
      1. Furnish and install all data/power cabling as required on the Drawings.
      2. Perform end-to-end tests of cable pairs, and verify assignments and terminations.
      3. The entire system shall be supported by engineering documentation in accordance with the
         provisions of these Specifications, specifically including:
         a. Wiring diagrams showing all devices, terminations, and interconnections.
         b. Connection diagrams showing interfaces between the devices, panels, and system
            head-ends.
         c. Cable assignments and terminations, showing all pair assignments and termination
            locations.

1.4 REGULATORY REQUIREMENTS
   A. Comply with California Electric Code and local codes and ordinances that may prevail.
   B. Materials shall meet with approval of the Division of Industrial Safety, State of California
      and all governing bodies having jurisdiction.
   C. Where required, materials shall be listed by Underwriter's Laboratories (U.L.) and shall bear
      the U.L. Inspection Label.
   D. Where required, the Contractor shall use plenum rated cabling that conforms to NEC
      specifications.

1.5 PRODUCT HANDLING
   A. Deliver materials to job site in original, unbroken packages, properly tagged with U.L. label,
      size, type, and manufacturer indicated.

PART 2 - PRODUCT
2.1 MATERIALS AND EQUIPMENT

A. Unless otherwise noted, all materials and equipment shall be new, of the type, capacity, and quality specified and free from defects. Material shall bear the label of, and be listed by, the Underwriters’ Laboratories unless of a type for which label or listing service is not provided.

B. Materials shall be of same brand or manufacturer throughout for each class of material or equipment, wherever possible.

C. Wire and Cable of the following description and specification shall be used as indicated on the drawings:

1. Signal Cabling – Type A: Unless otherwise specified, all signal cabling shall be 22 AWG, 2 conductor, twisted, non-shielded, West Penn Model 221, or approved equal.

2. Signal/Power (24VAC/VDC) Cabling – Type B: Unless otherwise specified, all 24 VAC/VDC signal/power cabling shall be 2 conductor, 18 AWG twisted, non-shielded, West Penn Model 224, or approved equal.

3. Fiber Optic Cabling – Type C:
   a. The contractor shall provide multi mode fiber cable used for connections to devices greater than 250 feet away from a Telecommunication Room. The fiber will be 6-strand 62.5/125 micron, zero water peak, with matched cladding. The multi mode fiber cable will be Indoor/Outdoor type with a central strength member. The required fiber type is FreedDM.
   b. The multi mode fiber cabling must comply with the TIA/EIA-568-B.3 standards for required attributes.
   c. Multi mode fiber cabling will have dual wavelength capabilities at 1310 nm and 1550 nm. The fiber must comply with the following maximum attenuation characteristics:
      i. 3.4 dB/km @ 850 nm
      ii. 1.0 dB/km @ 1300 nm
   d. All fibers shall be color coded per TIA 598-C to facilitate individual fiber identification. The coating shall be mechanically strippable.
   e. Cable Terminations: Field termination is required for all fiber strands. All connectors are to be ST field-installable connectors. Connectors must have a locking feature to the coupler to prevent optical disconnect.
   f. Unless otherwise specified, fiber optic cabling shall be Indoor/Outdoor, 6 strand by Corning Model: 006CSF-T4131D20, or approved equal.
   g. Unless otherwise specified, fiber optic patch cords shall be by Corning: Model 505002C51310-1/2M.

4. Transducer – Type D: Unless otherwise specified, all fence detection, power distribution and data communications shall be Southwest Microwave Model MC-115.

5. Signal Cabling – Type E: Unless otherwise specified, all underground signal cabling shall be 1 pair 22AWG non shielded, waterblocked construction, West Penn Model AQC291, or approved equal.

6. Category 6 (Exterior) – Type N: Unless otherwise specified, Category 6 (exterior) cabling shall be waterblocked construction 4 pair 24AWG solid non shielded, West Penn Model M57622, or approved equal.

D. Cable Labeling:
   1. Labels shall be a self-laminating vinyl.
   2. Labels shall have a white background for printing and a clear tab to protect the printed text.
3. Labels shall be a minimum of 1” wide and 1-1/4” long, the printed area shall be no less than ½” high.
4. Generate labels using a handheld Brady I.D. Pro-plus labeler Model ID PRO-PLUS, or equal.
5. Labels shall be by Brady, Model number WML-311-292, or equal.

PART 3 - EXECUTION

3.1 INSTALLATION
A. The Contractor shall be responsible for delivery, storage, protection, and placing of all equipment and materials.
B. The Contractor shall install materials and equipment in accordance with manufacturer's recommendations, instructions, and industry standards.
C. All cables shall be connected to terminal strips/blocks or to equipment via suitable factory-furnished or locally furnished connectors. Cable to rack-mounted equipment shall be long enough to allow complete removal of equipment, even if rear access is totally restricted.
D. All intra-rack wiring shall be neatly strapped, dressed, and supported. Terminal blocks, boards, strips, or connectors shall be supplied for all cables which enter or leave racks, enclosures or equipment modules except for coaxial cables. Cables shall be grouped according to signals carried.
E. Installation of Conductors:
   1. Conductors shall be continuous between outlets or junction boxes and no splices shall be made except in outlet boxes, pull-boxes, panel board gutters, or hand-holes.
   2. For wire training and clamping in cabinets and enclosures, use nylon cable ties, bundling no more than four (8) conductors per bundle to facilitate manual tracing of conductors.
   3. Open cable runs shall be supported independently. Provide 12 gauge ceiling wires with “Caddy” type clips and/or bridle rings as required (10’ maximum spacing.)
   4. End of line resistors shall be installed at field device locations, as required.
   5. All splices, taps, and end of line resistors shall be soldered connections with clear shrink wrap covering each soldered connection.
   6. Wire Pulling Lubricant shall be Minerallac “Pull-In” compound, Y-ER-EAS wire pulling lubricant, Ply-water, or other U.L. approved lubricant. Flax-soap, oil, or grease are not approved and are not permitted on this job.
   7. Conductors shall not come in contact with earth or laid out on concrete slabs while being installed.
   8. Swab conduits before installing cables, and exercise care in pulling to avoid damage or disarrangement of conductors, use approved grips.
   9. Bundle and lace conductors neatly on panels, cabinets, and equipment.
  10. Mounting facilities shall be provided by the Contractor for properly securing hanging fixtures, equipment, and outlets. Provide sleeves, inserts, expansion bolts, and all components required.
  11. Tighten pressure type lugs on panels and equipment, and re-tighten 24 hours later.
  12. Cable splices shall follow standard approved methods. Splices shall be located only in hand-holes, access boxes, or cabinets.
  13. Splices in ground pull boxes or in areas subject to moisture shall be provided with re-enterable splice cases and compounds. Properly prepared wire splicing devices shall be according to manufacturer’s recommendations.
14. The Contractor is responsible to see that all coaxial cables have been properly routed, dressed and secured to preclude stress and/or deformation. This includes insuring that the cable is run into the camera housing in a secured manner.

F. Installation and Testing of Fiber Optic Cable:
1. Perform bi-directional OTDR (Optical Time Domain Reflectometer) tests on each fiber of the fiber optic cabling system. Provide tests results to the District and Consultant for review. Consultant shall perform, in conjunction with the Contractor, random testing of the fiber optic cabling to ensure system accuracy.
2. The system loss measurements shall be provided at both 850nM and 1310nM for Multi mode fibers.
3. Pre-installation cable testing - The Contractor shall test all fiber cable prior to the installation of the cable. The Contractor shall assume all liability for the replacement of the cable should it be found defective at a later date. Test results shall be provided to the District as part of the final documentation.
4. Fiber Optic Span Budget Calculations:
   a. Span budgets are calculated by using the following formula @ 850nM:
      i. Fiber loss (distance in KM x 2.7dB)
      ii. + Splice loss (assumed to be 0.5dB per splice)
      iii. + Connector loss (assumed to be 1.0dB per mated pair)
      iv. + Insertion loss (assumed to be 0.5dB per device)
      v. + Margin (assumed to be 2.0dB)
      vi. = Flux budget in dB

G. Tagging of Conductors (Labeling):
1. Cable labeling shall be keyed to the Drawings, as approved by the Consultant, such that at each cable end, origination and destination can be quickly and clearly ascertained. Spare cables shall be so identified.
2. Label text shall be printed utilizing the “SMALL” text size setting.
3. Label text shall be printed on three lines utilizing the “WIRE” setting.
4. Label shall be affixed to cable jacket no more than 1” from where jacket is stripped back to allow ease of cable identification.
5. Label shall be affixed to cable jacket by adhering the white printed portion of the label directly to the jacketing and then wrapping the clear portion of the label around and over the white printed portion to protect the printed text of the label.
6. Label shall be positioned so that it can be easily read without needing to adjust or reposition label or surrounding cabling.

3.2 FIELD QUALITY CONTROL
A. Tests:
1. Furnish all necessary instruments and equipment required for conducting tests. Test all wiring for shorts, open circuits or grounding.
2. When entire installation has been completed, test out circuits and demonstrate that operation of system is in accordance with the Drawings.

END OF SECTION 26 05 19
PART 1 - GENERAL

1.1. INCLUDED IN THIS SECTION
A. Long range receiver and transmitter
B. Card reader

1.2. RELATED WORK SPECIFIED ELSEWHERE
A. Chain Link Fences and Gates 32 31 13
B. Low Voltage Wire and Cable 26 05 19.

1.3. DEFINITIONS – ACRONYMS
A. AHJ: Authority Having Jurisdiction - person or office charged with enforcing the Life Safety Code.
B. ANSI – American National Standards Institute - organization that oversees the development of standards for products.
C. CE: European Union Conformity.
D. EACS: Electronic Access Control System.
E. FCC - Federal Communications Commission - agency of the United States government responsible for regulating communications by radio, television, wire, satellite, and cable.
G. IEEE: Institute of Electrical and Electronics Engineers.
J. OEM: Original Equipment Manufacturer - (OEM) is a company whose products are used as components in another company's product
K. Receiver: A device for converting signals taken into possession wirelessly and over a distance, such as the electromagnetic waves emitted by a transmitter, into a form which may be used by an electronic access control system.
L. RFID: Radio Frequency Identification. Incorporating electromagnetic or electrostatic coupling in the radio frequency portion of the spectrum allowing electronic access control credentials and readers to communicate without contact.
M. Transmitter: A device that may be carried on a key ring that, when activated, emits electromagnetic waves containing access control related data.
N. UPS: Uninterruptible Power Supply.
O. **Wiegand™ Connection:** A minimum of a five conductor interface, consisting of conductors for Power, Ground, Data 0, Data 1, and LED control, used to transmit binary information typically between a reader and a system controller.

1.4. **PERFORMANCE REQUIREMENTS**

A. **Design Requirements:** Receivers shall obtain user data from a button press on a transmitter. Each button on a transmitter may be associated with a unique channel on a unique receiver. Each transmitter shall send a unique code that may be associated with a unique person. The receiver will send all data to a connected access control panel.

B. **Performance Requirements:**

1. Transmitters shall be read when activated up to 200’ from the receiver.
2. Transmitters shall use a radio frequency of 433-MHz.
3. Receivers shall support industry standard electronic access control interfaces.
4. Transmitters shall support industry communication standards (RFID).
5. Credentials shall be readable when presented in any orientation or at any angle to reader surface.
6. The reader data output time to the system controller: <95 milliseconds typical.
7. Transmission of radio frequency signals into the receiver shall not compromise the system.
8. Presence of small metal objects, such as keys or coins, near the credential shall not alter the code nor prevent the code from being read.
9. Damage or vandalism to the receiver shall not compromise any other part of the access control system.

1.5. **ACTION SUBMITTALS**

A. **Product Data:** Provide details and technical specifications for each product indicated. Include physical dimensions, features, performance, electrical characteristics, ratings, software versions, and operating system details, as appropriate.

B. **Furnish all permits required for the specified work.**

C. **Shop Drawings:** Include system line diagrams, equipment locations, installation details, and system integration plans.

1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
2. **Functional Block Diagram:** Show single-line interconnections between components for signal transmission and control. Show cable types, quantities, and sizes.
3. **Plans and Elevations:** Dimensioned plans and elevations of equipment racks, enclosures, and conduit interconnections, including access and workspace requirements.
4. **Power and Heat Load Calculations:** Provide power and heat load calculations for all hardware, including backup UPS capacity calculations.
5. Wiring Diagrams: For power and signal wiring.

D. Equipment and Software List: Include every piece of equipment and software by product/model name and/or number, manufacturer, serial number, revision number, location, and date of original installation. If factory and/or bench testing regimens are required by the project plan, add pretesting record of each piece of equipment and software, listing name of person testing, date of test, and adjustments made.

1.6. INFORMATIONAL SUBMITTALS

E. Field quality - control reports.
F. Warranty: Sample of product warranty for each system component

1.7. CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For all system components and software to include in emergency, operation, and maintenance manuals.
   1. Lists of spare parts and replacement components recommended for storage at the site for ready access.
   2. Operation Guides

1.8. QUALITY ASSURANCE

A. All work, equipment, materials, construction, and installation provided under the Contract shall comply with the current applicable rules, regulations, standards, and ordinances of the local Authorities Having Jurisdiction (AHJ).

B. All equipment shall be installed to National, State, and Local laws in accordance with the Authority Having Jurisdiction.

C. Electrical Components, Devices, Accessories, and Installation shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
   1. Comply with NECA 1.
   2. Comply with NFPA 70.

D. Integration between all system components shall be tested and certified for proper interoperability by the manufacturers of each system.

1.9. PROJECT CONDITIONS

A. Environmental Conditions: system components shall be capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
   1. All Receivers:
      a. Operation: Rated for continuous operation in ambient temperatures -40° to 150° degrees F (-40° to 65° degrees C).
b. Storage: Rated for continuous storage in ambient temperatures -40° to 150° degrees F (-40° to 65° degrees C).

2. All Transmitters:
   a. Operation: Rated for continuous operation in ambient temperatures -40° to 150° degrees F (-40° to 65° degrees C).
   b. Storage: Rated for continuous storage in ambient temperatures -40° to 150° degrees F (-40° to 65° degrees C).

1.10. WARRANTY
   A. All Receivers: One Year - Against Defects in Materials and Workmanship
   B. All Transmitters: One Year - Against Defects in Materials and Workmanship

PART 2 – PRODUCTS

3.1. APPROVED MANUFACTURER
   A. Farpointe Data, Inc.

3.1. LONG RANGE RECEIVERS / TRANSMITTERS
   A. Receivers Shall Support the Following:
      1. Frequency 433 MHz
      2. Mounting: Any flat surface
      3. Dimensions:
         a. Two Channel Unit: 3.3" W × 3.3" H × 1.9" D
         b. Four Channel Unit: 3.4" W × 6.3" H × 2.3" D
      4. Weight:
         a. Two Channel Unit: 8 oz (227 g)
         b. Four Channel Unit: 12 oz (340 g)
      5. Read Range:
         a. Two Channel Unit: Up to 100' (30.5 m)
         b. Four Channel Unit: Up to 200' (61 m), installer adjustable
         c. Four Channel Unit: Read range can be extended further using a separate dipole antenna attaching to Receiver’s on-board SMA connector.
      6. Voltage: 12 VDC nominal
      7. Current Draw:
         a. Two Channel Unit: 80 mA typical @ 12 VDC
         b. Four Channel Unit: 120 mA typical @ 12 VDC
      8. Indicators: LEDs and Audio ‘Beeper’ Tone Standard, installer adjustable
      9. Secure Transmission Rolling code + encryption
     10. Certifications FCC, ICC, CE, UL Standard 2942
     11. IP Code: IP65
     12. Cabling: 24 AWG multi-conductor stranded with an overall foil shield
13. Interface: Wiegand (26-bit industry standard and custom Wiegand formats)
14. Operating Temperature: –40° F to 149° F (–40° C to +65° C)
15. Enclosure:
   a. Impact Resistant PVC
   b. Electronics sealed in a weather-resistant, UL listed enclosure

B. Transmitters Shall Support the Following:
1. Frequency:
   a. RF Transmitter – 433 MHz
   b. Presentation – 125 kHz or 13.56 MHz
2. Activation Buttons:
   a. 2 Button Variant (Supports two channels)
   b. 4 Button Variant (Supports four channels)
3. Dimensions: 1.45" W × 2.5" H × 0.56" D
4. Secure Transmission: Rolling code + encryption
5. Weight: 0.7 oz. (20 g)
7. IP Code: IP65
8. Battery: Single replaceable CR2032, 3.3V, lithium battery
9. Read Range:
   a. RF Transmitter: Up to 200 feet (61 m)
   b. Presentation: Up to 3.5 inches (88 mm)
10. Durability: Electronics sealed in a weather-resistant enclosure
11. Interface: Wiegand (26-bit industry standard and custom Wiegand formats)
12. Operating Temperature: –40° F to 122° F (–40° C to +50° C)
13. Enclosure Color: Black polycarbonate enclosure with gray ABS keys
14. OEM Label Area: Dimensions: 0.9" W × 0.35" H (22.86 mm × 8.89 mm), with corner radius of 0.63" (16 mm)
15. LED: Red (activated upon button press)

3.1. CARD READERS:
A. Shall be mounted as detailed in the Construction Drawings.
B. Shall be read when presented in any orientation or at any angle to the surface of the reader (maximum read range: 4.5").
C. Shall power the card, process the encoded data, and output the data to the access system in less than 175 milliseconds.
D. Shall incorporate a tri-state LED on the front of the reader, which shall be configured as follows:
   1. Illuminate steady red when the door is closed and secure.
   2. Illuminate green upon a valid card read, then switch to steady red once the door is opened or the unlock time expires, whichever occurs first.
E. Shall have an audio "beep" tone feature to indicate to the user that the card was read and an access decision was made.
F. Accidental or intentional transmission of radio frequency signals into the reader shall not compromise the system.
G. Shall function in the access control system's normal or anti-pass back mode without changes to the reader.
H. Shall be provided in standard black finish.
I. Shall operate on 12VDC supplied directly by the card reader module.
PART 3 – EXECUTION

3.1. EXAMINATION
   A. Examine cable pathways including conduit, raceways, cable trays, and other pathway elements for compliance with space allocations, installation tolerances, hazards to cable installation, and other conditions affecting installation.
   B. Examine rough-in for control cable and conduit systems to card readers, and other EACS components to verify conduit and back-box locations prior to installation of EACS devices.
   C. Examine available network capacity and support infrastructure.
   D. Examine install location for compliance with surface requirements, space allocations, installation tolerance, hazards to safe system operation, and other conditions affecting installation.
   E. Commencement of work by installer is acceptance of substrate surface requirements, space allocations, installation tolerance, hazards to safe system operation, and other conditions affecting installation.
   F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2. PREPARATION
   A. Comply with ANSI/TIA-606-B Labelling Standard.
      1. Develop acceptance test concept and, on approval, develop specifics of the test.
      2. Develop cable and asset-management system details; input data from construction documents. Include system schematics and technical drawings in electronic format.
   B. In meetings with District, present planning documents and review, adjust, and prepare final programming and configuration documents. Use final documents to program and configure system software.

3.3. CABLEING
   A. Comply with NECA 1, "Good Workmanship in Electrical Construction"
   B. Install cables and wiring according to national, state, and local laws.
   C. Wiring Method: Install wiring in raceway and cable tray except within consoles, cabinets, desks, and counters.
   D. Junction boxes and enclosures containing security-system components or cabling, and which are easily accessible to employees or to the public, shall be provided with tamper resistant fasteners and/or tamper detection switches. In addition, hinged enclosure doors shall be equipped with locking hardware. Boxes above ceiling level in occupied areas of the building shall not be considered accessible. Junction boxes and small device enclosures easily accessible to the public shall be covered with a suitable cover plate and secured with tamperproof screws.

3.4. CABLE APPLICATION
A. Comply with TIA 569-C, "Commercial Building Standard for Telecommunications Pathways and Spaces."

B. Receivers and Peripheral Devices:
   1. Install number of conductors or pairs recommended by device manufacturer for the functions specified.
   2. Follow device manufacturer’s installation requirements for maximum cable distances and sizes.

3.5. GROUNDING
A. Comply with IEEE 1100, "Recommended Practice for Power and Grounding Electronic Equipment."
B. Ground cable shields, drain conductors, and equipment to eliminate shock hazard and to minimize ground loops, common-mode returns, noise pickup, cross talk, and other impairments.
C. Signal Ground:
   1. Terminal: Locate in each equipment room and wiring closet; isolate from power system and equipment grounding.
   2. Bus: Mount on wall of main equipment room with standoff insulators.

3.6. IDENTIFICATION
A. In addition to requirements in this article, comply with applicable requirements with TIA/EIA 606-B.
B. Label each terminal strip and screw terminal in each cabinet, rack, or panel.
   1. All wiring conductors connected to terminal strips shall be individually numbered, and each cable or wiring group being extended from a panel or cabinet to a building-mounted device shall be identified with the name and number of the particular device as shown.
C. At completion, cable and asset management documentation shall reflect as-built conditions.

3.7. FIELD QUALITY CONTROL
A. Tests and Inspections:
   1. LAN Cable Procedures: Inspect for physical damage and test each conductor signal path for continuity and shorts. Test for faulty connectors, splices, and terminations. Test according to TIA/EIA 568-C, "Commercial Building Telecommunications Cabling Standards - Part 1: General Requirements." Link performance for UTP cables must comply with minimum criteria in TIA/EIA 568-C.
   2. As appropriate, test each reader for proper LED and audio tone function, as well as read range and data output accuracy.
   3. Test each circuit and component of each system. Tests shall include, but are not limited to, measurements of power-supply output under maximum load, signal loop resistance, and leakage to ground where applicable. System components with
battery backup shall be operated on battery power for a period of not less than 10 percent of the calculated battery operating time. Provide special equipment and software if testing requires special or dedicated equipment.

4. Operational Test: After installation of cables and connectors, demonstrate product capability and compliance with requirements. Test each signal path for end-to-end performance from each end of all pairs installed. Remove temporary connections when tests have been satisfactorily completed.

B. Devices and circuits will be considered defective if they do not pass tests and inspections.

C. Prepare test and inspection reports.

3.8. STARTUP SERVICE

A. Complete installation and startup checks according to manufacturer's written instructions.

3.9. DEMONSTRATION

A. Demonstrate proper operating procedures to owner's representative.

B. Develop and provide training modules for operations and maintenance staff at the WQRRP.

END OF SECTION
SECTION 28 21 00
Surveillance Camera

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.

1.2 RELATED WORK NOT IN THIS SECTION
A. General and specific provisions of these Specifications apply to the work specified in this Section, as well as:
   1. Low Voltage Wire and Cable (26 05 19)

1.3 DESCRIPTION OF WORK
A. Furnish and install security systems as shown on the Drawings and specified herein.
B. The work of this contract shall be for the installation of a new digital video surveillance camera and associated devices for the District. The Contractor shall deliver a new, complete, and operating system as intended, shown, and specified.
D. Provide programming of the video server including, but not limited to the following:
   1. All system hardware configurations.
   2. Camera recording frame rates and resolutions.
E. Furnish and install a camera, pole, camera mount, fiber optic interfaces and cabling infrastructure as required and shown on the drawings.
F. Contractor shall supply new equipment as required to provide a complete system.
G. Provide, complete and in place, a DVSS system including, but not limited to:
   1. Installation of new camera and housing.
   2. Installation of new camera power supply.
   3. Installation of new camera mounting pole.
   4. Integration with existing video recording and control equipment.
   5. Termination of new camera to existing video recording and control equipment.
   6. Termination of new camera to power supply.
   7. Termination of camera output relay to slide gate controller.
   8. Installation of new conduit and cabling where existing conduit is not available.
   9. Installation of associated equipment as defined within this document.
H. These Specifications and the associated Bid Documents are not meant to be all inclusive, and the Contractor shall make adjustments accordingly. Include in the original bid all equipment, software, cabling, connectors, transformers, relays, etc., whether specified here or not, such that said bid fulfills the intent of these Specifications and renders these systems functional and fully operational.
1.4 SYSTEM DESCRIPTION
   A. The camera shall be compatible with the existing video monitoring and recording system.
   B. Network based cameras shall be connected to a new DVSS client/server over a local network to provide video surveillance and incident recording. Video will be archived to mirrored drive array internal to the client/server.
   C. The system shall provide for real-time monitoring and review of archived video stored on the client/server.
   D. Programming of all system parameters shall be performed through the DVSS client/server.
   E. The system shall be configured to store video for no less than fifteen (15) days.
   F. The system shall be capable of individually increasing/reducing the recording frame rate of any camera on the system based on alarm events which are activated through the camera.
   G. The system shall be capable of motion based event recording, including the functionality to program unique pre/post event recording durations by camera.
   H. It shall be possible to playback stored video for incident reporting purposes directly from the DVSS client/server.
   I. Video and camera output relay control shall be available at the client/server and over the internet at offsite locations.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT
   A. Unless otherwise noted, all materials and equipment shall be new, of the type, capacity, and quality specified. Material shall bear the label of, or be listed by the Underwriters’ Laboratories unless material is of a type for which a label or listing service is not provided.
   B. Materials shall be of same brand or manufacturer throughout for each class of material or equipment, wherever possible.
   C. All enclosures for all equipment shall be of metal throughout the system.
   D. The equipment chosen for this project has been selected by the District and the Consultant, to be included in this project, based upon product performance. No substitutions will be accepted unless otherwise noted in these specifications. Any substitutions must be submitted for approval prior to installation.

2.2 EXISTING DIGITAL VIDEO SURVEILLANCE SYSTEM
   A. DVSS Client/Server Hardware and Software:
      1. Client/Server Hardware:
         a. Intel Core Duo E4600 2.4 Ghz Processor
         b. 4 GB (ECC PC2-6400) (2x2GB) Memory
         c. Hard Drives
            i. Primary Drive- Internal 250 GB, SATA (Operating System)
ii. Second Drive- Internal 250 GB, SATA (RAID 1)
iii. Third Drive- Internal 250 GB, SATA (RAID 1)
iv. Fourth Drive- Internal 250 GB, SATA (Cold Spare)
d. 10/100/1000 Ethernet Communication
e. 16X Half Height SATA DVD RW Optical Drive
f. SC40GE 4 Port Internal PCIESAS Raid HBA.
g. USB Keyboard and 2 Button Mouse
h. Inkjet printer HP Officejet Pro K5400dtn
i. ATI Radeon X1300 Pro (256MB DH) Video Card
j. Dual monitors are 17” W1707 monitors by HP.
k. Client workstation is by HP, Model Proliant ML110 G5.

2. Workstation Software (Operating System):
a. Operating system software is by Microsoft Windows XP Professional (32 Bit).

3. Workstation Application Software (Digital Video):
a. Software shall provide support for video recording and real-time digital monitoring and retrieval of stored video functions.
b. Software shall provide support for web based viewing of live video and relay output control.
c. Digital Video Client Workstation software shall be by AXIS, Model Axis Camera Station 3.10 (Four Channel License).

2.3 DEVICE HARDWARE REQUIREMENTS
A. Panasonic Multi-Sensor Camera:
1. Camera shall be Panasonic model WV-X8570N.
2. Four repositionable lenses.
3. Four 4k (33MP) sensors for a resolution of 3,840 x 2,160 pixels at 15 fps.
B. Environmental Camera Housing:
1. Heavy duty, vandal and marine environment resistant housing.
C. Fiber Optic Interface Equipment:
1. Shall be designed to transmit and receive 10/100 Mbps data over one multimode optical fiber.
2. Shall Auto-Negotiate to a 10 Mbps or 100 Mbps Ethernet rate without any adjustments.
3. Shall be environmentally hardened to operate in extreme temperatures.
4. Shall have LED indicators provided for rapidly ascertaining equipment operating status.
5. Fiber optic interface is a ComNet, Model CNFE1002(M)(S)1-Mini Series Ethernet media converter.
D. Fiber Optic Patch Panel:
1. Wall Mount Patch Panel:
a. Shall be a wall mountable interconnect center.
b. Provide space for two (2) standard CCH connector panels.
c. Shall include lockable doors.
d. Wall Mountable Interconnect Center shall be by Corning, Model WIC-02P.

2. Connector Panel:
   a. Shall provide six (6) connectors per panel.
   b. Shall be ST-compatible (multimode).
   c. Shall be 62.5 µm fiber compatible.
   d. Connector Panel shall be by Corning, Model CCH-CP06-25T.

E. Camera Pole:
   1. Shall be high grade structural steel and conform to ASTM-A 501.68 standards.
   2. Shall include a hand hole and cover.
   3. Shall be 5” square and 18’ in height.
   4. Camera pole shall be USA Architectural Lighting, Model SNTS 185-11, or equal.

2.4 ENVIRONMENTAL CONDITIONS
   A. The following environmental conditions shall apply:
      1. Earthquake Loading: Zone 4, per UBC;
      2. Ambient temperature range (indoor): 10˚C to 40˚C;
      3. Ambient temperature range (outdoor): 0˚C to 55˚C;
      4. Relative humidity (indoor): 20% to 80% RH; and
      5. Humidity (outdoor): 0% to 95% @ 40˚C.

2.5 ELECTRICAL REQUIREMENTS
   A. Unless otherwise noted on the Drawings, terminate all equipment for this system to new
      120VAC power sources provided by the District.
   B. The Contractor shall check the adequacy of all existing power and wiring before making
      final connections and applying power to the equipment. If such wiring/service is not proper
      and/or adequate, The Contractor shall notify the District and/or the Consultant in writing,
      requesting specific correction of same. Should the Contractor fail to provide proper
      notification of wiring inadequacies to the District, he shall be bound to correct problems
      from such inadequacies with no cost to the District.
   C. The Contractor shall be responsible for terminating all cameras and other equipment at
      existing 120VAC source locations.

PART 3 - EXECUTION

3.1 CAMERAS
   A. The camera shall have the white balance level adjusted to provide the best image.
   B. Adjust AGC to provide the best image resolution.
   C. Back focus shall be adjusted to optimize the focal range.
D. Test line voltage to ensure that the 24VAC current meets the cameras minimum or maximum operating range.
3.2 INSTALLATION
A. General
1. Perform this work in accordance with acknowledged industry and professional standards and practices and the procedures specified herein.
2. A complete, operating system shall be provided. Include all devices specified including basic components and accessories, interconnecting wiring and other equipment and installation devices necessary for a complete system as specified.
B. Components
1. Video Camera
   a. Provide pole, outdoor housing and mount for camera.
   b. Exact placement of camera shall be field determined to ensure complete coverage.
2. IR Illuminator
   a. Adjust directional output of infra-red illuminator to supply adequate coverage of the cameras viewing area directly associated with the slide gate.
3. Coordinate specific camera programming requirements with the District.

3.3 POWER SUPPLIES
A. Test 120 VAC incoming line voltage prior to termination of camera power supply.
B. Test line voltage to ensure that the 24VAC output current meets the cameras minimum or maximum operating range.

END OF SECTION 28 21 00

END OF DIVISION 28
A. General
   1. Perform this work in accordance with acknowledged industry and professional standards and practices and the procedures specified herein.
   2. A complete, operating system shall be provided. Include all devices specified including basic components and accessories, interconnecting wiring and other equipment and installation devices necessary for a complete system as specified.

B. Components
   1. Video Camera
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END OF SECTION 28 21 00

END OF DIVISION 28
DIVISION 32:
EXTERIOR IMPROVEMENTS
SECTION 32 31 13
Chain Link Fences and Gates

PART 1 - GENERAL

1.1. INCLUDED IN THIS SECTION
A. Chain Link Fences.
B. Sliding Gates.
C. Pre-wired gate operator for horizontal sliding gates, including all selected attachments and accessory equipment.

1.2. RELATED WORK SPECIFIED ELSEWHERE
A. Low Voltage Wire and Cable 26 05 19.

1.3. SUBMITTALS
A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
   1. Fence and gate posts, rails, and fittings.
   2. Chain-link fabric, reinforcements, and attachments.
   3. Gates and hardware.
B. Shop drawings: Submit drawings showing connections to adjacent construction, range of travel, and all electrical and mechanical connections to the operator. All underground runs of electrical lines and inductive vehicle obstruction loop locations shall be indicated on drawings. Drawings shall also show the size and location of the concrete mounting pad.
   1. Include plans, elevations, sections, details, and attachments to other work.
   2. Include accessories, hardware, gate operation, and operational clearances.
   3. Wiring Diagrams: For power, signal, operator, and access control wiring.
C. Installation instructions: Submit two copies of manufacturer's installation instructions for this specific project.
D. Submit manufacturer’s completed warranty registration form to Project Manager.
E. Test reports:
   1. Submit affidavits from the manufacturer demonstrating that the gate operator mechanism has been tested to 200,000 cycles without breakdown.
   2. Each operator shall bear a label indicating that the operator mechanism has been tested. Operator is tested for full power and pressure of all hydraulic components, full stress tests of all mechanical components and electrical tests of all overload devices.
1.4. QUALITY ASSURANCE
   A. Emergency Access Requirements: Provide a “Knox Box” according to requirements of County Police and Fire for gates with automatic gate operators.
   B. Installer: Must have a minimum of three years’ experience installing similar equipment, provide proof of attending a HySecurity Technical Training within the previous three years, or obtain other significant manufacturer endorsement of technical aptitude, if required, during the submittal process.

1.5. CODES AND REGULATORY REQUIREMENTS
   A. Operators shall be built to UL 325 standards and be listed by a nationally recognized testing laboratory. Complete all electrical work according to local codes and National Electrical Code. All fieldwork shall be performed in a neat and professional manner, completed to journeyman standards.
   B. Current safety standards require the use of multiple external sensors to be capable of reversing the gate in either direction upon sensing an obstruction.
   C. Gate must have physical stops to prevent over travel in both the open and close directions.
   D. Current safety standards require gate operators to be designed and labeled for specific usage classes.
      1. HySecurity model SlideDriver™ 15 (222 SS ST) is listed for use in UL 325 Usage Classes: I, II, III, and IV.

1.6. PRODUCT DELIVERY AND STORAGE
   A. Store products upright in the original shipping containers, covered, ventilated and protected from all weather conditions.

1.7. WARRANTY
   A. Manufacturer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.
   B. Provide a gate operator warranty against all defects in materials or workmanship for five years or 500,000 gate cycles (whichever occurs first) after the date of installation. Defective materials shall be replaced at manufacturer’s discretion with new or reconditioned materials furnished by the manufacturer, at no cost to the owner. Freight, labor and other incidental costs are not covered under the factory warranty, but may be covered by a separate service agreement between installing company and the owner.
      1. To ensure validation of warranty, complete warranty registration form online at www.hysecurity.com/warranty. Warranty registration form is also included in the printed materials shipped with the operator.
PART 2 – PRODUCTS

2.1. PERFORMANCE REQUIREMENTS
A. Chain-link fence and gate frameworks shall withstand the design loads and stresses for fence height(s) and under exposure conditions indicated according to ASCE/SEI 7.
B. Minimum Post Size and Maximum Spacing: Determine according to CLFMI WLG 2445, based on mesh size and pattern specified.

2.2. CHAIN-LINK FENCE FABRIC
A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:
1. Fabric Height: 8 Feet
2. Steel Wire for Fabric: Wire diameter of 0.148 inch.
   a. Mesh Size: 2 inches.
   b. Zinc-Coated Fabric: ASTM A 392, Type II, Class 2, 2.0 oz./sq. ft. with zinc coating applied before weaving.
3. Selvage: Twisted top and knuckled bottom.

2.3. FENCE FRAMEWORK
A. Posts and Rails: ASTM F 1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 based on the following:
1. Fence Height: As indicated on Drawings.
2. Horizontal Framework Members: Intermediate, top and bottom rails according to ASTM F 1043.
3. Metallic Coating for Steel Framework:
   a. Type A: Not less than minimum 2.0-oz./sq. ft. average zinc coating according to ASTM A 123/A 123M or 4.0-oz./sq. ft. zinc coating according to ASTM A 653/A 653M.
   b. Type B: Zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. of zinc after welding, a chromate conversion coating, and a clear, verifiable polymer film.
   c. External, Type B: Zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. of zinc after welding, a chromate conversion coating, and a clear, verifiable polymer film. Internal, Type D, consisting of 81 percent, not less than 0.3-mil-thick, zinc-pigmented coating.
   d. Type C: Zn-5-Al-MM alloy, consisting of not less than 1.8-oz./sq. ft. coating.
B. Post Mounting: At Contractor's option, posts may be set in flanged sleeves anchored to structural slab.
   1. Sleeves: Fabricate sleeve of pipe as specified for posts, with inside dimension
for close fit with outside dimension of post, height to align with scheduled height for flooring base above finished floor.

2. Flange: As required for performance indicated, welded to sleeve.

3. Anchors: Fabricate anchorage devices capable of withstanding loads imposed by fences and gates. Coordinate anchorage devices with supporting structure.

2.4. TENSION WIRE
A. Polymer-Coated Steel Wire: 0.148-inch- diameter, tension wire according to ASTM F 1664, over zinc-coated steel wire.

2.5. FITTINGS
A. Provide fittings according to ASTM F 626.
B. Finish:
   1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz./sq. ft. of zinc.
      a. Polymer coating over metallic coating.

2.6. HORIZONTAL SLIDING VEHICULAR GATES
A. General: ASTM F 1184 for gate posts and single sliding gate types.
   1. Automated vehicular gates shall comply with ASTM F 2200, Class II.
   2. Classification: Type I overhead slide.
      a. Gate leaf width: 20 feet

B. Pipe and tubing:
   2. Gate posts: rectangular tubular steel.
   3. Gate frames and bracing: rectangular tubular steel.

C. Frame corner construction: assembled with corner fittings.

D. Overhead track assembly: manufacturer's standard track, with overhead framework supports, Bracing, and accessories, engineered to support size, weight, width, operation, and design of Gate and roller assemblies.

E. Hardware:
   1. Hangers, roller assemblies, and stops: fabricated from galvanized steel.

2.7. GATE OPERATOR
A. HySecurity gate operator model SlideDriver 15 (222 SS ST) with Smart Touch Controller (02827 HYS), or equal, as approved by the District.
B. For further information on the SlideDriver 15 Gate Operator, call the manufacturer at (800) 321-9947 or visit the website at www.hysecurity.com.

2.8. OPERATION
A. Operation shall be by means of a metal rail passing between a pair of reinforced composite wheels with polyurethane treads. Operator motors shall be hydraulic,
geroller type, and system shall not include belts, gears, pulleys, roller chains or sprockets to transfer power from operator to gate panel. The operator shall generate a minimum horizontal pull of 300 lb (136 kg) without the drive wheels slipping and without distortion of supporting arms. Operator shall be capable of handling gates weighing up to 1,500 lb (680 kg). Gate panel velocity shall not be less than 1 ft/s (304 mm/s) and shall be stopped gradually to prevent shock loads to the gate and operator assembly.

B. Minimum standard mechanical components:
1. Supporting arms: Cast aluminum channel. Arms shall incorporate a fully bushed, 1 1/2" (38 mm) bronze bearing surface, acting on arm pivot pins. (item 2 below)
2. Arm pivot pins: 3/4" (19 mm) diameter, stainless steel, with integral tabs for ease of removal.
3. Tension spring: 2 1/2" (63.5 mm) heavy duty, 800 lb (363 kg) capacity.
4. Tension adjustment: Finger tightened nut, not requiring the use of tools.
5. Drive release: Must instantly release tension on both drive wheels, and disengage them from contact with drive rail in a single motion, for manual operation.
6. Limit switches: Fully adjustable, toggle types, with plug connection to control panel.
7. Chassis: 1/4" (6 mm) steel base plate, and 12 Ga. (3 mm) sides and back welded and ground smooth.
8. Cover: 16 Ga. (1 mm) zinc plated steel with textured TGIC polyester powder coat finish. All joints welded, filled and ground smooth. Finished corners square and true with no visible joints.
9. Finish: Zinc plated steel with textured TGIC polyester powder coat finish, proven to withstand 1,000 hour salt spray test.
10. Drive wheels: Two 6" diam (152 mm) AdvanceDrive wheels. High-strength composite hub with polyurethane over mold.
11. Drive rail: Shall be extruded 6061 T6, not less than 1/8" (3 mm) thick. Drive rail shall incorporate alignment pins for ease of replacement or splicing. Pins shall enable a perfect butt splice.
12. Hydraulic hose: Shall be 1/4" (6 mm) synthetic, rated to 3,000 psi (20.6 MPa).
13. Hydraulic valves: Shall be individually replaceable cartridge type, in an integrated hydraulic manifold.
14. Hose fittings: At manifold shall be quick-disconnect type, others shall be swivel type.
15. Hydraulic fluid: High performance type with a viscosity index greater than 375 and temperature range -40° F to 158° F (-40° C to 70° C).
16. A zero to 2,000 psi (13.7 MPa) pressure gauge, mounted on the manifold for diagnostics, shall be a standard component.
17. The hydraulic fluid reservoir shall be formed from a single piece of metal, non-welded, and shall be powder painted on the inside and the outside, to prevent
C. Minimum standard electrical components:
   1. Pump motor: 1 hp, 3450 RPM, 56C, TEFC. Standard voltages available in single or three phase.
   2. All components shall have overload protection.
   3. Electrical enclosure: Type 1, metal, with hinged lid gasketed for protection from intrusion of foreign objects.
   4. Controls: Smart Touch Controller Board containing:
      a. inherent entrapment sensor;
      b. built in audible “warn before operate” system;
      c. built in timer to close;
      d. 32 character OLED display for reporting of functions and codes;
      e. multiple programmable output relay options;
      f. anti-tailgate mode;
      g. built-in power surge/lightning strike protection;
      h. menu configuration, event logging and system diagnostics easily accessible with a PC and HySecurity’s free Smart Touch Analyze and Retrieve Tool;
      i. RS-232 port for connection to laptop or other computer peripheral and RS-485 connection for network interface.
      j. Dual gate communication connection for bi-parting, sally port, or sequenced gates.
      k. Electromechanical and solid state relays.
      l. Radio option outputs.
      m. 21 inputs for site specific configurations.
   5. Transformer: 75 VA, non-jumpered taps, for all common voltages.
   6. Control circuit: 24 VDC.
D. Required external sensors: See 1.5B. Specify photo eyes or gate edges or a combination thereof to be installed such that the gate will reverse in either direction upon sensing an obstruction.
E. Optional control devices (choose one, or more, of the following): card reader, key-switch, radio control, pushbuttons, free egress vehicle detectors, vehicle obstruction loop detectors, keypads, seven day timers or various emergency vehicle open devices as dictated by local code.
F. Other options (May be chosen from the following list):
   1. Custom color chassis and cover: Zinc plated and primer painted with textured finish coat.
   2. Drive wheel manual release indicator switch.
   3. Heater with thermostat control for cold or damp climates.
   5. Through Beam or Reflective type photo eyes.
   6. Gate edge and transmitter radio reversing device.
7. Hy5B plug in type vehicle detectors.
8. Hy8Relay™ provides eight additional programmable user relay outputs.
9. Communications package delivering Internet Protocol (RJ-45 copper or SFP fiber), managed switch and web based interface to operator via HyNet™ Gateway.
10. Key operated cable manual release (secure side of gate).
12. 115/208/230 Hz single phase and 208/230/460/575 VAC three phase available. (50 Hz is available, specify voltage)
13. Other SlideDriver models available for gate speeds from 1 to 3 ft/s (304 mm/s - 914 mm/s).
14. Stainless steel chassis and cover, painted, for marine, caustic, or other extreme environments.
15. Stainless steel chassis 2B finish and cover brushed finish, for marine, caustic, or other extreme environments.
16. Hot dip galvanized chassis and cover, unpainted, for marine, caustic or other extreme environments.
17. Hot dip galvanized chassis and stainless steel cover, unpainted, for marine, caustic, or other extreme environments.
18. Available Modular configuration which includes separate metal enclosure to house electrical control box, pump, and electric motor assembly.
20. XtremeDrive™ System: a rack and pinion-like design, increases traction for heavy gates or for sites located in harsh environments.
21. Lock for operator cover.
22. Electric Solenoid gate panel deadbolt lock.
23. UPS DC battery powered models available.
24. UPS AC battery backup for systems up to 1 hp or VFD equipped. 208/230 VAC single phase only. 115 VAC single phase not available.

2.9. GROUT AND ANCHORING CEMENT
A. Nonshrink, nonmetallic grout: factory-packaged, non-staining, non-corrosive, nongaseous grout, complying with ASTM C 1107/C 1107M. Provide grout, recommended by Manufacturer, for exterior applications.
B. Anchoring cement: factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating, and that is recommended in writing by manufacturer for exterior applications.

2.10. FACTORY TESTING
A. Fully assemble and test, at the factory, each gate operator to assure smooth
operation, sequencing and electrical connection integrity.
B. Proof test with simulated physical and electrical loads to exceed the fully rated capacity of the operator components.
C. Inspect and test all hydraulics are leak free.
D. All testing data shall be individually logged and recorded by serial number.
E. Check all mechanical connections for tightness and alignment. Check all welds for completeness and continuity.
F. Inspect finishes for completeness. Touch up imperfections prior to shipment.
G. Check all hydraulic hoses and electrical wires to assure that chafing cannot occur during shipping or operation.

PART 3 – EXECUTION

3.1. SITE EXAMINATION
A. Examine area to review conditions affecting performance of the work.
B. Locate concrete mounting pad in accordance with approved shop drawings and in compliance with local building codes.
C. Make sure that gate is operating smoothly under manual conditions before installation of gate operators. Do not proceed until gate panel is aligned and operates without binding.

3.2. CHAIN LINK FENCE INSTALLATION
A. Install chain-link fencing according to ASTM F 567 and more stringent requirements specified.
B. Post setting: set posts in concrete at indicated spacing.
   1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
      a. Posts set into holes in concrete: form or core drill holes not less than 5 inches deep and 3/4 inch larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout anchoring cement, mixed and placed according to anchoring material manufacturer's written instructions. Finish anchorage joint to slope away from post to drain water.
C. Posts may be sleeve set in lieu of set into holes in concrete.
   1. Anchor sleeve baseplates to structural slab, plumb and level.
   2. Set posts in sleeves.
   3. Shim and grout posts secure in place.
D. Terminal Posts: Install terminal end, corner, and gate posts according to ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 30 degrees or more.
E. Line Posts: Space line posts uniformly at 10 feet on center.
F. Post Bracing and Intermediate Rails: Install according to ASTM F 567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal
posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.

1. Locate horizontal braces at mid-height of fabric 72 inches or higher, on fences with top rail, and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.

G. Top Rail: Install according to ASTM F 567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.

H. Intermediate and Bottom Rails: Secure to posts with fittings.

I. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 1-inch bottom clearance between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.

J. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts, with tension bands spaced not more than 15 inches on center.

K. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric according to ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.

1. Maximum Spacing: Tie fabric to line posts at 12 inches on center and to braces at 24 inches on center.

L. Fasteners: Install nuts for tension bands and carriage bolts on the side of fence opposite the fabric side. Peen ends of bolts or score threads to prevent removal of nuts.

3.3. GATE OPERATOR INSTALLATION

A. Install gate operator, aligned to fence line and grade, in accordance with the safety regulations and the manufacturer’s product literature and installation instructions, current at the time of installation. Coordinate locations of operators with contract drawings; other trades and shop drawings.

B. Concrete Bases: Cast-in-place or precast concrete, height not less than 12 inches, dimensioned and reinforced according to gate operator component manufacturer's written instructions.

C. Vehicle Loop Detector System: Cut grooves in pavement and bury and seal wire loop according to manufacturer's written instructions. Connect to equipment operated by detector.

D. Comply with NFPA 70 and manufacturer's written instructions for grounding of electric-powered motors, controls, and other devices.

E. Installer shall ensure that the electrical service to the operator is at least 20A. Electrical wiring to conform to NEC and manufacturer’s installation instructions.
SlideDriver 15 is 1500W.

3.4. FIELD QUALITY CONTROL
A. Test operator through ten full open and close cycles and adjust for operation without binding, scraping or uneven motion. Test limit switches for proper open and close limit positions.
B. All anchor bolts shall be fully tightened in the finished installation.
C. Owner, or owner’s representative, shall complete “check list” with installing contractor prior to final acceptance of the installation and submit completed warranty documentation to manufacturer.

3.5. TRAINING ON GATE OPERATION
A. Train owner's personnel on how to safely shut off electrical power, release and manually operate the gate. Additionally, demonstrate the general maintenance of the gate operator and accessories and provide one copy of “Programming and Operations Manual” for the owner's use. Manuals will identify parts of the equipment for future procurement.

END OF SECTION